



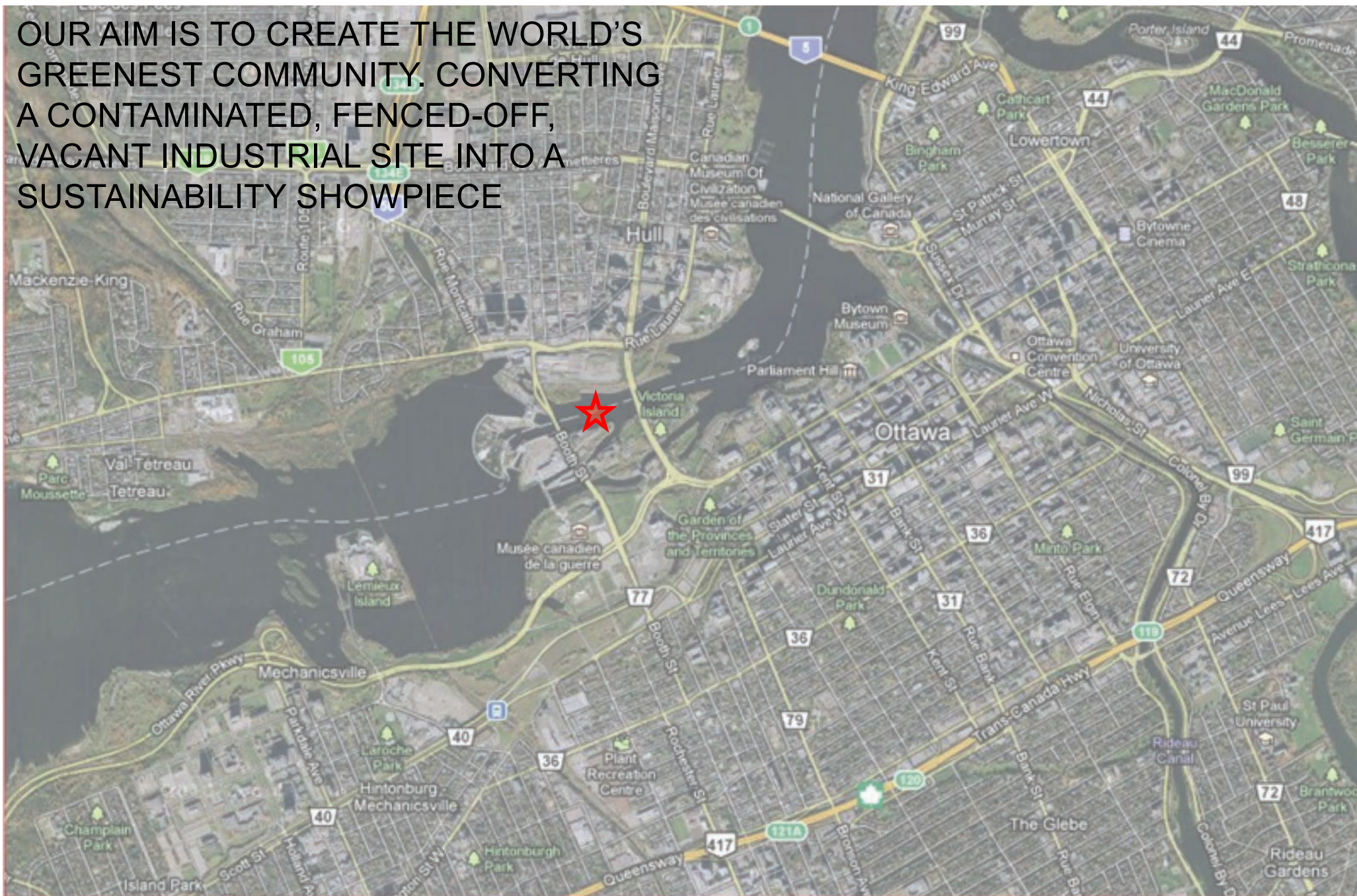
**URBAN
EQUATION**

ULI Toronto Leadership Program One Planet Living: Zibi Case Study

Alex Spiegel, Windmill Development Group
28 March 2019



OUR AIM IS TO CREATE THE WORLD'S
GREENEST COMMUNITY. CONVERTING
A CONTAMINATED, FENCED-OFF,
VACANT INDUSTRIAL SITE INTO A
SUSTAINABILITY SHOWPIECE



