Low Carbon Auckland

A Year in Action

October 2015



Celebrating our first year of action

Low Carbon Auckland (LCA) is a 30-year strategy and 10-year action plan to guide Auckland's transformation into a prosperous, energy resilient, low carbon city. It delivers on bold targets set in the Auckland Plan to reduce greenhouse gas (GHG) emissions by 40 per cent by 2040.

The action plan was adopted in June 2014 and publicly launched on 1 July 2014. It was co-developed with key partners and representatives from industry, academia, research institutions, NGOs and the wider Auckland community. It is a 'plan for Auckland'. It is not limited to the actions that Auckland Council and councilcontrolled organisations (CCOs) will undertake, but outlines multiple actions owned by many different organisations, groups and individuals. Given the sheer breadth and scale of change required, success demands the action of all 1.5million Aucklanders; it requires new thinking and a collaborative approach from businesses, industry, Auckland Council and central government.



Purpose and structure

This is the first annual implementation update of LCA. Its purpose is to report yearly on the progress that has been made in implementing the plan and to signal what will be happening over the next 12 months. This update is focused on measuring progress, which will support ongoing accountability, more informed decision-making and targeted action.

This update shows that a significant number of initiatives are already underway. While this is very positive, there is still much to be done to achieve the scale and pace of transformation required. The update provides a baseline against selected targets for future updates, highlights key achievements to date, and provides guidance on key areas to focus on in the year ahead.

A message from the Mayor

A year on from the launch of the Low Carbon Auckland action plan, it is heartening to see the city taking positive steps towards achieving our greenhouse gas targets.

A 40 per cent reduction by 2040 is an ambitious target; one that becomes both more critical and more possible as time goes on.

As technologies such as electric vehicles (EVs) and LED streetlights become increasingly affordable and reliable, we can help Auckland become much more carbon-efficient. Our significant investment in public transport, walking and cycling is an essential part of progress.

We need to keep up the pace, working with stakeholders and the community to make measurable change. The effects of climate change on our city and our communities are too serious to ignore.

I am pleased to announce that Auckland Council has now joined the Compact of Mayors, a global initiative of local government organisations working together to demonstrate the collective impact of city action and fight climate change. This is a significant step forward in our sustainability journey. By joining this initiative we will be able to share our commitment and our progress globally, and – as nations head into negotiations in Paris in December – to highlight the important contribution of cities to this most urgent challenge of the 21st century.



A climate of change in Auckland

Auckland's vision is to become the world's most liveable city. Energy resilience - securing sustained access to clean, efficient and affordable energy, and reducing greenhouse gas (GHG) emissions are critical to this vision.

A fast-growing population, climate uncertainty, scarce resources, volatile fossil fuel prices and dependence on imported energy are just some of the challenges and opportunities that call for decisive action and innovation.

Transport and stationary energy use account for around 70 per cent of Auckland's emissions. Unless we intervene, our emissions could increase by 46 per cent by 2025 and energy use by 65 per cent in 2040.

The Auckland Plan's aspirational target is to achieve a 40 per cent reduction in GHGs by 2040 (based on 1990 levels). To reduce GHG emissions by around 5.3 million tonnes, Auckland must transform from a fossil fuel-dependent, high energy-using, high-waste society to a mobile, quality, compact city. Low Carbon Auckland envisions a city with a prosperous eco-economy – powered by efficient, affordable, clean energy and using sustainable resources.

Low Carbon Auckland sets out a 30-year pathway

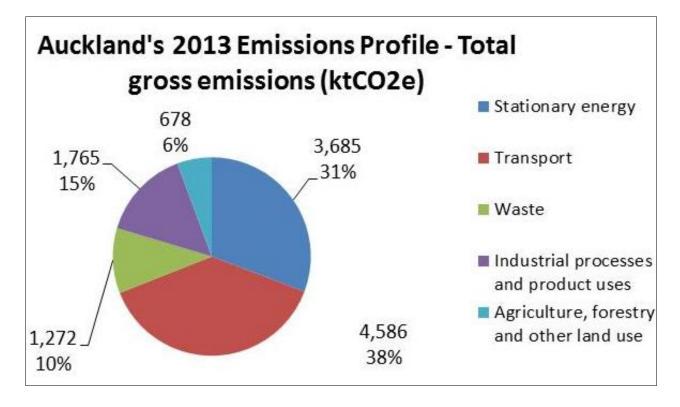
and a 10-year plan of action to guide the first stage of the city's transformation towards this low carbon, energy resilient future.

