

Pathway to a regenerative Christchurch

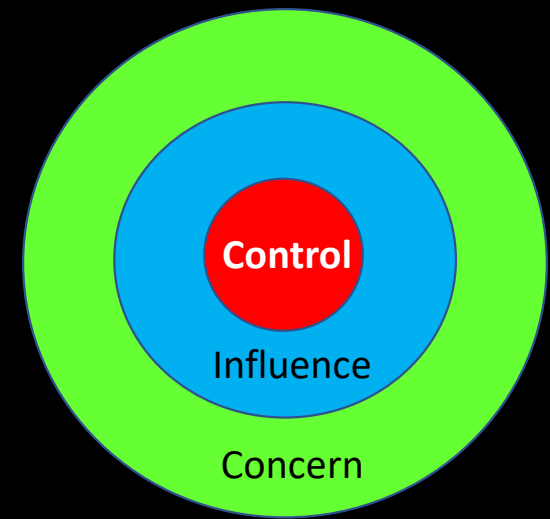


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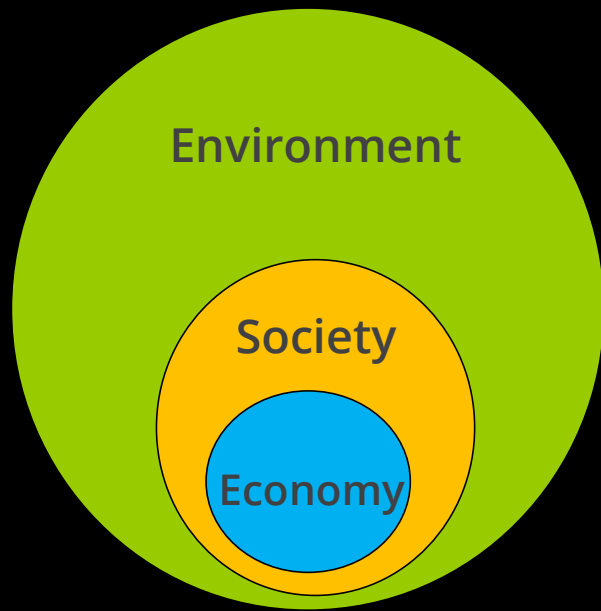
Spheres of influence





Business drivers for sustainability and climate action

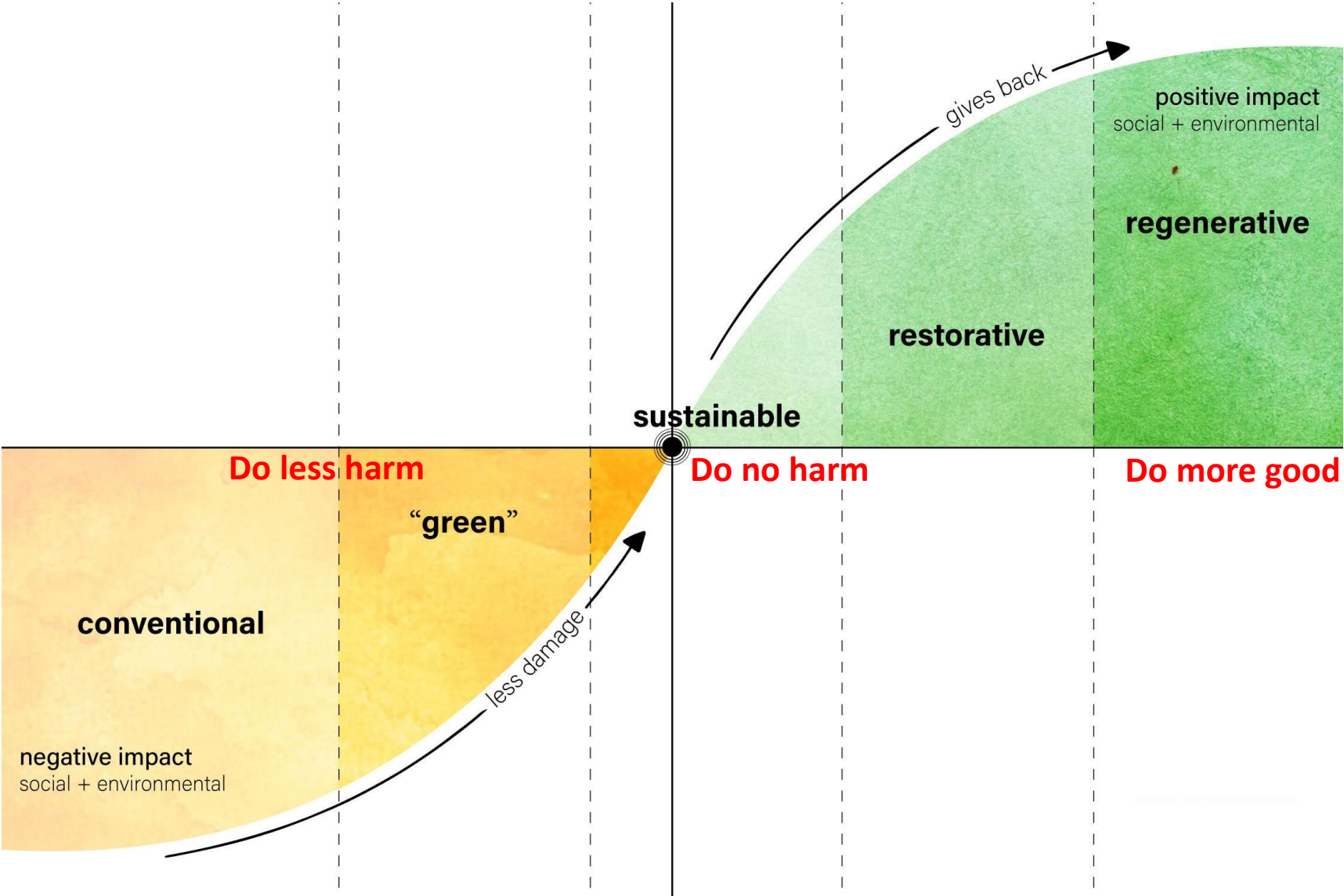
1. Compliance
2. Risk
3. Cost
4. Innovation
5. Competitive
6. Brand recognition
7. Attract and retain talent and investment
8. Stakeholder relationships
9. Long-term profitability



