



2015-2045

ENVIRONMENTAL SUSTAINABILITY STRATEGY IMPLEMENTATION PLAN

Front Cover Photo – The Common Unity Project at Epuni Primary School - courtesy of Common Unity Project Aoteroa.

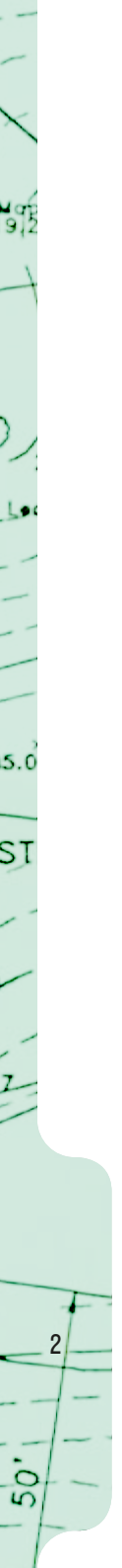


TOGETHER WE ARE A CITY.

ENVIRONMENTAL SUSTAINABILITY STRATEGY IMPLEMENTATION PLAN

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FOREWORD

It is my pleasure to present the Environmental Sustainability Strategy (2015 to 2045) Implementation Plan.

This Plan contains around 200 actions that Council will implement over the next 30 years to ensure our natural environment is protected and enhanced, and to ensure the city is in a sound state for both current and future generations.

Today, New Zealand and the world face serious environmental challenges; these include pollution, biodiversity loss, water quality, climate change, dwindling resources, and natural hazards.

Legislation is a key tool to enable and require environmental improvement. For example, the National Policy Statement for Freshwater Management provides regional councils with an opportunity to set standards to improve the quality of our rivers, and the Waste Minimisation Act requires councils to proactively reduce waste to landfill.

Hutt City Council will demonstrate leadership in environmental stewardship and sustainability, and to do its fair share to address the issues identified.

Our city's future is one where the environment is protected and enhanced, where risks are recognised and quickly responded to, and where people co-exist with their natural environment in such a way that lives are truly enhanced.



Our dependence on the environment is fundamental to so many aspects of our lives, and its proper care is essential if the city and our communities are to prosper.

Ray Wallace
Mayor – Lower Hutt
September 2015



INTRODUCTION

This Implementation Plan (the “Plan”) sets out the actions Council will take, and the Key Performance Indicators (KPIs) it will measure, to deliver on the goals set out within the Environmental Sustainability Strategy (ESS) 2015-2045. Actions are set out under each of Council’s focus areas of water, waste, transport, land-use, biodiversity, energy, and risk and resilience, and goals of leadership, protection, and enhancement. Council has an overall KPI to achieve 85% of the actions outlined within this Plan, an increase of 10% on the previous strategy’s KPI.

Part 1 of this Plan sets out the actions developed under each area of focus, preceded by a short introduction, and part 2 contains key information on KPIs, new actions, and a summary of the work Council has undertaken to determine which actions have the highest priority.

The actions contained within this plan include existing, updated, and new actions, projects and programmes. Approximately 44% of the actions within this strategy are new, 24% are updated and refreshed, and 32% are a continuation of existing successful programmes.

There is a spread of new actions across all the focus areas, and many of the new actions emanate from the Risk and Resilience section where there are pressing human health issues to manage such as Climate Change and Natural Hazards. In order to achieve new actions, Council will need to allocate additional resources and budget.

Progress against the actions and KPIs will be reviewed annually, and progress to address issues within the Focus Areas will be reviewed after three years. The ESS itself will be reviewed after five years, when it is expected that significant environmental improvements will have occurred at a corporate level, and across the city.





PART 1: KEY PERFORMANCE INDICATORS AND ACTIONS

PART I: KEY PERFORMANCE INDICATORS AND ACTIONS

KEY PERFORMANCE INDICATORS

One action from each of the objectives has been selected as a representative KPI for reporting purposes.

FOCUS AREA	ISSUE	KPI
Waste	Production	WPT3: Support schools to access the Enviroschools programme.
	Disposal	WDC6: Increase kerbside recycling tonnages per capita.
	Waste emissions	WET1: Reduce amount of waste going to landfill through increased landfill diversion, working with businesses, and purchase of recyclable products.
	Pollution and contamination	WPCT1: Maintain annual or biennial Hazmobile collection day.
Water	Usage	WUC4: Seismic assessments and replacement of (13) pump stations.
	Quality	WQC3: The Hutt/Wellington/Whaitua will set receiving water quality standards and identify solutions.
Transport	Transport emissions	TEE1: Continue to improve and increase the cycling network (Urban Growth Strategy 2012-32, page 42).
	Network optimisation	TNC1: Implement the Walk and Cycle the Hutt 2014-2019 Plan.
Biodiversity	Protection of species/habitat	BPE1: Continue to work with other agencies to halt the decline and aid the recovery of threatened plant species in the Department of Conservation Wellington/Poneke District.
	Invasive species	BIC1: Maintain and enhance existing pest, plant and animal control programmes city-wide with a special focus on areas with high biodiversity values.
	Coherence and connectivity	BCC1: Develop a viable, connected web of natural areas at a large scale to support typically representative species and genetic diversity over the long term.
Energy	Efficiency	EEC3: Reduce energy consumption at Council per staff member.
	Energy emissions	EME2: Investigate initiatives that would improve the standard of energy efficiency in our new housing stock.
	Changing demand	EDC2: Develop and Implement an Energy Reduction Plan for Council.
	Air pollution	EAT1: Investigate options to promote the burning of untreated dry firewood among households, and promote identified solutions.

OVERALL	ALL	FOCUS AREA – ISSUE - KPI
Land use	Accessibility and efficient use of space	LAC5: Council’s environmental performance is externally certified and reported on (currently ISO14001).
	Food supply	LFE1: Green gardener service maintained.
	Importance of green space	LIE2: Urban Forest Policy is implemented.
Risk and resilience	Natural hazards	RNA7: Plan for risks to roads and bridges from natural hazards and implement required response options to mitigate risks.
	Climate change	RNC2: Using Sea Level Rise maps, engage consultants to identify threatened places, assets, and communities, with specific response options identified. An interactive software tool will be developed and provided to enable this.
	Resource shortages	RNR2: Identify responsible Council Division and/or officer to develop and prepare a plan to respond to possible resource shortages.
	Economic Shocks	RNE2: Identify responsible Council Division and/or officer to develop and prepare a plan to respond to possible economic shocks.

Council has an overall KPI to complete at least 85% of the actions within this plan.



FOCUS AREA: WASTE

How we manage and minimise our waste is critical. It is important to do this well, not just in response to the environmental impacts occurring today, but with consideration to the available resources for the future. Waste management and reduction is crucial to our ability to live sustainably.

Waste incurs substantial economic costs and producing unnecessary waste means we are not using resources efficiently or sustainably. Approximately 93% of the materials we use do not end up in saleable products but are discarded during the production process. Approximately 80% of what we produce is discarded after a single use.

Silverstream Landfill is a Class A landfill operated by Council, where leachate and greenhouse gases are captured and properly managed. Because we have such a high quality facility, the focus for Council is on waste minimisation and diversion, and to ensure that we are using resources efficiently. The tonnage of waste to landfill has increased since 2011 to 125,885 tonnes in 2014. It is important to improve efforts to divert and minimise waste to landfill to maximise the life of the landfill.

A waste assessment undertaken in 2014 identified opportunities for improved diversion at landfill for items such as untreated timber, food waste, and cardboard. There is also scope to further improve the diversion of reusable items such as bicycles and furniture.

Waste Minimisation Act (WMA)

The WMA contains two main areas of focus: a waste levy on landfills which is allocated back to councils to spend on waste minimisation, and a product stewardship scheme to encourage recycling.

Each year Council receives around \$300,000 from the MfE's waste levy fund; approximately \$180,000 of this goes to support programmes such as diversion of reusable and recyclable waste at landfill, waste minimisation education, and commercial waste reduction, and approximately \$120,000 goes towards minimising waste at the landfill.

Regional Waste Management and Minimisation Plan (WMMP)

In 2011 Council worked with eight local councils to develop the regional WMMP. The plan sets out a coordinated regional approach to strategies, objectives, policies and activities to achieve long-term waste management and minimisation goals. The Regional Waste Education Strategy is also delivered under this plan.

Residential Recycling

Kerbside recycling takes place weekly and community recycling stations operate year round. Approximately 7500 tonnes of recycling were collected and recycled in 2014/15. Residential collection of recycling reached its peak in 2011 but has decreased slightly since then. It will be important for Council to investigate ways to ensure that residential recycling rates increase.

Green waste and methane capture at landfill

Green waste is used at Silverstream Landfill to cover waste, and helps to generate methane for electricity generation. At least 90% of the greenhouse gases generated in the landfill are captured and turned into energy which powers homes and businesses in the Hutt Valley. Currently 4700-5700 tonnes of methane are being captured per annum at the Silverstream landfill, powering Lower Hutt homes. Council also encourages

and supports home composting of green waste as there are no transport emissions associated with this type of composting.