It identifies five key areas of transformation:

- 1. the way we travel
- 2. the way we use and generate energy
- 3. our built environment and green infrastructure
- 4. Zero Waste
- 5. forestry, agriculture and natural carbon assets.

Achieving the interim targets in this plan requires a significant shift from business as usual. Key actions include reducing the demand for travel and fuel consumption through encouraging active modes of travel (walking and cycling) and public transport use, switching to alternative fuels, greater uptake of local renewable energy generation, smart grid networks and sustainable homes and buildings. New initiatives planned include trialling a Warrant of Fitness (WOF) for rental properties, a citywide organic waste collection scheme and developing a regulatory framework in the Proposed Auckland Unitary Plan that

supports and enables the delivery of sustainable costeffective low carbon solutions. The actions will also provide benefits for our environment (including reducing discharges to air, land and water), the economy and our overall well-being. Innovative funding mechanisms - as used for example in Retrofit



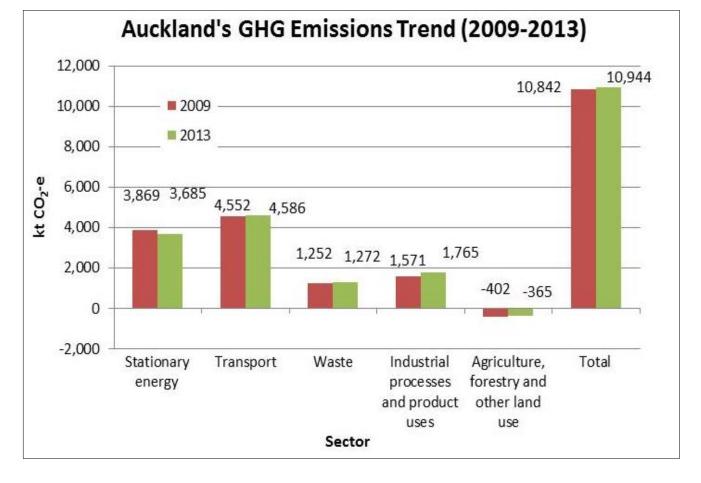
TARGETS							
Reduce the amount of human-induced greenhouse gas emissions by: a. 10%-20% by 2020 based on 1990 emissions levels b. 40% by 2040 based on 1990 emissions levels c. 50% by 2050 based on 1990 emissions levels	Support the national target of 90% of electricity generation from renewable sources by 2025						
Your Home programme - will also be required to generate finance for these activities in a manner that ensures the greatest value (and lowest risk) to ratepayers.	In 2013, Auckland's gross GHG emissions totalled 11,986 kilotonnes of carbon dioxide equivalent (ktCO2e) or 10,944 kt CO2e (net emissions) including carbon sequestration from forestry and other land						
Low Carbon Auckland is informed by the most up-to- date information and global best-practice. An updated emissions inventory has recently been completed in accordance with the Global Protocol for Community- Scale Greenhouse Gas Emission Inventories (GPC).	uses. Between 2009 (base year) and 2013, Auckland's GHG emissions have remained stable. Over the same period, the population increased by 5 per cent to 1,493,200. Subsequently, average GHG emissions						

framework to establish and maintain accurate, credible and comparable emissions accounting and reporting

This protocol provides cities with a clear and robust

practices.

(tCO2e per capita) decreased from 7.6 to 7.3 for net emissions and 8.4 to 8.0 for gross emissions. It is important to note that the emission intensity has improved and that we are decoupling emissions from population growth.



1. Transforming the way we travel

This section of the plan includes 19 actions that will guide a transformation in the way Auckland travels by: reducing the demand for travel; increasing the use of public transport, walking and cycling; improving transport efficiency to reduce the consumption of fuel, and moving away from the use of fossil fuels.