Strong Sustainability



Papatūānuku and Ranginui



Navigating our journey

Where are we

How did we get here

Where do we want to be

How can we get there



Navigating our journey - continual improvement policy cycle



We co-create our future



Central Christchurch
Recovery Plan

We co-create our future



Dallington Landing

Ōtākaro Avon River Regeneration Plan



The Local Government Act 2002

The purpose of local government is:

- (a) to enable democratic local decision-making and action by, and on behalf of communities; and
- (b) to promote the social, economic, environmental, and cultural well-being of communities in the present and for the future.

Community
outcomes

Loveable
city

Caring
& resilient
communities

Thriving
natural
environment

Inclusive &
prosperous
economy

Organisations



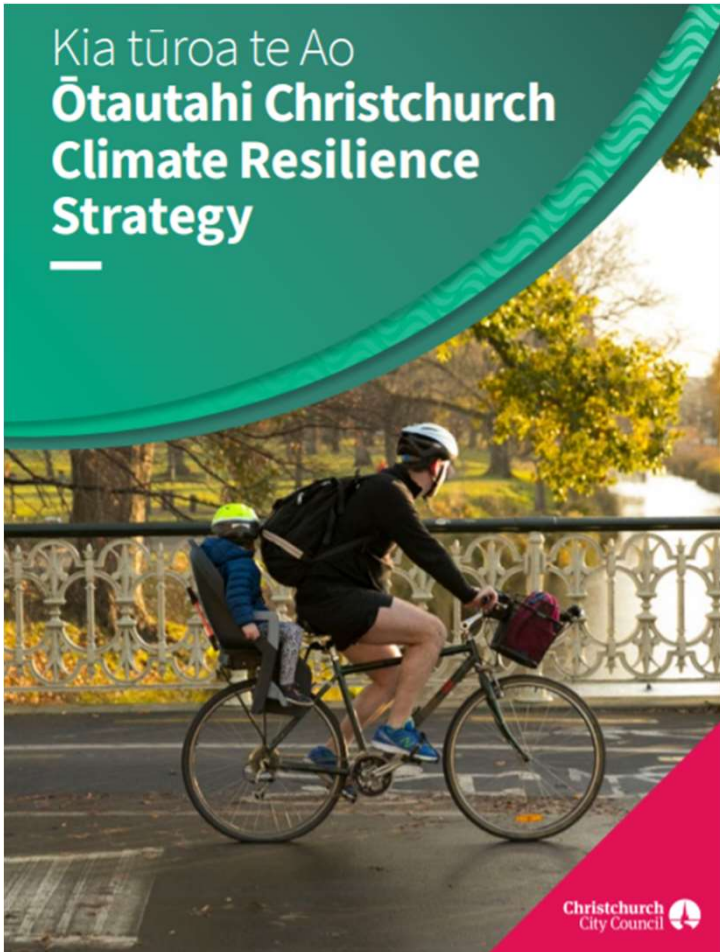
Individuals



Embedding sustainability and climate resilience in corporate processes



Declared a climate and ecological emergency in 2019



www.ccc.govt.nz/environment/climate-change

Christchurch City Council organisational emissions target:

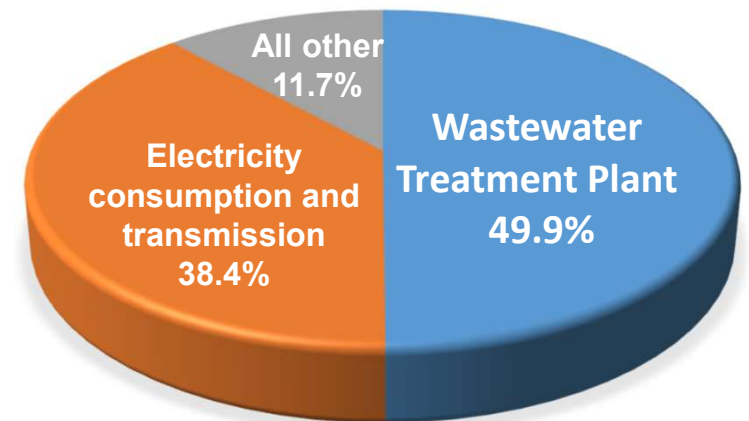
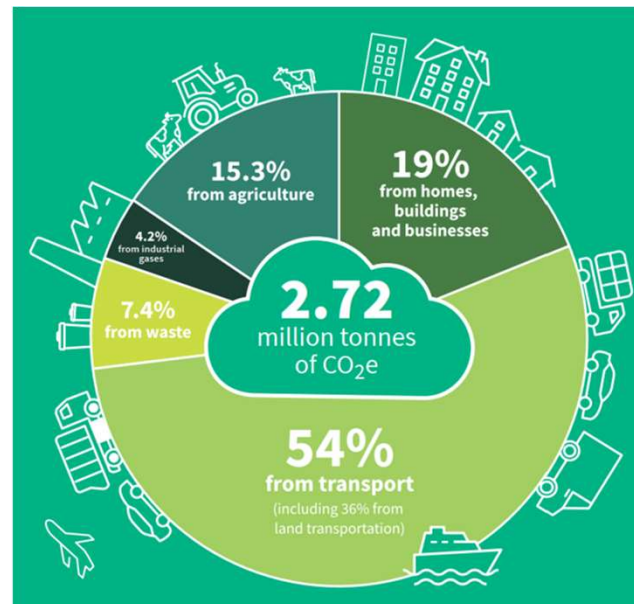
- Net carbon neutral by 2030 for our operations

