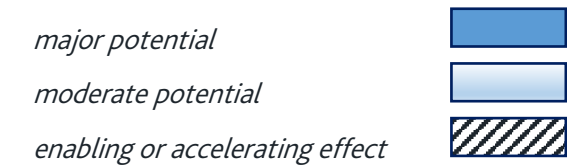



Implementation summary table

It is not possible to model all actions for potential emissions reduction through CURB, but indicative targets are incorporated here where available. It is important to note that enabling actions, although not modelled, will directly impact our ability in delivering emissions reductions and building resilience and so are a key component of meeting our climate goals. More information on our decarbonisation pathway and assumptions is available in the *Decarbonisation Pathway* section of the plan.

Key risks to the Auckland region have been identified and the potential impact of actions to address once or more of these risks is highlighted below. More information is available in the *Auckland's Climate Risks* section of the plan.

KEY (degree to which action will reduce greenhouse gas emissions and address climate risks):



Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Natural Environment																
Action N1: Build the resilience of Auckland's indigenous biodiversity, habitats, and ecosystems to the impacts of climate change	Increase our understanding of potential climate change risks to Auckland's indigenous ecosystems and species; and ensure that these are integrated into planning and policy considerations.	Auckland Council	Lever	Academia Central Government		Plant 80% of 19,350 hectares of new forest (15,480 hectares)	Plant 100% of 19,350 hectares of new forest			X			Extent of terrestrial, freshwater and marine environments formally protected (as a percentage of total area)			L
	Increase our commitment to control key pests and weeds that are expected to benefit from climate change, across the full range of Auckland's indigenous ecosystems.	Auckland Council	Direct Control	Mana Whenua / Māori Central Government (DoC / MPI) Community Private Landowners Land Managers Voluntary Sector			Canopy cover at 30 per cent across Auckland's urban area, and at least 15 per cent in every local board area		X	X	x		Per cent decrease in the area infested by invasive species			H
	Expand habitat protection, restoration and enhancement programmes to increase the viability, geographical extent and connectivity of indigenous terrestrial, freshwater and marine ecosystems.	Auckland Council	Direct Control	Mana Whenua / Māori Central Government (DoC / MPI) Private Landowners Community Voluntary Sector Land Managers					x	X	x		Per cent increase in Auckland's land area under invasive species management programmes			

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
	Expand habitat restoration within the Kaipara Harbour, Hauraki Gulf and Manukau Harbour.	Auckland Council	Lever	Central Government (DoC / MPI) Community Voluntary Sector					X	X			Percentage of threatened plants and animals under active management			H
	Develop approaches that support resilience and recovery of indigenous biodiversity from climate change effects (e.g. drought, storms) and increase public understanding of the importance of pre-emptive action.	Auckland Council	Direct Control Advocate	Central Government (DoC) Community Voluntary Sector						X		X	Percentage of priority native habitats under active management			M
	Increase opportunities for community-led monitoring programmes and connection to our natural environment.	Voluntary sector	Lever	Community Voluntary Sector Auckland Council					X	X		X	Percentage of marine area protected and restored Tree canopy cover, regionally and by Local Board area Marae and community-based nurseries			M
	Promote, progress and fund current and emerging initiatives, programmes and groups actively committed to the restoration, sustainability and protection of interaction between tangata (people) and whenua (land) systems within their communities.															
	Undertake and support research to improve understanding of the multiple benefits of trees in the Auckland region, incorporating mātauranga Māori and indicators of mauri.	Academia	Lever	Mana Whenua / Māori Community Auckland Council					X	X		X	Tree canopy cover, regionally and by Local Board area			M
	Increase indigenous tree plantings in road corridors, parks and open spaces.	Auckland Council	Lever Influence	Private Landowners Land Managers					X	X	X		Marae and community-based nurseries			M
	Use research and technology, in partnership with iwi and communities, to identify priority areas for future planting that achieves multiple outcomes.	Academia	Lever	Mana Whenua / Māori Community Auckland Council					X	X		X	Public perceptions of environmental protection and awareness			L

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Action N2: Grow and protect our rural and urban ngahere/forest to maximise carbon capture and build resilience	Provide support, guidance and advice for landowners to undertake ecological restoration and tree planting on private land and establish mechanisms to track these.	Auckland Council	Lever	Mana Whenua / Māori Community Voluntary Sector					X	X	X	X	increase in number of nature-based solutions owned and maintained by community			M
	Build the capacity and capability of existing marae and community nurseries and conservation / planting groups through assistance, advice, and training programmes.	Auckland Council	Direct Control						X	X			Number of approved developments that incorporate hua rakau, hua whenua, native trees and green spaces			M
	Protect important trees through improved planning regulations and ensure publicly managed trees are not removed without clear justification.	Auckland Council	Lever Direct Control	Auckland Transport Panuku					X	X			Public perceptions of environmental protection and awareness			L
Action N3: Integrate connected, nature-based solutions in development planning	Increase uptake of nature-based solutions within council family projects and develop further supporting tools for decision making where these are not currently available.	Auckland Council	Lever	Private Landowners / Developers Panuku Mana Whenua / Māori						X			increase in number of nature-based solutions owned and maintained by community			L
	Provide new and promote existing regulatory, planning and educational tools to support nature-based solutions and maintain habitat corridors on private land and developments.	Auckland Council	Direct Control							X			Number of approved developments that incorporate hua rākau, hua whenua, native trees and green spaces			L
	Incorporate protection, managed retreat and restoration of indigenous coastal ecosystems into planning for sea level change.	Auckland Council	Direct Control						X	X	X	X				L
	Establish a monitoring framework to show the benefits of nature-based solutions projects.	Auckland Council	Lever	Panuku Mana Whenua / Māori					X	X	X	X				L
	Empower and partner with community groups and the public to encourage community-led projects.	Auckland Council	Lever Influence	Community Voluntary Sector					X	X						M
	Enhance, extend and connect Auckland's blue-green networks to protect and enhance ecosystem function and species viability.	Auckland Council	Direct Control Lever	Mana Whenua / Māori Panuku					X	X	X	X				H

