



CRC for
Water Sensitive Cities



Australian Government
Department of Industry,
Innovation and Science

Business
Cooperative Research
Centres Programme

Benchmarking water sensitive city performance around the globe

Presentation and discussion on the WSC Index

7 October 2020

watersensitivecities.org.au

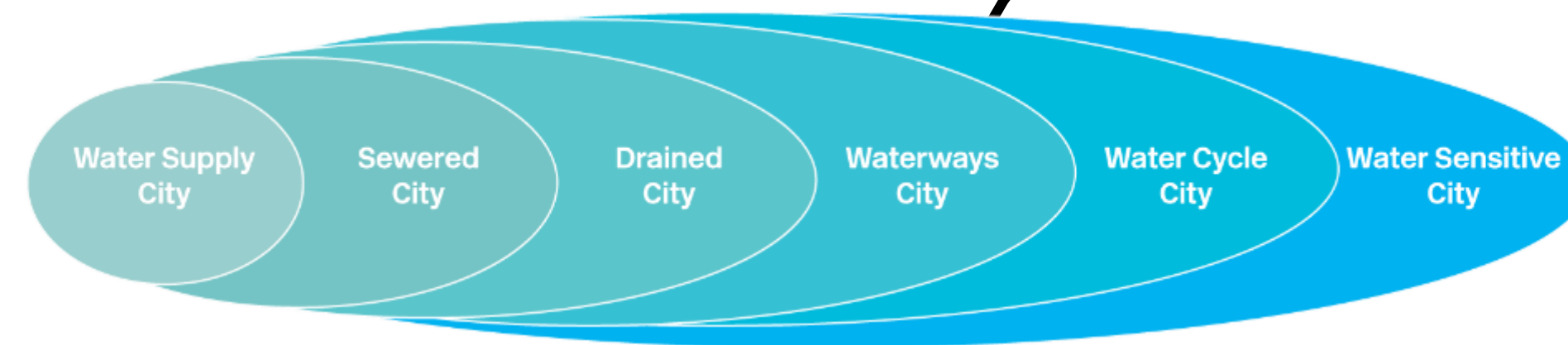
Transitioning to water sensitive cities



Water Sensitive City



Green infrastructure, nature-based solutions, fit-for-purpose water, integrated water (cycle) management, low impact development, sustainable urban drainage systems, ...



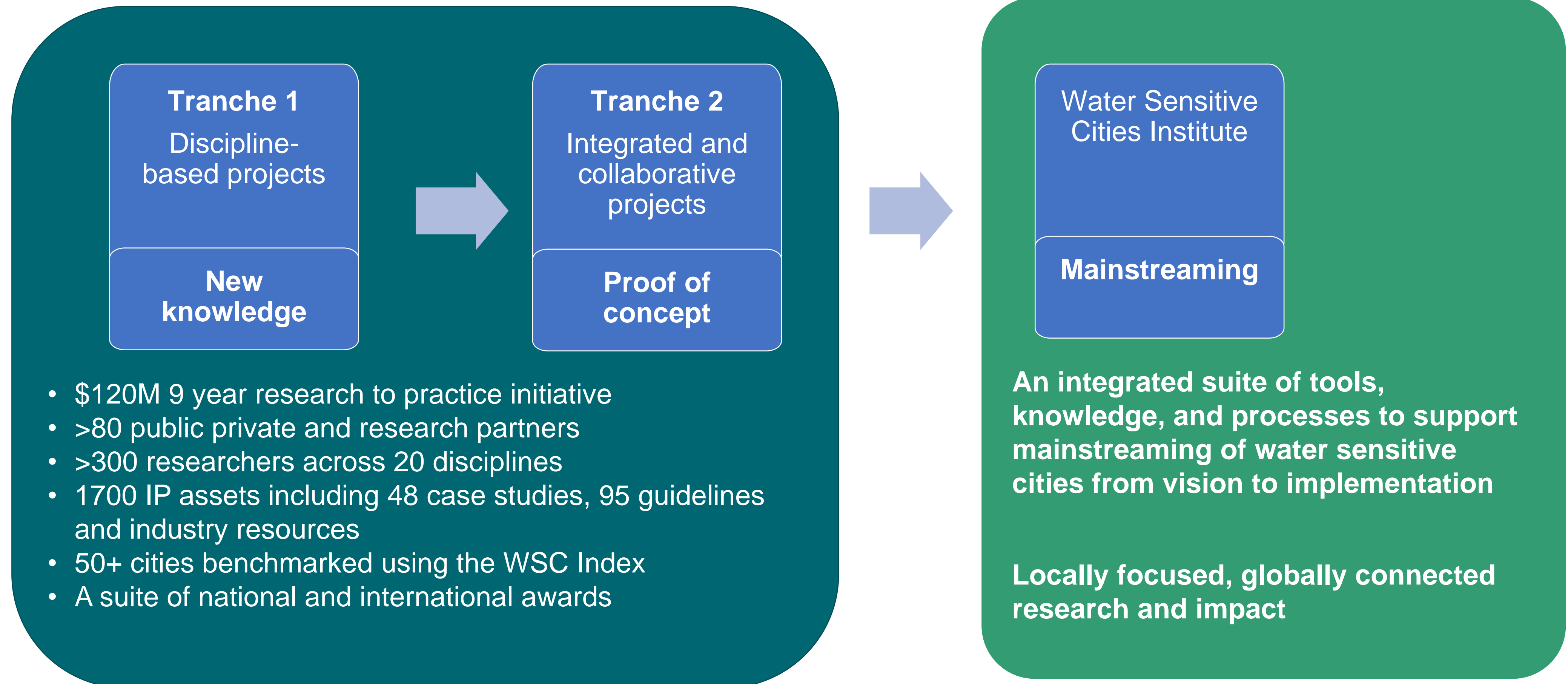
Current System



Key enablers of further change:

1. All water sources at multiple scales
2. Better use of nature based solutions (ecosystem services)
3. An engaged and informed community

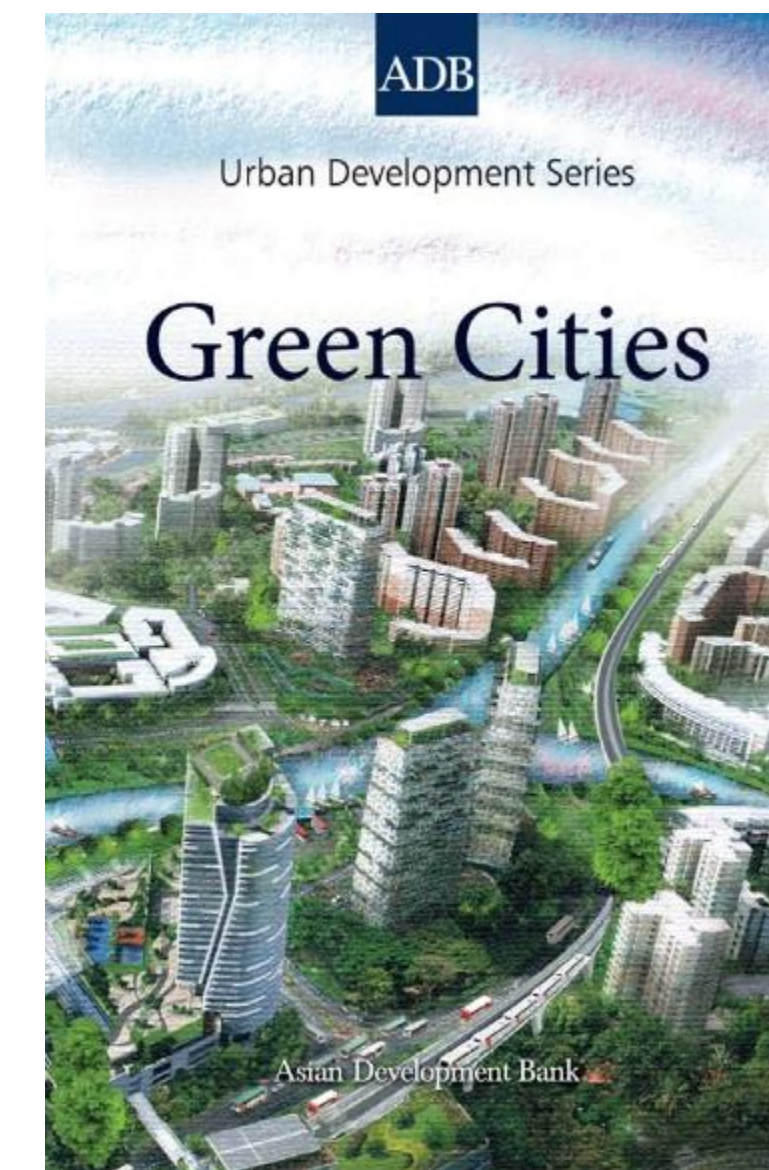
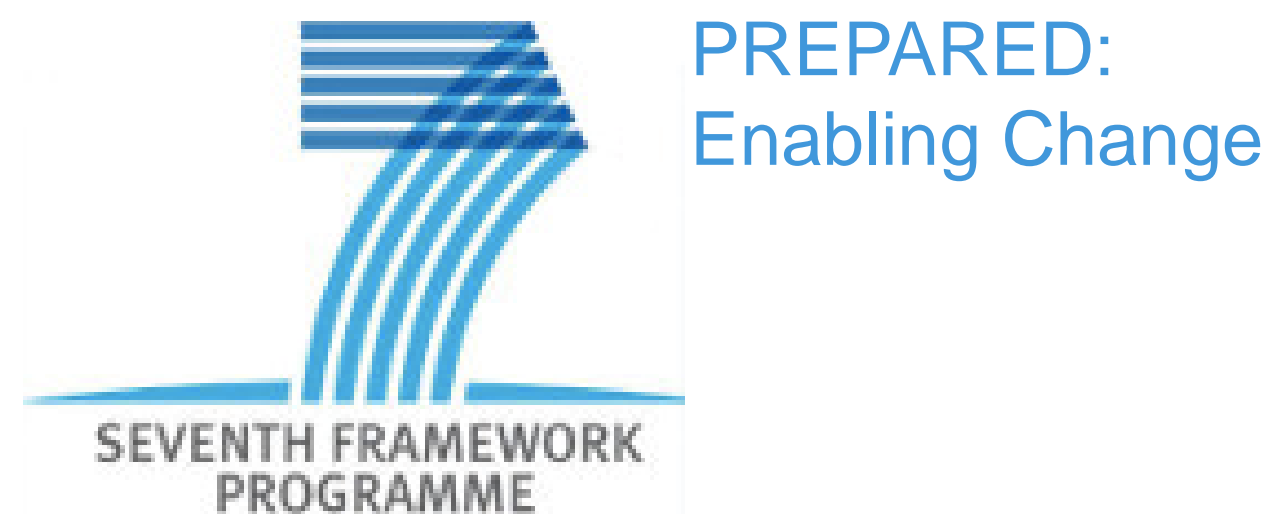
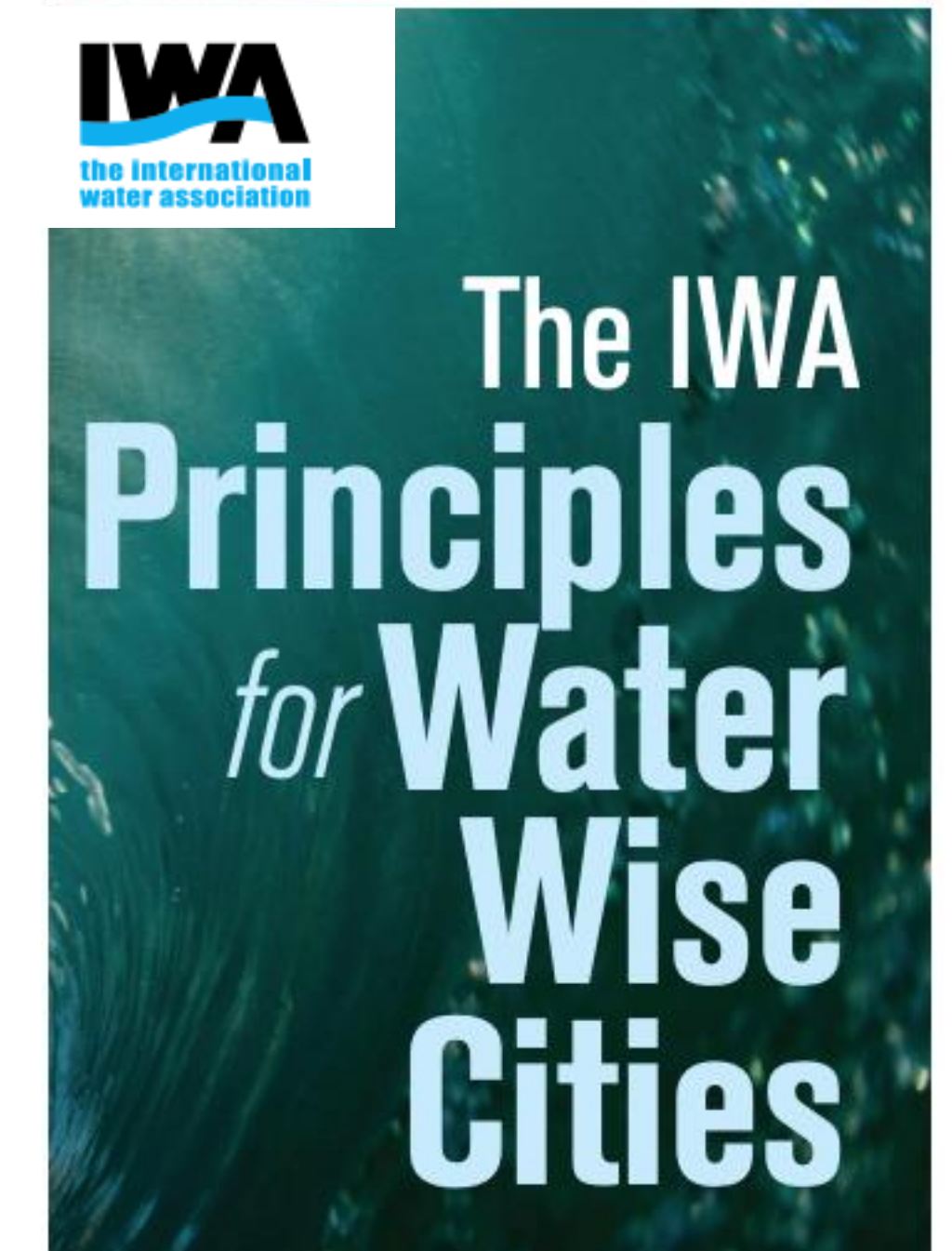
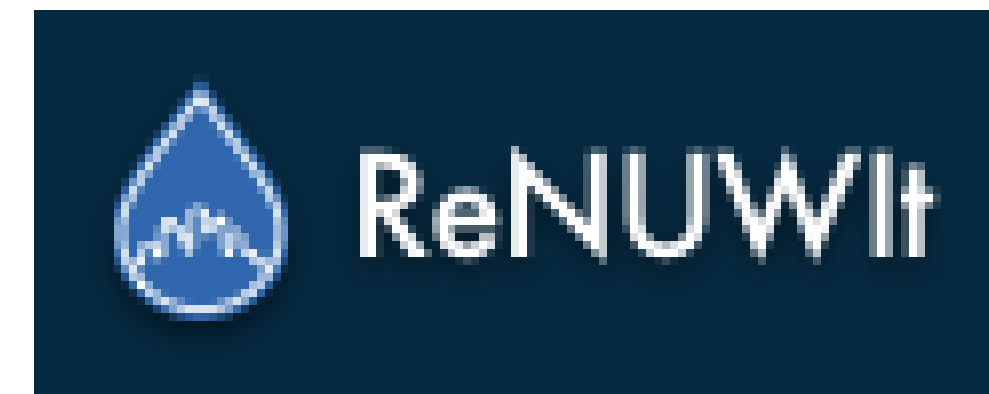
CRCWSC Research 2012 – 2021 and beyond