Christchurch District Target:

- Net zero greenhouse gas emissions by 2045 and 50% reduction by 2030

City emissions 2.7 million tonnes CO₂-e

Council emissions 21,862 tonnes CO₂-e



Resource Efficiency and Greenhouse Gas Emission Policy

Covers:

- All parts of Council
- All operational activities and assets
- Energy, water, waste and greenhouse gases

Commits to:

1. Continual improvement
2. Measure to manage approaches
3. Legal compliance
4. Cost-effective action and procurement
5. Staff education and capacity building
6. Review of policies and practices
7. Reporting to staff, council and our community

Resource Efficiency and Greenhouse Gas Emission Policy

We are committed to being resource efficient and reducing greenhouse gas (GHG) emissions from our operations to demonstrate leadership and deliver the related environmental, health and economic benefits from this commitment. We have set a target to be net carbon neutral by 2030 for our activities.

We will:

1. Continually and systematically improve our performance in energy use, management of GHG emissions, solid waste generation and water use through the implementation, monitoring and review of policies, programmes and services.
2. Ensure the availability of resources and information regarding energy use, GHG emissions, solid waste generation and water use through data platforms with the aim to achieve objectives and targets.
3. Accept responsibility for complying with all applicable legal and other requirements related to energy use and efficiency.
4. Implement, where appropriate, practical and cost effective procurement of energy efficient, low GHG emission, low solid waste generation and water efficient products and services, including equipment and plant and the design of new buildings and building renovation projects.
5. Regularly review our own performance in energy use, management of GHG emissions, solid waste generation and water use, and publicly report on our performance yearly.
6. Promote an awareness among staff with regard to the requirements of this Resource Efficiency and GHG Emission Policy.

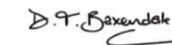
Definitions for the purpose of this policy:

1. Resource efficient refers to using energy efficiently, reducing solid waste being sent to landfill or cleanfill and using water efficiently.
2. Greenhouse gas emissions refers to emissions to air including carbon dioxide, methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF6).
3. Our operations refers to all Council assets, facilities and services delivered by the Council.

The purpose of this policy is to guide staff when making decisions that have an impact on resource use or GHG emission generation, as well as state Council's commitment to be resource efficient and to reduce GHG emissions from its operations.

The objective of this policy is for Council to become measurably more resource efficient and reduce its GHG emissions.

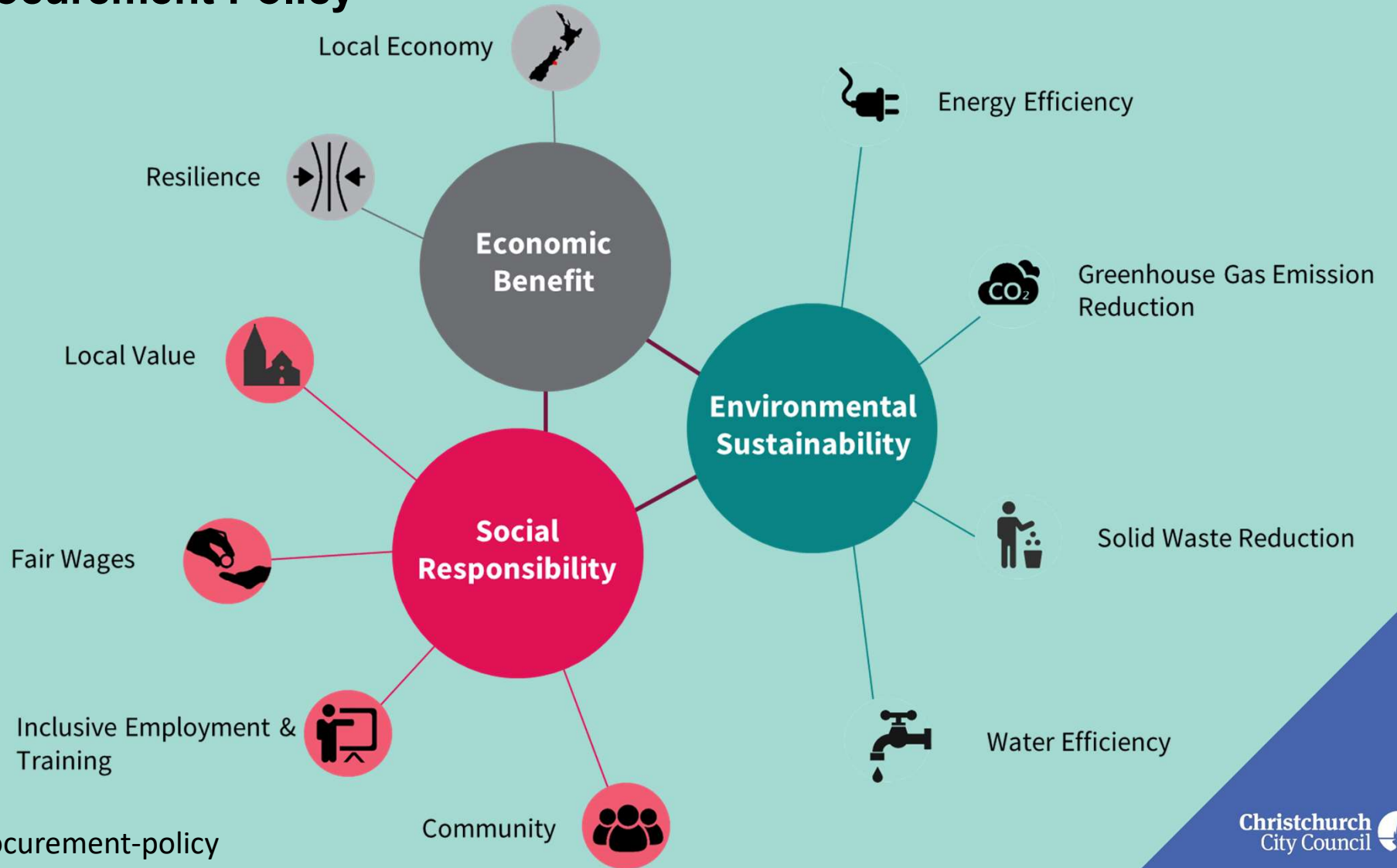
This policy is active from 1 April 2020 to 31 March 2022. It will be reviewed after two years.