CURRENT COUNCIL PROJECTS AND PROGRAMMES

- Implementation of the regional Waste Management and Minimisation Plan
 - Waste reduction programmes for businesses and schools
 - Regional Waste Education Strategy
 - Regular community waste and recycling awareness campaigns
 - Support for the Earthlink programme, which collects and sells usable material from the landfill
 - The Silver Lining programme, which aims to reduce commercial waste to landfill by working closely with local producers of commercial waste and identifying possibilities for re-use or recycling of materials
 - Internal Council waste minimisation activities, such as recycling and food waste composting at Council facilities and events, and ensuring all printers minimise paper use, by using a 'follow me' printing management service and defaulting to double-sided
 - Development of a waste events policy and informative DVD
 - Continue to provide the World of Waste full-day school bus tours
 - Support for Keep Hutt City Beautiful initiative, including funding for the annual volunteer clean-up week
- A city-wide kerbside recycling service, along with six recycling stations
 - Household hazardous waste collection where hazardous substances and items are collected free of charge
 - Capturing at least 90% of landfill gas at Silverstream Landfill for electricity production
 - Undertaking best practice environmental management at Silverstream Landfill
 - Free e-waste recycling for Hutt City residents at Earthlink
 - Maintaining street recycling bins where these are well used



COLOUR KEY

Existing Action	New Action	Mix of New and Existing Actions
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WASTE ACTIONS

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Production		
Objective:	Council minimises volume of waste produced (WPC)	Over-consumption is reduced and products and services produce minimal waste (WPT)	Waste is managed from source to disposal (WPE)
	WPC1: Waste minimisation plans are required as part of Council building projects - Work Instruction to be approved by Council's Senior Leadership Team.	WPT1: Support and deliver food waste prevention programmes focussed on minimising food waste.	WPE1: Deliver annual business sustainability presentations / workshops and engage with local businesses to reduce waste production.
	WPC2: Council purchases sustainable non-toxic, recycled and/or recyclable products when economically viable	WPT2: Support and promote reusable nappy programme.	WPE2: Regional Waste Minimisation Plan is implemented, and deliverables strengthened.
	WPC3: Provide incentives and information for people to access compostable disposable nappies solution, and Sustainable Parenting workshops.	WPT3: Support schools to access the EnviroSchools programme.	WPE3: Wellington Regional Waste Education Strategy is implemented, and regional cooperation is strengthened.
	WPC4: Procurement policy updated and implemented to include improved sustainable purchasing criteria, and Life Cycle Assessment tool.	WPT4: Deliver a comprehensive waste minimisation programme to include education, information, incentives, and community engagement.	WPE4: Maintain external contract to offer free waste audits and solutions for local businesses.
	WPC5: Decrease waste to landfill as a percentage of regional GDP.	WPT5: Support and promote waste minimisation certifications for businesses.	
	WPC6: Consider the use of recovered materials in Council building contracts.	WPT6: Continue World of Waste Bus Tours.	
		WPT7: Strengthen and support Bike Tech initiatives.	

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Issue Area	Disposal		
Objective:	Council manages landfill to best practice (WDC)	Waste is channelled to the appropriate disposal method – recycling, composting, landfill (WDT)	Most waste is able to be recycled, composted or reused (WDE)
	WDC1: Improve public reporting on landfill environmental performance, eg. leachate capture, air quality, methane capture and waste diversion.	WDT1: Review effectiveness, number, and positions of community recycling stations. Implement agreed changes (if any).	WDE1: Encourage and support household composting.
	WDC2: Improve signage and layout for recycling bays at landfill.	WDT2: Maintain public place recycling bins service and increase or relocate bins where appropriate.	WDE2: Improve reporting on where recyclables are sent, how recycled, and improve collection of data on weight and type of recyclables.
	WDC3: Investigate and implement measures to prevent recyclables from being put into the landfill.	WDT3: Provide city-wide weekly refuse and recycling collection service plus recycling stations.	WDE3: Investigate the establishment of a free to use recycling waste facility and shop before the landfill gates, implement if found to be economically viable.
	WDC4: Maintain and renew contract with Earthlink to assist with waste diversion at landfill and around Lower Hutt.	WDT4: Develop and implement event recycling Policy/Work Instruction.	WDE4: Investigate use of wheelie bins for kerbside recycling.
	WDC5: Investigate methods to prevent recycling from being put in Council rubbish bags.	WDT5: Undertake community recycling awareness programmes.	WDE5: Increase waste diversion at landfill and increase collection and diversion of reusable and recyclable items.
	WDC6: Increase kerbside recycling tonnages per capita.	WDT6: Promote and encourage construction and demolition waste reduction, reuse, and recycling.	
		WDT7: Manage community recycling stations to reduce illegal dumping.	

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Issue Area	Emissions		
Objective:	Council captures landfill emissions (WEC)	The amount of waste in the city and exposure to emissions pricing is reduced (WET)	The environmental impact of emissions
	WEC1: Maintain or improve methane capture rate at Silverstream Landfill (based on available resource).	WET1: Reduce amount of waste going to landfill through increased landfill diversion, and working with businesses to encourage recycling and use of recyclable materials.	WEE1: Council monitors and reports on its carbon emissions and encourages businesses and organisations to do likewise.
Issue Area	Pollution and contamination		
Objective:	Council identifies, monitors, avoids and manages contamination from waste (WPCC)	Contamination is prevented and legacy issues (eg. heavy metals) are addressed (WPCT)	Effective control, including phasing out of contaminating materials (WPCE)
	WPCC1: Actively enforce, control and reduce littering and illegal dumping.	WPCT1: Maintain annual or biennial Hazmobile collection day.	WPCE1: Investigate methods to ensure that refrigerant gas disposal and capture is undertaken.
		WPCT2: Review effectiveness, scope and location of Hazmobile (hazardous waste) collection day.	WPCE2: Council works with local businesses to identify, reduce, and phase out contaminating materials.
		WPCT3: Continue to offer and promote free e-waste collection service for Hutt City residents.	
		WPCT4: Investigate methods and implement procedures to prevent e-waste from going to landfill.	

FOCUS AREA: WATER

Fresh water is New Zealand's most valuable natural asset. It is vital to the agricultural and horticultural products that we export. The scenic beauty and recreational opportunities offered by our lakes, rivers and wetlands are major attractions for tourists and locals alike. The productive, recreational, cultural, and spiritual uses of fresh water lie at the core of our identity as New Zealanders.

The Hutt Valley is the most densely populated floodplain in New Zealand. The floor of the Hutt Valley has had well over a century of intensive human development and has been significantly altered from its original form in order to mitigate the flooding risks this environment poses. The city has a stormwater network that is well equipped to deal with minor rainfall events, but still faces risks from more severe rainfall events. This poses significant risks to water quality and health as contaminated flood waters will drain into receiving streams and into the harbour. Appropriate structural measures, together with some work on controlling run off from source, will help lower this risk.

Hutt City has many outstanding natural water resources including a number of rivers and a high quality artesian water source. But the health of these systems cannot be taken for granted – the community needs to be aware of how we use these systems and take appropriate action to balance the negative effects our activities can have.

Water quality is mostly graded 'good' or 'excellent' at monitored sites located in the Hutt catchment. The two exceptions are sites on the lower reaches of the Mangaroa River and Waiwhetu Stream that are graded

'poor' because key indicators don't meet recommended guidelines. The Mangaroa River fails some indicators, as a result of agricultural land use around it, while urban contaminants, including stormwater and sewer inputs, mean the Waiwhetu Stream fails to meet guidelines for all six water quality indicators.

Water supply

The urban areas in Hutt City are supplied with a reticulated water supply. Water is harvested and treated by Greater Wellington Regional Council from sources in Hutt City and Upper Hutt City. It is then supplied via the bulk distribution system to the local supply networks of the four cities in the region.

Hutt City is at elevated risk of droughts over the drier summer months. As the region continues to grow, water conservation and security of supply will become important as the current bulk water system nears the limits of its designed capacity.

Wastewater

The Seaview wastewater treatment plant has worked well since commissioning in 2001 with minimal issues and a very good compliance record. Prior to the commissioning of this plant, wastewater from the Hutt Valley received only primary treatment before being discharged. Heavy rainfall can still lead to overflows of diluted wastewater at some points in the network. High levels of infiltration have historically overloaded the wastewater network in areas surrounding the Waiwhetu Stream where the water table is high.



1 From GWRC Air Land Water in the Wellington Region 2012: [http://www.gw.govt.nz/assets/council-publications/Air%20Land%20&%20Water%20in%20the%20Wellington%20region%20-%20Folder%20&%20leaflets%20\(for%20web\).pdf](http://www.gw.govt.nz/assets/council-publications/Air%20Land%20&%20Water%20in%20the%20Wellington%20region%20-%20Folder%20&%20leaflets%20(for%20web).pdf)

Stormwater

Hutt City sits on a natural flood plain, and because of its natural topography is considered a high flood risk area. Council operates an extensive network of stormwater sumps, drains, pumps, stopbanks, catchpits, and open waterways to help mitigate the risk of flooding. Some older parts of the stormwater network have a 10% to 20% chance in any year of overloading. 'First flush' stormwater contains high levels of contaminants from roads and other impervious surfaces.

Climate change

In the Hutt Valley, flood frequency and intensity are projected to increase over the remainder of the century. This will have an impact on the design and capability of stop banks and stormwater system. Consultation is currently underway on the upgrade of stop banks to ensure that they are sufficient to withstand flood events. Rising sea levels could have an impact on low-lying areas like Petone and Seaview, and could disrupt our transport systems, particularly along SH 1 and 2, and the rail corridor from Wellington to the Hutt Valley. Other potential effects of climate change in the Hutt Valley include increased risk of droughts, and more frequent algae blooms in the Hutt River, which could affect the recreation opportunities, biodiversity, and animal health in the region.

Emergency water supply

Water supply has been identified as one of the major risk areas in the event of a serious earthquake or natural disaster, as mains pipes may rupture and repairs could take weeks to complete.

National Policy Statement on Freshwater Management

The National Policy Statement for Freshwater Management (NPS-FM) requires regions to 'safeguard the life-supporting capacity' of fresh water, and maintain or improve the water quality in their lakes,

rivers, wetlands and aquifers. Major changes to the NPS-FM were implemented in mid-2014, including a requirement for regional councils to account for all water takes and contaminant discharges, and implementation of a national framework to support communities in setting freshwater objectives.