Mainstreaming water sensitive cities



An international research and action agenda



Mainstreaming water sensitive cities

Many tools and frameworks exist globally that aim to advance water sensitive practice:



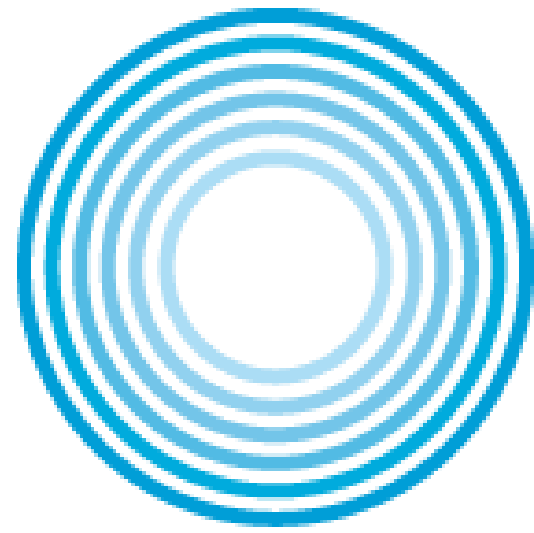
SUSTAINABLE CITIES
WATER INDEX

CITY
RESILIENCE
INDEX

The Canadian Water Sustainability Index (CWSI)