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
				Central Government (Kainga Ora) Community Voluntary Sector Private Landowners												
Action N4: Maximise carbon capture potential of terrestrial and marine ecosystems	Support research and pilot projects that measure the biological sequestration of carbon in terrestrial, freshwater and marine ecosystems.	Academia	Lever	Auckland Council								Carbon sequestered by trees/vegetation, soils and marine ecosystems			M	
	Improve understanding of soil sequestration potential of different land management practices.	Academia	Lever	Rural Landowners Land Managers								Investment in sequestrations schemes by sector			M	
	Identify opportunities for businesses and individuals to contribute to sequestration schemes in the region that support their emissions reduction goals and wider social and environmental outcomes.	Auckland Council	Lever	Business					X	X	X				L	
Action N5: Ensure land use practices deliver healthy, resilient soils, waterways and ecosystems	Support rural Aucklanders to manage land in ways that grow resilience to climate change and enhance and support biodiversity and waterway health.	Rural landowners	Lever Influence	Auckland Council Land Managers					X	X	X	X	Marine and freshwater quality indicators (e.g. nutrients, sediment, temperature) from SOE reporting			H
	Establish land management actions that will create 'green infrastructure' to benefit farmers, land managers and the wider region (e.g. planting trees, riparian fencing and planting, restoring or creating wetlands).	Auckland Council	Lever	Rural Landowners Land Managers					X	X	X		Air quality indicators (e.g. particulate matter)			M
	Trial soil quality enrichment practices to enhance plant growth and carbon sequestration	Auckland Council	Lever	Rural Landowners Land Managers							X		Soil health indicators (e.g. nutrient levels)			L

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	

Built Environment

Action B1:
Ensure our approach to planning and growth aligns with low carbon, resilient outcomes

Review provisions in the Auckland Unitary Plan (AUP) from a climate and natural hazards perspective and use this to inform the statutory review of the AUP and future plan changes.	Auckland Council	Lever	Planning & Development Sector		All new residential and commercial buildings to operate at net zero emissions	All new residential and commercial buildings to operate at net zero emissions			X			Percentage of annual dwelling consents within 1,000m of a train or busway station (rapid transit network stations)			L
Ensure growth modelling assesses the impacts of different growth scenarios on climate change mitigation and adaptation.	Auckland Council	Lever	Central Government Academia						X						L
Review and update the growth modelling criteria in line with the latest climate evidence, knowledge and projections.	Auckland Council	Lever	Central Government Academia		Retrofit 50% of existing residential and commercial buildings to a high standard of energy efficiency	Retrofit 100% of existing residential and commercial buildings to a high standard of energy efficiency			X			Number of buildings consented in flood plains and flood prone areas per annum			L
Maintain and uphold a quality compact urban form as outlined in the Auckland Development Strategy. Review its implementation to ensure that opportunities for low carbon, resilient development are being realised.	Auckland Council	Lever	Mana Whenua Planning & Development Sector					X	X	X					L
Develop masterplans that demonstrate and promote the opportunity for zero carbon, transit-oriented development that build climate resilience.	Auckland Council	Lever	Mana Whenua Planning & Development Sector		40% of new dwellings are in transit-oriented developments	65% of new dwellings are in transit-oriented developments		X	X	X	X				L
Develop Auckland Council requirements and guidance for development with known natural hazard risks and formalise the approach to consenting and vesting of at-risk assets.	Auckland Council	Direct Control			Replace 75% of gas heaters in existing residential and commercial buildings with electric heat pumps	Replace 100% of gas heaters in existing residential and commercial buildings with electric heat pumps		X	X	X					L
Investigate mechanisms to improve consenting for projects that reduce and manage natural hazards and develop a natural hazard management toolbox for regulatory staff	Auckland Council	Lever			Replace 75% of gas heaters in existing residential and commercial buildings with electric heat pumps	Replace 100% of gas heaters in existing residential and commercial buildings with electric heat pumps		X	X						L
Collaborate to ensure climate change mitigation and adaptation is a priority in national planning legislation.	Central Government	Advocate	Auckland Council Planning & Development Sector		Replace 50% of gas water heaters in	Replace 100% of gas water heaters in			X						L

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Action B2: Ensure new infrastructure is planned and designed to minimise climate risks and lifecycle emissions	Assess climate change impacts for all new developments and infrastructure, starting at the business case stage, to identify to what degree a proposal supports or conflicts with our climate goals over its lifecycle.	Auckland Council	Lever	Planning & Development Sector		existing residential and commercial buildings with electric heat pump water heaters	existing residential and commercial buildings with electric heat pump water heaters						Percentage of major development and infrastructure proposals that complete a climate change impact assessment, starting at the business case stage			L
	Embed a Dynamic Adaptive Policy Pathways approach to support decisions being made at the right time	Auckland Council	Direct Control	Lifelines Group									Number of buildings consented in flood plains and flood prone areas per annum			L
	Assess and support pathways to decrease construction of new infrastructure in known hazard zones	Auckland Council	Direct Control	Planning & Development Sector		Wood waste reduced by 30% and 30% of the remaining waste incinerated to produce energy	Wood waste reduced by 50% and 100% of the remaining waste incinerated to produce energy				X		Percentage of major development and infrastructure proposals that complete a climate change impact assessment, starting at the business case stage			L
	Ensure that long term resilience and natural hazard planning are embedded in new infrastructure developments.	Auckland Council	Direct Control	Planning & Development Sector		50% of electricity currently imported by wastewater treatment plants is met by internal generation	100% of electricity currently imported by wastewater treatment plants is met by internal generation				X		Number of buildings consented in flood plains and flood prone areas per annum			L
	Deliver stormwater solutions and water sensitive urban design to enable resilient development and build community resilience.	Auckland Council	Direct Control	Planning & Development Sector					X	X	X	X	Number of buildings consented in flood plains and flood prone areas per annum			H
	Reduce infrastructure carbon for water and wastewater assets and build their resilience in line with the latest climate projections	Watercare	Direct Control	Planning & Development Sector					X				New Infrastructure consented in known hazard zones			H
												The number of flooding events that occur and the associated number of habitable floors affected per 1000 properties connect to Auckland Council's stormwater network			H	