CURRENT COUNCIL PROJECTS AND PROGRAMMES

- Implementation of Council's Water Conservation and Efficiency Plan
- Comprehensive asset management plans for upgrading and renewal of existing water, stormwater and wastewater infrastructure
- Council undertook a project to inspect the sewer pipes of over 2000 properties in the Waiwhetu area, and around 70% were replaced with non-leaky pipes
- Continually maintaining the Seaview wastewater treatment plant, Silverstream wastewater detention facility, and main outfall pipe at Pencarrow
- Stormwater management plan implemented for 2012-2017, including a specific pollution reduction campaign in the Gracefield industrial area
- A programme for removing contaminants from Waiwhetu Stream, along with improved flood protection
- Water quality and biodiversity improvement programmes in partnership with local community groups
- Undertaking seismic assessments and upgrades of pump stations and reservoirs

WATER ACTIONS

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Usage		
Objective:	Council monitors, manages and uses water efficiently (WUC)	Adequate supply is maintained and redundancy enhanced while avoiding overuse (WUT)	Multiple supply options are pursued and water availability is not reduced (WUE)
	<p>WUC1: Implement HCC Water Conservation & Efficiency Plan.</p> <p>A regional "Three Waters Community Education" programme will be developed by Wellington Water by 2018 to include raising awareness of environmental impacts of peoples water use and behaviour and encourage people to "do the right thing"</p>	<p>WUT1: Promote and incentivise purchase of 200 litre garden water tanks by HCC residents.</p>	<p>WUE1: Promote usage of grey water recycling systems and rainwater harvesting on new and refurbished buildings.</p>
	<p>WUC2: Continue programme to seismically assess and strengthen reservoirs over 20 years.</p>	<p>WUT2: Maintain water consumption (residents and businesses) at less than 350 litres per head per day.</p>	<p>WUE2: Investigate changes to District Plan to require water conservation measures as part of resource consent requirements.</p>
	<p>WUC3: Install one auto-closing valve per year on those reservoirs requiring valves over 5 years.</p>	<p>WUT3: Take part in regional discussions to decide when a new bulk water source is needed.</p>	<p>WUE3: Promote establishment of grey water recycling systems and rainwater harvesting on new and refurbished Council buildings.</p>
	<p>WUC4: Undertake seismic assessments and replacement of (13) pump stations.</p>	<p>WUT4: Publicise location of emergency water distribution points at key centres.</p>	<p>WUE4: Encourage water conservation measures as part of resource and building consent requirements.</p>
	<p>WUC5: Emergency Preparedness Planning Project to be completed as part of the Regional Seismic Resilience Initiative (for WCC, HCC, UHCC, PCC, GWRC Bulk Water) by WWL by 2018.</p>	<p>WUT5: Maintain and monitor emergency water tanks.</p>	<p>WUE5: Work with the 25 highest water consumers to assist them to use water more efficiently.</p>
		<p>WUT6: Discuss distribution of bottled water with WREMO during a Civil Defence Emergency.</p>	<p>WUE6: Undertake reservoir critical supply network (pipelines) upgrades of distribution pipes from reservoirs once WUC5 is completed.</p>
		<p>WUT7: Investigate the supply and management of emergency water tanker trucks with WREMO.</p>	<p>WUE7: Update Emergency Water Supply Plan as part of regional seismic resilience initiative.</p>
		<p>WUT8: Prepare pre-plan for reservoirs to be completed by June 2016.</p>	<p>WUE8: Ongoing identification of fire hydrants that do not meet the code and rectification (ties in with renewals programme).</p>
		<p>WUT9: Identify and document the agreed emergency water distribution points.</p>	<p>WUE9: Implement further initiatives to support the Water Conservation and Efficiency Plan actions.</p>

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Quality		
Objective:	Council monitors and manages water quality to a high standard (WQC)	Adequate supply is maintained and redundancy enhanced while avoiding overuse (WQT)	Multiple supply options are pursued and water availability is not reduced (WQE)
	WQC1: Implement Water Conservation & Efficiency Plan.	WQT1: Investigate feasibility of building car wash pad for community car washes, implement if viable.	WQE1: Investigate pros and cons of fitting pollution separators between streams and rivers.
	WQC2: Work with Regional Council and local groups to improve water quality and biodiversity.	WQT2: Promote and encourage water sensitive urban design principles in accordance with the Regional Standard for Water Services November 2012.	
	WQC3: The Hutt/Wellington Whaitua will set receiving water quality standards and identify solutions in order to meet the requirements of the National Policy Statement for Freshwater Management.		

FOCUS AREA: TRANSPORT

Transportation dominates every aspect of our lives, our health, the form of our communities, our environment, economy and our personal financial well-being. The transport system is vital to New Zealand's success, economically and socially.

The development and growth of motor vehicles has provided New Zealand and the world with a convenient, comfortable, and relatively cheap way of travelling. This has provided our society and economy with huge gains over the last 100 years. Yet these gains have not been without costs, some of which we are only just starting to understand.

The impact on the environment from globally increasing levels of greenhouse gas (GHG) emissions, especially carbon dioxide (CO₂) emissions, has added a critical new element to the issue. Transport accounts for 36% of the Wellington region's emissions, and about 46% of Hutt City's gross emissions². Regionally, over the last 10 years GHG emissions have been slowly decreasing, which is a promising sign on the road to sustainability. Our job is to ensure that this trend continues.

While the local GHG emissions have been slowly decreasing over the past 10 years, New Zealand still has the ninth highest transport emissions per capita in the world³. Increasing oil prices and their impact on fuel prices also has an effect on our economic and social well-being.

Central government requires an integrated approach to regional transport planning, ensuring coordinated

transport and land use planning, and ensuring that sustainable forms of transport, such as walking, cycling, and public transport, are given greater priority at the local and regional level.

Walking and cycling – Walk and Cycle the Hutt

Pedestrians and cyclists are the most vulnerable road users, and keeping them safe is a key priority for Council. Only 26% of surveyed Hutt City residents consider that the level of service for cycling is good⁴, so Council is investing heavily in developing the network further over the next five years. While walking infrastructure in the city is extensive and well maintained, ad-hoc cases exist where improvements could be made, and the attractiveness of the walking environment is lacking on some key routes. The city's Walking and Cycling Strategy – Walk and Cycle the Hutt - was adopted in 2014.

Public transport

Nationally, there has been a lack of central government funding and support for public transport. Hutt City has good accessibility to public transport, although some suburbs have poor public transport coverage (such as Belmont and Korokoro) or none at all (Tirohanga and Harbourview). Council has little impact on bus routes and services because Greater Wellington Regional Council is responsible for regional bus services. There is also currently a lack of public transport access to some public green space areas and reserves.



² From Greenhouse Gas Inventory for the Wellington Region, URS, March 2014

³ From International Energy Agency CO₂ Emissions from Fuel Combustion Highlights 2012: <http://www.iea.org/co2highlights/co2highlights.pdf>

⁴ From Draft HCC Walking and Cycling Strategy 2014



Private vehicles

Using more fuel efficient vehicles offers huge potential for reducing greenhouse gas emissions. In addition, improving the fuel efficiency of the local vehicle fleet offers short- and long-term economic and social advantages to the city. Council actively promotes internal fleet efficiency initiatives, such as sponsoring an eco-driving course for staff, and encouraging a shift to more fuel efficient vehicles for both our internal fleet, and the wider fleet of privately owned vehicles in the community.

CURRENT COUNCIL PROJECTS AND PROGRAMMES

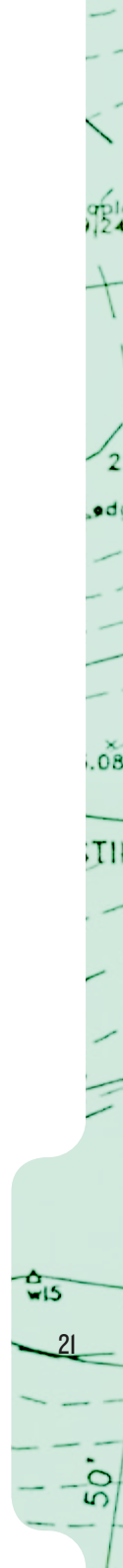
- A well-established and maintained local roading network, with generally low levels of congestion
 - Implementation of a comprehensive walking and cycling strategy for Lower Hutt
 - A bus-only lane on The Esplanade, 740 bus stops, and 183 bus shelters city-wide
 - Investing approximately \$22 million in developing the cycleway network – currently 26 kilometres of cycleways and provision of cycle parking around the main centres as part of Walk and Cycle the Hutt (WaCtH)
 - Completion of the Eastern Bays cycleway and walkway by 2022 – as above
 - Improvement of walking and cycling access to Wainuiomata, and the Hutt River Trail – as above
 - Participation in the regional Active Transport Forum, focused on the development of active modes of transport, such as walking and cycling, across the region
 - Improvement of walkways and pedestrian road crossings
 - An extensive footpath network, provided to a high level of service
- Implementation of 15 school travel plans, including walking school buses and cycle skills training, with additional schools coming on board each year
 - Providing support for community-lead sustainable transport programmes, including the BikeTecNZ programme
 - Workplace travel plan to ensure Council supports more environmentally sustainable transport options for staff
 - Council's vehicle fleet includes a large number of highly fuel efficient vehicles
 - Sponsoring a defensive driving course for Council employees

TRANSPORT ACTIONS

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Emissions		
Objective:	Council selects and promotes low emission transport options (TEC)	Emissions are reduced and use of active and public transport is increased (TET)	The environmental impact of emissions is understood and managed (TEE)
	<p>TEC1: Continue to implement and improve Council's Sustainable Fleet Vehicle Policy including:</p> <ul style="list-style-type: none"> Encourage acquisition of fuel-efficient and electric vehicles Monitor kilometres travelled by car on Council business, with objective of continually improving efficiency Bikes and public transport passes available for staff business travel as alternatives to car trips. 	<p>TET1: Continue to implement school travel plan programme, to reduce car trips and increase walking, cycling, public transport and shared car trips to school. Refer Wellington Regional Land Transport Plan 2015 – Chapter 14 Travel Demand Management.</p> <p>Target for increased use of active modes for journeys to school (page 42).</p>	<p>TEE1: Continue to improve and increase the cycling network (Urban Growth Strategy 2012-32, page 42).</p> <p>High quality infrastructure – Network of key routes consists of 3 main projects for protected cycleways</p> <ul style="list-style-type: none"> Hutt City Beltway Wainuiomata Hill summit bridge and shared path Eastern Bays shared path.
	TEC2: Encourage acquisition of fuel-efficient and electric vehicles within Council.	<p>TET2: Work in partnership with GWRC to promote public transport use and grow patronage in Hutt City.</p> <p>Target for increased public transport use in Wellington Regional Land Transport Plan 2015, p37:</p> <p>Public transport mode share of JTW (census) – Increase to at least 17.8% in 2025.</p>	TEE3: Advocate for reduction in driver-only car trips to work and reduce peak time congestion.
	TEC3: Car fleet numbers reduced and fuel consumption lowered as a ratio against staff numbers.	TET3: Provide high quality, safe infrastructure for pedestrians ie. footpaths, safe crossing points, improved lighting. Remove barriers and provide accessible walk-offs to meet the needs of wheelchair and mobility scooter users.	<p>TEE4: Increase private vehicle occupancy for trips to work, and reduce peak time congestion.</p> <p>Work in partnership with GWRC to implement measures outlined in Chapter 14 of RLTP 2015 Travel Demand Management, to increase mode share for walking, cycling, public transport and shared car trips. Wellington Regional Land Transport Plan target for reduced harmful emissions from transport (p43).</p>
	TEC4: Work with GWRC and other partners to implement a workplace travel plan programme in Hutt City, to reduce car trips and increase walking, cycling, public transport and shared car trips to work.		