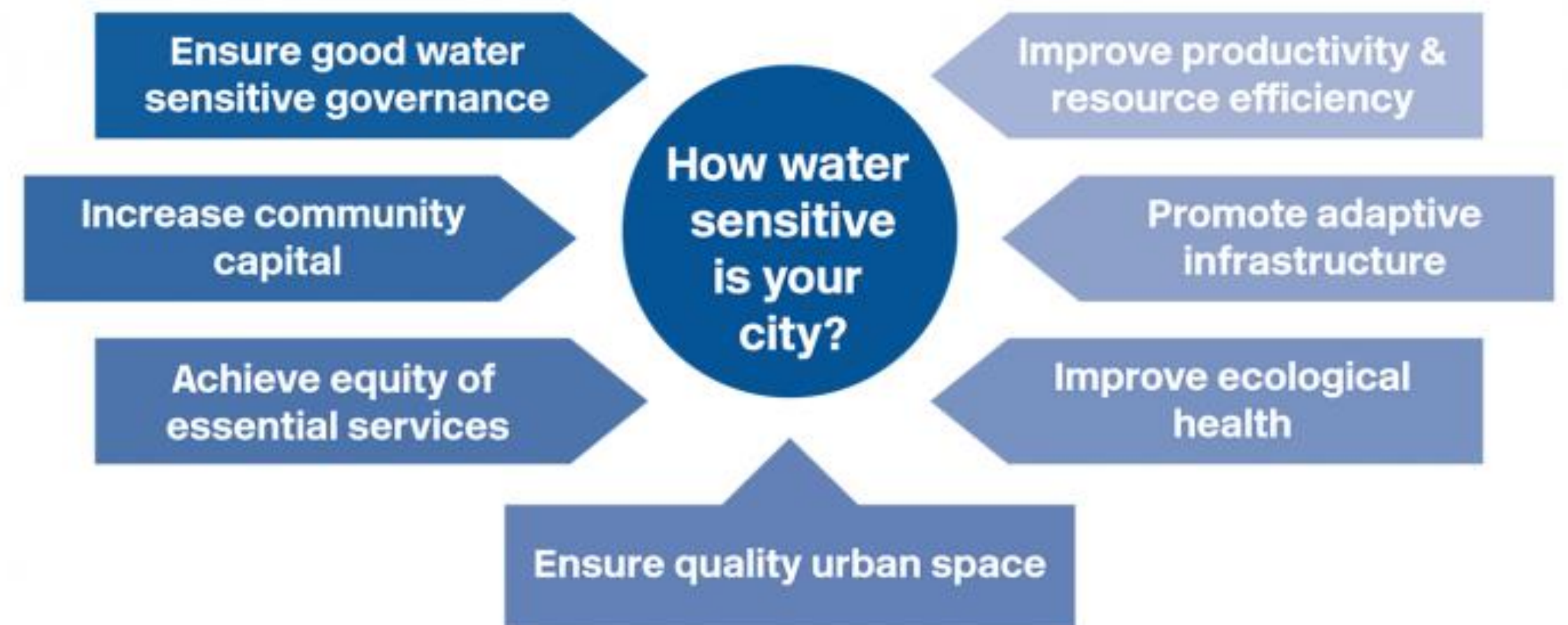


ECOCITY
STANDARDS



Water Sensitive Cities Index

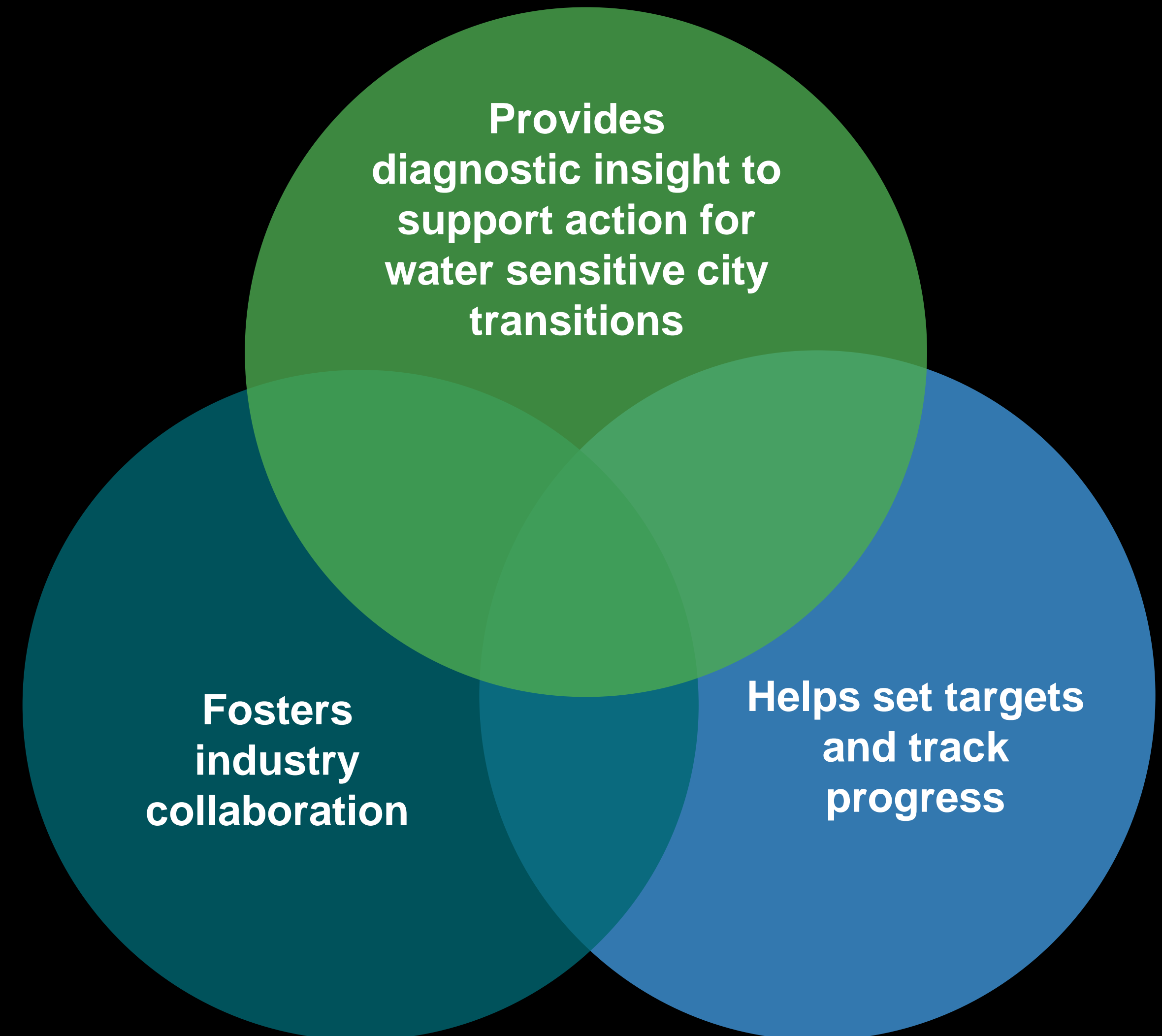
What it measures – Urban water indicators



What is the purpose of the Index?

- To benchmark current water sensitive performance of a place
- To help city stakeholders articulate a shared set of water sensitive aspirations

What does the Index do?



WSC Index development process

Development and testing
(Oct 2014 – Sep 2016)



Validation and refinement
(Oct 2016 – Dec 2017)

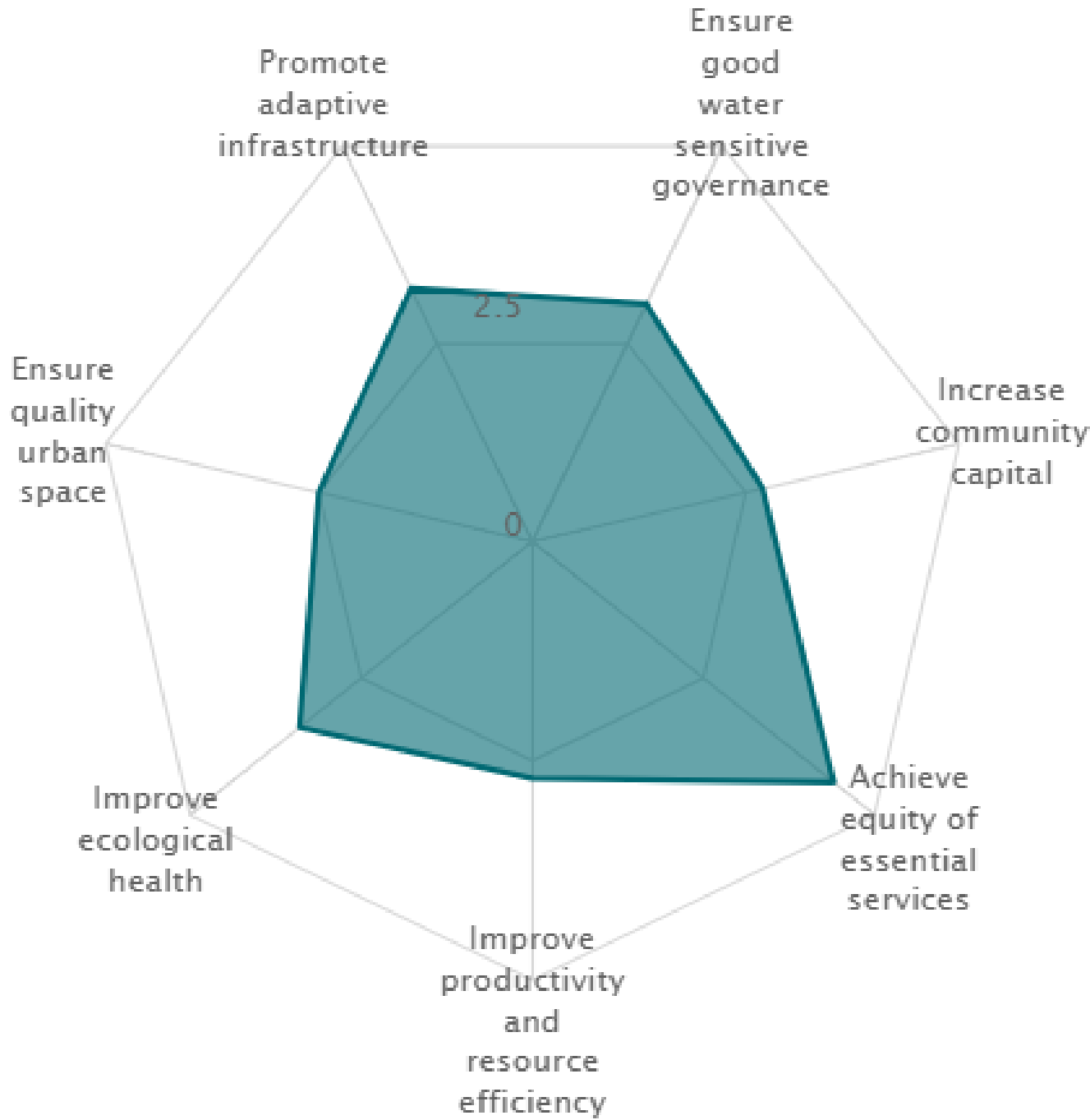


Roll out and further development
(Jan 2018 +)

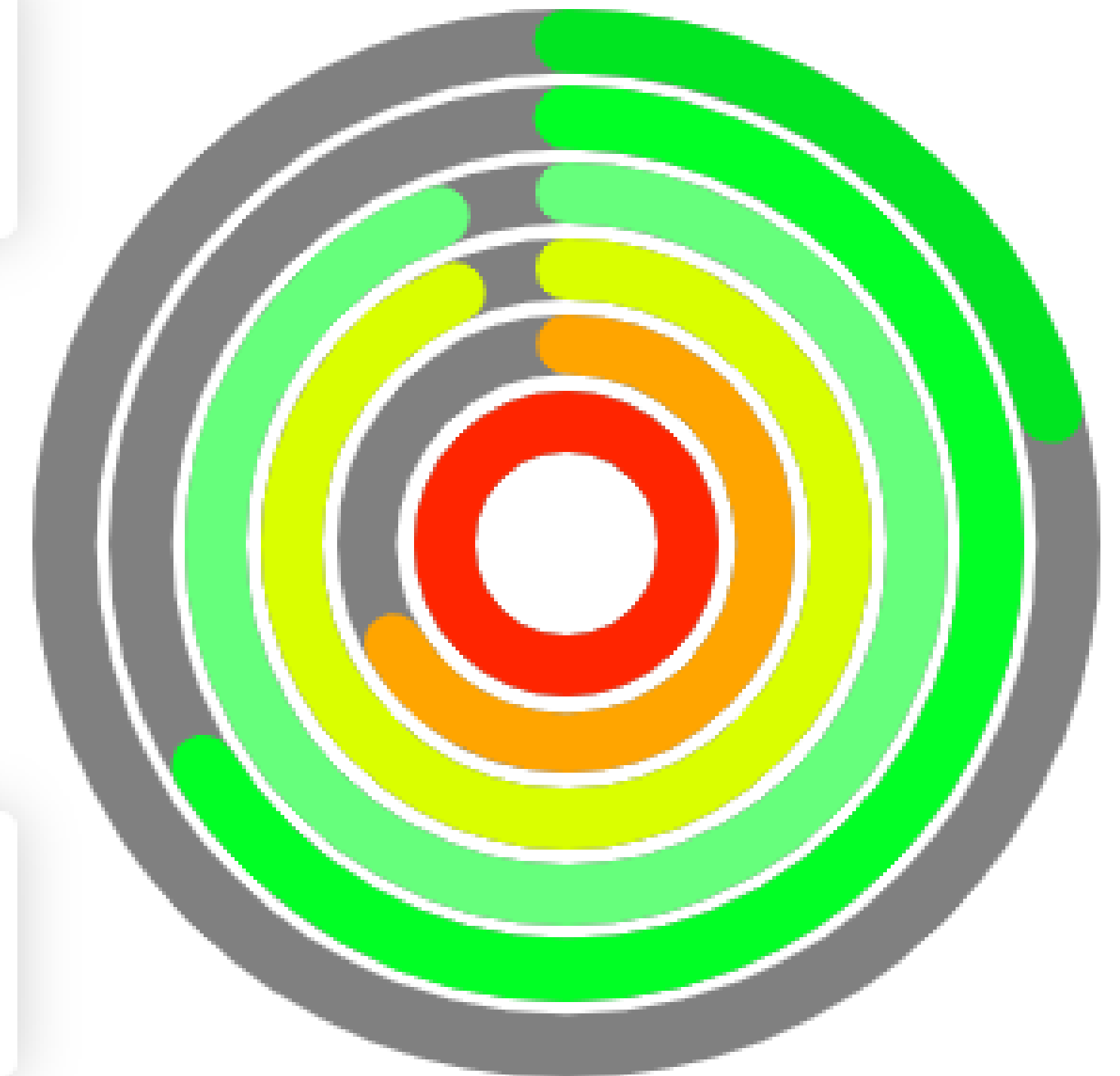
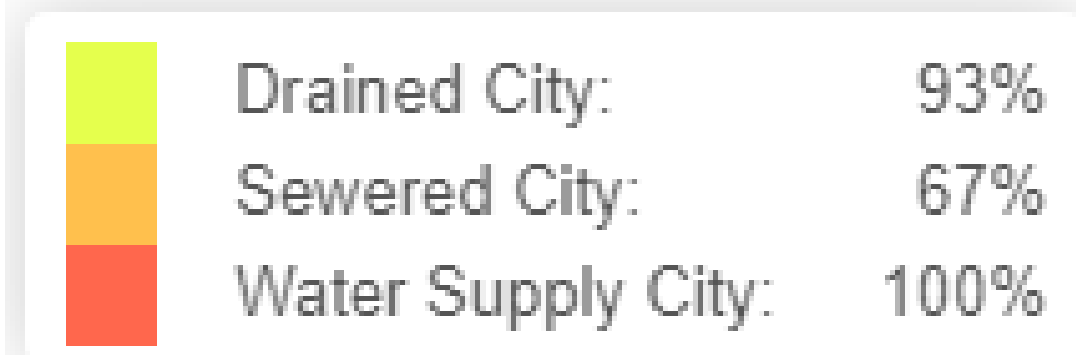
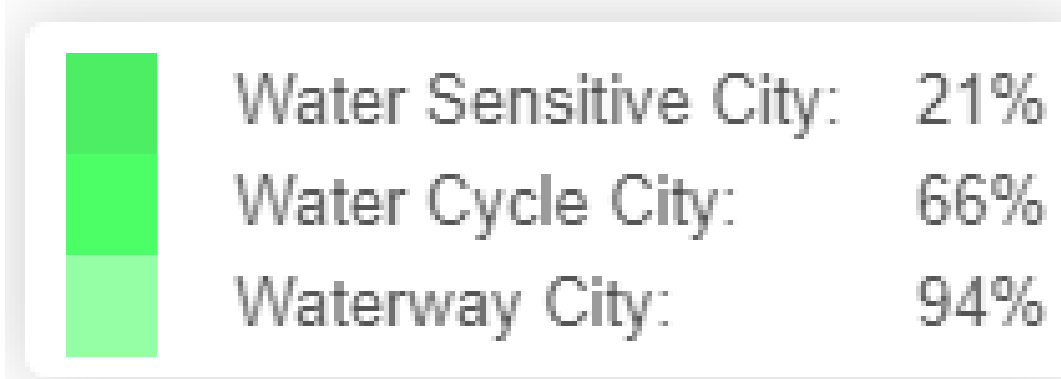
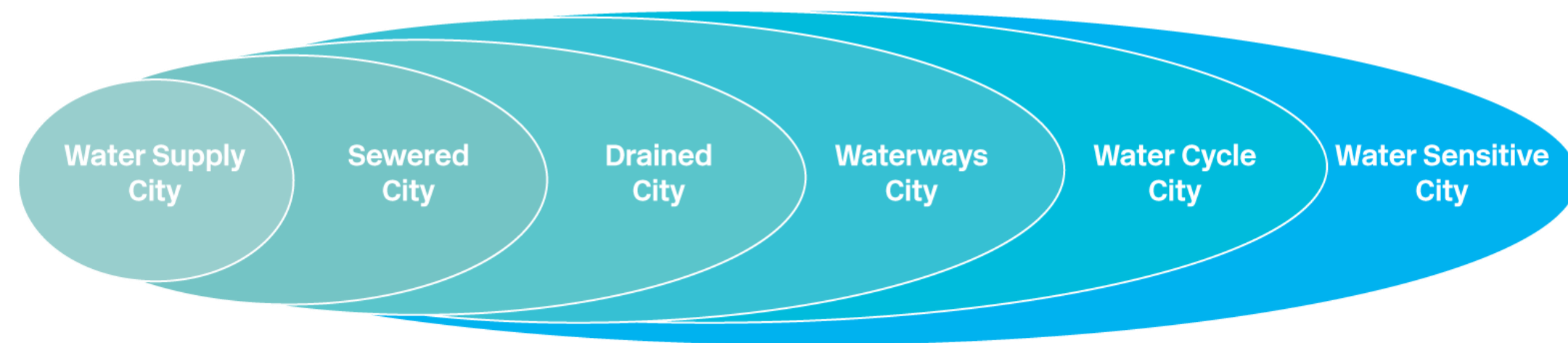