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Action B3: Ensure the management of existing infrastructure increases climate resilience and reduces emissions	Address natural hazard and climate risks in asset management plans, applying natural hazards risks criteria and methods, such as Dynamic Adaptive Policy Pathways.	Auckland Council	Direct Control										Quantity and value of infrastructure exposed to climate risks			L
	Improve understanding of the economic impacts of natural hazards on Auckland Council assets.	Auckland Council	Direct Control								X		Port of Auckland emissions			L
	Understand where critical infrastructure may be vulnerable to the impacts of climate change and identify interdependencies	Auckland Lifelines Group	Direct Control								X		Closed landfill emissions			L
	Address climate change issues relating to Auckland's closed landfills, including exposure to climate risks and GHG emissions.	Auckland Council	Direct Control							X						M
	Transition to a zero emissions Ports of Auckland by 2040	Ports of Auckland	Lever	Shipping & Freight Sector												H
Action B4: Identify and deliver alternative water supply options to address population growth and climate change while protecting and enhancing te Mauri o te Wai	Investigate alternative water sources that consider the impacts of climate change while ensuring the protection and enhancement of te Mauri o te Wai.	Watercare	Direct Control						X	X			Water sources for the region			H
	Investigate energy and emissions requirements for possible new water supply options (including desalination and wastewater reuse) to inform decision making for new sources.	Watercare	Lever										Emissions related to water supply			L
	Monitor and model climate impacts on the water system to understand the resilience of the network.	Watercare	Direct Control										The average consumption of drinking water per day per resident (litres)			L
	Identify low-lying water and wastewater assets that are within projected sea level rise over the next 100 years.	Watercare	Direct Control													L
	Advocate for central government to progressively update the Building Code on a regular basis with all new buildings required to operate at net zero carbon by 2030.	Central Government	Advocate	Property & Construction Sector / New Zealand Green Building Council										Percentage of new buildings built to a sustainable design standard per annum		
Remove barriers to sustainable design and construction, including council processes and	Property & Construction Sector / New	Lever	Auckland Council						X	X	X					L

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Action B5: Accelerate the uptake of sustainable design and construction for new buildings	enable other mechanisms, such as incentivisation and upskilling.	Zealand Green Building Council										Number of buildings located in a hazard zone				
	Document, share and promote processes and lessons learned on delivery of net zero energy buildings, such as a net positive energy, zero carbon building project in Henderson, to inspire and enable easier and faster uptake of sustainable buildings.	Property & Construction Sector / New Zealand Green Building Council	Lever	Auckland Council Te Kōpua Marae					X	X		X	Percentage of buildings exposed to flood hazards		L	
	Promote and incentivise the certification of new apartment properties to performance standards that meet the requirements of the Healthy Homes Act (e.g. Passive House).	Property & Construction Sector / New Zealand Green Building Council	Lever	Auckland Council Panuku Development Ltd					X	X	X		The number of flooding events that occur and the associated number of habitable floors affected per 1000 properties connect to Auckland Council's stormwater network			L
	Deliver on Auckland Council's Sustainable Asset Standard and use third party green building and sustainable infrastructure rating tools to measure and reduce council asset's environmental impact.	Auckland Council	Direct Control	Property & Construction Sector					X	X	X					H
Action B6: Deliver and support retrofit programmes to transition to low-carbon, resilient, healthy buildings	Deliver a residential retrofit programme to improve the health and efficiency of Auckland's residential buildings, including the installation of insulation, double glazing, efficient heating and lighting, and renewable energy generation.	Central Government	Advocate	Homeowners					X	X	X		Percentage of residential and commercial buildings retrofitted to a high standard of energy efficiency			H
	Establish a commercial building retrofit programme, to improve the performance and resilience of Auckland's commercial building sector and promote and enable fuel switching from natural gas to electricity.	Central Government	Advocate	Property & Construction Sector / New Zealand Green Building Council Businesses							X	X		Percentage of residential and commercial buildings retrofitted to increase resilience		H
	Establish a programme for installing climate resilience measures at a building and area scale to address climate risks.	Auckland Council	Lever Direct Control (over Auckland Council owned assets)	Property & Construction Sector / New Zealand Green Building Council					X	X	X					H
	Support uptake of productive roofs in Auckland. Showcase opportunities through pilots on public assets, address current barriers to uptake and investigate incentivisation mechanisms	Auckland Council	Lever	Property & Construction Sector / New Zealand Green Building Council					X	X		X				L

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
				Central Government												
Action B7: Develop and support initiatives to minimise construction and demolition waste	Update the Building Code to consider waste and climate impacts, for full lifecycle (including deconstruction) when consents are lodged.	Central Government	Advocate	Construction Sector / New Zealand Green Building Council						X	X		Tonnes of construction and demolition waste per year and percentage sent to landfill		L	
	Continue to roll out the "Building out Waste" tools and guidelines to educate the wider construction industry, and support and integrate community and social enterprises into construction and demolition initiatives.	Auckland Council	Lever	Community Social Enterprises					X	X	X			L		
	Develop a deconstruction hub that provides infrastructure for industry to exchange key materials and share best practice expertise.	Auckland Council	Direct Control	Construction Sector							X	X			M	
	Embed circular economic principles to address construction and demolition waste.	Construction Sector	Lever	Academia Central Government Auckland Council					X	X	X				L	
	Continue research into the role of reused and recycled construction materials and ensure Auckland Council contracts are maximising opportunities to recover useful materials.	Construction Sector	Lever	Academia Central Government Auckland Council					X	X	X				L	
	Use demonstration projects to drive demand for recovered materials.	Construction Sector	Lever	Academia Central Government Auckland Council					X	X	X				L	
	Embed climate change mitigation and adaptation measures in all park plans for the region.	Auckland Council	Direct Control	Central Government (DoC)							X				L	
	Ensure public spaces meet the growing demands of a growing population and urban intensification by optimising spaces for multiple functions such as recreation, water management and biodiversity enhancement.	Auckland Council	Direct Control	Central Government					X				M, L		H	
	Prioritise the use of green infrastructure to provide multiple benefits with a low carbon footprint and include lifecycle analysis requirements in business cases.	Auckland Council	Direct Control	Central Government					X	X	X	X	S, M, L		L	