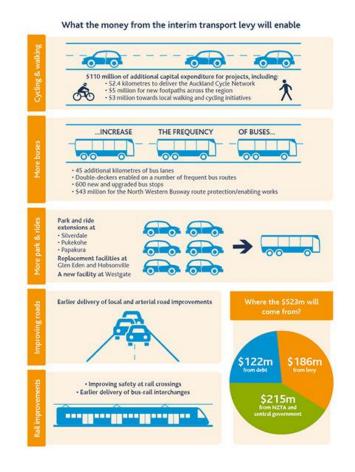
Over the last 12 months, implementation has commenced and/or continued on 14 of these actions, which focus on the following five priority areas.

- Development of the Proposed Auckland Unitary Plan and Regional Land Transport Plan to provide an enabling regulatory framework for Auckland's low carbon development.
- Rollout of electric trains across Auckland's rail network.
- Improving Auckland's integrated public transport network services and infrastructure.
- Expansion and improvements to walking and cycling infrastructure.
- Promoting and accelerating the uptake of plug-in electric vehicles (PEVs).



Key highlights

 Development of the Proposed Auckland Unitary Plan, which enables greater levels of intensification in centres with good access to public transport. Removing minimum parking requirements from these areas will take away an existing subsidy for private vehicle travel. Travel demand management tools such as parking and travel planning will all contribute to reducing the need to travel.



- 22km of new cycleways and 12km of cycling feeder routes were constructed.
- Development and expansion of Auckland's integrated public transport network, including:
 - continued rollout of electric trains across all Auckland rail lines. Electric trains are now operating on the Western, Onehunga, Southern (to Papakura) and Eastern lines. Auckland's overall use of electric trains will reduce the consumption of diesel by 9 million litres per year.
 - public consultation on a new, frequent bus network and expansion of dedicated bus lanes.
 - public consultation on integrated ticketing and simplified fares.
 - publication of the Ferry Development Plan.
- An investigation has been commissioned into the potential use of light rail (i.e. trams) for the central isthmus.
- Auckland Council has replaced 10 petrol vehicles with two EVs and eight hybrid vehicles, and there is further potential to switch nearly half of the 110 pool vehicles via the fleet optimisation programme.

 Pānuku Development Auckland (formerly Waterfront Auckland) has committed to achieving an ambitious 70:30 modal split for Wynyard Quarter. That means 70 per cent of peak trips are by public passenger transport, walking and cycling, and only 30 per cent by private vehicle.



Performance scorecard

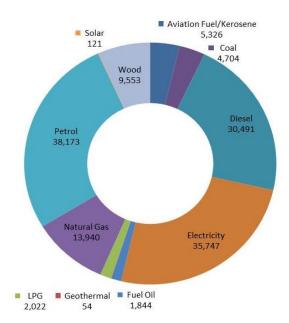
Key activities planned for 2016

- Completion of the Proposed Auckland Unitary Plan.
- Continued rollout of bus lanes and construction starting on City Rail Link in late 2015/early 2016.
- Citywide EV car-sharing scheme to be launched with an initial fleet of 300 vehicles supported by a charging network across Auckland.
- Route optimisation /network operating plan initiatives including 30 minor network efficiency improvements by 2018. Begin delivery of the \$120 million urban cycleways programme.
- Delivery of 52km of the Auckland Cycle Network by 2018, including a greenways network to provide for an anticipated 2.5 million new cycle trips per year.

GOAL AND TARGETS	BASELINE	2014/2015	% CHANGE	TO A	RACK CHIEVE GET?	2020 TARGET
10% reduction in vehicle kilometres travelled (VKT) per capita by 2020 from baseline (2006)	8,546 km (2005/2006)	8,311 km (2013/2014)	-2.8%	Yes		7,692 km per capita
5% of cycle mode share by 2020	0.9% (2006)	1.1% (2013)	0.2%	No		5% of cycle mode share
73 public transport trips per person each year by 2020	41 (2008/2009)	47 (2013/2014)	14.6%	Yes		73 public transport trips per person p.a.
Fossil fuel sales do not exceed 1,400 million litres by 2020	1,544 m litres (2008/2009)	1,615 m litres (2014/2015)	4.6%	No		1,400 m litres

2. Transforming the way we use and generate energy

The plan sets out a programme of 15 actions to meet and manage the increasing energy demands associated with Auckland's rapid growth. These will be achieved by improving energy efficiency and conservation, and accelerating greater use of Auckland's renewable energy resources including distributed solar photovoltaics (PV) and large-scale wind.