The WSC Index: 7 Goals, 34 indicators

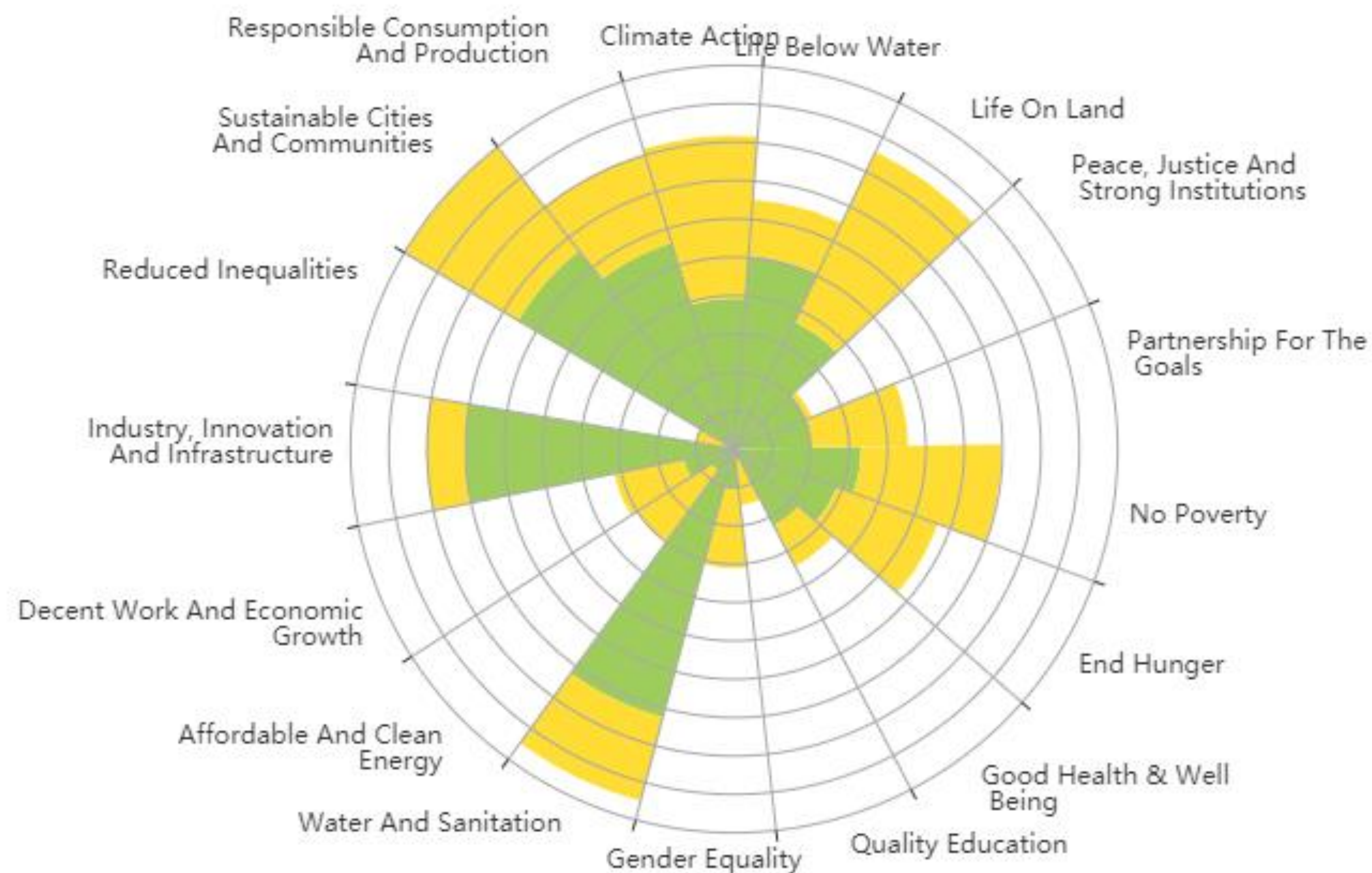
1. Ensure good water sensitive governance	2. Increase community capital	3. Achieve equity of essential services	4. Improve productivity and resource efficiency	5. Improve ecological health	6. Ensure quality urban space	7. Promote Adaptive infrastructure
1.1 Knowledge, skills and organisational capacity	2.1 Water literacy	3.1 Equitable access to safe and secure water supply	4.1 Benefits across other sectors because of water-related services	5.1 Healthy and biodiverse habitat	6.1 Activating connected urban green and blue space	7.1 Diverse fit-for-purpose water supply system
1.2 Water is key element in city planning and design	2.2 Connection with water	3.2 Equitable access to safe and reliable sanitation	4.2 Low GHG emissions in water sector	5.2 Surface water quality and flows	6.2 Urban elements functioning as part of the urban water system	7.2 Multi-functional water system infrastructure
1.3 Cross-sector institutional arrangements and processes	2.3 Shared ownership, management and responsibility of water assets	3.3 Equitable access to flood protection	4.3 Low end-user potable water demand	5.3 Groundwater quality and replenishment	6.3 Vegetation coverage	7.3 Integration and intelligent control
1.4 Public engagement, participation and transparency	2.4 Community preparedness and response to extreme events	3.4 Equitable and affordable access to amenity values of water-related assets	4.4 Water-related commercial and economic opportunities	5.4 Protect existing areas of high ecological value		7.4 Robust infrastructure
1.5 Leadership, long-term vision and commitment	2.5 Indigenous involvement in water planning		4.5 Maximised resource recovery			7.5 Infrastructure and ownership at multiple scales
1.6 Water resourcing and funding to deliver broad societal value						7.6 Adequate maintenance
1.7 Equitable representation of perspectives						