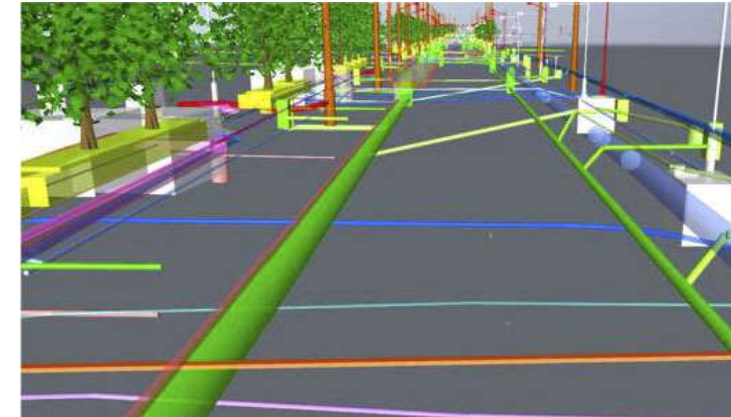
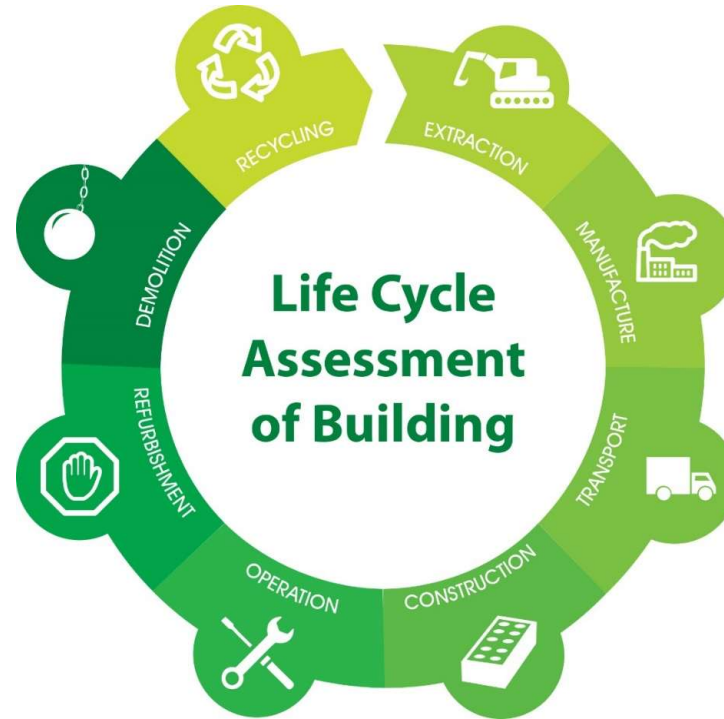
Dawn Baxendale
Christchurch City Council Chief Executive