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Action B8: Ensure public spaces support a low carbon, climate resilient Auckland and optimise multi-functional benefits	Explore initiatives to reduce travel need and adapt locations and scheduling for more local events such as sporting events.	Auckland Council	Lever	Community and Sporting Groups Sports and Events Sector					X						L	
	Use underutilised land for opportunities such as energy generation and carbon sequestration.	Auckland Council	Direct Control						X	X	X				M	
Action B9: Establish and rapidly scale low carbon, resilient precincts across Auckland	Create climate positive districts and suitable locations across the region	Auckland Council Panuku Development Auckland Ltd	Lever Direct Control	Property & Construction Sector NZ Green Building Council Business Community					X	X					H	
	Identify and optimise opportunities for delivering low carbon, resilient precincts, such as the Opanuku Precinct in Henderson and the Unlock Takapuna programme.	Auckland Council Panuku Development Auckland Ltd	Lever Direct Control	Property & Construction Sector NZ Green Building Council Business Community					X	X		Number of low carbon precincts delivered			H	
	Deliver a zero emissions area in the City Centre and apply learnings to other urban centres.	Auckland Transport	Direct Control	City Centre Stakeholders					X	X					H	

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	

Transport

**Action T1:
Changing the way we all travel**

Encourage the use of public transport, walking and micro-mobility devices, rather than driving.	Community Business	Lever Influence	Auckland Council Auckland Transport Central Government (NZTA, MoT, MfE, MBIE) Other government sector and Not-For-Profit Partners		Vehicle kilometres travelled by private vehicles reduced by 12% as a result of avoided motorised vehicle travel, through actions such as remote working and reduced trip lengths	Vehicle kilometres travelled by private vehicles reduced by 12% as a result of avoided motorised vehicle travel, through actions such as remote working and reduced trip lengths		X	X	X		All transport indicators			M
Shorten private vehicle trips, and fulfil several travel needs at once including for business purposes.	Community Business	Lever Influence	Auckland Council Auckland Transport Central Government (NZTA, MoT, MfE, MBIE) Other government sector and Not-For-Profit Partners		Public transport mode share to increase from 7.8% to 24.5%	Public transport mode share to increase from 7.8% to 35%		X	X	X					M
Choose lower emissions vehicles when purchasing, sharing or leasing.	Community Business	Lever Influence	Auckland Council Auckland Transport Central Government (NZTA, MoT, MfE, MBIE) Other government sector and Not-For-Profit Partners		Cycling mode share to increase from 0.9% to 7%	Cycling mode share to increase from 0.9% to 9%		X	X	X					M
Reduce private vehicle travel and encourage lower emissions travel options by introducing pricing and parking measures.	Auckland Council Auckland Transport Central Government (MoT)	Lever Influence Direct Control	Central Government (NZTA, Treasury, MfE, MBIE) Business		100% of Auckland's bus fleet to be zero emission	100% of Auckland's bus fleet to be zero emission 80% of passenger and			X	X					H

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need	
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)		
				Other government sector and Not-For-Profit Partners		40% of passenger and light commercial vehicles to be electric or zero emission	light commercial vehicles to be electric or zero emission										
Action T2: Make travelling by public transport more appealing than using personal vehicles	Make travel by public transport faster, more frequent and reliable over a wider network.	Auckland Council Auckland Transport Central Government (NZTA)	Direct Control Lever			40% of road freight to be electric or zero emission	80% of road freight to be electric or zero emission		x	x	x		Public transport boardings total and per capita			H	
	Adjust public transport prices to support low income Aucklanders and increase inter-peak ridership	Auckland Council Auckland Transport Central Government (NZTA)	Direct Control Lever			18% increase in fuel efficiency of the light vehicle fleet (internal combustion engine)	25% increase in fuel efficiency of the light vehicle fleet (internal combustion engine)		x		x	x					M
	Prioritise investment along congested corridors and expand Auckland's Rapid Transit Network	Auckland Council Auckland Transport Central Government (NZTA)	Direct Control Lever			15% increase in fuel efficiency of the freight vehicle fleet (internal combustion engine)	25% increase in the fuel efficiency of the freight vehicle fleet (internal combustion engine)		x	x	X						H
Action T3: Increase access to bicycles, micro-mobility devices and the safe, connected, and dedicated infrastructure that supports their use	Accelerate investment in dedicated cycleways that can be used by other micro-mobility devices and improve access to public transport hubs, education facilities and other key destinations.	Auckland Council Auckland Transport Central Government (NZTA)	Direct Control Lever			15% increase in fuel efficiency of the freight vehicle fleet (internal combustion engine)	20% of road freight to shift to rail		X	X	X		Cycle counts at selected sites.			M	
	Improve bicycle and micro-mobility parking and other end-of-trip facilities.	Auckland Council Auckland Transport	Direct Control Lever	Central Government (NZTA)		8% of road freight to shift to rail			X	X	X					L	
	Improve access to communal and personal transport devices for low-income Aucklanders.	Auckland Council Auckland Transport	Direct Control Lever	Central Government Community					X	X	X	X					L