Windmill

| dream



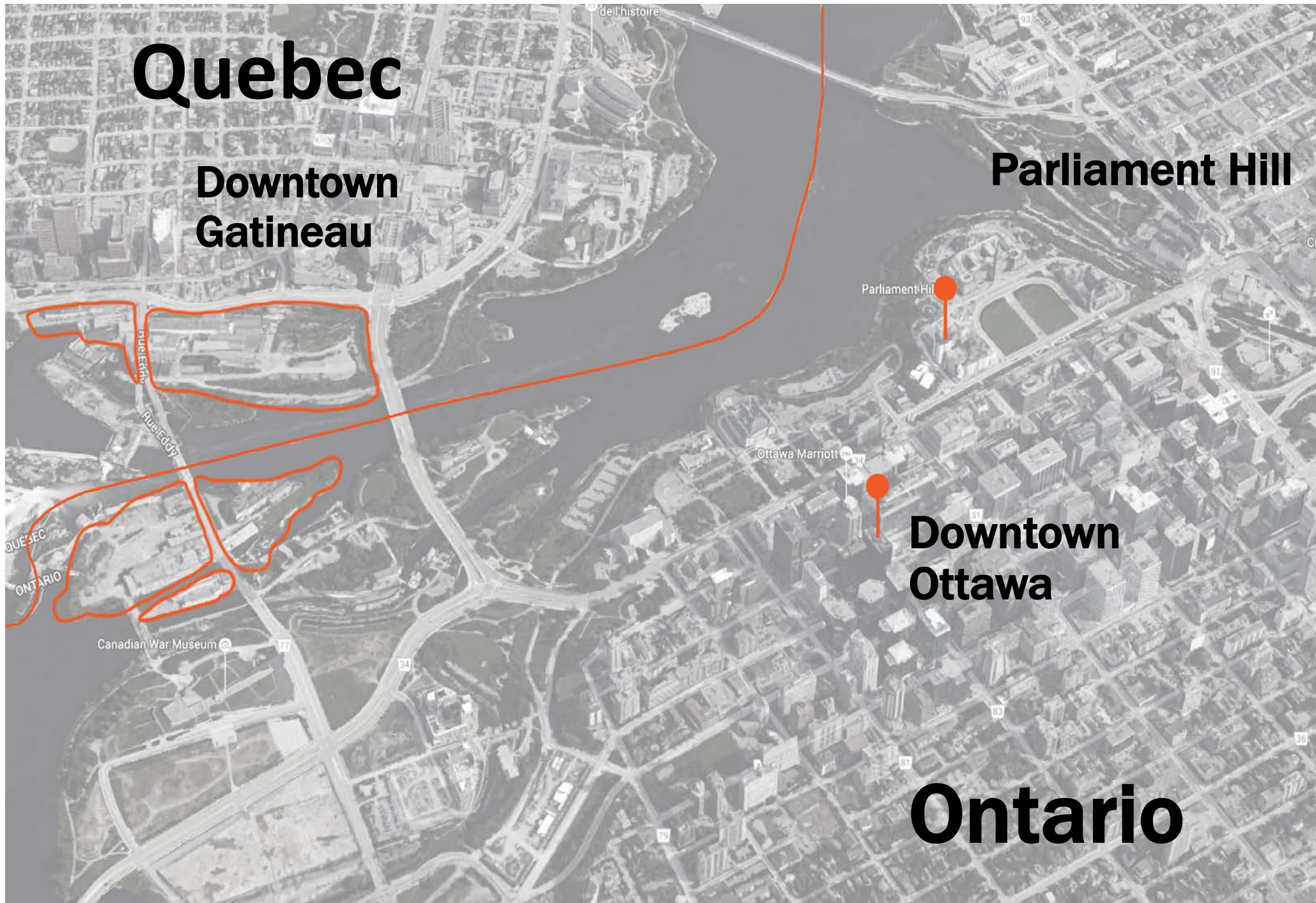
Quebec

Downtown Gatineau

Parliament Hill

Downtown Ottawa

Ontario





One Planet Living



A vision of a world in which people enjoy happy, healthy lives within their fair share of the earth's resources, leaving space for wildlife and wilderness

OPL: One Planet Living

If everyone on earth had European patterns of consumption, we would need 3 planets to support us.



If everyone had American lifestyles we would need 5 planets.

OPL Framework





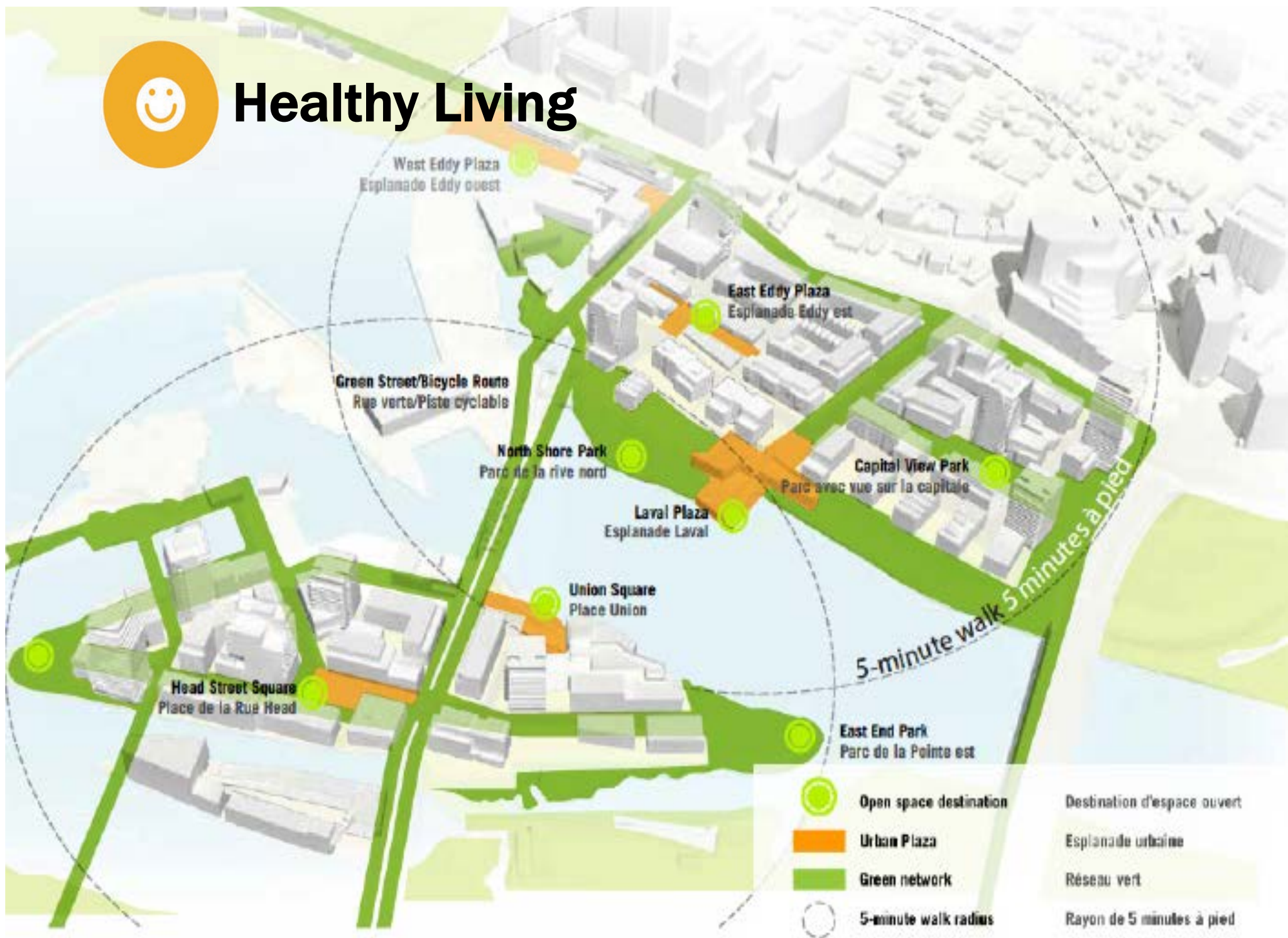
Health and Happiness

Encouraging active, sociable, meaningful lives to promote good health and well being





Healthy Living





Equity and Local Economy

Creating bioregional economies that support equity and diverse local employment and international fair trade