1 April 2020

Council Procurement Policy



Tools to help us measure and manage whole of life impacts



IS Materials Calculator

www.isca.org.au

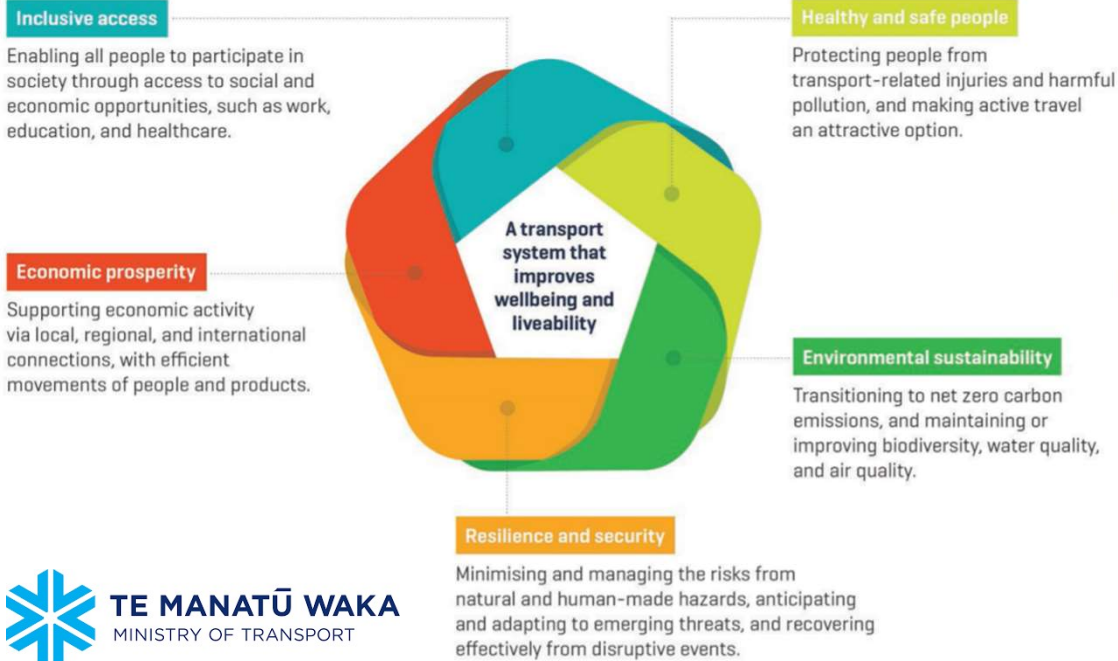
LCA Quick Tool
CO₂nstruct Tool

www.branz.co.nz/buildingLCA

Waka Kotahi (Road PEET) and 3W PEET
Project Emissions Estimation Tool

www.nzta.govt.nz/climate-change-mitigation