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Action T4: Improve safety, connectivity, and amenity of walking infrastructure	Accelerate investment in high-quality, safe, and connected pathways.	Auckland Council Auckland Transport	Direct Control Lever	Central Government (NZTA)					x	x	x	x	Walking mode share			M
	Improve road crossings, where pedestrians are disadvantaged because of high exposure to traffic, long waits at signals or significant distances between controlled crossing points.	Auckland Council Auckland Transport	Direct Control Lever	Central Government (NZTA)					x	x	x	x				L
	Prioritise improvements to walking infrastructure at major destinations including public transport hubs and educational facilities	Auckland Council Auckland Transport	Direct Control Lever	Central Government (NZTA)					x	x	x	x				M
Action T5: Accelerate the transition of our passenger and light commercial fleet to low emissions vehicles	Implement policies and regulations that facilitate faster uptake of lower emissions vehicles.	Central Government (MoT)	Influence	Central Government (MfE, Treasury) Auckland Council Auckland Transport						x	x		Percentage and number of electric vehicles and hybrid light and heavy vehicles in fleet			M
	Invest in electric vehicle recharging capacity and incentivise uptake of electric vehicles through targeted parking and network priority.	Auckland Council Auckland Transport	Direct Control Lever	Central Government (NZTA) Industry							x	x				L
	Reduce emissions from our public transport fleet, including procurement of only electric buses from 2025	Auckland Council Auckland Transport	Direct Control Lever	Vector Bus Operators Central Government (NZTA)							x					M
Action T6: Make heavy freight systems more efficient and low carbon	Implement policies that facilitate faster uptake of low emissions vehicles.	Central Government (MoT)	Influence	Central Government (MfE, Treasury) Auckland Council Auckland Transport							x	x	Average fuel consumption/km of heavy vehicles in fleet			M
	Consolidate loads, mitigating empty runs, swap freight transit from heavy vehicles to rail and coastal shipping, and facilitate small-vehicle last mile deliveries from freight hubs	Central Government (NZTA) KiwiRail Industry	Lever Influence	Auckland Council Auckland Transport Central Government (NZTA, MoT) Ports of Auckland Ltd								x	x	Average vehicle kilometres travelled per heavy vehicle in fleet Freight tonne kilometres moved		

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
													by rail, coastal shipping and road			
Action T7: Enhance the resilience of our transport network	Assess the current and potential susceptibility of our transport network assets (and the services using it) to hazards, and update this assessment for potential future hazard conditions	Auckland Transport Central Government (NZTA) Kiwirail	Direct control	Auckland Council Mana Whenua / Māori					x		x	x	Quantity and value of transport infrastructure exposed to climate risks			L
	Work with NZTA and KiwiRail to understand similar susceptibility conditions for our state highways and rail network	Auckland Transport Central Government (NZTA) Kiwirail	Advocate	Auckland Council Mana Whenua / Māori					x		x	x				L
	Use these analyses to reduce long-term cost and ensure resilience of future asset design and constructions	Auckland Transport Central Government (NZTA) Kiwirail	Direct control (for Auckland Council assets and infrastructure)	Auckland Council Mana Whenua / Māori					x		x	x				H
Economy																
Action E1: Accelerate Auckland's transformation to a resilient, regenerative, and distributive economy	Investigate new economic tools and frameworks, such as the City Doughnut tool, to inform Auckland's economic transition.	Auckland Council	Lever	ATEED Central Government					x	x	x	x	Number of businesses adopting regenerative business models			L
	Accelerate business capability and pathways to resilient and regenerative business models.	Central Government	Lever	Business ATEED Mana Whenua / Māori Central Government					x	x	x	x	Environmental impact and social cost of economic production and consumption e.g. genuine progress indicator			M
	Assess climate change risks to Auckland's economy and develop targeted programmes to support the most affected sectors	ATEED	Lever	Business Mana Whenua / Māori Central Government					x	x	x	x				L
	Redirect capital towards sustainability outcomes, improve how we value social and environmental impacts and build awareness	Finance Sector, through the Aotearoa Circle	Lever	Auckland Council Business					x	x	x		Number of jobs created for the green economy (or percentage of employment in			L

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Action E2: Accelerate the uptake of innovation that supports the delivery of a resilient, climate proof and regenerative economy	and capacity in the financial sector more broadly.	Sustainable Finance Forum		Central Government Academia								the green economy)				
	Define regenerative economy for Auckland in collaboration with mana whenua, iwi, business and community and in alignment with Te Ora O Tāmaki Makaurau.	Mana Whenua & Auckland Council	Lever	Business Community Mana Whenua / Māori Central Government					X	X	X	X	Percentage change in the average wage in Auckland			L
	Partner and collaborate with central government, business, academia and Māori to enable adoption of technology and solutions that accelerate the decarbonisation of Auckland.	ATEED	Direct Control	Central Government Business Academia Mana Whenua / Māori Non-Governmental Organisations					X	X	X	X	Investment in climate innovation by Auckland businesses (\$NZ)			H
Action E3: Accelerate the decarbonisation of Auckland's business sector	Provide a climate innovation hub that enables Aucklanders to introduce climate compatible solutions to the market.	ATEED	Direct Control	Central Government Business Academia Mana Whenua / Māori Non-Governmental Organisations					X	X	X	X	Investment in climate innovation by Auckland businesses (\$NZ)			H
	Decarbonise operations, supply chain and products and services.	Business	Lever	Auckland Council Central Government					X	X	X		Percentage change in tCO2e per million \$NZ GDP			L
	Enable alternative and remote ways of working for Aucklanders.	Business	Lever	Auckland Council					X	X	X		Percentage change in tCO2e per million \$NZ GDP			L
	Where applicable, disclose on climate-related financial risks.	Business	Lever	Auckland Council Central Government							X		Number of Auckland businesses disclosing their climate risks			L

