

# WEL Networks Sustainability Statement 2020

## Background

**WEL Networks (WEL) is an electricity distribution business fully community owned by the WEL Energy Trust.**

The Management and Board of WEL Networks are committed to running the business in a way that is sustainable and embraces the principles of corporate social responsibility because this is the right thing to do for our staff, our community, our shareholder and our environment.

The wellbeing of our staff and of our community is of utmost importance to us. We demonstrate this through ensuring strong safety performance, being a good employer and providing reliable and low cost electricity to our community.

WEL recognises that the business of network operation and maintenance relies on a vehicle fleet of trucks, utes and cars to service the network geographic area and the corporate offices. The network contains distributed electrical monitoring and control systems at numerous locations across the region. Consequently WEL is an emissions intensive organisation.

Throughout its operations, WEL strives to be an environmentally responsible organisation. This year we have initiated a series of sustainability initiatives to measure and respond to our environmental responsibilities.

## Statement of Intent

**WEL acknowledges that sustainable business practices are fundamental to our future. We strive to minimise the environmental impact of our operations and embrace initiatives to protect our consumers and reduce energy hardship within our community. WEL operates a diverse and inclusive workplace and actively supports the wellbeing of its employees.**

### Principles

- WEL recognises that protecting the environment today is essential to the creation of a sustainable business future
- We seek to reduce our impact on the environment over time through the investigation, and where appropriate, the delivery of sustainability initiatives
- Greenhouse gas emissions will be measured, verified and managed through Toitū carbonreduce certification by Toitū Envirocare\*
- WEL is committed to reducing its relative greenhouse gas footprint
- We ensure our staff go home safely every day and that our network assets are operated and maintained with public safety as the top priority
- We strive to be an employer of choice offering a great place to work where employees are valued and supported

## Strategic Activity Areas

**We have chosen to align our activity to four of the United Nations’ Sustainability Development Goals (SDGs) where we can make the most impact and generate the most synergy with our strategic direction. In this way we believe we will add the most value and have the largest impact on business performance.**

The following strategic activity areas support our Company values and are directly related to the activities encompassed in our strategic plan.

AREA	UN Sustainable Development Goal - SDG
Employee Relations, Welfare, Diversity and Inclusion	Aligned to Good Health and Wellbeing (SDG 3) 

To promote a positive workplace for WEL staff through a commitment to best practice employment processes

- Implementation of a diverse workforce and inclusive work environment
- Monitor and deliver gender equality across the business
- Deliver ongoing wellbeing initiatives for staff and implement an overarching wellbeing framework

AREA	UN Sustainable Development Goal - SDG	
Sustainable Community	Aligned to Affordable and Clean Energy (SDG 7)	<b>7</b> AFFORDABLE AND CLEAN ENERGY 

Invest in the future of the local community and address energy hardship through the provision of an affordable, reliable and safe supply of electricity

- Operate the OurPower retail platform to provide cheaper retail electricity to the wider Waikato community
- Reduce the risk of harm in the community through the ongoing effective implementation of a public safety management system across the network assets
- Support the expansion of EV charging infrastructure throughout the network to encourage the uptake of electric vehicles

Resilient Infrastructure	Aligned to Industry Innovation and Infrastructure (SDG 9)	<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE 
--------------------------	---	---

Build resilient infrastructure and promote sustainable and innovative development of network assets

- Monitor and reduce SAIDI (customer outage times) through a resilient network
- Develop nano-grid technical infrastructure to better understand how to optimise sources of generation attached to the network
- Install solar panels and a grid battery at the WEL depot in support of the nano-grid
- Investigate options for grid scale renewable energy generation

Greenhouse Gas Emissions	Aligned to Climate Action (SDG 13)	<b>13</b> CLIMATE ACTION 
--------------------------	------------------------------------	---

WEL has undertaken an initial assessment of its greenhouse gas emissions with a view to reducing the relative impact of its emissions over time. WEL has used the 2018 - 2019 financial year as the baseline against which future appraisals will be compared. All measurements will be validated by Toitū Envirocare. Emissions from vehicles, staff travel and energy consumption form the majority of WEL's emission profile.

- Toitū carbonreduce certification\*
- Change over 75% of the WEL pool vehicle fleet to electric vehicles (EV)
- Operate and evaluate the fully electric powered elevated work platform truck (the first 100% electric EWP truck in New Zealand)

*\*Toitū carbonreduce certification*

*WEL became a CEMARS® certified organisation in 2019. Following a rebrand this is now called Toitū carbonreduce certification. WEL believes that the Toitū carbonreduce certification is a positive step towards reducing the company's greenhouse gas emissions and it will encourage staff and contractors to make environmentally responsible decisions every day.*

*Certification ensures that we measure our greenhouse gas emissions and create plans to manage the emission profile. 2018-2019 was the base year profile for greenhouse gas emissions at WEL, with figures validated and certified to the International Standard ISO 14046-1:2006. Compliance with the programme is independently verified annually to maintain certification.*

# Sustainability

## The reduction and management of greenhouse gas emissions forms a key part of WEL’s Sustainability Programme.

By achieving the baseline numbers for our greenhouse gas emission profile, WEL now has an improved understanding of these emission sources. With total WEL emissions (excluding subsidiaries) of 1428 tCO<sub>2</sub>e (tonnes of CO<sub>2</sub> equivalent) this allows us to identify targets within the greenhouse gas reduction plan.