Value-based design - mobility

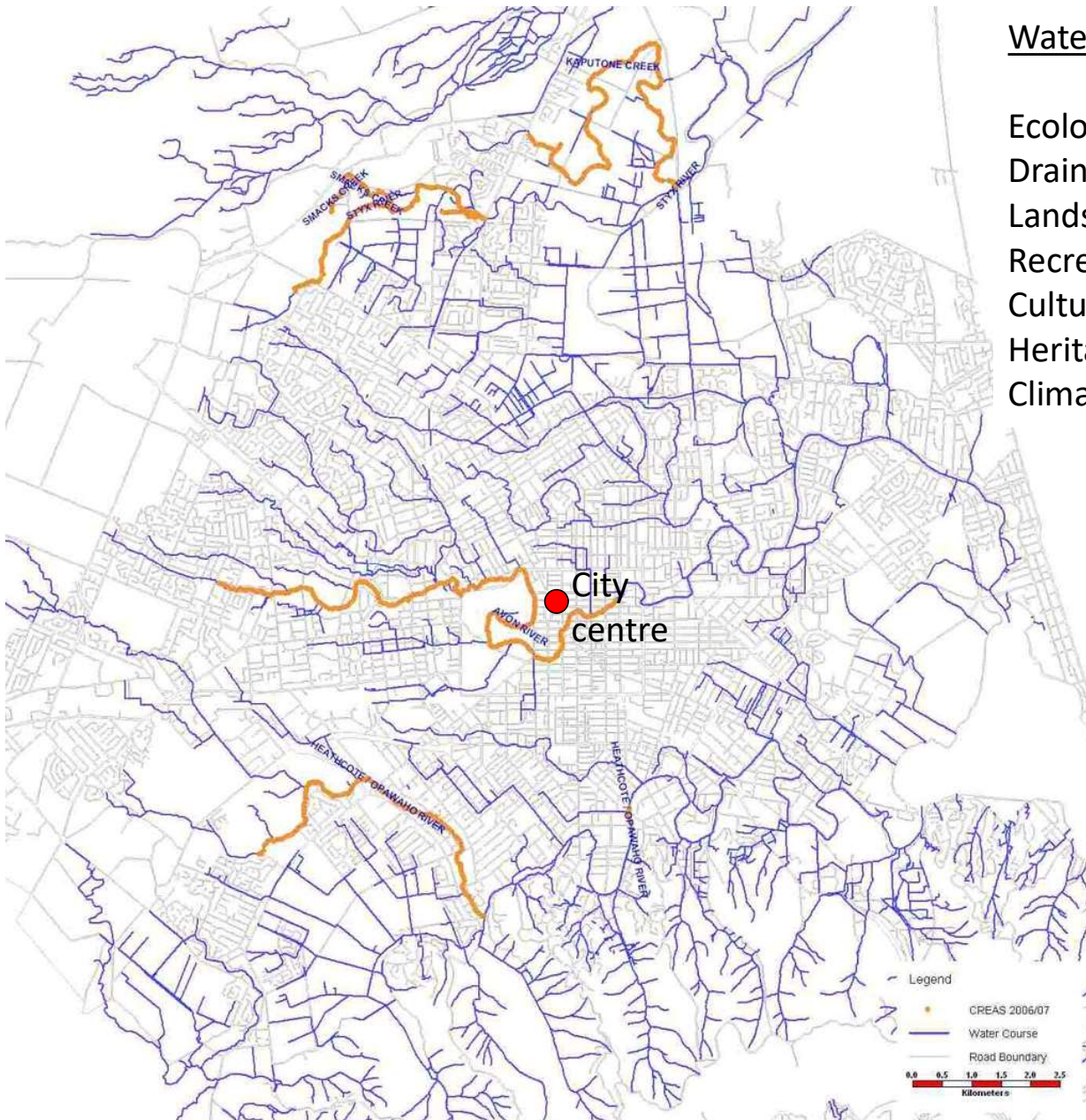


MOT - transport-outcomes-framework



Source: Lucy Saunders

www.healthystreets.com



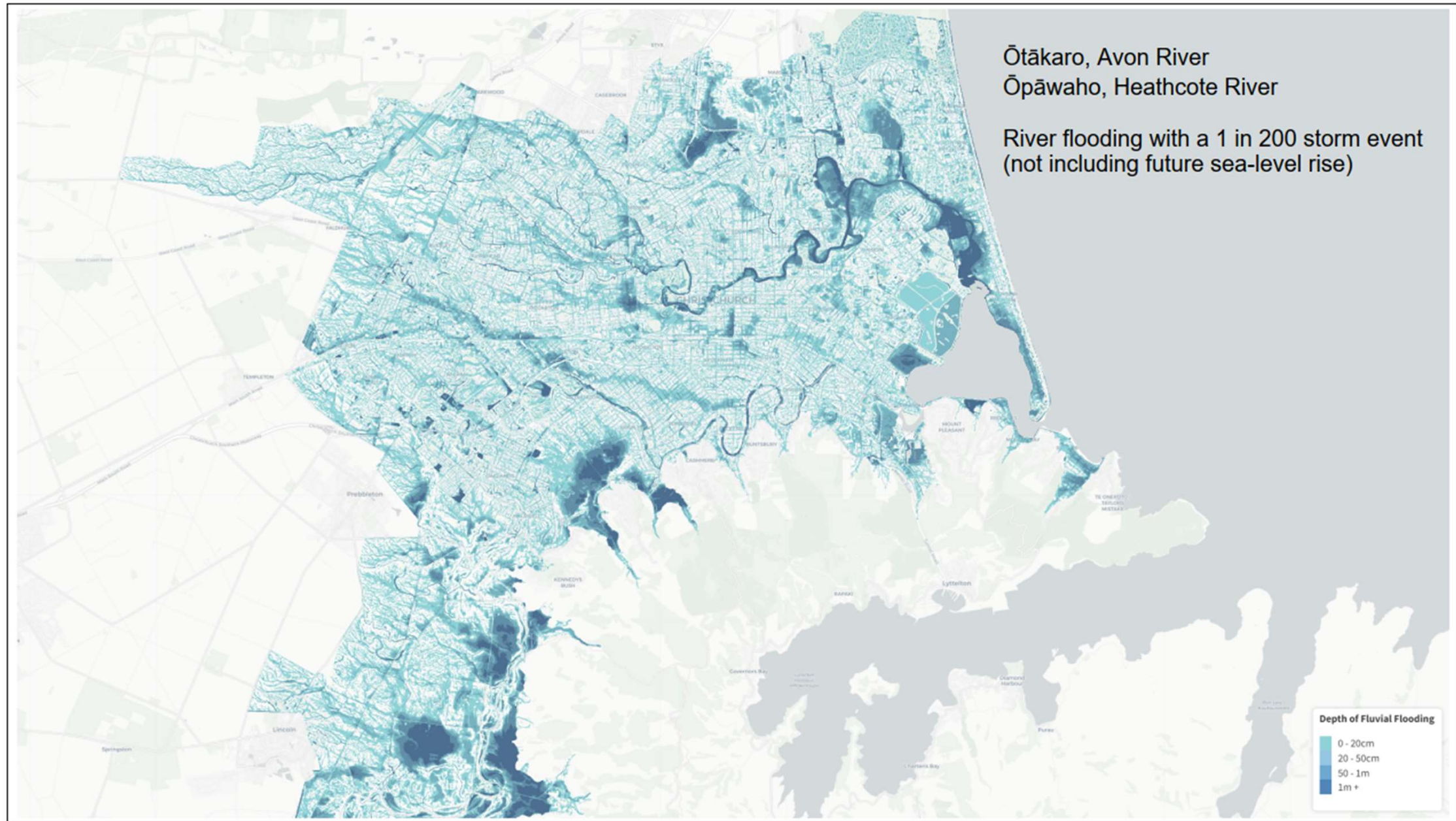
Waterway values

- Ecology
- Drainage
- Landscape
- Recreation
- Culture
- Heritage
- Climate change



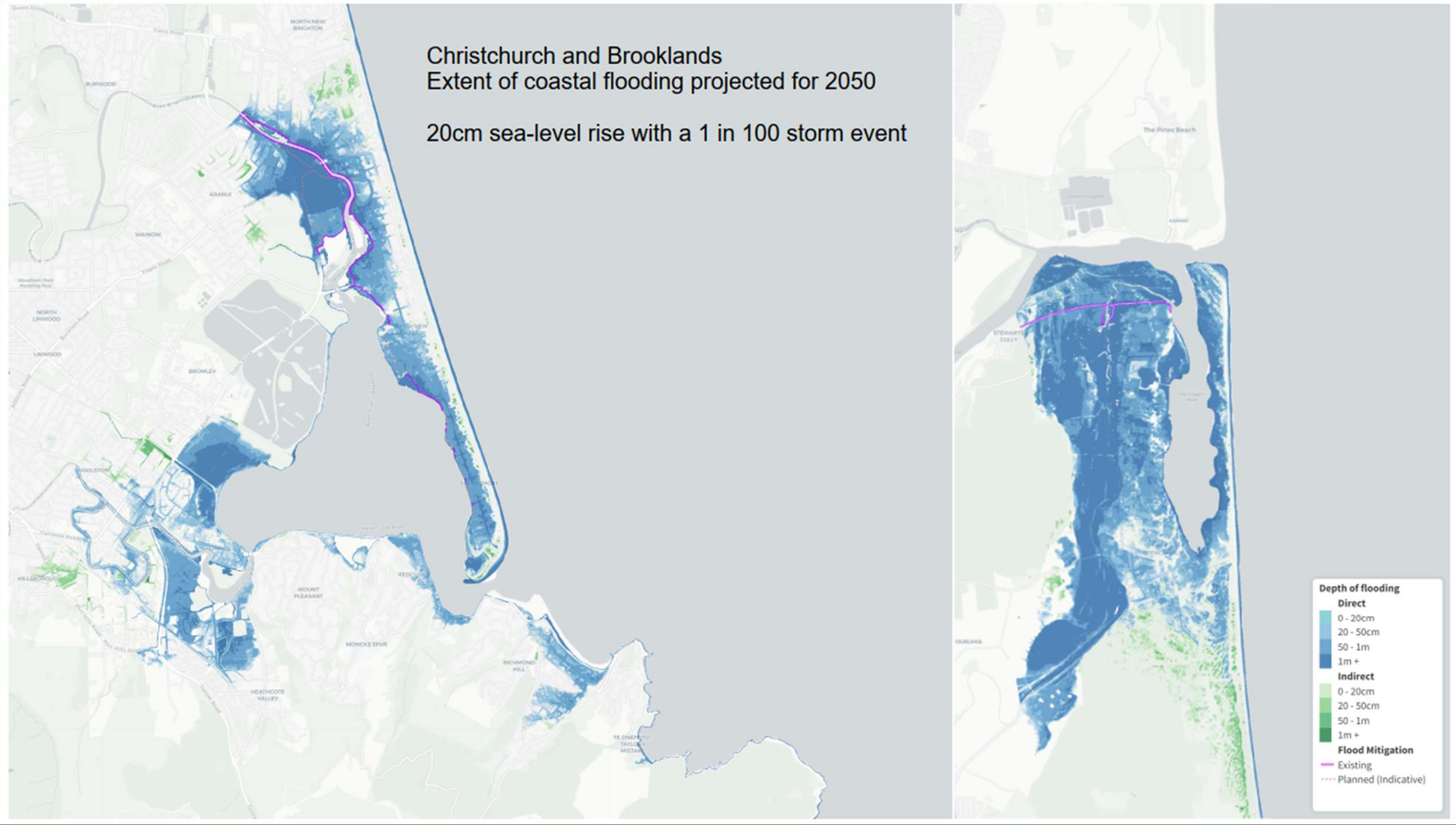
Ōtākaro, Avon River
Ōpāwaho, Heathcote River