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need		
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)			
Action E4: Ensure Aucklanders are prepared for the transition to a zero-carbon economy	Collaborate with business, community, academia and Māori to develop a regional just transition plan for Auckland.	ATEED	Direct Control	Business Academia Community Mana Whenua / Māori Central Government					X	X	X		and/or greenhouse gas emissions in their annual plan					
	Build low-carbon and climate-resilient skills into New Zealand's education system.	Central Government	Lever						X	X		X	Percentage of people working remotely				L	
	Provide employees with the necessary training needed to support the delivery of a low-carbon economy.	Business	Direct Control (for own employees)	Academia Auckland Council					X	X	X		Number of jobs created for the green economy (or percentage of employment in the green economy)				L	
Action E5: Leverage public sector and large business procurement to deliver climate outcomes for Auckland	Work with large businesses and suppliers to reduce emissions and climate risk throughout supply chains.	Business	Lever	Auckland Council					X	X	X		Percentage of Auckland Council Group supplier contracts with carbon reduction KPI's				L	
	Encourage the adoption of innovation, green technology and circular solutions, and support suppliers as they transition to a lower carbon economy.	Business	Lever	Auckland Council					X	X	X						M	
Action E6: Manage our resources to deliver a zero waste, circular economy	Implement the Auckland Waste Management and Minimisation Plan including roll out of an urban household kerbside food scraps collection and establishing the Resource Recovery Network across Auckland.	Auckland Council	Lever Direct Control	Community Business Mana Whenua / Māori Business					X	X	X		Percentage change in total solid waste generation per annum				H	
	Undertake research and feasibility studies to inform investigations into onshore processing solutions for plastics and paper/cardboard from kerbside collections.	Central Government	Advocate	Business							X	X		Percentage change in domestic kerbside refuse per capita per annum			L	

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	

Communities and Coast











Action C1: Work together to strengthen the resilience of our communities, people and places	Establish a prioritised programme of support for communities and individuals who are most impacted	Auckland Council	Direct Control	Central Government Community Schools and Early Childhood Educators Social Agencies Not-for-Profit Organisations District Health Boards					X	X	X	X	Percentage of Aucklanders that feel connected to their local communities and empowered to take action together			M
	Engage and educate communities and industries to be aware of current and future climate risks and consequences of hazards.	Auckland Council	Direct Control					X	X	X	X	Number of households identified as disproportionately impacted by climate change				L
	Identify how mana whenua communities and their places can be more resilient.	Auckland Council	Direct Control	Auckland Council Academia Central Government				X	X	X	X					L
Action C2: Address the implications of climate change on our coastline	Establish long-term management approaches for our changing coastline, working with mana whenua communities in delivery of Coastal Management Plans.	Auckland Council	Direct Control	Mana Whenua / Māori Central Government Community Infrastructure Providers Business				X	X	X	X	Number of Coastal Compartment Management Plans delivered				H
	Undertake a regional coastal erosion study and a coastal hazard vulnerability assessment and work with communities to discuss options and prepare them for the future.	Auckland Council	Direct Control	Mana Whenua / Māori Central Government Community Infrastructure Providers				X	X	X	X					M
	Support iwi and hapu to account for climate change impacts from sea level rise.	Auckland Council (Ngā Mātārae)	Lever	Mana Whenua / Māori Auckland Council				X	X	X	X					M

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
	Develop a tsunami hazard model that takes account of sea level rise impacts	Auckland Council	Direct Control						X	X	X	X				L
	Incorporate protection, managed retreat and restoration of indigenous coastal ecosystems into planning for sea level change.	Auckland Council	Direct Control	Mana Whenua / Māori					X	X	X	X				L
	Review provisions in the Auckland Unitary Plan (AUP)	Auckland Council	Direct Control						X	X	X	X				L
Action C3: Engage in a way that enables and empowers all Aucklanders to have a say in climate decisions and to act	Communicate and engage with Aucklanders to improve understanding of the implications of climate change.	Auckland Council	Direct Control	Central Government Business					X	X	X	X	Percentage of Aucklanders that are aware of and concerned about climate change			L
	Improve and tailor resources for Aucklanders to take action at a local level	Auckland Council	Direct Control	Mana Whenua / Māori Community					X	X	X	X				L
	Form an intergenerational collective, that is rangatahi-led, to act as a channel between council and stakeholders to support climate action.	Auckland Council	Lever	Te Ohu Mana Rangatahi Auckland Council					X	X	X	X	Percentage of Aucklanders that are willing to change their lifestyle to ensure we meet our climate commitments			L
	Enhance whanaungatanga connections with mana whenua and mataawaka	Mana whenua / Māori							X	X	X	X				L
Action C4: Remove barriers and support community-based initiatives that reduce emissions and build resilience in a fair way	Support community-led action, enabling community and rangatahi activators	Auckland Council	Direct Control	Community Mana Whenua / Māori Schools and Early Childhood Educators					X	X	X	X	Number of Aucklanders engaged in living a low carbon lifestyle			M
	Deliver a climate action fund and establish community spaces (hubs) for support, learning and resilience.	Auckland Council	Direct Control	Community Mana Whenua / Māori Schools and Early Childhood Educators					X	X	X	X		Number of Community Climate Action Plans delivered		
	Provide communications and tools to support sustainable lifestyles through behaviour change.	Auckland Council	Direct Control	Community												
	Provide low carbon living demonstration sites, guidance and advisory services to enable a reduction in consumer emissions.	Auckland Council	Direct Control	Central Government Community												M










Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
				Schools and Early Childhood Educators Social Agencies Not-for-Profit Organisations												
	Enable mana whenua and mataawaka to reduce emissions and build resilience.	Auckland Council	Direct Control	Mana Whenua / Māori											M	
	Grow capacity and capability of schools, staff and students to reduce emissions, increase resilience and enable future leaders.	Auckland Council	Direct Control	Not-for-Profit Organisations Schools and Early Childhood Educators					X	X	X	X			L	
	Promote, progress and fund current and emerging initiatives, programmes and groups who are actively committed to the restoration, sustainability and protection of interaction between tangata (people) and whenua (land) systems within their communities.	Auckland Council	Lever	Rangatahi Community					X	X					M	
Action C5: Plan for climate-related migration	Assess potential impacts of climate change scenarios on Auckland's population and establish targeted programmes for affected communities and individuals to support climate migrants and the current needs of our growing population.	Auckland Council	Direct Control	Mana Whenua / Māori Community					X	X	X	X	Climate-related migration			M

Food

	Understand the impacts of climate change on food production in the region.	Auckland Council	Lever	Primary Industries Sector Mana Whenua / Māori		Food waste reduced by 30% and 30% of the remaining waste diverted to anaerobic	Food waste reduced by 50% and 100% of the remaining waste diverted to anaerobic				X		Number of landowners adopting regenerative practices			L
	Identify and share practices, technologies and business opportunities for environmental and economic sustainability in the primary sector.	Primary Industries Sector	Lever	Auckland Council						X	X		Food CCRA completed			M