The initial Toitū carbonreduce audit confirmed that more than 85% of WEL emissions come from diesel use in vehicles and generators; and electricity use in the offices and network sites. Addressing these areas for net relative reductions, this year, is a key focus of our greenhouse gas reduction plan.

As part of our pledge to reduce our relative carbon footprint, we’ve become part of the Climate Leaders Coalition. We’ve also committed to the Paris Agreement target of keeping global warming below 2 degrees and further pursue efforts to limit the temperature to 1.5 degrees.

While the greenhouse gas reduction plan specifies targets for efficiencies and economies in operating WEL vehicles, in electricity consumption and in personnel behaviours, other initiatives are being introduced across the business to support WEL’s Sustainability Programme.

### tCO<sub>2</sub>e by Sources (1 April 2018 to 31 March 2019)

Diesel	905
Diesel commercial	196
Electricity	135
Petrol regular	45
Air travel domestic (average)	35
Waste landfilled LFGR Mixed waste	33
Petrol premium	23
Air travel short haul (econ)	20
Sulphur Hexafluoride (SF <sub>6</sub> )	15
Private Car average (fuel type unknown)	9
Electricity distributed T&D losses	8

## Micro Grid Takes World Stage

**The micro grid project, how WEL's adapting to a changing environment and future plans for integrating new technology into the traditional network, formed part of WEL's presentation to industry experts at the All Energy Exhibition and Conference in Australia.**



There are four components to our micro grid – the traditional network supply, solar (from PV panels on the depot roof), a diesel generator and the battery energy storage system (BESS).

Industries, utilities and communities are looking for new ways to harness renewable power, bring electricity to remote areas and prepare for climate change. We believe the micro grid is one way forward.

## Sustainable Energy Solutions

**Trialling EV car chargers and solar panels in the car park as well as solar on the bike shed and chargers for our staff's electric bikes are two of the sustainable projects that we're currently implementing.**

By installing a solar array in the carpark, we're creating four 'covered' carparks. Four EV chargers will also be installed to allow staff to utilise the solar energy to charge their EVs during the work day. The bike shed will be a similar concept on a smaller scale.

By combining the two technologies, the aim of the trial is to enable us to reduce EV charging at peak evening times, and utilise extra generation from solar at the time it's produced.

## Reducing Electricity Use

**With expected power savings of up to 65% on each light fitting, LED lighting has been installed as a replacement for incandescent, metal halide and fluorescent lights across the business as part of WEL's commitment to reduce its electricity use.**

The first phase of the LED lighting project has been completed with over 400 LED lights installed throughout Level 1 of WEL's head office, the depot and the distribution centre.

The second phase of the project, which will see a further 114 LED lights installed throughout Level 2 of WEL's head office, is expected to be completed later this year.

This project has been followed up with the placement of sensors in strategic positions to allow banks of lights to turn off when no-one is around.

We're also considering the introduction of daylight harvesting in some areas of the business, this year.

Daylight harvesting systems use daylight to offset the amount of electric lighting needed to properly light a space, in order to reduce energy consumption. This is accomplished using lighting control systems that are able to dim or switch electric lighting in response to changing daylight availability.

## Diverting Plastic From Landfill

**Reducing waste and its environmental impact are the main drivers behind WEL Networks and Gyro Plastics sustainable initiative to recycle network pillars that are no longer in service.**

WEL is the first electricity distributor to partner with Gyro Plastics as part of their Product Stewardship Programme that's aimed at increasing the amount of product collected - diverted from landfill - recycled and reused as recycled raw material.

Since the initiative started in November 150 pillars have been recycled.

As part of WEL's end of job process, once the pillars are removed from the network, any metal or brass is removed, they are rinsed with water and placed into a cage. Once the cage is full, with about 60 pillars, it's sent to Gyro Plastics in Fielding.

The cage is refilled with WEL's pillar replacement order before it's sent back to WEL's Hamilton premises.

"Sustainability is a company-wide focus for WEL and we're always looking at what we can do to improve. The cage goes down full and comes back full. It's been very good and we've had a lot of positive feedback. By diverting our pillars from landfill and working with Gyro Plastics, we're supporting the safe, responsible and sustainable production of infrastructure plastic solutions," Group Manager Procurement Alison Barrow says.

The recycling process starts once Gyro Plastics receive the pillars. Once the process is complete, recycled and repurposed raw materials and components are re-introduced into the manufacturing and assembly process.

"Our product designs allow for a variation in plastic properties giving us the ability to use recycled plastic powder interchangeably with virgin plastic. Our recycled plastic powder is used in any manufacturing where an in-ground item would be traditionally manufactured in black virgin plastic. Within our premium range of pillars which are used by WEL, this typically means that bases (as opposed to lids) can be made from recycled plastic powder.