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Network optimisation		
Objective:	Council plans for improved networks for multiple uses – vehicles, pedestrians, cyclists (TNC)	Existing and proposed development designed with effective networks which favour active and low impact modes (TNT)	Ongoing adaptive network design and management (TNE)
	<p>TNC1: Implement the Walk and Cycle the Hutt 2014-2019 Plan.</p> <p>Objectives:</p> <ol style="list-style-type: none"> 1. Safe and integrated networks for commuting and recreational purposes 2. High quality facilities for pedestrians and cyclists 3. Safety and positive promotion. 	<p>TNT1: Provide for cyclists in land development (development proposals, subdivision plans, consent applications).</p>	<p>TNE1: Continue to increase the cycling network.</p>
	<p>TNC2: Increase and promote walking and trails. Implement Making Places 'walkability' workstream – greater priority for pedestrians and cyclists in CBD streets and urban spaces.</p>	<p>TNT2: Provide high quality infrastructure for cyclists ie. safe, protected cycleways and off-road facilities separated from traffic. Other measures eg. reduced speed limits around schools and on inner city streets, neighbourhood traffic calming schemes.</p> <p>Key projects:</p> <ul style="list-style-type: none"> • Hutt City Beltway (includes river trail) • Wainuiomata Hill shared path and summit bridge • Eastern Bays shared path <p>Target for increased mode share for pedestrians and cyclists (page 42).</p>	<p>TNE2: Encourage shift to electric and hybrid vehicles.</p>
	<p>TNC3: Work with partners (GWRC, bus service providers, NZTA) to investigate greater use of measures to reduce bus journey times eg priority at traffic signals, bus lanes, express services.</p> <p>Wellington Regional Land Transport Plan 2015, p38.</p>	<p>TNT3: Improve safety for pedestrians and cyclists. Continue to work through Council's Road Safety Action Plan partnership on education and behavioural measures i.e. safety campaigns to target cyclists, pedestrians, and drivers of other vehicles to watch out for vulnerable road users.</p> <p>Targets for pedestrian and cyclist safety – Wellington Regional Land Transport Plan 2015, p40.</p>	

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
	<p>TNC4: Construct the proposed new CBD bus interchange.</p> <p>TNC5: Work with GWRC and partners to achieve improved level of service for public transport, and improved integration between transport modes.</p> <p>Wellington Regional Land Transport Plan 2015, p41.</p>	<p>TNT4: Provide for cyclists and pedestrians in land development (development proposals, subdivision plans, consent applications) by developing revised District Plan objectives, policies and rules, and design guidance (District Plan, transport chapter review).</p>	



FOCUS AREA: BIODIVERSITY

Biodiversity contributes to many aspects of our livelihoods and well-being, providing products such as food and fibres, whose values are widely recognised. Biodiversity also underpins a wider range of services, such as the bacteria and microbes that transform waste into usable products; insects that pollinate crops and flowers; mangroves that protect coastlines; and the biologically-rich landscapes and seascapes that provide enjoyment.

Human development has had a huge impact on biodiversity in New Zealand. Ecosystems are being transformed, and in some cases, irreversibly degraded. The pressures on biodiversity have taken three forms: hunting, habitat destruction, and introduced pests and weeds.

A large number of species are becoming extinct and many more are threatened with extinction. In addition, many other species have only small isolated populations with limited genetic diversity, threatening their long term health as a species. It is well established that current changes to biodiversity on land and in the world's fresh and marine waters are more rapid than at any time in human history. International awareness of the need to protect biodiversity has been growing steadily since the first 'Earth Summit' in Rio de Janeiro in 1992.

The Hutt Valley is fortunate to have a wide variety of diverse ecosystems, including river, beach and bush. About half of the land within city boundaries is managed as reserve. Hutt City has approximately 20,000 hectares of land that is managed as public open space. Of this, a substantial proportion of the 5305 hectares that Council owns is managed for ecological values, primarily as bush reserve.

Climate change

Climate change will inevitably impact on biodiversity. A number of biological changes have already been observed globally including shifts in the range of some species, and earlier timing of leaf-unfolding, bird migration and egg-laying in some species. Other effects may include strong impacts as extreme weather events become more frequent and severe, changes to ecosystem productivity, and disruption of freshwater ecosystems due to warmer water and lower flows in rivers and streams. In the Hutt Valley, the greatest impacts from climate change on biodiversity include coastal erosion, loss of ecosystems and loss of species. Healthy population levels and species diversity can help provide stability and resilience as we adapt to the fluctuations and disturbances brought about by climate change.

Pest species

The most serious threats to biodiversity in the region arises from the establishment of animal and plant species categorised as pests by the Regional Council. Our native plants can be smothered by exotic weeds or eaten by introduced deer, goats, and possums; our native birds, frogs and weta can be eaten by introduced stoats, rats and cats; some native fish can be displaced by introduced trout. All of these can have a big effect on our regional biodiversity. A key challenge for all of us is to limit the spread of pest species and mitigate the damage that they can cause.

Infill housing and development

Council's Urban Growth Strategy sets out goals for increasing density in some areas of Hutt City.

The growth anticipated will have an impact on our environment and biodiversity. Council intends to help offset the loss of some private open space by improving local public open spaces and encouraging protection of biodiversity and habitat on private property.

Pollution

Pollution will continue to have an impact on ecosystems and biodiversity, including pollution through litter, leachate, stormwater, sedimentation, nutrification, and household dumping. Council aims to mediate these effects through a variety of pollution-reduction programmes.

Existing reserve areas

In the Hutt Valley there is currently a lack of connectivity between existing reserve areas, which can limit the movement of species across the valley floor. There is also a lack of native species within some reserves, particularly on the valley floor.

Data and public knowledge

Historically, we have had a lack of data and monitoring of biodiversity, though this is improving through implementation of a regional biodiversity strategy and other local initiatives. There is also a general lack of awareness of biodiversity issues within the wider community, though Council's education initiatives aim to improve this.

CURRENT COUNCIL PROJECTS AND PROGRAMMES

- Pest plant and animal programmes, including an extensive possum control programme in partnership with Greater Wellington Regional Council

- Development and implementation of the Wellington Region Open Space Plan, a coordinated approach for the development, management and protection of open space across the Wellington region
- Council has an overarching strategy for reserves management (Reserves Strategic Directions) and has comprehensive reserve management plans
- Restoration and naturalisation projects at several key locations and support for community projects

- Implementing the Urban Forest Plan, which sets objectives for managing and improving vegetation in Hutt City, including planting 6000 new trees by 2030
- Planning and development of parks and reserves places a high emphasis on protecting and enhancing existing natural ecosystems
- Extensive use of locally sourced native species in plantings to enhance habitat and amenity values

- Managing one of the largest collections of New Zealand threatened plant species, held at Percy's Scenic Reserve
- Fire mitigation of bush lands through firebreaks, a fire reservoir network, fire management, and rapid intervention

BIODIVERSITY ACTIONS

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Protection and enhancement of species and habitat		
Objective:	Council identifies key areas and species, and plans for protection in conjunction with key partners (BPC)	Critical areas of the city are effectively protected and monitored and responses altered to adjust to changing risks (BPT)	Value ecosystem services and re-introduce native or locally extinct species (BPE)
	BPC1: Classify all reserve lands that make a contribution to the open space network.	BPT1: Continue to maintain positive, close working relationships with key agencies that have a focus on the natural environment.	BPE1: Continue to work with other agencies to halt the decline and aid the recovery of threatened plant species in the Department of Conservation Wellington Poneke District.
	BPC2: Promote Biodiversity values and caring for the natural environment.	BPT2: Facilitate and support community restoration projects that contribute to Council's environmental objectives and match the aspirations of the community.	BPE2: With other organisations, scope the distribution, content and condition of ecologically significant areas in Hutt City so that decision making and coordination of activities improves.
	BPC3: Maintain fire mitigation and fire control operations.	BPT3: Facilitate and encourage protection of biodiversity / habitat on private property.	
		BPT4: Promote and facilitate community understanding of biodiversity values.	