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Action F1: Support primary industries and small businesses to increase food security, reduce emissions and build economic and climate resilience	Support development of a sustainable food economy through research, pilot studies and promotion of best practice and start-up innovation.	ATEED Auckland Council Panuku	Lever	Primary Industries Sector Business		digestion and composting 10% reduction in methane emissions from livestock	digestion and composting 47% reduction in methane emissions from livestock		X	X	X		Jobs relating to a sustainable food economy			L
						30% reduction in GHG emissions sources on land e.g. from fertiliser use and liming	80% reduction in GHG emissions sources on land e.g. from fertiliser use and liming									
Action F2: Protect our productive soils and move toward regenerative practices to increase food security and carbon sequestration	Advocate for and implement regulation that protects Auckland's productive soils for growing food and supports a change to more regenerative food growing practices.	Auckland Council Central Government (MPI)	Direct Control Lever	Mana Whenua / Māori Primary Industries Sector		Our food system makes up 18% of our consumption emissions in Auckland.				X	X		Percentage of productive soils protected			L
	Local government collaborate with community groups and industry to promote regenerative food growing, demonstrate and promote best practice and provide education and mentoring opportunities.	Auckland Council	Direct Control Lever	Mana Whenua / Māori Primary Industries Sector, including urban farmers Non-Governmental Organisations		Our modelling however can only address production emissions and so targets cannot be identified in the same way.					X	X				M

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Action F3: Prevent and reduce waste and maximise the value of surplus food	Deliver education and behaviour change programmes to prevent food waste, and redistribution of edible food.	Auckland Council	Lever	Food & Beverage Sector, including food rescue organisations Mana Whenua / Māori Primary Industries Sector, including urban farmers												
	Support redistribution of food through food rescue initiatives.	Auckland Council	Lever	Food & Beverage Sector, including food rescue organisations Mana Whenua / Māori Primary Industries Sector, including urban farmers					X	X	X		Percentage of food waste going to landfill			M
	Encourage home and community composting where possible, including local composting initiatives.	Waste Management Sector Food & Beverage sector	Direct Control Lever	Auckland Council Mana Whenua / Māori					X	X	X					H
	Collect remaining food waste with a kerbside collection of food scraps in urban areas of Auckland.	Auckland Council	Lever Direct Control	Community Business Mana Whenua / Māori Business					X	X	X					H
	Reduce food wastage at Auckland Council and Council Controlled Organisations assets and ensure Auckland Council run events are zero waste.	Auckland Council	Direct Control Lever Advocate	Waste Management Sector					X	X	X					L
	Advocate for national policies and funding mechanisms that drive food waste reduction.	Central Government	Advocate	Waste Management Sector					X	X	X	X				

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Action F4: Increase supply and demand for local, seasonal and low carbon food	Work with communities, food growers and retailers to ensure that all Aucklanders have access to fresh, affordable, and low carbon food and that this is an easy first choice for consumers.	Food & Beverage Sector	Lever	Auckland Council Community					X	X			Percentage of Aucklanders within 1km of a source of fresh seasonal produce		L	
	Support people to grow their own food, improving access to low carbon food growers or retailers, delivering behaviour change programmes and shifting procurement policy to prioritise sustainably produced, low carbon food.	Auckland Council, Panuku	Direct control, lever	Health Sector Primary Industries Sector, including urban farmers Food & Beverage Sector Non-Governmental Organisations					X	X	X	X	Percentage of Aucklanders within 1km of a source of fresh seasonal produce	 	M	
	Support, endorse and resource food sovereignty in accordance with our indigenous measurement tool: 'Ka noho' - wairua and ngākau: Assist rangatahi to reconnect with mātauranga Māori to nurture skills and awareness around what it means to be self-sufficient. 'Teina' - hinengaro: Enable educational programmes focused on reviving ancient Māori food practices as a way to help rangatahi and their whānau understand self-sovereignty beginning with food sovereignty. 'Te tangata' - tinana: Promote, progress and fund current and emerging initiatives, programmes and groups who are actively committed to the restoration, sustainability and protection of food sovereignty systems within their communities.	Auckland Council	Lever	Mana Whenua / Māori Rangatahi					X	X	X	X	Food Policy Council established		L	

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
						Action F5: Provide strategic direction and governance for Auckland's food system	Develop a food charter for Auckland, establish a Food Policy Council and advocate to government to establish a national food resilience policy.		Auckland Council	Advocate	Food System Actors Central Government					

Te Puāwaitanga Ō te Tātai: Actions are in further development both within the priority area and across the plan







Energy & Industry

Action EN1: Reduce process heat and industrial process emissions in the Auckland region	Collaborate and partner with central government and industry to decarbonise process heat	Central Government	Advocate	Business		23% reduction in GHG emissions from industrial processes as a result of efficiency gains, innovation and introducing biochar into the steel making process	82% reduction in GHG emissions from industrial processes as a result of efficiency gains, innovation and the use of hydrogen and biochar in the steel making process			X	X		Percentage change in emissions from industrial processes			H
	Support and advise on available low carbon technologies for low to medium process heat; and enable access to available funding opportunities.	Central Government	Advocate	Business						X	X					L
	Advocate for investment into research, development and implementation of high temperature process heat solutions.	Academia	Lever	Central Government						X	X		Percentage change in emissions from stationary fuel combustion (e.g. process heat)			M
	Address barriers in Auckland Council processes to the uptake of low carbon technologies.	Auckland Council	Levers							X	X					L
	Lead by example by decarbonising process heat on Auckland Council's and CCO's assets by phasing out natural gas boilers.	Auckland Council	Direct control							X	X					H
	Support and build on opportunities to decarbonise heavy vehicles and process heat through the Ports of Auckland's first green hydrogen fuel production plant.	Ports of Auckland	Lever	Central Government Business		22% of process heat switched from gas to electricity by 2030	50% of process heat switched from gas to electricity by 2030			X						
Advocate for central government to develop standards for hydrogen production and storage facilities and ensure these are reflected in the Auckland Unitary Plan (AUP).	Central Government	Advocate	Energy Sector		42% reduction in	50% reduction in process heat			X	X						L