Diversion from landfill is our immediate goal. With further uptake from the electricity industry, greater resource use, economic and energy savings will be gained," Gyro Plastics Managing Director Trudi Duncan says.



## Delivering Efficiency With NZ's First EWP Truck

**New Zealand's first EWP electric truck has hit the road as part of WEL Networks' fleet.**

Converted from a diesel truck to a 132 kWh battery truck, the vehicle will be used for line maintenance and is powerful enough to operate an elevated work platform and travel 200km on a single charge.

Chief Executive Garth Dibley says sustainable energy and sustainable transport are front of mind for the business.



## Charging The Waikato

### Working in partnership, two innovative Waikato businesses – Waitomo and WEL Networks - have installed the first rapid electric vehicle (EV) charger on a Waitomo Fuel Stop.

The EV charger joins WEL's network of 22 that are located across the Waikato region. Compatible with any EV, WEL's Rapid chargers are located on Maui Street, Caro Street, Waikato Innovation Park, Hampton Downs, Te Kauwhata and Raglan. Fast chargers are located at Waikato Countdown supermarkets.

Installation of the rapid charger at the Mystery Creek Fuel Stop has been partly funded through an Energy Efficiency Conservation Authority (EECA) grant to grow WEL's electric vehicle network.

Transport is one of the biggest opportunities we have in the energy sector to help New Zealand achieve a low-carbon economy, WEL Networks Commercial Engineering Manager Cameron Chapman says.

“Partnering with another innovative Waikato business like Waitomo Group has allowed us to expand the southern boundary of our EV network. We've already received a positive response from EV drivers about the Mystery Creek location, which connects all areas of our

region and allows us to offer new energy solutions to more drivers in our communities,” he says.

Waitomo Managing Director Jimmy Ormsby says WEL's a great Waikato business that's passionate about supporting communities in the Waikato region like Waitomo.

“If we can support them (WEL) with their EV strategy, we're stoked to be able to do that. While some might see EV vehicles as competition to our fuel business, we simply see it as complementary. Often EV drivers have a second car for longer distance journeys. We're all about offering Kiwis competition and choice, and by installing an EV charger, we can make Waitomo a one-stop Fuel Stop for all their needs,” he says.

The rapid EV charger will enable customers to charge their EVs from low to 80 per cent battery capacity in around 20 minutes - compared to a standard charger which takes around four hours.

“We believe electric vehicles will play a really important part in New Zealand's energy future and by investing in electric trucks, we're not only generating fewer emissions, but also helping to future-proof our business and community.

“Throughout our operations, WEL strives to be an environmentally responsible organisation. This year we are launching structured sustainability initiatives to measure and respond to our environmental responsibilities and having more energy-efficient vehicles is a step in the right direction.”

The truck was made possible thanks to co-funding received from the Energy Efficiency and Conservation Authority's (EECA) Low Emission Vehicles Contestable Fund.

“The aim of the Fund is to drive innovation, and grow confidence in an electrified vehicle fleet. Projects like this will show other heavy vehicle operators what's possible and encourage them to invest in decarbonising their fleets,” EECA's Manager Programme Partnerships Richard Briggs says.

The truck underwent its transformation at SEA Electric in Melbourne, where the diesel engine was removed from the 10-tonne Isuzu FTR750 and a fully electric SEA-Drive system installed. SEA Electric worked in conjunction with CAL Isuzu (Hamilton) to supply the converted cab and chassis.

Waimea Truck and Crane in Nelson fitted the Elevated Work Platform (EWP). It takes between four to eight hours to fully charge the truck.



## Furniture Donation WEL-Received

**As part of WEL Networks' head office furniture upgrade, all surplus furniture has been donated to Waikato charitable trusts and organisations to support the work they do in enabling our communities to thrive.**

K'aute Pasifika Trust are "overwhelmed" with generosity after receiving a large donation of office furniture.

WEL donated 25 desks, 6 large cabinets, 20 chairs, 20 dividers/partitions, a large filing cabinet, a projector and two screens to the charitable trust.

Based in Hamilton, K'aute Pasifika Trust provides health, education and social services to Pacific communities and all other ethnicities who wish to access the services they provide.

"We were overwhelmed with the generosity of the team at WEL Networks. Your donation of furniture is really appreciated. Our staff are using the desks and furniture which is giving them essential equipment they need to do their job," K'aute Pasifika Chief Executive Rachel Karalus says.

WEL Networks Sustainability and Business Improvement Manager Nick Childs says all furniture that's passed on is in excellent condition and the gifting aligns with WEL's values from both philanthropic and sustainability viewpoints.

"As we upgrade our office space it is heartening to be able to pass our surplus furniture on to local community groups and lower decile schools knowing that it is going to be valued in its new home. All recipients are incredibly grateful for the donations as it allows them to get on with their core purpose rather than diverting valuable funds into furniture purchases."

The Refugee Orientation Centre Trust, Kaitumutumu Marae Trust and Light of All Nations Ministries have also received office furniture donations.