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Invasive species		
Objective:	Council monitors and manages the impact of weeds and pest species in conjunction with key partners (BIC)	Significant impacts are managed, mitigated, or avoided, and responses are co-ordinated (BIT)	Strict control or elimination of high-risk invasive species (BIE)
	BIC1: Maintain and enhance existing pest plant and animal control programmes city-wide with a special focus on areas with high biodiversity values.	BIT1: Encourage participation in habitat restoration that contributes towards achieving HCC strategies and fits with the aspirations of volunteer groups.	BIE1: Identify potential environmental threats that may come over the horizon and consider appropriate actions.
Issue Area	Coherence and connectivity		
Objective:	Council plans for suitable connectivity of flora and fauna and community amenity (BCC)	Key biodiversity connections are identified and invested in (BCT)	Development ensures biodiversity, connectivity and coherence across the city (BCE)
	BCC1: Develop a viable, connected web of natural areas at a large scale to support typically representative species and genetic diversity over the long term.	BCT1: Advocate for adequate protection and funding of biodiversity locally.	BCE1: Investigate practical, affordable methods for monitoring the condition of natural areas for which Council is responsible.

FOCUS AREA: ENERGY

The use of energy is fundamental to our economic and social well-being and development. Today's standard of living is underpinned by the availability of affordable energy for use at home, in commerce, and for transport.

In New Zealand, about 75% of our electricity comes from renewable sources, primarily hydroelectricity and geothermal sources⁵. We are fortunate to have access to such renewable energy sources, though they are not without their own impacts. Land must be flooded for large hydroelectric dams to be built, meaning farmland or native bush may be lost. Flows downstream from dams can be reduced, limiting the amount of water available. In order to harvest geothermal energy, some natural geothermal features such as hot springs, geysers, and mud pools can be irreparably damaged, along with other possible side effects such as ground subsidence and water pollution.

About 23% of New Zealand's electricity has been derived from fossil fuels in the form of coal, petroleum, and natural gas⁶. Fossil fuels are a finite resource. While we should not necessarily forgo use of such fuels simply because they will be unavailable for later generations, we should ensure that we use such fuels efficiently to ensure these resources are not wasted.

The use of fossil fuels also imposes significant environmental costs. These costs have not generally been included in the price of fossil fuels, resulting in over-use. These costs were well known in some instances, such as the air pollution from Victorian era

factories, while others have only become apparent recently. Climate change in particular has focused attention on the environmental impact of fossil fuel use and the need for change.

Greenhouse gas emissions are a serious by-product of energy production and use. New Zealand's per capita greenhouse gas emissions are the fifth highest in the world among developed countries⁷. Within cities such as Lower Hutt, almost all emissions result from transport and energy consumption. If we continue 'business as usual', by 2030 energy-related greenhouse gas emissions will rise a further 23% above 1990 levels⁸. New Zealand has set a target of reducing its greenhouse gas emissions 30% by 2030, and we have a long way to go.

No energy source is perfect, and it is important to make sure we use energy efficiently to limit the number of new energy generation sites we must develop.

Energy efficiency and renewable energy

Addressing energy inefficiency often has greater benefit to cost ratios than generating new forms of energy. Legislation is moving towards making energy efficient design mandatory in new developments. In the Hutt Valley renewable energy development is lacking, and there is a big opportunity for Council to promote and incentivise the use of solar hot water and electricity systems, and wind turbines.

Healthy homes

As well as energy efficiency gains, insulating homes reduces health risks caused by cold, damp housing such as respiratory illnesses and serious diseases like rheumatic fever. New Zealand traditionally has a problem with cold, damp, inefficient homes, and there is big potential for improving existing homes in the Hutt Valley.

Energy consumption

Between 1990 and 2012, total consumer energy demand increased by 31%⁹. Reducing the demand for energy consumption is critical to reducing the need to develop new forms of energy. Opportunities exist to work with high energy use businesses to reduce demand.

Emissions Trading Scheme (ETS)

Implemented in 2008, the ETS puts a price on greenhouse gases to provide an incentive to reduce emissions, invest in energy efficiency, and plant trees. Across New Zealand it has impacted by causing a slight increase in energy prices. The ETS has had a minimal impact on reducing New Zealand's carbon emissions, and total carbon emissions are currently increasing.

5 From MBIE New Zealand Energy Data File 2012: <http://www.med.govt.nz/sectors-industries/energy/energy-modelling/data/electricity>

6 From MBIE New Zealand Energy Data File 2012: <http://www.med.govt.nz/sectors-industries/energy/energy-modelling/data/electricity>

7 From MfE Greenhouse Gas Inventory 2013 <http://www.mfe.govt.nz/publications/climate/greenhouse-gas-inventory-2013-snapshot/>

8 From New Zealand's Sixth National Communication Under the UNFCCC: <http://www.mfe.govt.nz/publications/climate/nz-sixth-national-communication/sixth-national-communication.pdf>

9 From MBIE Energy in New Zealand 2013: <http://www.med.govt.nz/sectors-industries/energy/energy-modelling/publications/energy-in-new-zealand/previous-energy-in-new-zealand-editions>

CURRENT COUNCIL PROJECTS AND PROGRAMMES

- Energy management of Council run facilities. Council is a major user of energy, using over \$3 million in electricity every year. Council has an energy management and audit system to ensure cost-effective energy efficiency is maximised
- Council's Eco Design Advisor offers free advice to Hutt City residents on how to reduce energy bills and keep homes warm and dry
- Council is a part of the Wellington Regional Healthy Housing Coalition, which focuses on retrofitting homes and linking health and social services to retrofitted homes in the greater Wellington region
- Capturing at least 90% of landfill gas (mostly methane, a potent greenhouse gas) at Silverstream Landfill for electricity production
- Discounts on building consent fees for several energy efficiency measures, including solar photovoltaic and heating systems, installing double glazed windows, and more
- Undertaking a comprehensive, on-going greenhouse gas audit of Council's operations to better understand where improvements can be made
- In partnership with seven other local councils, Council has undertaken a regional greenhouse gas emissions inventory, to help set a benchmark and identify areas for improvement



ENERGY ACTIONS

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Efficiency		
Objective:	Council identifies and addresses issues in its operations (EEC)	Significant transmission losses are identified and resolved (EET)	Local energy generation is preferred (EEE)
	EEC1: Investigate the energy rating of Council buildings, if found to be viable rate buildings on a rolling basis as finances allow.	EET1: Liaise with Lines Company and Energy Suppliers to assist with, advocate for identification and reduction of transmission losses.	EEE1: Investigate use of a wood fired boiler on a Council building.
	EEC2: Support Urban Plus to undertake energy audits of Council properties.	EET2: Improve our residents' health and well-being through making our homes warmer and more energy efficient.	EEE2: Investigate measures to encourage wind turbines.
	EEC3: Reduce energy consumption at Council per staff member.		
Issue Area	Energy emissions		
Objective:	Council selects low emission options for its operations (EMC)	Reduction, efficiency, and conservation including renewables (EMT)	Materials used in building and infrastructure do not increase emissions (EME)
	EMC1: Investigate installation of additional solar energy on Council buildings, install where economically viable.	EMT1: Maintain building consent fee waivers for conservation initiatives, and investigate improvements to the scheme.	EME1: Lobby Central Government on policies that would improve the standard of energy efficiency and conservation within the Hutt Region.
	EMC2: Introduce and trial use electric car/s into Council vehicle fleet.	EMT2: Support local curtain bank projects.	EME2: Investigate initiatives that would improve the standard of energy efficiency in our new housing stock.
		EMT3: Investigate extending the home efficient heating scheme in Wainouiomata.	
		EMT4: Identify top 10 highest users and work with them to help reduce energy use.	
		EMT5: Work with businesses to help build electric car charging points.	

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Changing demand		
Objective:	Council identifies and improves its energy footprint (EDC)	City-wide energy demands and uses are understood and addressed (EDT)	Alternative energy including combined heating, cooling, and power systems are encouraged (EDE)
	EDC1: Investigate use of Council gym equipment to generate and store electricity.	EDT1: Investigate District Plan changes with regards to energy conservation consideration.	EDE1: Identify areas where Council can incentivise the uptake of energy efficiency technologies, eg. waiving consent fees for wall insulation, installation of wind etc.
	EDC2: Develop and Implement an Energy Reduction Plan for Council.	EDT2: Promote home energy monitors for Hutt City residents.	EDE2: Improve the quality of information on our local renewable energy resource, solar insolation, wind etc.
		EDT3: Investigate incentivising energy audits for largest users.	
		EDT4: Make available better information on energy saving schemes and products.	
Issue Area	Air pollution		
Objective:	Council identifies and avoids energy use which contaminates the air (EAC)	Dirty energy is identified and curtailed (EAT)	Control, including phasing out of materials that may cause pollution (EAE)
	EAC1: On new buildings, Council selects the lowest air contaminating energy use option, where economically viable.	EAT1: Investigate options to promote the burning of untreated dry firewood among households.	EAE1: Develop education campaign around reducing the burning of fossil fuels.
	EAC2: Council uses renewable energy whenever economically viable e.g. solar, wind, ground-source.	EAT2: Deliver information to residents encouraging them not to burn treated timber.	

FOCUS AREA: LAND USE

In the past century, the Hutt Valley has been radically changed by development. It has changed from a densely forested valley containing a system of water ways to a valley containing kainga and gardens, to a collection of villages and farms, and then to an almost continuous ribbon of urban development. We have straightened and contained the rivers and streams, cleared and heavily developed the valley floor, and terraced the hills. Our city form now resembles a long spine of urban development surrounded by satellite settlements in Wainuiomata, Stokes Valley and Eastbourne.

The design of our city affects almost every aspect of our lives. It influences how we use our buildings, homes, streets, public spaces and infrastructure. Given its importance, it is vital that we build our city to help achieve sustainable outcomes. The types of building and development that occur within the city are also important. Poor quality design and materials can diminish a building's energy efficiency. It can affect the building's long term adaptability and usability, requiring renovations or demolition and replacement. Design quality affects how valued by society and how well used a development is, and therefore if the development is an efficient and sustainable use of resources. All of these factors affect the quantity of material and energy needed by our buildings and urban development over time.

The key is to encourage urban growth that minimises environmental impacts. Quality development can help achieve this, and avoid some of the environmental problems experienced in the past.

Urban design and transport

There is a strong community desire to ensure that public places are perceived as safe when walking and cycling around key centres. Some Hutt City suburbs do not have an urban form that enables walking, cycling or the provision of high frequency public transport as a practical alternative to private motor vehicle use. Hutt City's urban form does not always reinforce the viability, vibrancy, and safety of our key centres.