Auckland Energy Use (TeraJoules)

Overall, 13 of the 15 initiatives have been progressed over the first 12 months of implementation, many of which have been implemented by external stakeholders. Over the last 12 months, Auckland Council and its CCOs have focused on three key areas.

- Developing an enabling regulatory framework via the Proposed Auckland Unitary Plan to support and promote renewable energy generation, energy efficiency and conservation, and a secure and resilient transmission and distribution network.

Auckland Council has implemented a range of energy efficiency improvements across council and CCO operations (saving \$961,571), including installation of solar PV and bulk LED street lighting. This encompasses the installation of over 200kW of solar PV arrays on six new community buildings, including Te Oro, Glenn Innes' new music and arts centre. Work has also commenced on collaborative pilot schemes and innovative finance models to accelerate solar installations on buildings.



The 68kW solar PV array on Te Oro, Glen Innes' new music and arts centre.

Key highlights

- Energy Efficiency and Conservation Authority (EECA) partnered with 18 large energy users in the Auckland area. These partnerships have delivered 9.5GWh of energy savings and 1,630 tonnes of CO2-eq. A further 1.9GWh of energy savings and 310 tonnes of CO2 eq. have been delivered through EECA-accredited energy specialists working predominantly with smaller energy users.
- An energy partnership agreement between Auckland Council and EECA has been established. This outlines a three-year programme to deliver energy efficiency and renewable energy initiatives across council operations and the region.
- Completion of the North Auckland and Northland Grid Upgrade project by Transpower, which further improves the resilience of Auckland's electricity transmission system.
- Auckland Council reviewed its long-term power purchase agreements giving consideration to support large-scale renewable energy projects.
- Pānuku Development Auckland has required that all rooftops in the Wynyard Central redevelopment are solar PV-ready, enabling Wynyard Central, over time, to generate a portion of its own energy.
- Pānuku Development Auckland is tracking progress in the implementation of its Sustainable Development Framework. The Wynyard Quarter Smart (wqsmart.co.nz) platform is the first step in leveraging technology to capture, collate, communicate and drive performance improvement and behavioural change.

Securing Auckland's power supply

Power outages in recent years have drawn attention to the security of Auckland's electricity supply. At the same time, Auckland has experienced a relentless growth in electricity demand. This trend has been driven by Auckland's continued growth, and an economy, urban form and lifestyle which are energy hungry (especially transport and electricity). Our ability to reliably meet this demand is critical for Auckland and New Zealand's well-being and economic prosperity. The risks of electricity infrastructure failure can be significant.

Power outages have occurred in the past due to equipment failures, transmission constraints and restricted generation capacity. These disruptions provide periodic reminders of how reliant we are on a 24/7 power supply and the cost to business and society when this is interrupted.

In 2014, Transpower completed a \$415 million upgrade project to provide greater transmission capacity, and reinforced electricity supply across Auckland and into Northland to help meet the increasing energy demands in these areas. Prior to the completion of this project, west Auckland, the North Shore and Northland were heavily reliant upon a single transmission line between Ōtāhuhu and Henderson for their power. Following project completion, there is now a diverse power supply across Auckland via 37km of new underground cables, supported by two new substations. In addition 8km of overhead lines have been dismantled.

This project has improved the reliability and security of electricity supply into and around the Auckland region. This was evident in October 2014 when a fire at a Penrose substation caused blackouts to areas of Auckland including Remuera, Mt Wellington and city fringe suburbs. The upgrade prevented a much larger loss of supply to other areas including the CBD - the economic benefit of which was estimated at \$1.5 million.



