

## Ngā mahi huringa āhuarangi me ngā whāinga paetae

### Climate actions and targets

The targets outlined below provide a summary of the climate actions modelled to develop a decarbonisation pathway for Auckland.

#### *Modelled Climate Actions and Targets*

2030	2050
<b>Buildings</b>	
All new residential and commercial buildings to operate at net zero emissions	
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
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
Replace 50% of gas water heaters in existing residential and commercial buildings with electric heat pump water heaters	Replace 100% of gas water heaters in existing residential and commercial buildings with electric heat pump water heaters
40% of new dwellings are in transit-oriented developments	65% of new dwellings are in transit-oriented developments
<b>Energy</b>	
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
20% of residential and commercial buildings installed with solar PV	50% of residential and commercial buildings installed with solar PV
22% of process heat switched from gas to electricity by 2030	50% of process heat switched from gas to electricity by 2030
42% reduction in process heat emissions as a result of waste heat recovery, high temperature heat pumps, best practice technology and switching from gas to biofuels.	50% reduction in process heat emissions as a result of waste heat recovery, high temperature heat pumps, best practice technology and switching from gas to biofuels.

2030	2050
<b>Transport</b>	
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	
Public transport mode share to increase from 7.8% to 24.5%	Public transport mode share to increase from 7.8% to 35%
Cycling mode share to increase from 0.9% to 7%	Cycling mode share to increase from 0.9% to 9%
Walking mode share to increase from 4.1% to 6%	Walking mode share to increase from 4.1% to 6%
100% of Auckland's bus fleet to be zero emission	
40% of passenger and light commercial vehicles to be electric or zero emission	80% of passenger and light commercial vehicles to be electric or zero emission
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)
8% of road freight to shift to rail	20% of road freight to shift to rail
40% of road freight to be electric or zero emission	80% of road freight to be electric or zero emission
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)
<b>Waste</b>	
Food waste reduced by 30% and 30% of the remaining waste diverted to anaerobic digestion and composting	Food waste reduced by 50% and 100% of the remaining waste diverted to anaerobic digestion and composting
Paper/cardboard waste reduced by 30% and 30% of the remaining waste recycled	Paper/cardboard waste reduced by 50% and 100% of the remaining waste recycled
Plastic waste reduced by 30% and 30% of the remaining waste recycled	Plastic waste reduced by 50% and 100% of the remaining waste recycled
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

2030	2050
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
<b>Industrial processes and product use</b>	
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
<b>Agriculture, forestry and land use</b>	
10% reduction in methane emissions from livestock	47% reduction in methane emissions from livestock
Plant 80% of 19,350 hectares of new forest (15,480 hectares)	Plant 100% of 19,350 hectares of new forest
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