River flooding with a 1 in 200 storm event
(not including future sea-level rise)



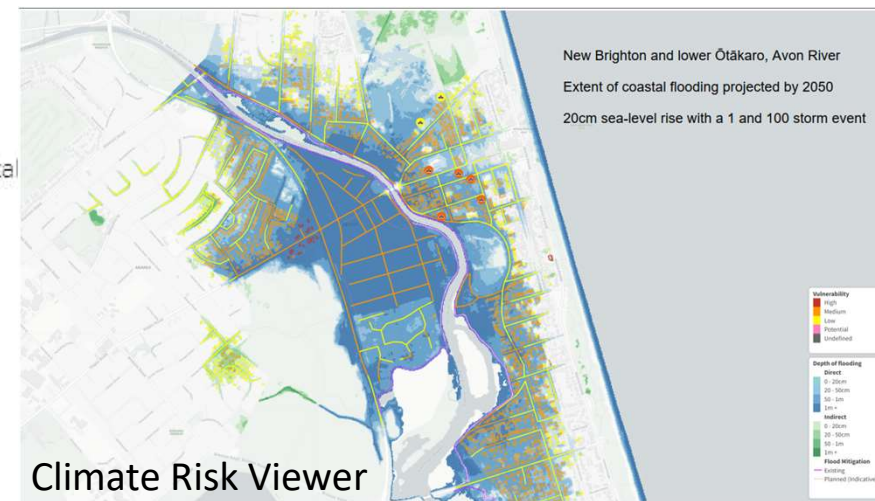
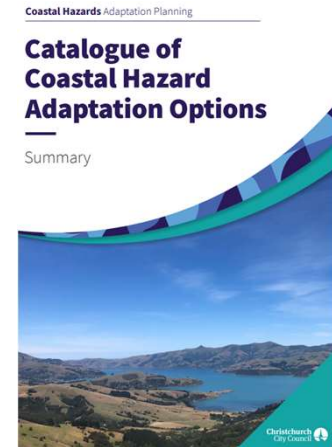
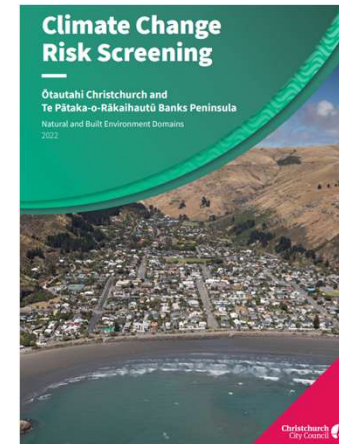
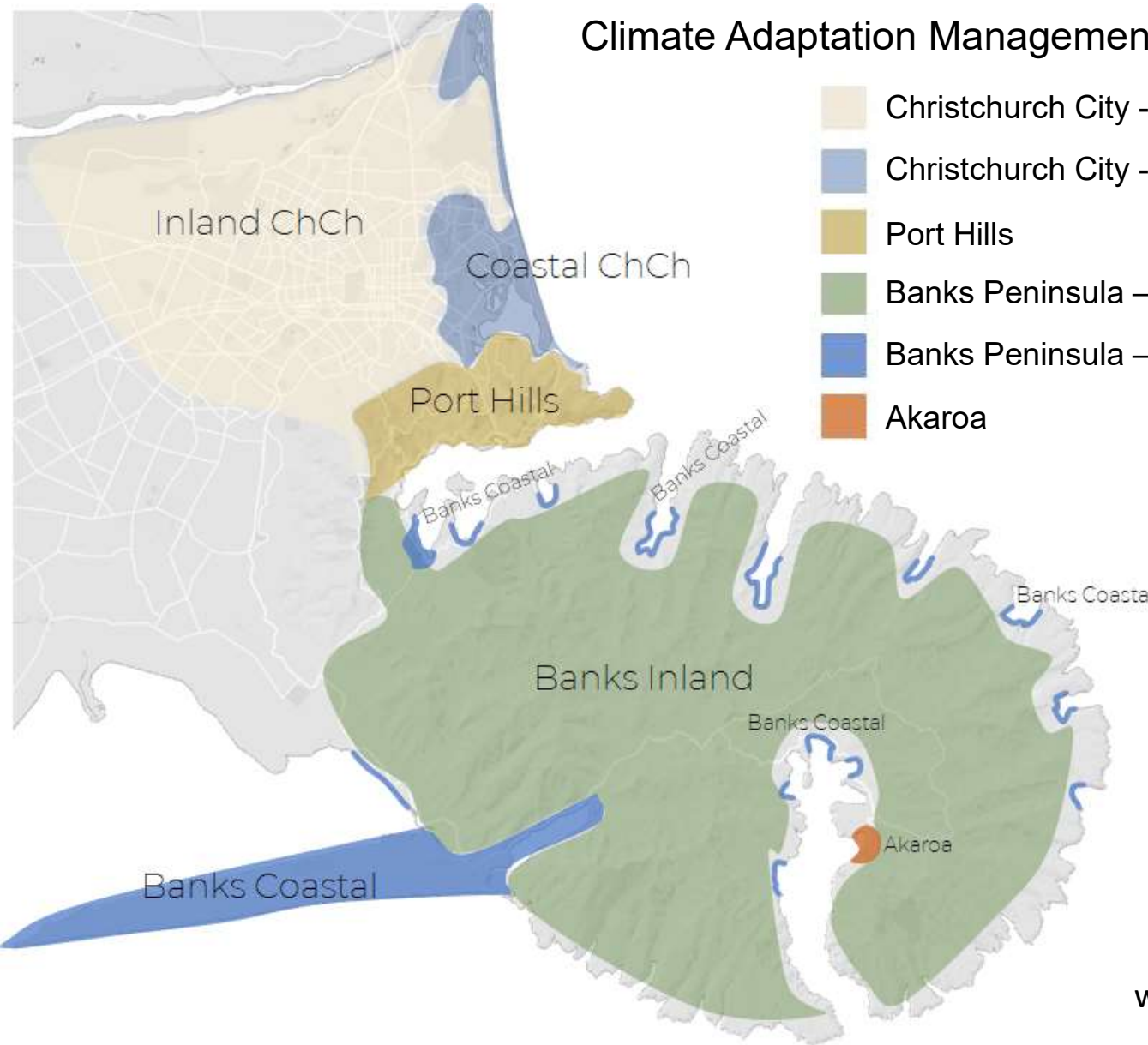
Christchurch and Brooklands Extent of coastal flooding projected for 2050