Urban Design

Sustainable urban design incorporates modern building techniques and green design principles such as permeable surfaces, grey water recycling, integrated rubbish and recycling facilities, energy efficiency and appropriate building orientation. Council is a signatory to the NZ Urban Design Protocol and is committed to good urban design in the public spaces Council is responsible for developing and maintaining. In private spaces, good urban design is promoted through the Eco Design Advisor service and in design guides with a mix of non-regulatory and regulatory management through the District Plan.

Public open space

Green space provides many benefits to the community, including flood containment, native habitat and migration, and recreational and visual amenity. Increased growth and infill has an impact on the environment and green space. While Council encourages infill in certain areas, we also recognise the importance of protecting and improving public green space. Council recognises that good quality public open spaces are an important component of urban areas, particularly as these are more intensively developed.

Food supply

Use of land for growing and distributing food locally can benefit the Hutt Valley community in a number of ways, from reducing the emissions produced when transporting food long distances, to supporting the local economy by providing jobs. Council is committed to supporting a number of local food programmes, including community gardens, private food production and composting.

CURRENT COUNCIL PROJECTS AND PROGRAMMES

- Reviewing the District Plan to provide for and encourage residential development along key transport routes and around shopping centres
- Development and implementation of the 20 year Urban Growth Strategy, implemented in 2012
- Signatory to the New Zealand Urban Design Protocol which is a voluntary commitment to specific urban design initiatives
- Maintaining the free Eco Design Advisor programme for Lower Hutt residents
- Using permeable surfaces and rain gardens for many new developments
- Development of public design guides to establish an agreed and explicit direction for future work by Council in the defined area
- Supporting use of some reserve land for community gardens, and providing the Green Gardener service for Hutt City residents

LAND USE ACTIONS

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Accessibility and efficient use of space		
Objective:	Council plans for local centres, multiple uses, connectivity and community amenities that supports strong neighbourhoods (LAC)	Suburban centres and proposed developments offer local services, connectivity, local infrastructure and economic opportunities (LAT)	Urban neighbourhoods have identity and are flexible to allow for alternate uses (LAE)
	LAC1: Strengthen community-led partnerships with Council.	LAT1: Maintain links with community houses to support sustainability initiatives.	LAE1: Encourage soft landscaping to complement and enhance development - native species may be preferred where environmental conditions are appropriate and desired landscape outcomes are maintained.
	LAC2: Support Keep Hutt City Beautiful initiatives.	LAT2: Encourage inclusion of private open space within new developments, where there is a specific defined purpose and an agreed long term management mechanism in place.	LAE2: Encourage use of sustainable urban drainage systems (SUDS) eg. permeable surfacing, swales, and rain gardens.
	LAC3: Process is put in place to ensure that all plans, strategies, work instructions and policies consider and contain sustainability and environmental protection criteria.	LAT3: Encourage retention and development of Design Guides, where appropriate.	LAE3: Encourage inclusion of discrete waste and recycling spaces within new developments.
	LAC4: Encourage District Plan policies and rules which promote sustainable urban form within plan changes and reviews.	LAT4: Provision of cycle parking within new developments is encouraged.	LAE4: Minimum floor levels are considered and required (where appropriate) by Council through the Building Act to mitigate the effects of flooding and/or projected sea level rise.
	LAC5: Council's environmental performance is externally certified and reported on (currently ISO14001).	LAT5: Encourage development of residential buildings which maximise solar gain for heating and warmth eg. passive solar, photovoltaics.	LAE5: Building form and scale respect heritage values in Heritage Areas and, where appropriate, the form and height of nearby buildings.

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Importance of green space		
Objective:	Council evaluates and categorises existing green space (LIC)	Green space is protected for multiple purposes, including ecosystems and risk management (eg, flood containment)(LIT)	Green space is enhanced and expanded with multi-purpose 'green corridors' for habitat, recreational and visual amenity (LIE)
	LIC1: Improve access to, and connections between, urban parks and reserves.	LIT1: Support and encourage development of pathways and cycleways alongside streams and rivers.	LIE1: Improve ecological linkages between urban parks, reserves.
	LIC2: Improve the appeal and popularity of urban parks and reserves.	LIT2: Community gardens are supported and promoted on some Council and private land, where appropriate and where defined uses and outcomes can continue to be met.	LIE2: Implement Urban Forest Policy.
	LIC3: Look for opportunities to develop new public open space as part of new urban development.	LIT3: Within parks and reserves some native planting may be preferred where environmental conditions are appropriate and desired landscape outcomes are maintained.	

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Food supply		
Objective:	Council supports local food production on public and private land (LFC)	Urban agriculture and home food growing are important parts of city life (LFT)	Locally produced food is encouraged and fostered in the city (LFE)
	LFC1: Support and promote fruit tree planting on some Council and private land, where appropriate and which meet defined uses and outcomes.	LFT1: Support community led Community Gardens.	LFE1: Maintain Green Gardener service.
	LFC2: Promote and encourage Fruit Tree Guardian Programme.		LFE2: Support and provide workshops and courses to the community on food production. LFE3: Engage and consult with the community in an on-going way on opportunities to increase food production.



FOCUS AREA: RISK AND RESILIENCE

This category includes natural hazards, climate change impacts and risk management in areas of issues such as resource shortages and economic shocks.

Council has the ability to plan and develop appropriate land-use zoning based on risk or hazards. Some of the issues associated with hazards have been clearly brought home following the Christchurch earthquakes, where land has been abandoned and core economic activity has relocated away from the CBD. This suggests a real need to be proactive, and use long-term risks and hazards to transition to a preferred future state. The city also needs to consider multiple or cascading risks. For example, if resources become less available, fuel more expensive and then a major natural disaster occurs. Strengthening our resilience has a strong link to improving health and wellbeing.

Interest in all aspects of resilience has increased recently – both in New Zealand and internationally. This has been driven by major events such as the Christchurch earthquakes (as mentioned), the Japanese tsunami, and an increase in high impact storms. On a smaller scale, awareness of local food dependency has increased, with Council support via initiatives such as the Green Gardener service, supporting community gardens and Enviroschools.

OUR APPROACH TO RESPONDING TO RISKS AND BUILDING RESILIENCE

Although we are still aiming to deliver on the goals of this strategy (lead, protect, enhance), this category cuts across all the others, which means we need to look at how each issue here relates to each issue in the other focus areas.

- **IDENTIFY RISKS:** This involves understanding the level of risk to, and resilience of, our environment – We need to understand the potential effects economically, socially, culturally, and environmentally, and on our community values.
- **ENGAGE AND COLLABORATE:** It is critical to broaden the discussion around resilience, increase understanding and work closely with others to define preferred solutions. In regard to leadership, we could, for example, aim to set up a Mayor's task-force on resilience – covering natural hazards, climate change, resource shortages and economic shocks.
- **PLAN PROACTIVELY FOR GREATER RESILIENCE:** This involves outlining risk/resilience scenarios and their impact on both the city's and Council's operations, developing a risk management approach, and adopting a set of risk management principles.
- **CONTINUOUSLY ADAPT:** Adjust our systems and processes to allow for ongoing change and uncertainty, building our diversity, independence, modularity (ability to roll out solutions at a variety of scales), seek continual feedback, and apply no-regrets approaches.

RISK AND RESILIENCE

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Natural Hazards		
Objective:	Continuously adapt, engage and collaborate, plan proactively for greater resilience, identify risks (RNA)		
	RNA1: Support Sustainable Living Programme.	RNA2: Continue to undertake activities and projects that support Education for Sustainability (EfS) in schools.	RNA3: Liaise with District Plan Policy (DP) Team on the development and implementation of District Plan changes and reviews to ensure that sustainability and environmental protection measures are fully considered and included where appropriate.
	RNA4: Update Natural Hazards section of District Plan when appropriate to mitigate risk.	RNA5: Work with regional partners and stakeholders to identify and mitigate risk from flooding, slips, earthquakes, and sea level rise.	RNA6: Council strategies, policies, plans and actions take full account of natural hazards.
	RNA7: Plan for risks to roads and bridges from natural hazards and implement required response options to mitigate risks.	RNA8: Plan for risks from flooding and other natural hazards and implement required response options to mitigate risks.	RNA9: Plan for community resilience from natural hazards and implement required response options to mitigate risks.
	RNA10: Implement Regional Hazard Management Strategy.	RNA11: Assess and strengthen earthquake prone buildings.	RNA12: Undertake hazards mapping and continuously update to inform risk.
Issue Area	Climate change		
Objective:	Continuously adapt, engage and collaborate, plan proactively for greater resilience, identify risks (RNC)		
	RNC1: Acquire projected 0.5m, 1.0m, and 1.5m Sea Level Rise and Storm Surge inundation maps for Hutt City coastal areas. Determine whether hydrodynamic and impeded drainage modelling is required, and acquire if needed.	RNC2: Using Sea Level Rise maps, engage consultants to identify threatened places, assets, and communities, with specific response options identified. An interactive software tool will be developed and provided to enable this.	RNC3: District Plan changes are developed and implemented as required to mitigate the effects of flooding and drought events.
	RNC4: Develop and implement Sea Level Rise Protection and Mitigation Plans over necessary time periods.	RNC5: Regional cooperation and agreement on how to protect Hutt rivers from flooding is achieved.	RNC6: Hutt Rivers Flood Control plans are implemented over necessary time periods.
	RNC7: Stormwater pipes and pumping station upgrades are planned to respond to increased and larger precipitation events, and sea inundation.	RNC8: Implement water conservation strategy.	RNC9: Develop and implement Community carbon emissions reduction plan.
	RNC10: Sustainable Living Programme supported.	RNC11: Develop and implement climate change community consultation and awareness plan.	RNC12: Set targets to reduce Council's carbon emissions.