Key activities planned for 2015-16

- Replacement of 10,000 streetlights with lowerenergy LED bulbs – an annual saving of 10 GWh of electricity.
- Commence rollout of LED lighting upgrades across the council's car parks, libraries and corporate facilities.
- Staged installation of solar PV across libraries, leisure centres, swimming pools and community centres.
- Continue to seek opportunities via the council's energy purchase agreements to support renewable energy.
- Auckland Council and key partners will progress work (including the completion of feasibility studies) to develop and implement communityled/-owned energy efficiency solar PV projects utilising council buildings.

GOAL AND TARGETS	BASELINE	2014/2015	% CHANGE	TO A	TRACK CHIEVE RGET?	2020 TARGET
20% reduction in energy use in street lighting based on 2011/12 levels	53.3 GWh (2012/2013)	56.6 GWh (2014/2015)	6%	Yes		42.6 GWh
Electricity is affordable at 2012 levels (in real terms)	36.4 c/kWh (2011/2012)	38.0 c/kWh (2013/2014)	4%	No		36.4 c/kWh
22 MWp distributed solar photovoltaics is generated in Auckland by 2020	n/a (6.5 MW consumed (2012))	200kWp installed	n/a	No		22 MWp

Performance scorecard

3. Transforming our built environment and green infrastructure

Transforming our built environment accounts for approximately 51 per cent of the action plan's potential emissions savings. Over the last 12 months, work has progressed on 14 of the 18 actions in two priority areas.

- Developing the Proposed Auckland Unitary Plan to promote, support and enable best-practice sustainable design and development.
- Creating and promoting exemplar healthy, highquality green buildings (new and retrofits) and sustainable urban design and renewal.

Key highlights

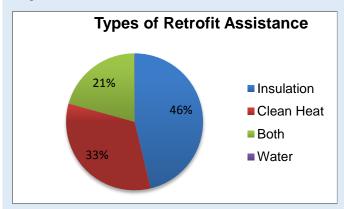
- Set minimum standards in the Proposed Auckland Unitary Plan for new buildings to meet bestpractice sustainable design and operation.
- Implemented a minimum sustainable design standard (equivalent of 6 Homestar rating) for homes consented in Strategic Housing Areas.
- Five offices and two school buildings gained a 4 Green Star rating or above.
- Continued development of Auckland's waterfront as a location of leading sustainable urban transformation and renewal. Developers of Wynyard Central are required to meet minimum sustainability standards, which cover issues such as climate change impacts, resource efficiency, transport and economic vitality. Furthermore, all commercial and residential developments are required to achieve minimum sustainable design standards (5 Green Star rating and 7 Homestar rating respectively).
- Three large-scale infrastructure projects at the waterfront redevelopment, Auckland Airport and the City Rail Link are piloting Infrastructure Sustainability Council of Australia's (ISCA) rating tool to understand how they compare against global best-practice for design and construction.
- Warm Up NZ insulation programmes, administered by EECA, have insulated 66,500 Auckland homes.
- A further 8360 homes have been insulated under Auckland's RYH scheme in the last 12 months.
 The scheme has been expanded to include clean

heat and rainwater tanks, and an increase in the amount of finance available.

Retrofit Your Home – A growing success

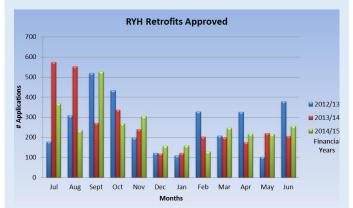
Established from a legacy Waitākere City Council programme, the Retrofit Your Home (RYH) programme is an Auckland-wide voluntary residential ratepayer assistance initiative launched in 2011. The programme is designed to provide Aucklanders with healthier, warmer homes and reduce the impact of winter heating on air quality.

Through the RYH programme, ratepayers who are up to date with their rates are able to access financial assistance from Auckland Council to a maximum of \$5000 to support home retrofitting interventions. Principal, interest and a programme administration interest charge are repaid over nine years via a targeted rate.



The programme's initial focus was on insulation and clean heating, and in the 2014-2015 financial year, additional interventions targeting fire place removal, water conservation and the reduction of internal home moisture levels were added. A breakdown of RYH applications to date by intervention type is provided below.