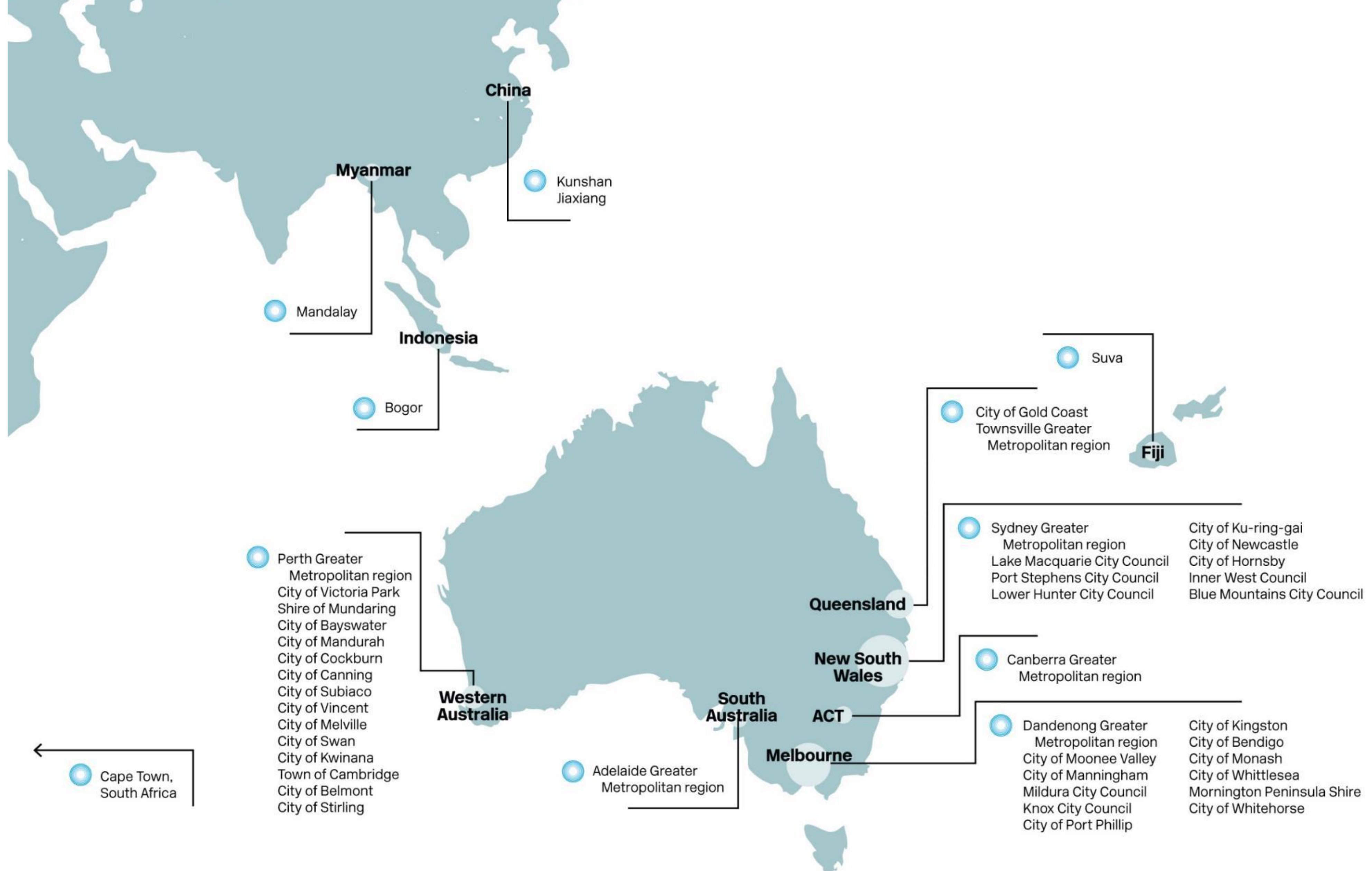


Diagnostic lens: urban water city-states



Diagnostic lens: Sustainable Development Goals

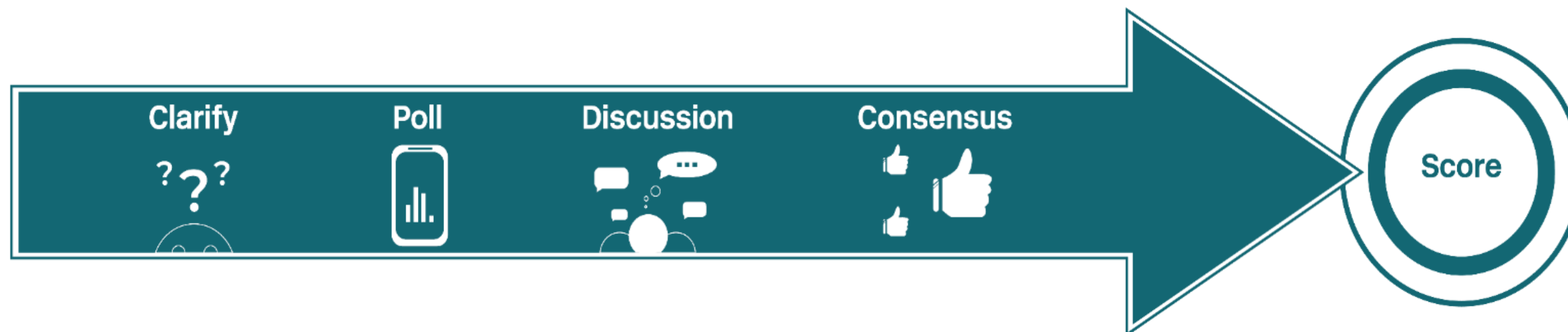




* Map is not to scale

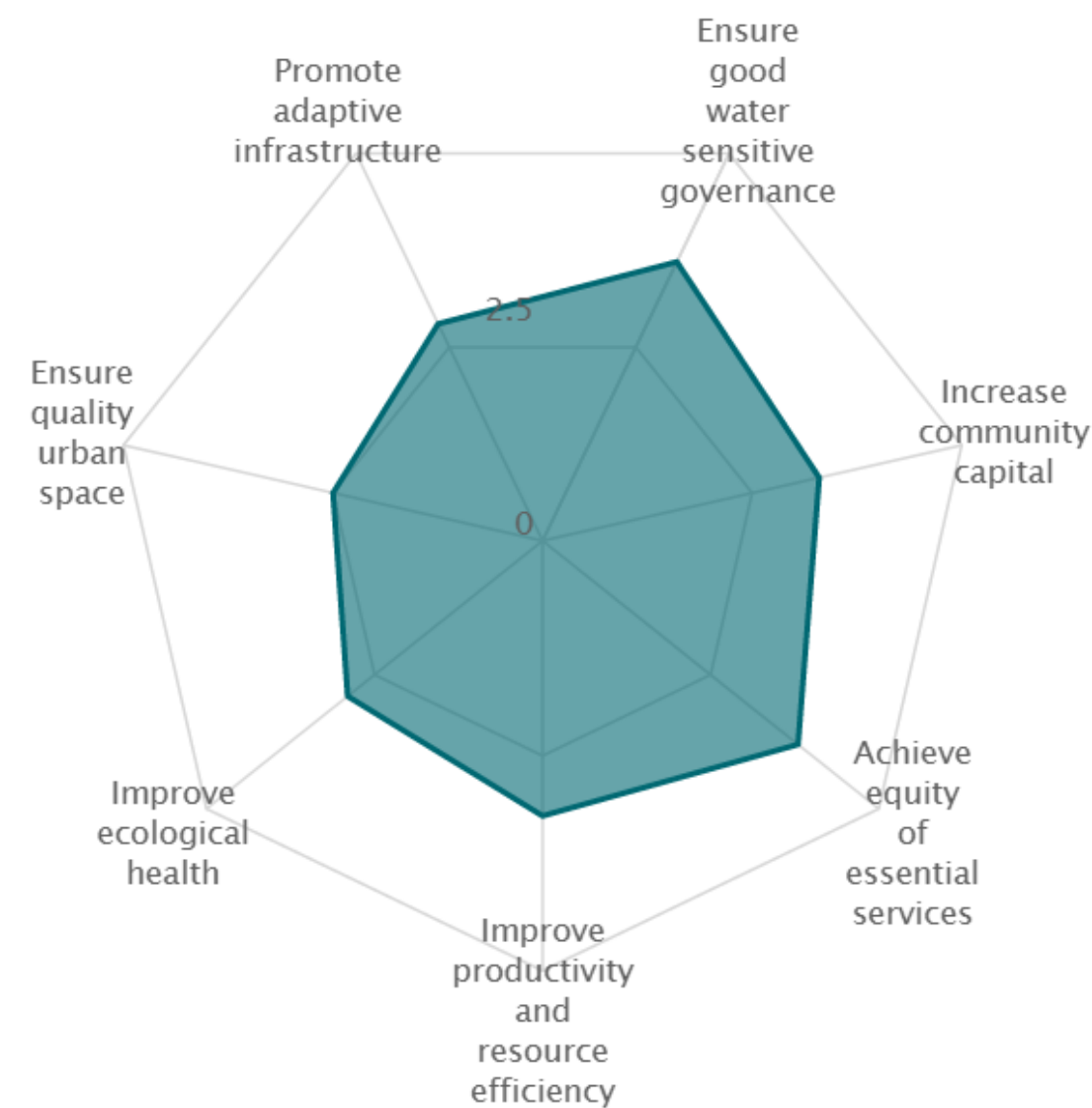
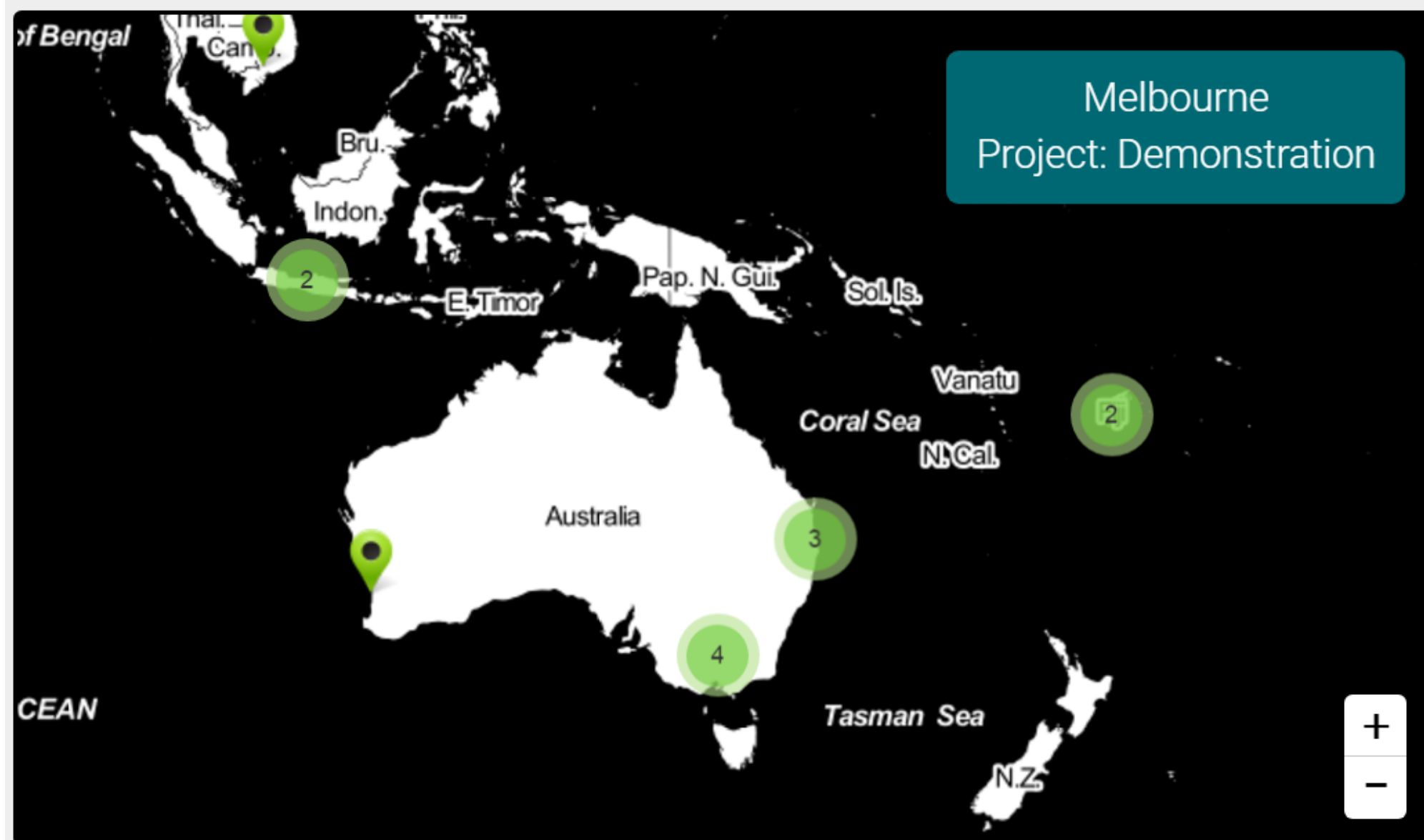
Benchmarking Methodologies

1. Collaborative workshop process to reach consensus and shared understanding
2. Rapid assessment by small working group
3. Regional benchmarking assessments
4. High level orienting and guiding framework