ENVIRONMENTAL GOALS	COUNCIL DEMONSTRATES LEADERSHIP IN ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY	THE CITY EMBRACES ENVIRONMENTAL PROTECTION AND COMMUNITY RESILIENCE	THE CITY CONTINUOUSLY ADAPTS AND ENHANCES ITS ENVIRONMENT
Issue Area	Resource shortages		
Objective:	Continuously adapt, engage and collaborate, plan proactively for greater resilience, identify risks (RNR)		
	RNR1: Support Sustainable Living Programme.	RNR2: Identify responsible Council Division and/or officer to develop and prepare a plan to respond to possible resource shortages.	RNR3: Work with regional partners and stakeholders to develop and implement a plan to respond to possible resource shortages.
Issue Area	Economic shocks		
Objective:	Continuously adapt, engage and collaborate, plan proactively for greater resilience, identify risks (RNE)		
	RNE1: Support Sustainable Living Programme.	RNE2: Identify responsible Council Division and/or officer to develop and prepare a plan to respond to possible economic shocks.	RNE3: Work with regional partners and stakeholder to develop and implement a plan to respond to possible economic shocks.





PART 2: PRIORITISING ACTIONS

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THE PRIORITISATION TOOL

The Prioritisation Tool has been developed by Council for evaluating and prioritising activities for Hutt City, to ensure that we focus on doing the right things that are most effective to achieve our objectives. This aim is to assess the relative merits of one action over another within and across areas of Focus. Essentially this involves selecting environmental actions that will make the most difference. The model generates a score for each current or proposed environmental action, which can then be used to prioritise those which we choose to undertake. This is across all areas of the environment including water, waste, energy, transport, land-use, biodiversity, and risk and resilience.

FACTORS WHICH HAVE BEEN INCLUDED IN THE MODEL ARE:

- Focus area score (based on the ESS, these are scored from 1 to 7 for each focus area based on their importance – using national level published priorities from NZIER)
- Issue score (based on the ESS, scored from 1 to 3 based on their evaluated consequence)
- Strategic fit (based on the number of key Council strategies that align with the action – ie. 1-4)
- Human health risk/effect (scored from 1 to 4 based on estimated risk level)
- Environmental Risk/effect of inaction or environmental benefit of action (scored from 1 to 4 based on estimated risk level)

- Community support (scored from 1 to 4 based on estimated level of support)
- Level of discretion (scored 1 for non-discretionary, 0 for discretionary)

The model does have limitations in that it is subjective – based on both the factors included in the model, and on the scoring that is decided upon by the user. It should therefore be used as a rough guide and not adhered to rigidly to make decisions (eg, on whether to include or exclude actions) as other criteria or factors are also likely to play a part. Council will be developing a second generation implementation plan that will include community consultation in regard to the actions that should be undertaken to address the issues, and will include further work on our prioritisation tool to ensure that actions undertaken consider community views and identified priorities.

In the following table, the 20 actions with the highest scores are shown. Actions within the risk and resilience section appear most frequently within this group, and this is because climate change and natural hazards represent particular threats to flora and fauna. There is also one biodiversity action and one water action within this top 20. These top 20 actions should receive the highest priority from Council in terms of providing resources and budget to ensure these actions are fully implemented.

TOP 20 HIGHEST SCORED ACTIONS

FOCUS AREA	ISSUE	ACTION	SCORE
Risk and Resilience	Natural hazards	RNA8: Plan for risks from flooding and other natural hazards and implement required response options to mitigate risks.	22
	Climate change	RNC4: Develop and implement Sea Level Rise Protection and Mitigation Plan over necessary time periods.	22
	Natural hazards	RNA10: Regional Hazard Management Strategy is implemented.	21
		RNA4: Natural Hazards section of District Plan is updated when appropriate to mitigate risk.	21
		RNA5: Work with regional partners and stakeholders to identify and mitigate risk from flooding, slips, earthquakes, and sea level rise.	21
		RNA6: Council strategies, policies, plans and actions take full account of natural hazards.	21
	Climate change	RNC1: Acquire projected 0.5m, 1.0m, and 1.5m Sea Level Rise and Storm Surge inundation maps for Hutt City coastal areas. Determine whether hydrodynamic and impeded drainage modelling is required, and acquire if needed.	21
		RNC2: Using Sea Level Rise maps, engage consultants to identify threatened places, assets, and communities, with specific response options identified. An interactive software tool will be developed and provided to enable this.	21
Biodiversity	Protection of species/habitat	BPC3: Maintain fire mitigation and fire control operations.	20.5
Risk and Resilience	Natural hazards	RNA12: Hazards mapping is undertaken and continuously updated to inform risk.	20
		RNA2: Continue to undertake activities and projects that support Education for Sustainability (EfS) in schools.	20
		RNA7: Plan for risks to roads and bridges from natural hazards and implement required response options to mitigate risks.	20
		RNA9: Plan for community resilience from natural hazards and implement required response options to mitigate risks.	20
	Climate change	RNC3: District Plan changes are developed and implemented as required to mitigate the effects of flooding and drought events.	20
		RNC5: Regional cooperation and agreement on how to protect Hutt rivers from flooding is achieved.	20
		RNC6: Hutt Rivers Flood Control plans are implemented over necessary time periods.	20
		RNC7: Stormwater pipes and pumping station upgrades are planned to respond to increased and larger precipitation events, and sea inundation.	20
Water	Quality	WQC1: HCC Water Conservation & Efficiency Plan fully implemented.	19.5
Risk and resilience	Natural hazards	RNA1: Sustainable Living Programme supported.	19
		RNA11: Assessment and strengthening of earthquake prone buildings.	19

NEW ACTIONS IN ORDER OF PRIORITY

The table below lists new actions in order of priority. Nearly half of the actions within this strategy are new. The prioritisation tool is particularly useful when used to analyse these, as we can use the results to determine which actions have the greatest urgency, and how resources are allocated to implement these. It should be borne in mind that some actions listed are required by legislation or Council or Regional Council plans, strategies or policies. These will therefore need to be actioned regardless of the score they receive. For example, Council receives approximately \$300,000 a year from Government to spend on waste minimisation activities, the Council consequently is required to undertake these actions as a result of Waste Minimisation Act requirements.

FOCUS AREA	ISSUE	ACTION	SCORE
Risk and resilience	Climate change	RNC4: Develop and implement Sea Level Rise Protection and Mitigation Plan over necessary time periods.	22
	Natural hazards	RNA4: Natural Hazards section of District Plan is updated when appropriate to mitigate risk.	21
	Climate change	RNC1: Acquire projected 0.5m, 1.0m, and 1.5m Sea Level Rise and Storm Surge inundation maps for Hutt City coastal areas. Determine whether hydrodynamic and impeded drainage modelling is required, and acquire if needed.	21
		RNC2: Using Sea Level Rise maps, engage consultants to identify threatened places, assets, and communities, with specific response options identified. An interactive software tool will be developed and provided to enable this.	21
		RNC3: District Plan changes are developed and implemented as required to mitigate the effects of flooding and drought events.	20
	Natural hazards	RNA3: Liaise with District Plan Policy (DPP) Team on the development and implementation of District Plan changes and reviews to ensure that sustainability and environmental protection measures are fully considered and included where appropriate.	19
	Climate change	RNC11: Climate change community consultation and awareness plan developed and implemented.	19
		RNC12: Set targets to reduce Council's carbon emissions.	19
		RNC9: Community carbon emissions reduction plan developed and implemented.	18
Economic Shocks	RNE2: Identify responsible Council Division and/or officer to develop and prepare a plan to respond to possible economic shocks.	17	
Resource shortages	RNR3: Work with regional partners and stakeholder to develop and implement a plan to respond to possible resource shortages.	17	
Waste	Pollution and contamination	WPCT2: Review effectiveness and scope and location of Hazmobile collection day.	16.5
Risk and resilience	Resource shortages	RNR2: Identify responsible Council Division and/or officer to develop and prepare a plan to respond to possible resource shortages.	16
Waste	Disposal	WDT3: Provide city-wide weekly refuse and recycling collection service plus recycling stations.	15.5
Water	Quality	WQC3: The Hutt/Wellington Whaitua will set receiving water quality standards and identify solutions.	15.5

FOCUS AREA	ISSUE	ACTION	SCORE
Water	Quality	WQE1: Investigate pros and cons of fitting pollution separators between streams and rivers.	15.5
Land use	Accessibility and efficient use of space	LAC1: Strengthen community-led partnerships with Council.	15
Risk and resilience	Economic Shocks	RNE3: Work with regional partners and stakeholders to develop and implement a plan to respond to possible economic shocks.	15
Land use	Importance of green space	LIE1: Improve ecological linkages between urban parks, reserves.	15
Biodiversity	Protection of species/habitat	BPC1: Classify all reserve lands that make a contribution to the open space network.	14.5
Transport	Network optimisation	TNT3: Improve safety for pedestrians and cyclists. Continue to work through Council's Road Safety Action Plan partnership on education and behavioural measures ie. safety campaigns to target cyclists, pedestrians, and drivers of other vehicles to watch out for vulnerable road users.	14.5
Waste	Waste emissions	WEE1: Council monitors and reports on its carbon emissions and encourage businesses and organisations to do likewise.	14.5
Water	Usage	WUE9: Implement further initiatives to support the Water Conservation and Efficiency Plan actions.	14.5
Energy	Efficiency	EEC2: Support Urban Plus to undertake energy audits of Council properties.	14
	Energy emissions	EMT3: Investigate extending the home efficient heating scheme in Wainuiomata.	14
Land use	Accessibility and efficient use of space	LAE4: Minimum floor levels are considered by Council to mitigate the effects of flooding and/or projected sea level rise.	14
		LAT2: Encourage inclusion of open amenity areas within new developments.	14
Biodiversity	Coherence and connectivity	BCE1: Investigate practical, affordable methods for monitoring the condition of natural areas for which HCC is responsible.	13.5
Waste	Disposal	WDE2: Improved reporting on where recyclables are sent, how recycled, and improve collection of data on weight and type of recyclables.	13.5
	Production	WPC2: Council purchases sustainable non-toxic, recycled and/or recyclable products when economically viable.	13.5
	Pollution and contamination	WPCE1: Investigate methods to ensure that refrigerant gas disposal and capture is undertaken.	13.5
		WPCT3: Continue to offer and promote free e-waste collection service for Hutt City residents.	13.5