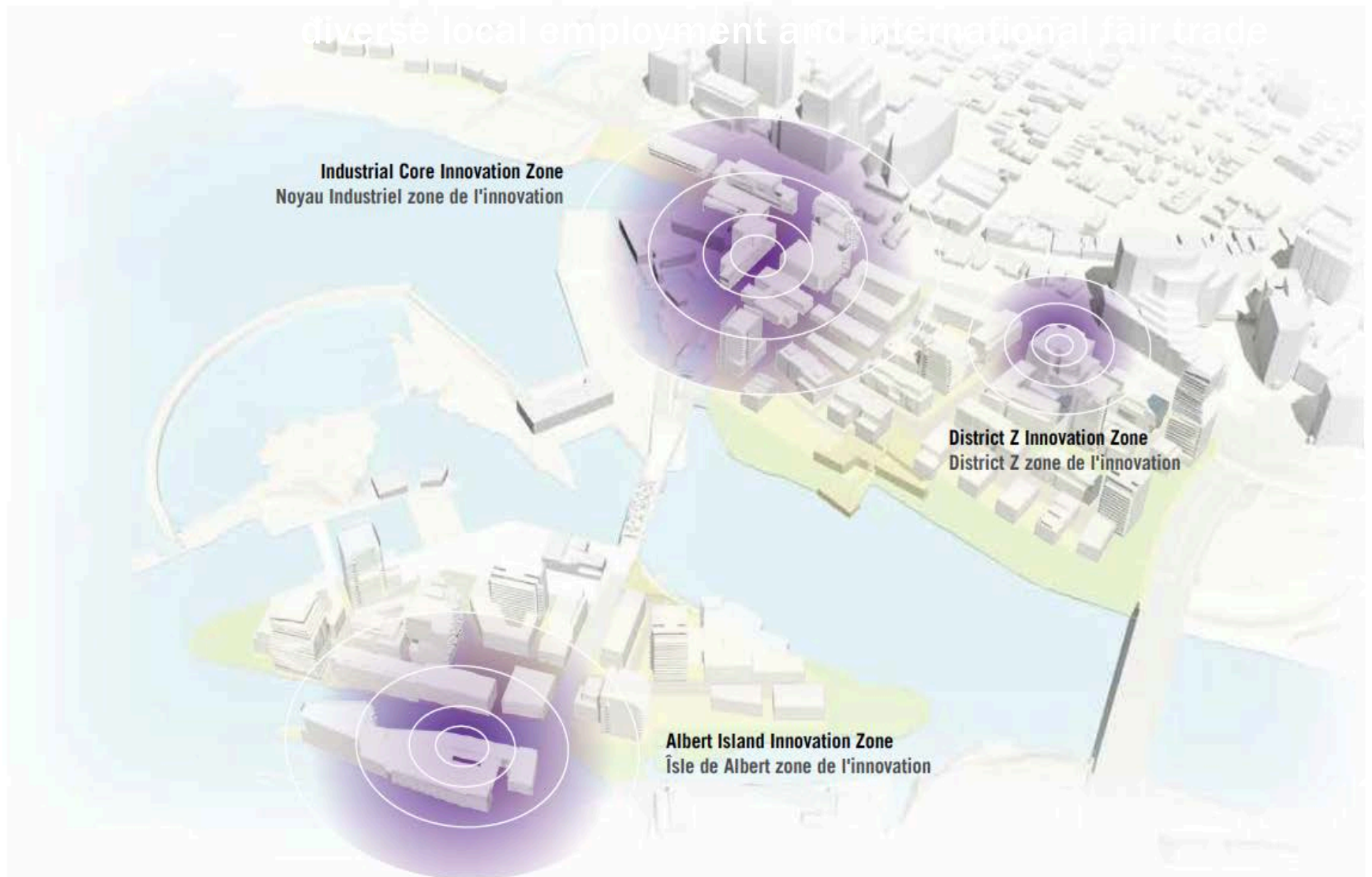
Innovation Hubs

– diverse local employment and international fair trade

Industrial Core Innovation Zone
Noyau Industriel zone de l'innovation

District Z Innovation Zone
District Z zone de l'innovation

Albert Island Innovation Zone
Île de Albert zone de l'innovation

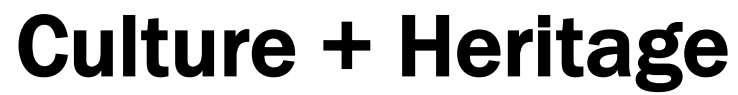




Culture and Community

Respecting and reviving local identity, wisdom and culture; encouraging the involvement of people in shaping their community and creating a new culture of sustainability