20cm sea-level rise with a 1 in 100 storm event

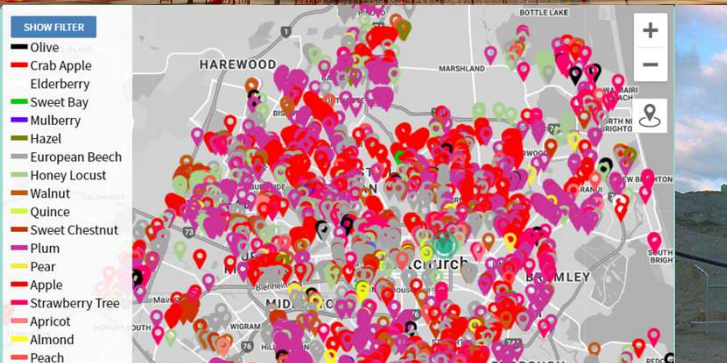


Climate Adaptation Management Areas

- Christchurch City - inland
- Christchurch City - coastal
- Port Hills
- Banks Peninsula – inland
- Banks Peninsula – coastal
- Akaroa



www.ccc.govt.nz/how-climate-change-affects-us





In a Future-Fit Society...	Break-Even Goals that every business must strive to reach	SDG alignment
Energy is renewable and available to all	Energy is from renewable sources	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Water use is environmentally responsible and socially equitable	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Water is responsibly sourced and available to all	Natural resources are managed to respect the welfare of ecosystems, people and animals	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Operational emissions do not harm people or the environment	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
The environment is free from pollution	Operations emit no greenhouse gases	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Products emit no greenhouse gases	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Products do not harm people or the environment	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Waste does not exist	Operational waste is eliminated	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Products can be repurposed	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Our physical presence protects the health of ecosystems and communities	Operations do not encroach on ecosystems or communities	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
People have the capacity and opportunity to lead fulfilling lives	Community health is safeguarded	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Employee health is safeguarded	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Employees are paid at least a living wage	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Employees are subject to fair employment terms	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Employees are not subject to discrimination	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Employee concerns are actively solicited, impartially judged and transparently addressed	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Product communications are honest, ethical, and promote responsible use	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Product concerns are actively solicited, impartially judged and transparently addressed	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Social norms, global governance and economic growth drive the pursuit of future-fitness	Procurement safeguards the pursuit of future-fitness	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Financial assets safeguard the pursuit of future-fitness	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Lobbying and advocacy safeguard the pursuit of future-fitness	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	The right tax is paid in the right place at the right time	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Business is conducted ethically	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

In a Future-Fit Society...	Positive Pursuits that any business may undertake	SDG alignment
Energy is renewable and available to all	Others depend less on nonrenewable energy	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	More people have access to energy	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Water is responsibly sourced and available to all	Others contribute less to water stress	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	More people have access to clean water	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Natural resources are managed to safeguard communities, animals and ecosystems	Others depend less on inadequately managed natural resources	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Others generate fewer greenhouse gas emissions	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
The environment is free from pollution	Greenhouse gases are removed from the atmosphere	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Others generate fewer harmful emissions	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Waste does not exist	Harmful emissions are removed from the environment	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Others generate less waste	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Our physical presence protects the health of ecosystems and communities	Waste is reclaimed and repurposed	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Others cause less ecosystem degradation	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
People have the capacity and opportunity to lead fulfilling lives	Ecosystems are restored	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Others cause less damage to areas of high social or cultural value	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Social norms, global governance and economic growth drive the pursuit of future-fitness	Areas of high social or cultural value are restored	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	More people are healthy and safe from harm	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Social norms, global governance and economic growth drive the pursuit of future-fitness	People's capabilities are strengthened	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	More people have access to economic opportunity	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Social norms, global governance and economic growth drive the pursuit of future-fitness	Individual freedoms are upheld for more people	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Social cohesion is strengthened	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Social norms, global governance and economic growth drive the pursuit of future-fitness	Infrastructure is strengthened in pursuit of future-fitness	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Governance is strengthened in pursuit of future-fitness	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Social norms, global governance and economic growth drive the pursuit of future-fitness	Market mechanisms are strengthened in pursuit of future-fitness	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
	Social norms increasingly support the pursuit of future-fitness	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

We need to think and act long-term to leave a positive legacy



Christchurch homes 150 years ago



Thanks for making our world a better place,
for us and the generations to come