Accreditation process





Tools

Compare projects

Add

Diagnosis & actions

My Projects

Demonstration

ADB

Perth Pilot

E2D & LB

Melbourne Assessment

Sponge Cities

Melbourne

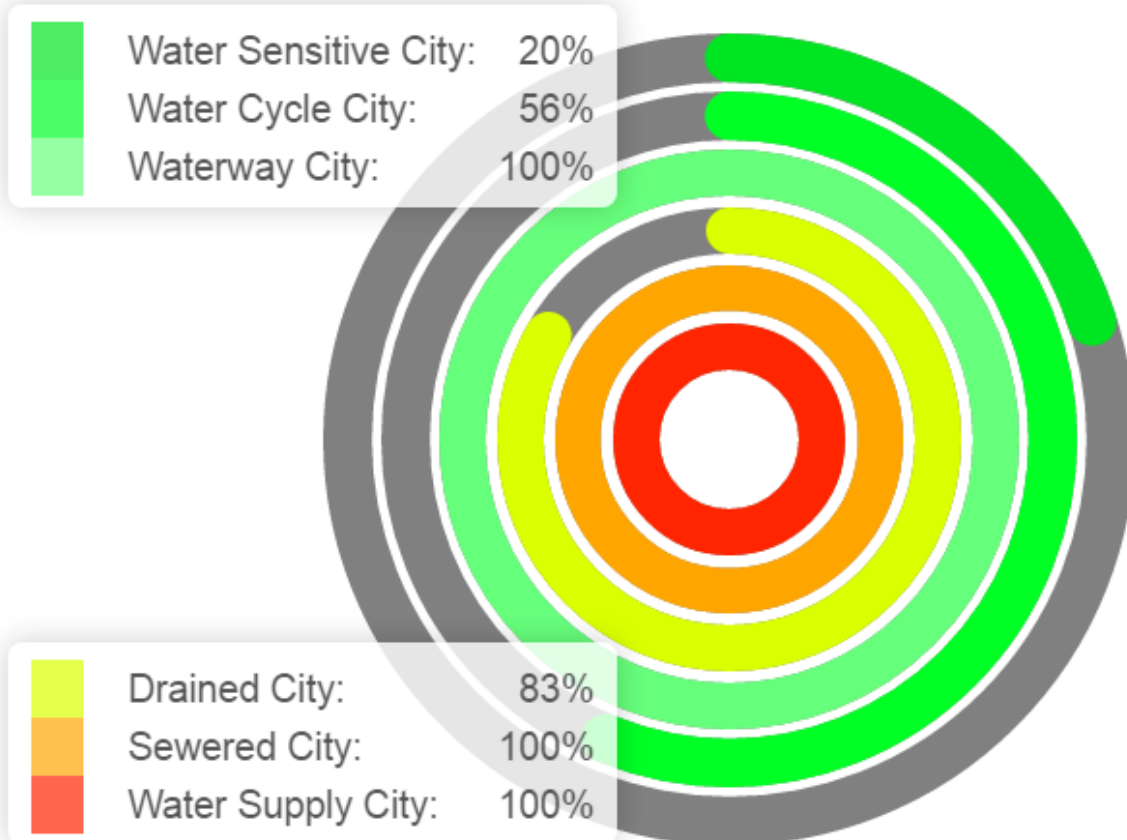
CRCWSC

crcwsc

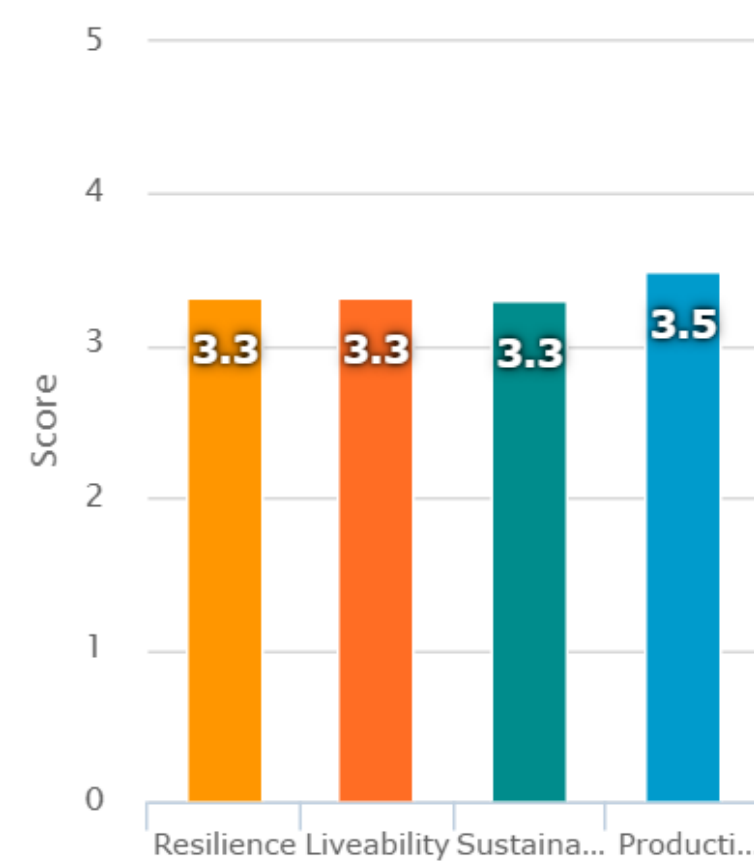
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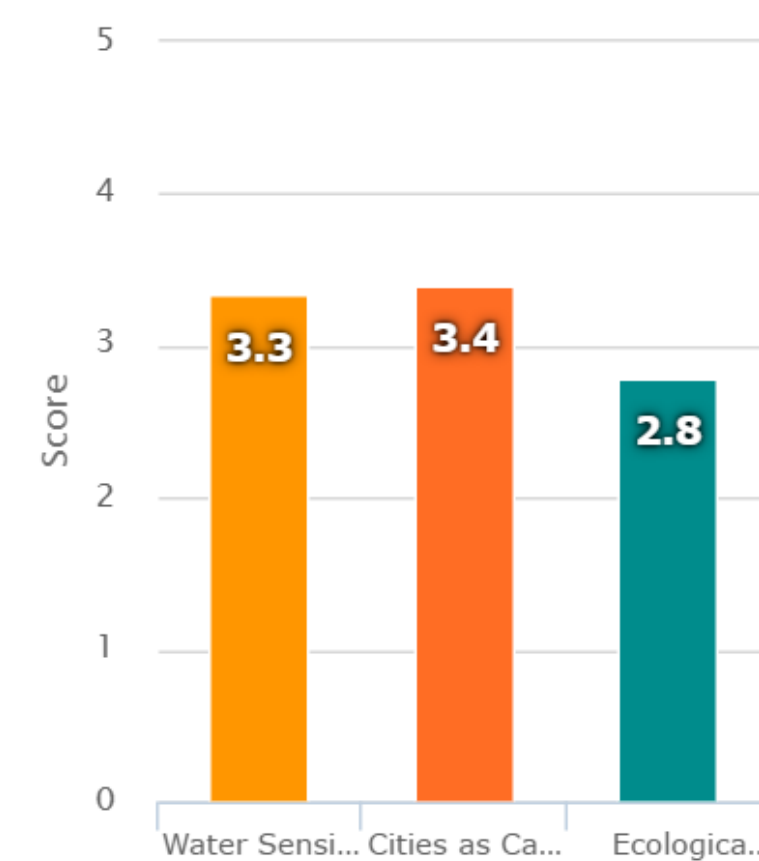
City State