Demand for RYH financial assistance has been strong with more than 12,000 retrofits completed to date. To respond to ratepayer demand for this scheme, the annual financial assistance facility for RYH was increased from \$6 million to \$9 million in the Long Term Plan (2015-2025).



- New Zealand Green Building Council (NZGBC) has led the implementation of the NABERSNZ energy performance rating scheme. Across Auckland:
 - certified ratings of 10 commercial offices were completed, and 11 were registered for assessments
 - 22 credited NABERSNZ assessors were trained.
- Auckland Council started an audit and retrofit programme to improve the performance of its key properties. Over the last 12 months, three office retrofits have been completed including the head office at 135 Albert Street (Green Star accreditation for sustainable design is pending). In addition, NABERSNZ certification was completed for two corporate buildings, achieving ratings of 3.5 and 3 stars (the current industry average is 2.5 stars). A further two corporate buildings are currently being assessed.
- Auckland Council exceeded its 2018 target of 30 per cent waste reduction, four years early. This was achieved through an innovative weighed waste contract change with its waste and recycling partner, and the addition of an organics diversion programme consisting of over 150 worm bins and a range of organic waste composting collections.



Sustainable retrofit of Auckland Council's head offices

Performance scorecard

- The Auckland Design Manual was updated to include guidance and case studies for residential development, subdivision and water-sensitive design.
- Auckland Council participated in the trial of the Warrant of Fitness (WOF) scheme for rental properties with a view to an Auckland-wide rollout.
 Voluntary WOF programmes have also been introduced by four local boards.

Key activities planned for 2015-16

- Waitematā Local Board will launch a local Low Carbon action plan, focusing on the central city.
- Auckland Council will:
 - introduce a requirement for disclosure of a building's performance at the point of sale, rent or lease.
 - consider the development and implementation of a WOF programme for rental properties that builds on new legislation.
 - benchmark the performance of its corporate buildings against a 5 star NABERSNZ energy rating and retrofit assets that perform poorly.
 - Insulate a further 6000 Auckland homes under the Warm Up NZ programme by June 2016.
 - Continue growing the RYH scheme with an additional 3000 homes installing insulation or clean heat solutions, and provide \$9 million in repayable financial assistance under the scheme by June 2016.
 - Continue development of the Auckland Design Manual as an online tool to provide information, case studies and guidance to the public and the development industry on bestpractice sustainable design.
 - Advocate for strengthening the national Building Code to foster best-practice.

GOAL AND TARGETS	BASELINE	2014/2015	% CHANGE	ON-TRAC TO ACHIE TARGET	
Auckland Council operations: 40% reduction in GHG emissions by 2040	27,475 tCO2e (2011/2012)	22,680 tCO2e (2013/2014)	-17%	Yes	n/a
Auckland Council operations: 30% reduction in waste by 2018	0.75kg/fte/wk (2011/2012)	0.44 kg/fte/wk	-41%	Yes	n/a
Auckland Council operations: 15% reduction in energy use by 2014 (and 5% each following year)	89,762 MWh (2010/2011)	97,522 MWh (2013/2014)	+9%	No	n/a

4. Transforming to Zero Waste

Auckland currently sends 1.2 million tonnes of material to landfill every year. Construction and demolition 'waste', organic material and products at the end of their lives form a large part of what is discarded.

Low Carbon Auckland sets out a programme of action to achieve Zero Waste by 2040 through a focus on waste minimisation, and growing product design and responsibility.

By reducing Auckland's waste to landfill, the region will make better use of resources, promote innovative economic development, provide local communities with an income stream, and reduce its GHG emissions.

Successful implementation will account for up to 20 per cent of the action plan's emissions reduction potential.



Key highlights

Over the last 12 months, work has progressed on 18 of the 20 actions. Key achievements include:

- Successful trials of food-waste collection services in Northcote and Papakura
- Two collaborative workshops (with a third planned) held on minimising waste during the design, construction and deconstruction of buildings
- Opening of the first two facilities in the Resource Recovery Network (Waiuku and Helensville

Waste no more

CID Resource Recovery Facility was born out of a vision to find sustainable alternatives to dumping Auckland's construction and demolition waste into holes in the ground. This vision has been shared and supported by the Ministry for the Environment through their Waste Minimisation Fund, and Auckland Council on whose land the facility is situated.