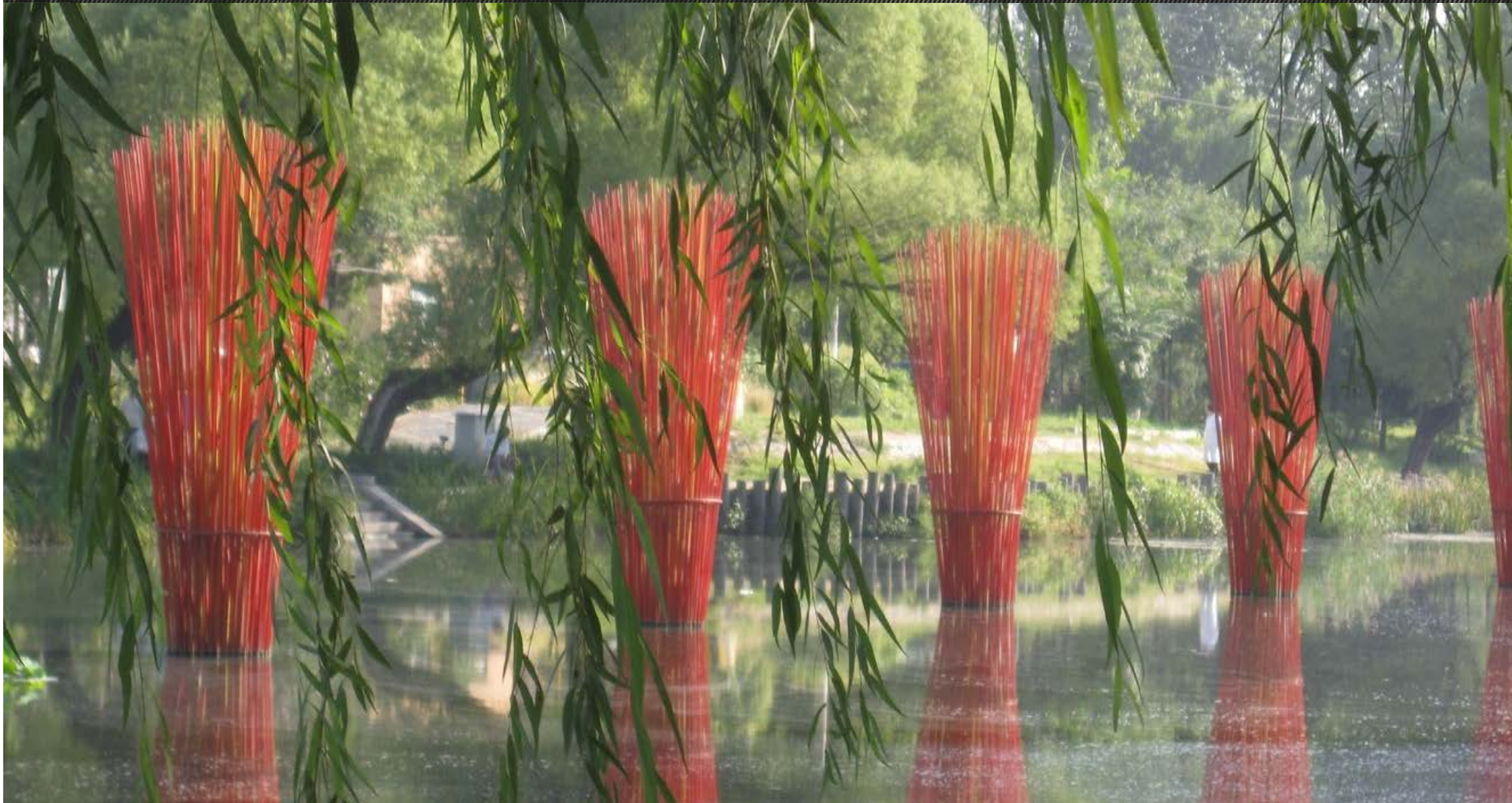






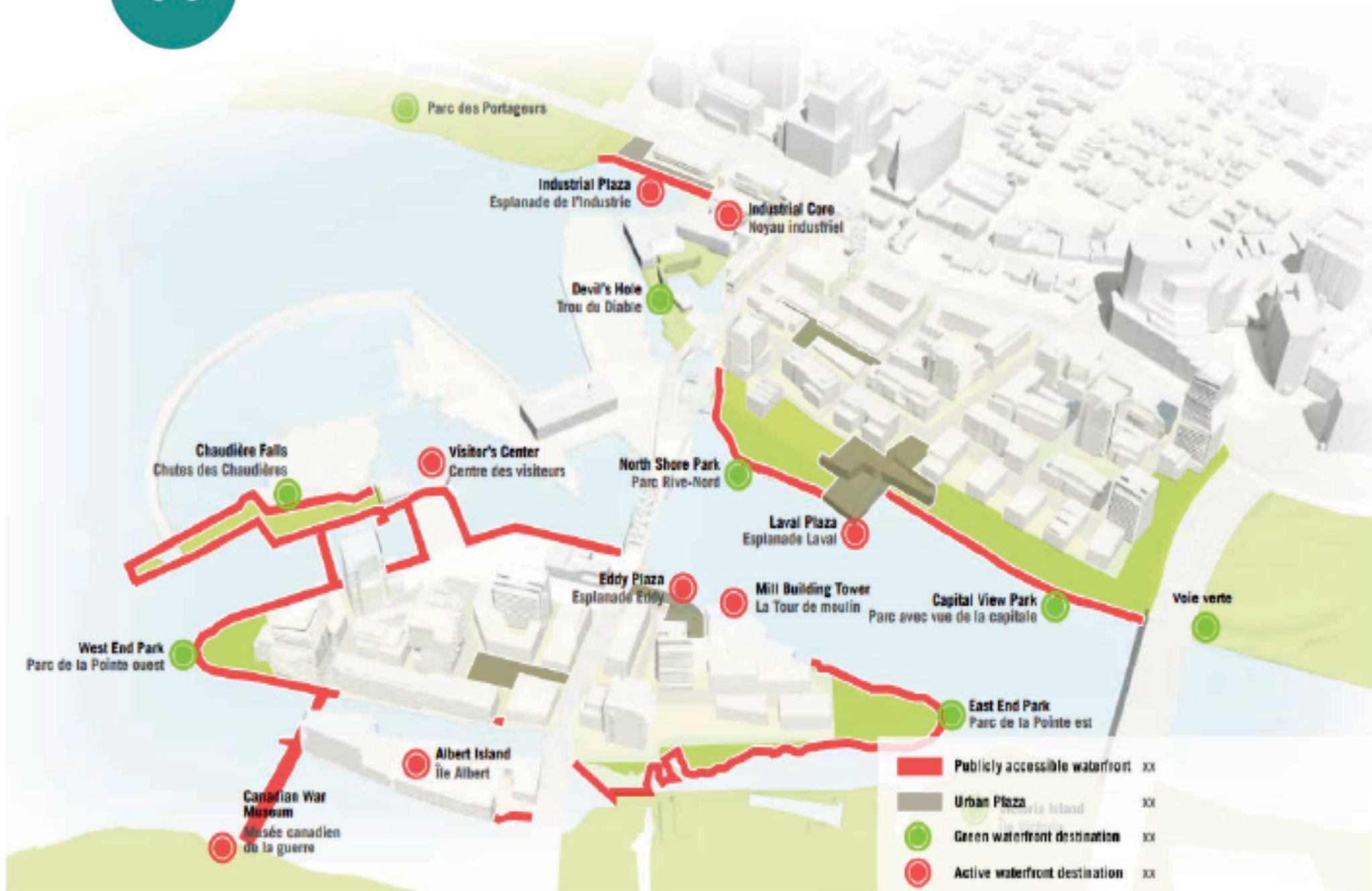
Land Use and Wildlife

Protecting and restoring biodiversity and creating new natural habitats through good land use and integration into the built environment