Outcomes

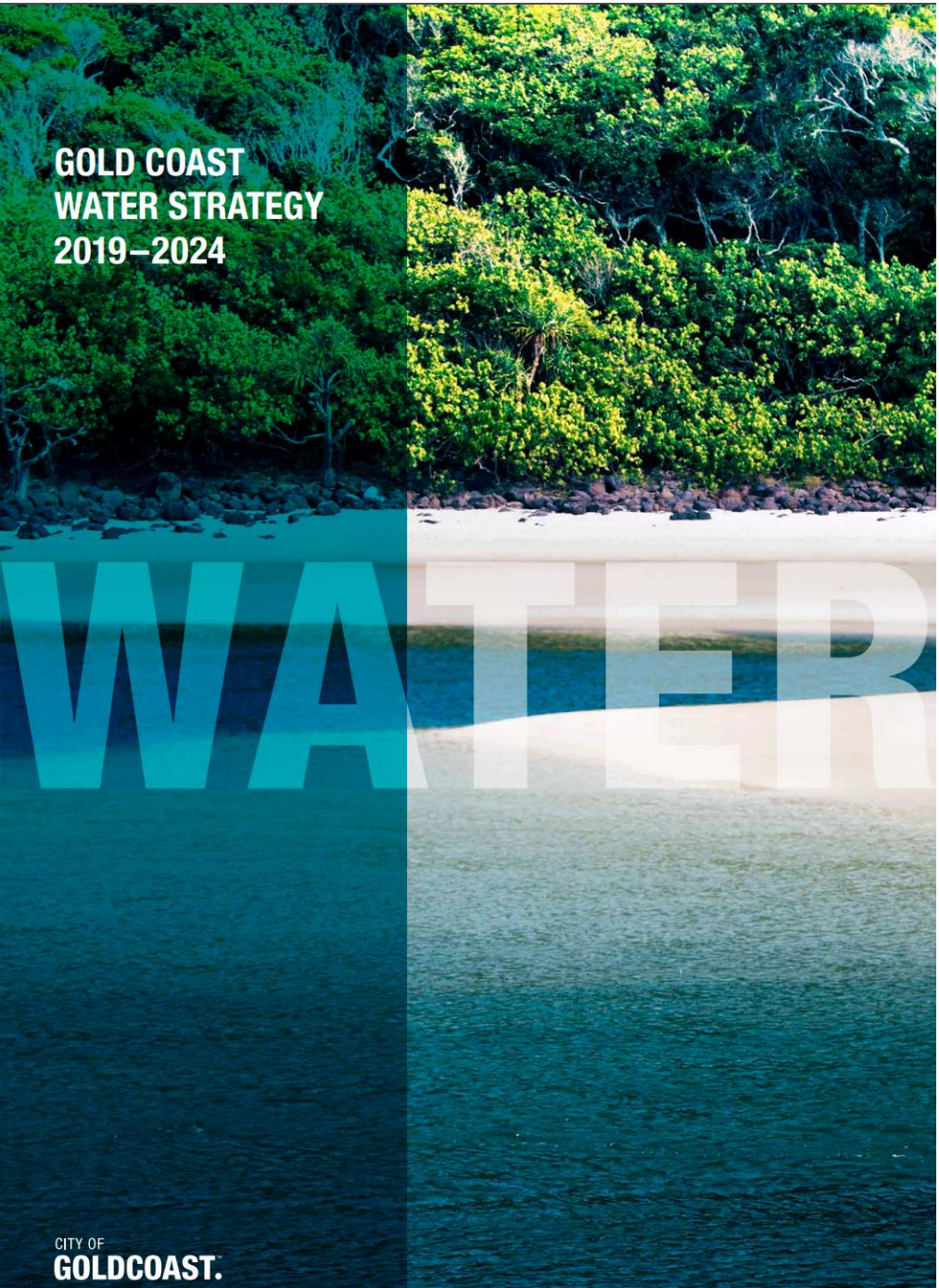
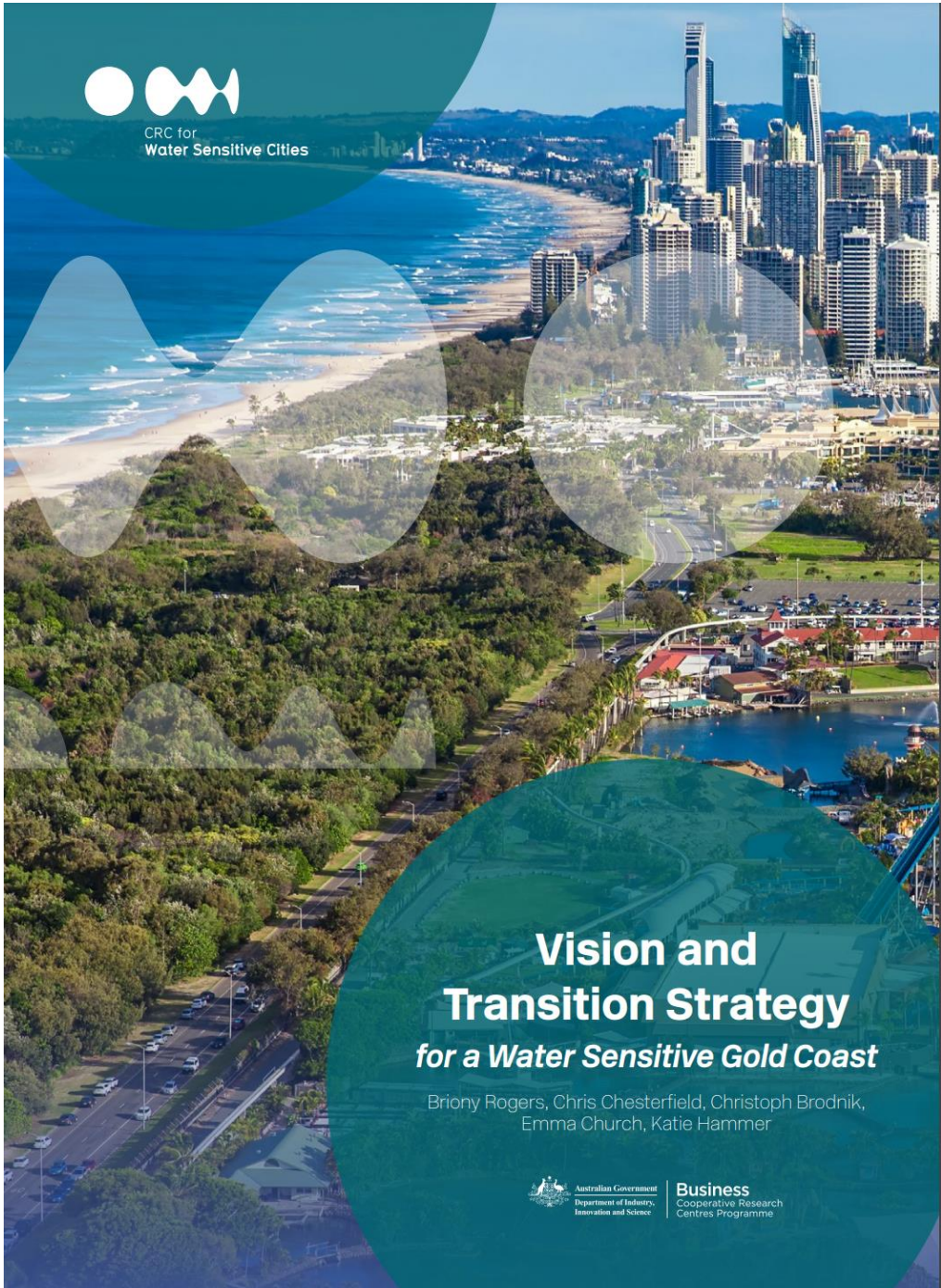


Practices



Case study examples

1. Gold Coast, Australia



BENCHMARKING THE GOLD COAST IN ITS TRANSITION TO A WATER SENSITIVE CITY

Our journey toward becoming a water sensitive city will be measured every five years using the CRCWSC Index. The index consists of seven goals and assesses 34 indicators that represent the major attributes of a water sensitive city. The use of the index will provide the City of Gold Coast with the ability to track the Gold Coast's water sensitive city transition over time as our water services and systems transition through the different stages. As this index is used both nationally and internationally, it also provides us with the ability to compare ourselves with other cities and identify opportunities for further improvement and innovation.

During the development of the Water Strategy, key stakeholders from across the region representing water, planning, environment, community and other related sectors participated in an initial benchmarking of our city. The outcomes (illustrated below) provide a benchmark against which the Gold Coast can measure its progress as we transition to a water sensitive city.

Figure 4: Early benchmarking outcomes for the Gold Coast, 2017



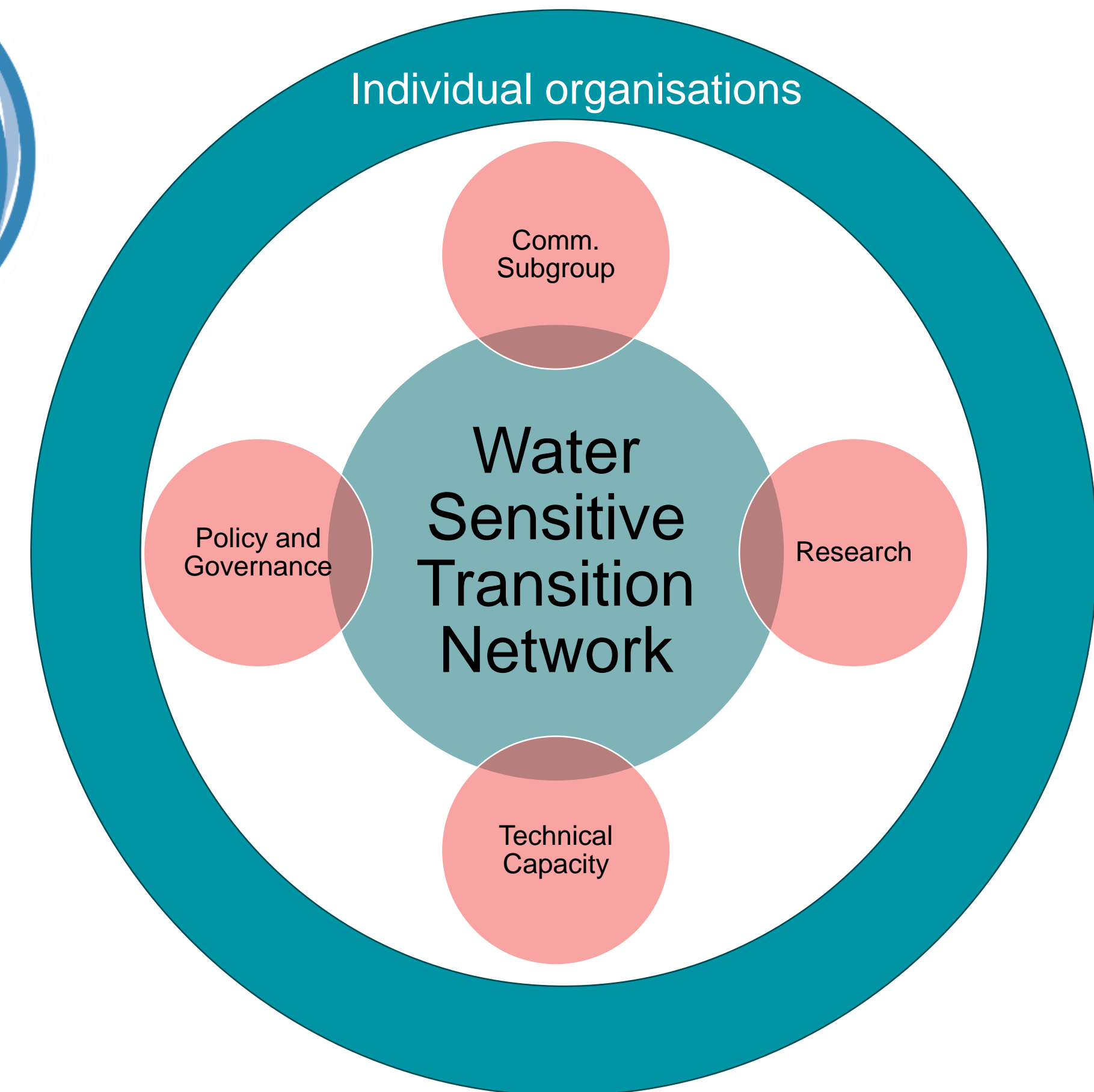
This Water Strategy recognises the importance of water in supporting our city's lifestyle, beauty and long term prosperity. Without the natural resources we depend on, there can be no people, no thriving communities and no meaningful prosperity. We want water to continue to be at the heart of the city, sustaining and inspiring our lifestyle.

By working together, our collective efforts on a local and regional scale can achieve a beautiful water sensitive Gold Coast where we address future challenges, create opportunities, build partnerships and manage resources carefully for a sustainable future.

With your help, we can use the Water Strategy as a map to guide us successfully along the path toward establishing ourselves as not only a water sensitive city, but as a region capable of supporting a healthy, happy and prosperous lifestyle for generations to come.