CID is the only comprehensive construction and demolition waste resource recovery facility in Auckland. It recovers around 70 per cent of the waste processed that would otherwise be destined for landfill. CID further processes recovered wood-waste on-site into a biofuel which is used by Golden Bay Cement as an environmentally friendly alternative to coal. Plasterboard is also further processed on-site into reusable gypsum and paper, while other recyclables are sent to third party receivers.



Waste is delivered to the facility located in Onehunga by CID's partner company, Green Gorilla, which provides skip bins to construction and industrial companies, as well as from third party haulers.



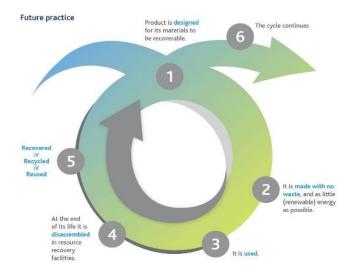
The target set under the Auckland Housing Accord is to consent 39,000 new homes for Auckland from 2015 to2016. Building these homes will produce more than 150,000 tonnes of waste – that's a lot of landfill! When you add commercial construction into the equation the waste volume doubles to over 300,000 tonnes. If this waste is processed by CID, 70 per cent will be diverted from landfill into alternative recycle/reuse products.

CID plays an imperative role in achieving Auckland's waste management goals, and ensuring sustainability in creating the world's most liveable city.

Community Recycling Centres), both operated by local community enterprises

Current practice





- Commencement of a trial involving a local community group to test new ways to increase resource recovery at the council-owned Waitākere Transfer Station
- Successful 'deconstruction' workshop sessions with partners and stakeholders, run by Auckland Council at events such as the WasteMinz conference.

Performance scorecard

- Supporting the development of voluntary product stewardship schemes for plastic bags, car seats and mattresses
- Commencement of a pilot project to increase resource recovery at the Waitākere Transfer Station
- Working with the property and building industries on construction and demolition waste, and promoting deconstruction
- Extending Para Kore marae waste management support to papakāinga housing and other places.

Auckland Council directly manages less than one-fifth of the region's waste stream. Therefore, achieving Zero Waste will require continued advocacy and engagement with central government and industry.

Key activities planned for 2015-16

- Introducing a 'pay-as-you-throw' system for general refuse to encourage recycling and composting as a way of reducing waste.
- A new organic collection service is scheduled to be rolled out progressively from mid 2017/18.
- Auckland Council's Waste Management and Minimisation Plan will be reviewed in 2017.
 Auckland's third Community Recycling Centre (CRC) will open in Devonport in early 2016 to divert resources from landfill and create a source of income for local community groups

GOAL AND TARGETS	BASELINE	2014/2015	% CHANGE	TO A	TRACK CHIEVE RGET?	2020 TARGET
30% of total current waste to landfill diverted by 2020	977 kg per capita (2007/2008)	816 kg per capita (2010)	-16%	Yes		30%

5. Transforming forestry, agriculture and natural carbon assets

Approximately 6 per cent of Auckland's GHG emissions come from agriculture, while the extensive forests, natural areas and tree-planting programmes are actively removing carbon dioxide from the atmosphere. Carbon sequestration is a co-benefit of current activities such as soil management, timber production, and plantings traditionally undertaken for improving biodiversity and recreation.

Currently, agricultural emissions are largely unchecked, with industry given minimal regulatory imperative, incentives or knowledge to reduce emissions. Opportunities exist to capitalise on new technologies to reduce GHG emissions in the agricultural and energy sectors through converting plant material to energy. There are also opportunities to increase the carbon sequestered in land, coastal and marine environments.



Myers Park urban forest

The action plan outlines a four-tiered approach to transforming Auckland's forestry, agricultural and natural carbon assets, including coastal and marine areas. This approach focuses on expanding urban and regional forests, utilising residual biomass for energy generation, developing local food production, and understanding the role marine and coastal ecosystems play in carbon sequestration.