FOCUS AREA	ISSUE	ACTION	SCORE
Water	Usage	WUE1: Promote usage of grey water recycling systems and rainwater harvesting on new and refurbished buildings.	13.5
		WUT6: Discuss distribution of bottled water with WREMO.	13.5
		WUT7: Discuss the supply and management of emergency water tanker trucks with WREMO.	13.5
Energy	Air pollution	EAE1: Develop education campaign around reducing the burning of fossil fuels.	13
		EAT1: Investigate options to promote the burning of untreated dry firewood among households, and promote identified solutions.	13
	Efficiency	EEC1: Investigate the energy rating of Council buildings, if found to be viable rate buildings on a rolling basis as finances allow.	13
	Energy emissions	EME2: Investigate initiatives that would improve the standard of energy efficiency in our new housing stock.	13
Land use	Accessibility and efficient use of space	LAE1: Encourage soft landscaping to complement and enhance development, native planting being preferred where appropriate.	13
		LAE2: Encourage use of sustainable urban drainage systems (SUDS) eg. permeable surfacing, swales, and rain gardens.	13
		LAT1: Maintain links with community houses to support sustainability initiatives.	13
Transport	Transport emissions	TEC3: Car fleet numbers reduced and fuel consumption lowered as a ratio against staff numbers.	12.5
Waste	Disposal	WDC1: Improve public reporting on landfill environmental performance, eg. leachate capture, air quality, methane capture waste diversion.	12.5
		WDE3: Investigate the establishment of a free to use recycling waste facility and shop before the landfill gates, implement if found to be economically viable.	12.5
		WDE5: Waste diversion at landfill increases – increase collection and diversion of reusable and recyclable items.	12.5
	Production	WPC1: Waste minimisation plans are required as part of Council building projects - Work Instruction to be approved by SLT.	12.5
	Pollution and contamination	WPCE2: Council works with local businesses to identify, reduce, and phase out contaminating materials.	12.5
		WPCT4: Investigate methods and implement procedures to prevent e-waste from going to landfill.	12.5
	Usage	WUE2: Investigate changes to District Plan to require water conservation measures as part of resource consent requirements.	12.5

FOCUS AREA	ISSUE	ACTION	SCORE
Water	Usage	WUE3: Promote establishment of grey water recycling systems and rainwater harvesting on new and refurbished Council buildings.	12.5
		WUT3: Council will take part in regional discussions to decide when a new bulk water source is needed.	12.5
Energy	Air pollution	EAC2: Council uses renewable energy whenever economically viable eg. solar, wind, ground-source.	12
	Changing demand	EDE1: Identify areas where Council can incentivise the uptake of energy efficiency technologies. eg. Waiving consent fees for wall insulation, installation of wind etc.	12
		EDE2: Improve the quality of information on our local renewable energy resource, solar insolation, wind etc.	12
	Efficiency	EEE1: Investigate use of a wood fired boiler on a Council building.	12
	Energy emissions	EMC1: Investigate installation of additional solar energy on Council buildings, install where economically viable.	12
EMC2: Introduce and trial use electric car/s into Council vehicle fleet.		12	
Land use	Accessibility and efficient use of space	LAC3: Process is put in place to ensure that all plans, strategies, work instructions and policies consider and contain sustainability and environmental protection criteria.	12
		LAT3: Encourage retention and development of Design Guides, where appropriate.	12
	Food supply	LFC2: Fruit Tree Guardian Programme is introduced and encouraged.	12
Transport	Network optimisation	TNC3: Work with partners (GWRC, bus service providers, NZTA) to investigate greater use of measures to reduce bus journey times eg. priority at traffic signals, bus lanes, express services.	11.5
Waste	Disposal	WDC5: Investigate methods to prevent recycling from being put in Council rubbish bags.	11.5
		WDC6: Increase kerbside recycling tonnages per capita.	11.5
		WDE4: Investigate use of wheelie bins for kerbside recycling.	11.5
	Production	WPC6: The use of recovered materials is considered in Council building contracts.	11.5
Energy	Air pollution	EAC1: On new buildings, Council selects the lowest air contaminating energy use option, where economically viable.	11
	Changing demand	EDC1: Investigate use of Council gym equipment to generate and store electricity.	11
		EDC2: An Energy Reduction Plan is developed and implemented for the organisation.	11
		EDT1: Investigate District Plan changes to require energy conservation consideration.	11

FOCUS AREA	ISSUE	ACTION	SCORE
Energy	Efficiency	EEE2: Investigate measures to encourage wind turbines.	11
	Energy emissions	EME1: Lobby Central Government on policies that would improve the standard of energy efficiency and conservation within the Hutt Region.	11
Land use	Accessibility and efficient use of space	LAE3: Encourage inclusion of discrete waste and recycling spaces within new developments.	11
Transport	Transport emissions	TEE2: Advocate for increased mode share for public transport trips.	10.5
Waste	Disposal	WDT1: Review effectiveness, number, and positions of community recycling stations. Implement agreed changes (if any).	10.5
		WDT6: Promote and encourage construction and demolition waste reduction, reuse, and recycling.	10.5
Water	Quality	WQT1: Investigate feasibility of building car wash pad for community car washes, implement if viable.	10.5
Energy	Efficiency	EET1: Liaise with Lines Company and Energy Suppliers to assist with, advocate for identification and reduction of transmission losses.	10
	Energy emissions	EMT4: Identify top 10 highest users and work with them to help reduce energy use.	10
		EMT5: Work with businesses to help build electric car charging points.	10
Waste	Production	WPC4: Procurement policy updated and implemented to include improved sustainable purchasing criteria, and Life Cycle Assessment tool.	9.5
Energy	Changing demand	EDT3: Investigate incentivising energy audits for largest users.	9
Waste	Disposal	WDC3: Investigate and implement measures to prevent recyclables from being put into the landfill.	8.5
		WDC2: Improve signage and layout for recycling bays at landfill.	7.5

ADDITIONAL INFORMATION ON THE PRIORITISATION TOOL

How the prioritisation tool was developed

There is no single off-the-shelf model that prioritises environmental action at a local level. This model has therefore taken components from a number of different approaches internationally and is open to testing and improvement over time. The model is designed to be relatively simple and straightforward to use and understand, so only includes a number of what are considered to be the key factors to assess actions based on a few key measures which are:

- based on sound evidence that can be enhanced over time
- balanced across environmental need, impact, risk, achievability and support
- related to our key environmental areas of interest (focus areas and issues).

THE FACTORS USED TO SCORE THE ACTIONS:

Focus Area provides a ranking at the highest level for an individual action. This reflects that some areas of the environment are more in need of action than others. The ranking currently used has been developed from an NZIER approach (which has its own limitations) and is at the national level. However, it provides a useful starting point for us to establish our own city-based priority list for our focus areas. With a reduction in the weighting of focus area it does not have an over-riding impact on the action scoring.

The **Issue score** is based on work done during development of the revised ESS (p18) which identified the magnitude of consequences of not addressing particular environmental issues. This scoring was carried out through workshop sessions with Council staff across a range of different teams and some external stakeholders. Further work can

be done to improve the foundation for this scoring as outlined in the ESS (p18).

Strategic fit is important to ensure that we are taking action that aligns with the direction and purpose of the organisation. The current approach is fairly 'blunt' and could be further improved to identify if the action is achieving overall strategic goals for the organisation.

The impact of the action on **human health** was seen as an important component to recognise key environmental outcomes related to provision of eco-system services (eg. clean water, air, soil, etc.) which people utilise.

Overall **environmental effect** is probably the single most important component of the model – it is, after all, what the ESS is seeking to improve. If anything it could potentially be given greater weighting or prominence within the tool.

Community support aims to give some assessment of the likely level of support that exists. It can be somewhat subjective, but may be improved by use of survey results, opinion polls, or submissions on Council plans and strategies.

In addition, actions are identified as discretionary/ mandatory, though this factor is not included in the scoring – however, if some mandatory actions were found to score low then part of the decision-making for Council may be around renewing discussions on the merit of such activities with the mandating agency.

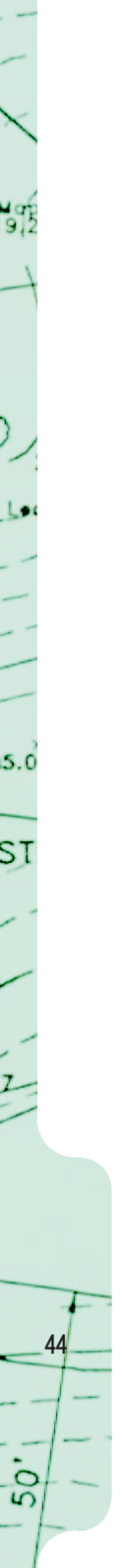
The model does have limitations in that it is subjective – based on both the factors included in the model, and on the scoring that is decided upon by the user. It should therefore be used as a guide and not adhered to rigidly to make decisions (eg. on whether to include

or exclude actions) as other criteria or factors are also likely to play a part. Actions should also be scored by a number of people and results checked or approved by managers (ie. a process developed to use, update and report on model findings).

Overall the prioritisation approach can be used as one component in decision-making about environmental actions, across both new and existing actions, and across all focus areas. The number of actions is in itself not a good measure of how effective we are being in the environmental area.

It is proposed that this tool be regularly updated and improved – for example, Council could:

- combine all information on individual actions into a single system, file or database (ie. combining priority scoring with other implementation information such as cost, lead officer, timing, etc.). Currently we are replicating the information in two places which necessitates managing two different systems.
- develop improved local information for which to base the scoring for all factors in the model.
- test and 'socialise' the model internally and externally.





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