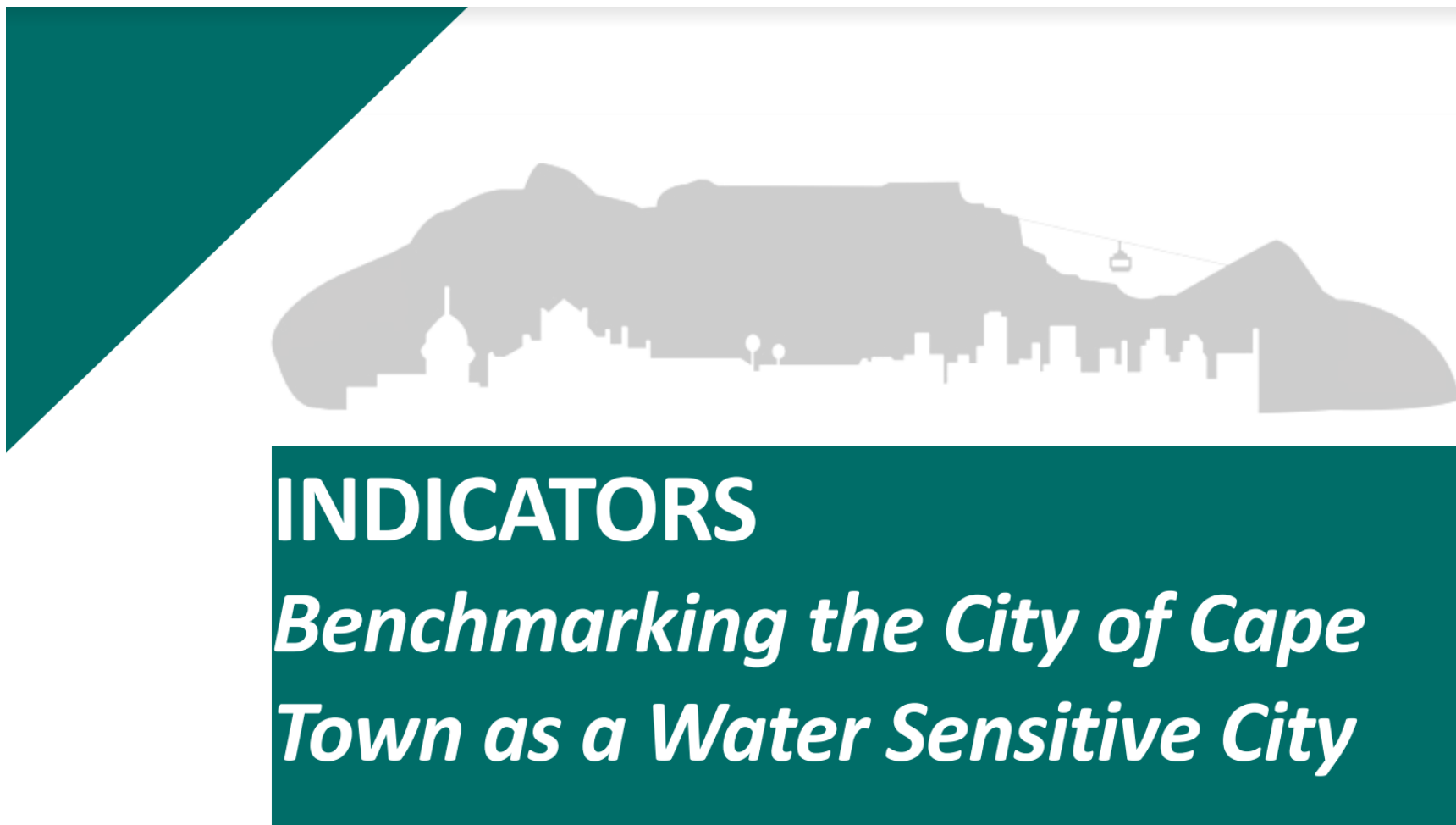
Case study examples

1. Gold Coast, Australia
2. Perth, Australia



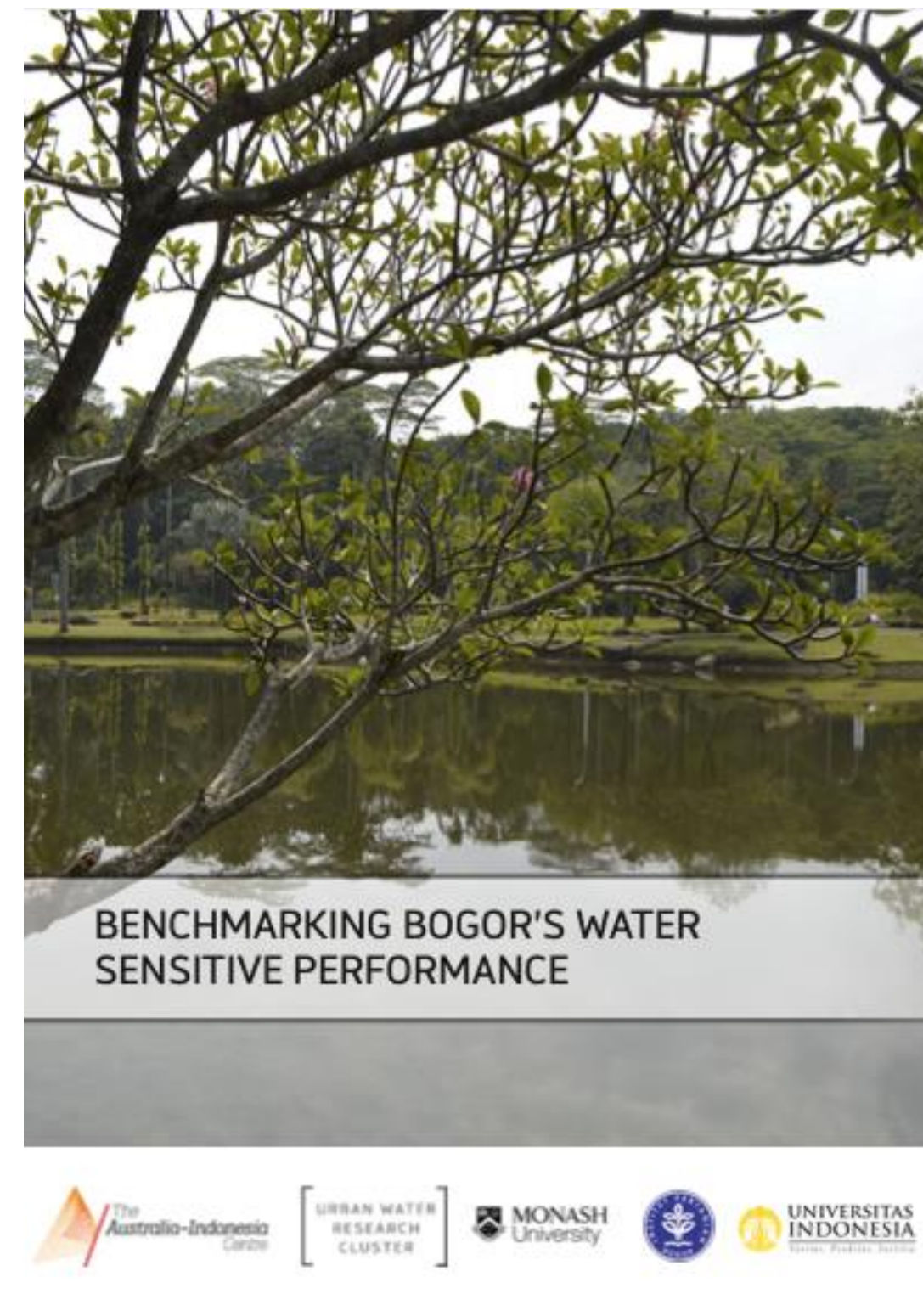
Case study examples

- 1. Gold Coast, Australia
- 2. Perth, Australia
- 3. Cape Town, South Africa



Case study examples

1. Gold Coast, Australia
2. Perth, Australia
3. Cape Town, South Africa
4. Bogor, Indonesia



“

*“Now **conversations are happening** that weren’t happening previously”*

*“...**breaking down these silos** and getting a better understanding of how we deal with water”*

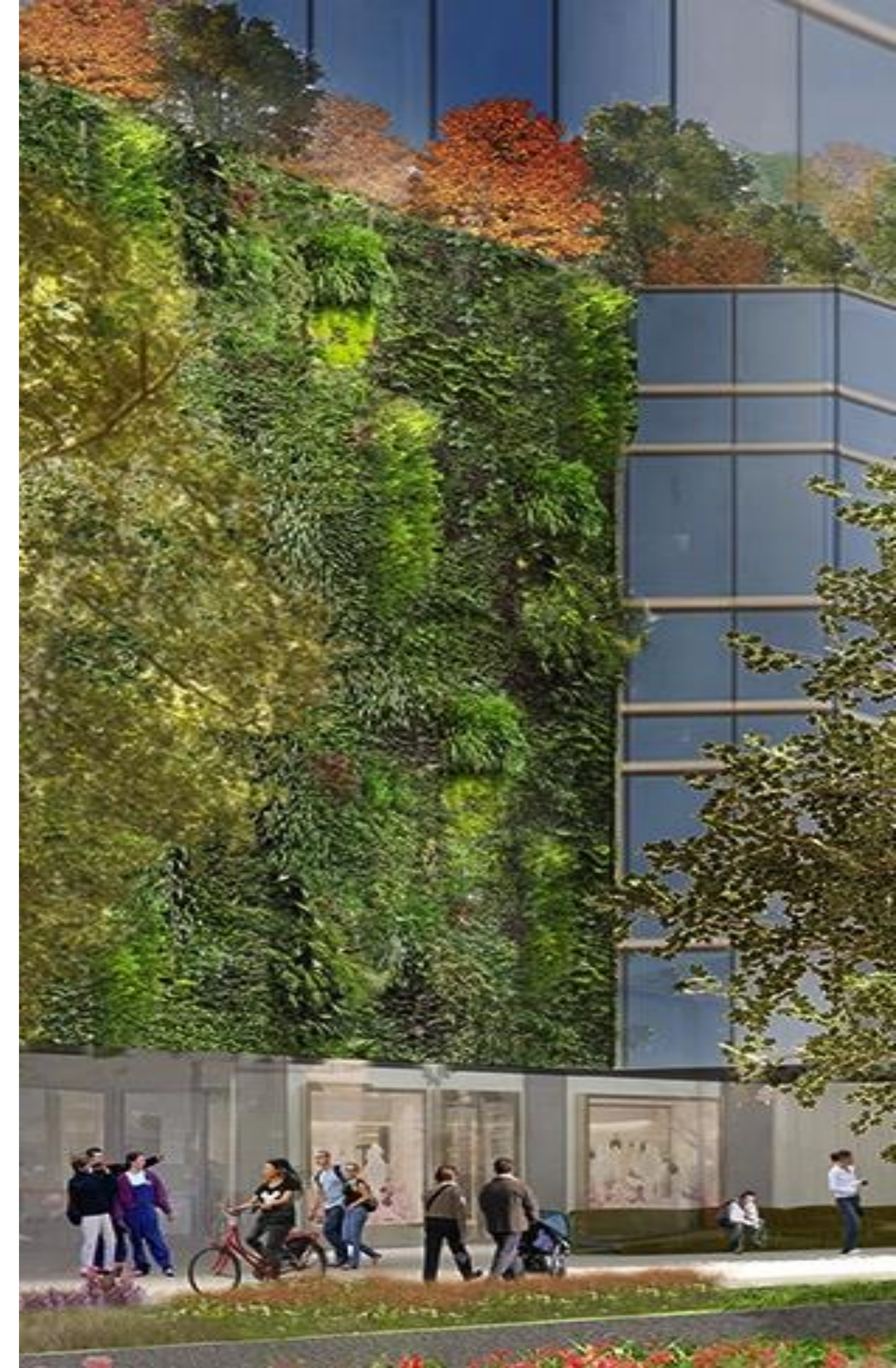
*“There’s way more **coordination** towards a common purpose, the spirit of people working together and **momentum** that’s been generated has really shifted”*

*“One of the great things we found was the **process of bringing people together**”*

”

Where to from here?

- Apply, test and contribute to global agenda
- Database of city scores to inform analysis and identification of trends
- City-to-city learning guided by a common framework
- Develop tailored engagement approach in regions including university and consulting partners
- Training modules to be delivered online in November
- Cost:
 - No cost for initial training modules
 - Benchmarking support fee per application (<10% of total fee)



Questions?

Discussion

1. Do you see the WSC Index being relevant or useful to your city, country or region?
2. How can the WSC Index add value to the work you are currently delivering?



Contact us

CRC for Water Sensitive Cities

8 Scenic Boulevard, Level 1, Building 74 Monash University

Clayton, VIC 3800, Australia



+61 3 9902 4985

For enquiries please
contact Ebony
Henderson.



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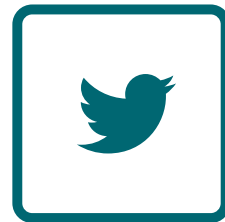
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