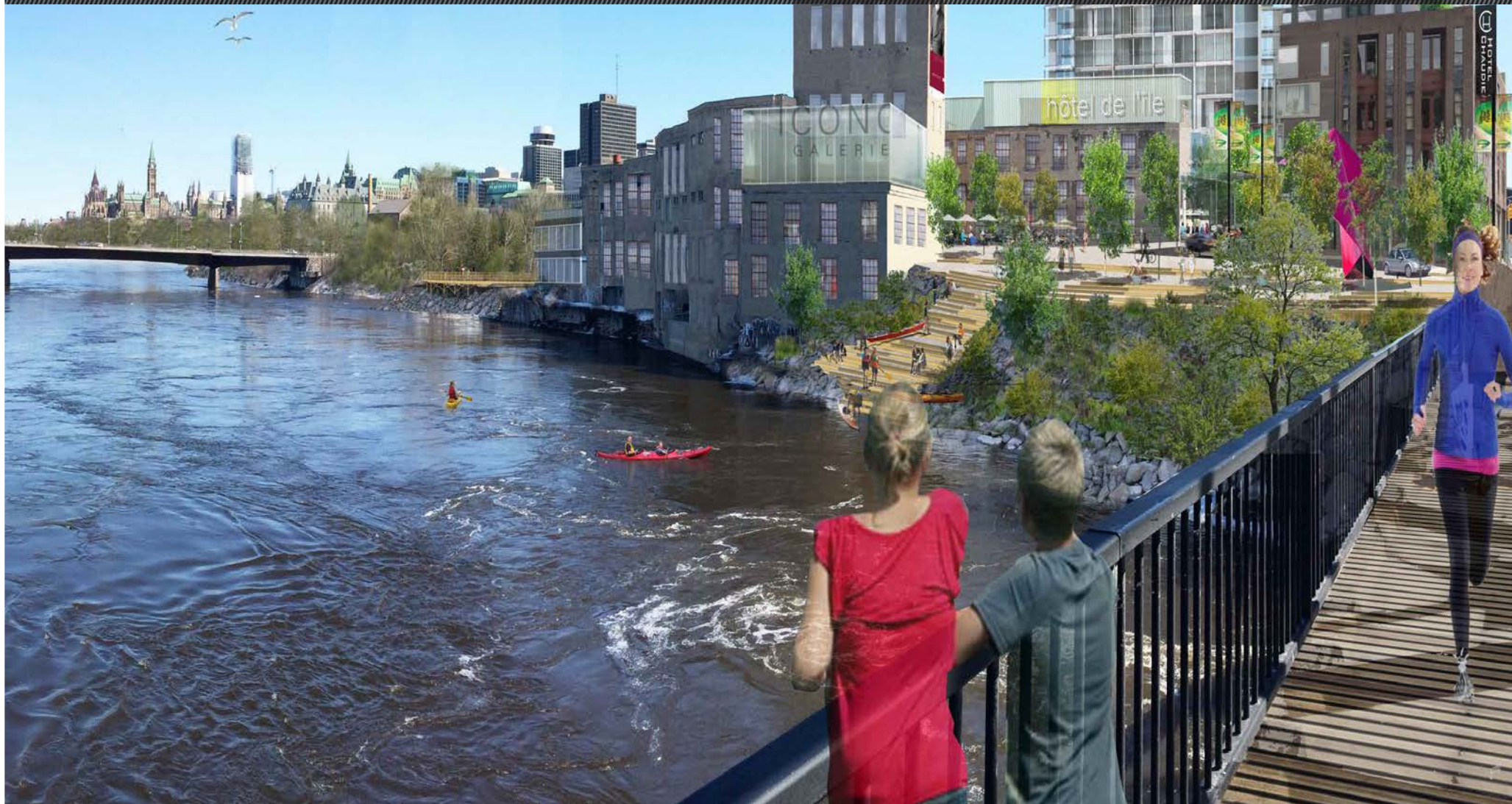
Access to Waterfront



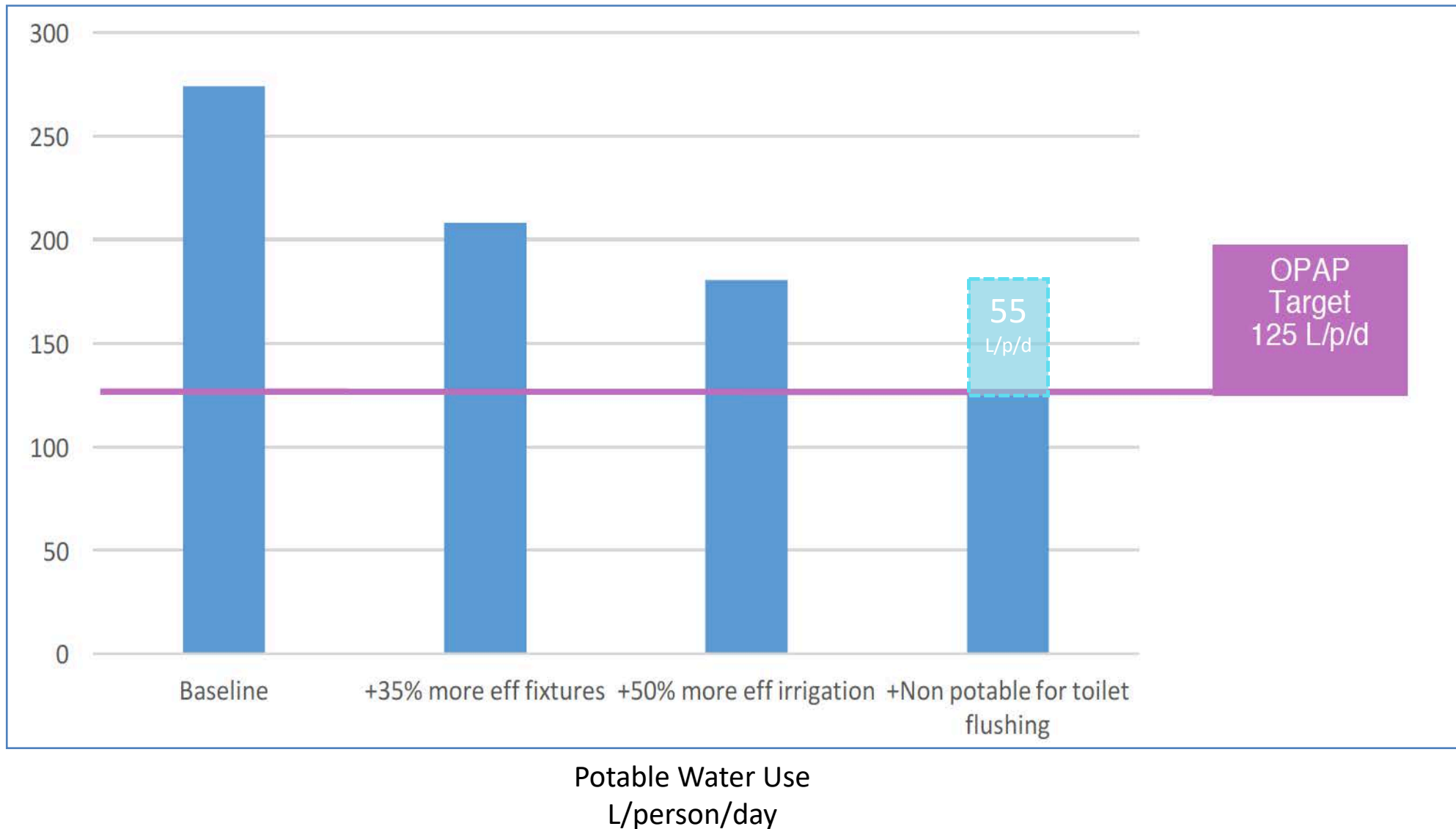


Sustainable Water

Using water efficiently in buildings, farming and manufacturing. Designing to avoid local issues such as flooding, draught and water course pollution



Water Value Proposition



Water Value Proposition

	Riverwater	Greywater	Rainwater
Goals			
Residential potable water =125L/person/day.	Yes	Yes	Contributes
Eliminate potable water use in landscaping.	Yes	Contributes	No
All new buildings will utilize non-potable water for sewage conveyance.	Yes	Yes	No

Residential cost per/sq.ft	\$2.45	\$2.73	\$2.45
Cost per residential flush litre	\$0.15	\$0.17	\$0.36



Local and Sustainable Food

Supporting sustainable and humane farming, promoting access to healthy, low impact, local, seasonal and organic diets and reducing food waste





Sustainable Materials

Using sustainable and healthy products, such as those with low embodied energy, sourced locally, made from renewable or waste resources