Over the last 12 months, progress has been made in implementing a number of initiatives, predominately through existing work programmes. Key achievements have focused on three areas, including:

 Creating an enabling regulatory framework in the development of the Proposed Auckland Unitary Plan Creating 'a city within a forest' by protecting and expanding Auckland's network of urban and regional forests improving local food production.

Trees for Survival

Trees for Survival (TfS) is a programme in its 24th year. It was started by Pakuranga Rotary Club and is now run by Auckland Council in partnership with the Trees for Survival Trust. Currently, 70 schools and a head-injury rehabilitation unit participate in the programme. The participants are supplied with up to 1200 seedlings per annum, which they grow for a year and plant the following year on stream edges wetlands and steep slopes. The focus of the programme is to improve water quality through soil stabilisation.

Last year, 48,000 trees were planted in the Auckland region through the programme, and 1993 metres of waterways were planted by 2220 school students and an additional 280 volunteers.



Key highlights

- Elite and prime soils and significant ecological areas have been identified in the Proposed Auckland Unitary Plan with accompanying provisions for their protection or restoration.
- Structure plans have been developed, taking into consideration opportunities to expand ecological corridors or areas which can be re-vegetated.
- A number of programmes have started in 2014/15 with schools, iwi, and community groups to create small-scale nurseries, predominantly to supply minor localised projects. Plantings are ongoing, and approximately 30km of stream length will be

protected through planting and/or fencing over the next 10 years.

- The education programme 'Sustainable Communities Through Kai' has been rolled out across 12 schools.
- EECA has undertaken a pilot project with Irrigation NZ to promote water and energy efficiency practices across Auckland's agricultural sector.



Key activities planned for 2015-2016

- Continued implementation of the "Kai Auckland" community-focused programme.
- Continued implementation of the greenways programme.
- Auckland Council and the Ministry of Education will work with Auckland schools to phase out coalfired boilers in schools. Schools will be encouraged to consider renewable energy alternatives such as biomass residues from forestry.

Auckland's greenways

Neighbourhood greenways connect communities by providing on-street and trail links between destinations (such as schools, town centres, open spaces and transport hubs), by creating recreational opportunities and allowing people to experience Auckland's natural and cultural heritage. Greenways also provide opportunities to enhance ecological connections such as biodiversity corridors and to restore ecological functions through water-sensitive design.

Greenway plans have been led by community champions and local boards, including Whau, Puketāpapa, Maungakiekie-Tāmaki and Waitematā. Plans are now being implemented by over a dozen local boards.

A wider strategic collaboration has begun, involving Auckland Council, CCOs, local boards, the Tūpuna Maunga o Tāmaki Makaurau Authority, mana whenua, trusts and corporate partners.



This collaboration will ensure the growing network is connected and high-quality, and delivers on-theground green infrastructure that will be well-used and loved by all Aucklanders.

Performance scorecard

GOAL AND TARGETS	BASELINE	2014/2015	% CHANGE	ON-TRACK TO ACHIEVE TARGET?	2020 TARGET
Map of all soil classes has been produced that clearly delineates the land use capability (LUC) class 1 and 2 soils by 2014	n/a	Completed	n/a	Target achieved	n/a

How can I be involved?

Would you or your organisation like to be involved in delivering any of the proposed actions in the Low Carbon Auckland action plan?

Are you, or do you know an inspiring individual, group or business that is leading Auckland's low carbon transformation? If the answer is yes, we would like to hear from you. We want to promote Auckland's 'brightspots' to support and inspire others to take action.

Email <u>40by40@aucklandcouncil.govt.nz</u> with your name (and organisation if applicable) to register your interest.

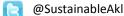
Find out about what local organisations, communities and Auckland Council are doing to create a low carbon, energy resilient city.

Please visit: www.aucklandcouncil.govt.nz/lowcarbon



For more information:

Please visit: <u>www.aucklandcouncil.govt.nz/lowcarbon</u> Or email: <u>40by40@aucklandcouncil.govt.nz</u>



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