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need	
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)		
Action EN2: Investigate and support the role of alternative, low carbon fuels in Auckland	Determine Auckland's role in the generation, storage and export of low carbon fuels.	Auckland Council	Lever	Energy Sector		process heat emissions as a result of waste heat recovery, high temperature heat pumps, best practice technology and switching from gas to biofuels.	emissions as a result of waste heat recovery, high temperature heat pumps, best practice technology and switching from gas to biofuels.				X	X				L	
	Action EN3: Reduce emissions from the electricity grid	Advocate to central government to implement renewable energy infrastructure to increase the proportion of renewable electricity supply in the grid.	Central Government	Lever	Energy Sector		94% of grid electricity is renewable - all coal and half of gas-fired power generation replaced with renewable electricity generation	100% of grid electricity is renewable				X	X	Percentage of grid electricity generated from renewable sources			H
Action EN4: Reduce emissions from industrial product use, specifically the use of hydrofluorocarbon (HFC) refrigerants	Support the installation of renewable energy generation in the Auckland region.	Auckland Council	Lever	Central Government		50% of residential and commercial buildings installed with solar PV					X	X				L	
	Align with the requirements of the Kigali Amendment to the Montreal Protocol	Central Government	Advocate			20% of residential and commercial buildings installed with solar PV					X		Percentage change in emissions from industrial product use			L	
	Advocate for product stewardship for HFCs in in New Zealand, and partner with refrigerant and air conditioning manufacturers in the Auckland region to identify and promote the safe use of low Global Warming Potential (GWP) refrigerants.	Central Government Auckland Council	Advocate Lever	Business, specifically refrigerant and air conditioning manufacturers.								X	X				L
	Educate and raise awareness of the GWP impacts of refrigerants and the products that contain them	Auckland Council Business, specifically refrigerant and air conditioning manufacturers.	Lever	Business							X	X					L
	Advocate for mandatory emissions labelling for products that contain refrigerants, to increase transparency.	Central Government	Advocate	Business								X	X				L
	Use Auckland Council's and CCO's property to test, trial and showcase innovative energy generation and support market growth through public procurement.	Auckland Council	Direct Control									X	X	Installed generation capacity of local and regional decentralised renewable energy solutions			H
	Remove barriers in council processes and support businesses and community groups	Auckland Council	Lever	Business								X	X				M

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
Action EN5: Develop, deliver and support local and regional decentralised renewable energy solutions	with the uptake of renewable energy solutions.															
	Support community-led initiatives to implement sustainable energy solutions.	Auckland Council	Lever	Community Energy sector Central Government					X	X		X			M	
	Provide an online community power hub to enable access to required skills and expertise.	Auckland Council	Lever	Community Energy sector Central Government							X	X		X		
	Develop energy sector partnerships to deliver regional energy efficiency opportunities at scale.	Auckland Council	Lever	Community Energy sector Central Government							X	X		X		
	Assess and remove barriers in Auckland Council procedures to the uptake of decentralised renewable energy solutions.	Auckland Council	Direct control								X	X		X		
Action EN6: Support energy demand management technologies, tools, and techniques to address Auckland's peak energy use	Use and support smart technologies to decrease peak energy usage and investigate incentives to change behaviours.	Energy Sector	Lever	Central Government												
									X	X	X	Percentage change in emissions from electricity consumption Percentage change in total stationary energy use Percentage change in total electricity use Percentage change in peak electricity use			L	
	Address energy poverty by providing targeted support for high energy household users in low socio-economic circumstances.	Auckland Council	Lever	Central Government Energy Sector												

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
	Deliver community energy efficiency and generation schemes through energy sector partnerships.	Energy Sector	Lever						X	X	X				L	
	Optimise building management systems and use other initiatives on Auckland Council's and CCO's facilities to reduce energy consumption.	Auckland Council	Direct Control							X	X				H	
Cross-Cutting																
Uphold Te Tiriti o Waitangi and treaty partnerships in decision making	Identify approaches, such as co-governance and on-going assessments of climate decision making, to ensure that treaty roles are upheld.	Auckland Council	Partnership	Independent Māori Statutory Board Mana Whenua Kaitiaki Forum					X	X	X	X				L
Secure long-term commitment and leadership from across mana whenua and public, private and voluntary sectors	Establish a leadership programme and governance with representation across sectors. Ensure that rangatahi are supported to be part of decision making.	Auckland Council	Partnership	Business Mana Whenua Kaitiaki Forum Rangatahi Central Government Community District Health Boards					X	X	X	X				L
Regularly review and update climate change evidence to inform decisions	Establish an on-going climate research programme, addressing gaps in knowledge and building awareness of decision makers. Establish new systems to more accurately measure costs and implications of on-going severe weather events.	Auckland Council	Partnership	Academia Schools Business Central Government					X	X	X	X				M

Action	Sub-action	Lead	Role of Council	Partners	GHG reduction	Indicative target aligned to decarbonisation pathway (where modelled)		Address climate risks	Additional Benefits				Indicators	When does this need to be delivered?		Resource Need
						2030	2050		Social	Environmental	Economic	Cultural		Years 1-3	Years 3-10 (by 2030)	
<p>Be transparent and provide data and information to enable citizen science, innovation and research and enabling people to be informed</p>	<p>Share climate-related data and information in an accessible way and identify research challenges and opportunities to address.</p>	Auckland Council	Partnership	<p>Academia Central Government (MBIE) National Science Challenges</p>					X	X	X	X				L
<p>Support, endorse and resource the establishment of a rangatahi roopu that enables us to put the rangatahi indigenous framework into action</p>	<p>Form an intergenerational collective, that is rangatahi-led, to act as a channel between council and stakeholders.</p>	Auckland Council	Partnership	Rangatahi					X	X	X	X				L