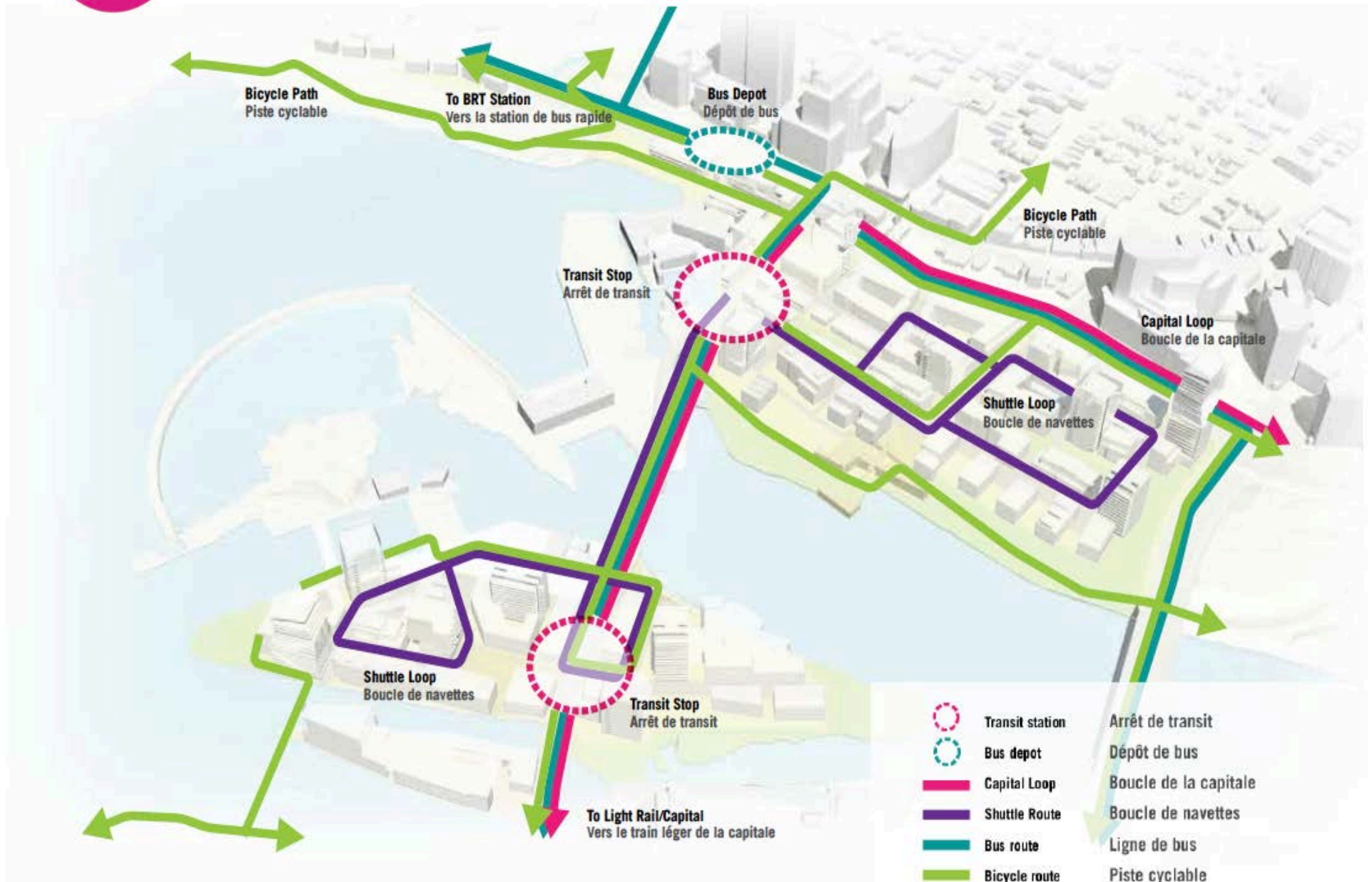
Sustainable Transport

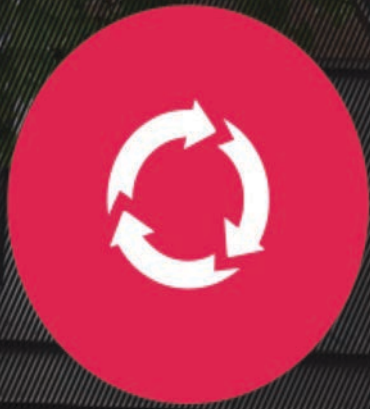
Reducing the need to travel, and encouraging low and zero carbon modes of transport to reduce emissions





Sustainable Transport





Zero Waste

Reducing waste, reusing where possible, and ultimately sending zero waste to landfill





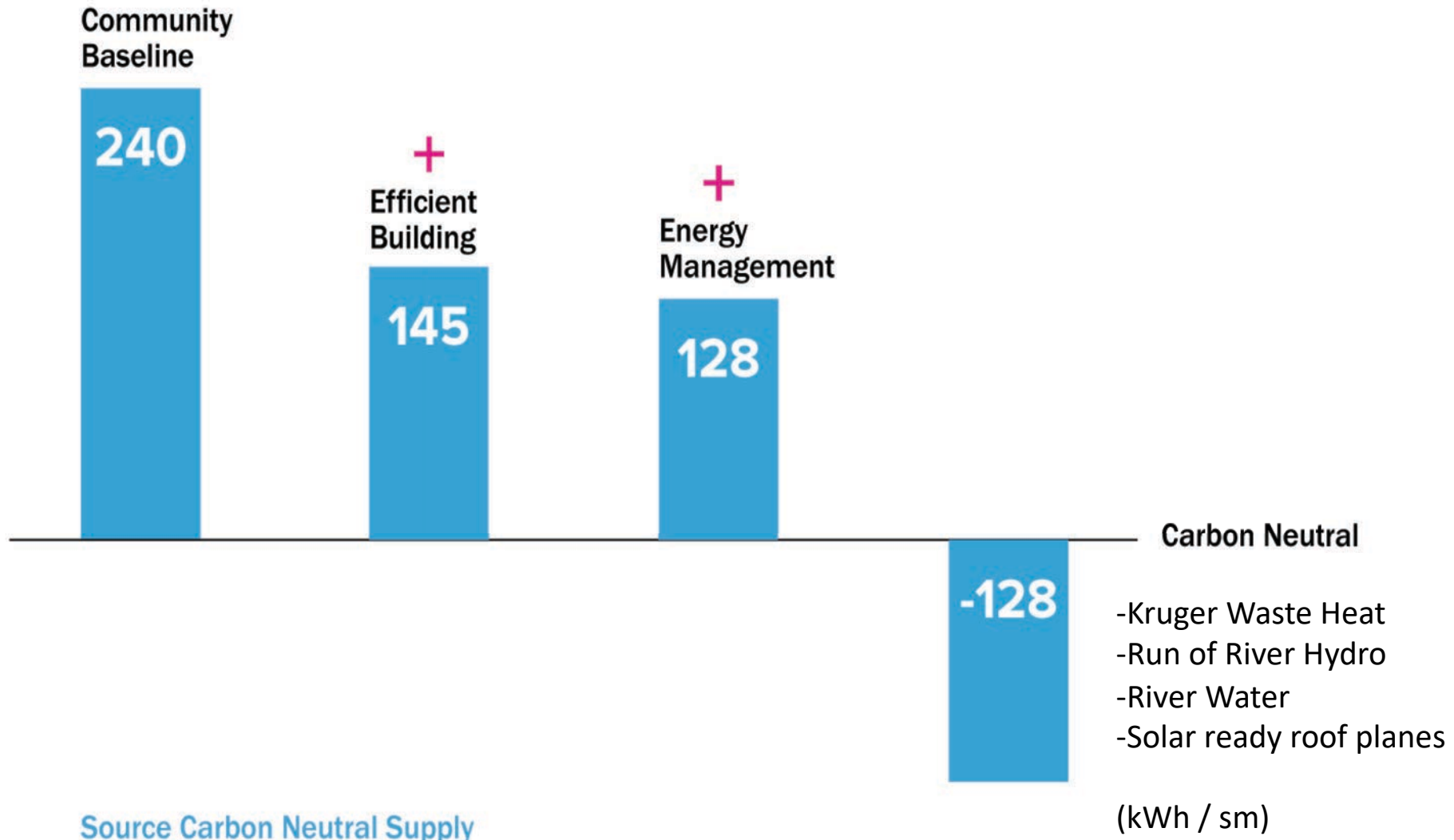
Zero Carbon

Making buildings energy efficient and delivering all energy with renewable technologies



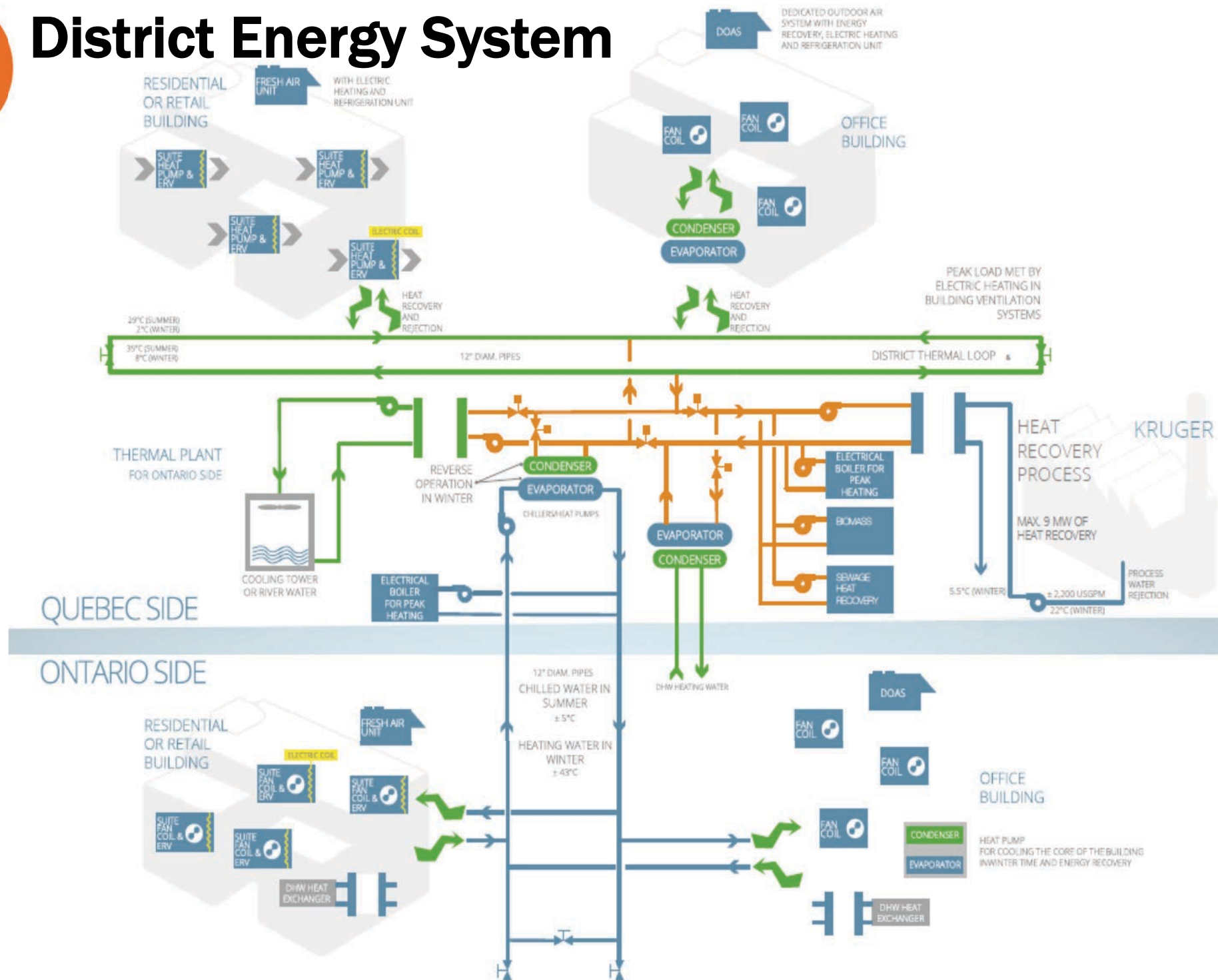
Carbon Neutral Value Proposition

Drive Energy Demand Down





District Energy System



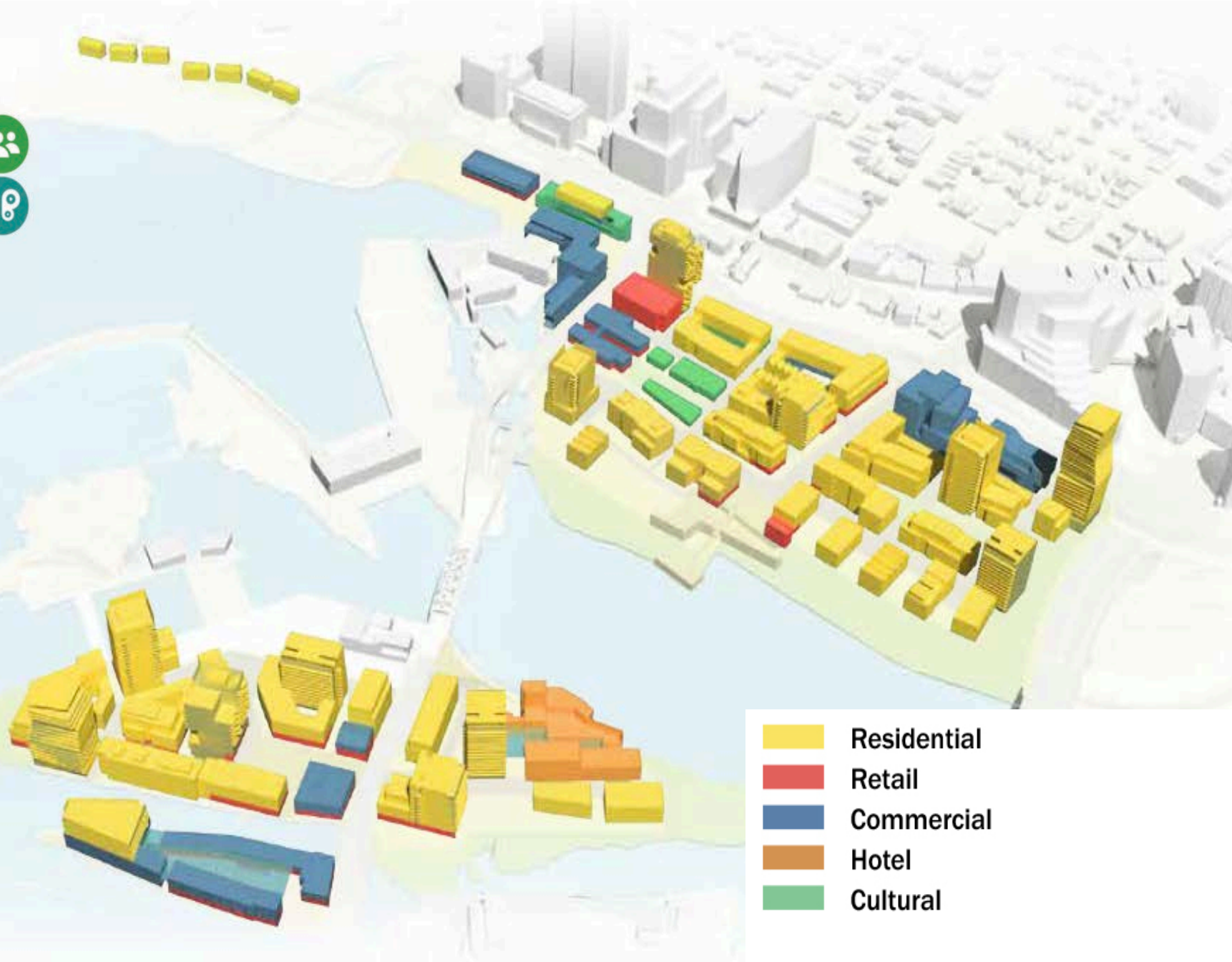
Integration



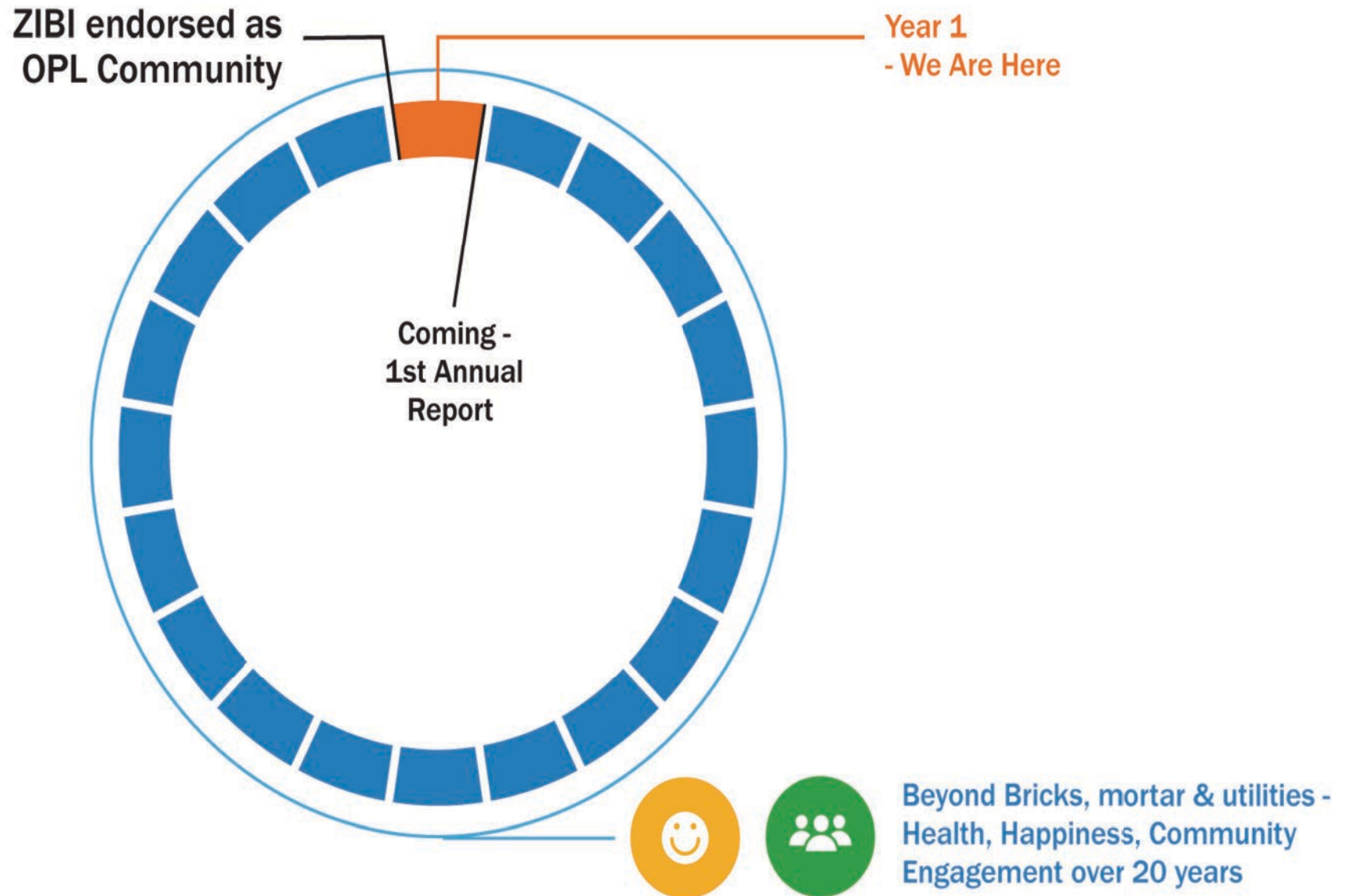
Views Street pattern



Zibi is a Complete Community



OPL: 20-Year Commitment







Windmill

GREENING OUR
URBAN ENVIRONMENTS

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