

# NET

## **ALIGN 1.5 NET ZERO REPORT 2024**

**Our roadmap to Net Zero by 2050 or sooner, aligning to the  
1.5 Degree Paris Agreement targets for global warming**

By Veolia Australia and New Zealand



# Acknowledgement of Country

Veolia acknowledges the Traditional Custodians of Country throughout Australia and their continuing connection to land, waters, and community. We pay our respects to them and their cultures and to their elders past, present, and emerging.

## Ahi Kā

*Rights to land by occupation through Whakapapa (genealogy)*

Veolia recognises Māori people as the Tangata Whenua o Aotearoa (people of the land of New Zealand).

**We recognise and support in particular these values important to Māori:**

### **Aroha**

*Love, respect, compassion, and care*

### **Kaitiakitanga**

*Stewardship, conservation and care for the environment*

### **Whakamana Tangata**

*People and cultures are deserving of dignity, respect and fair treatment*

*Whakakotahitanga – respect individual differences while seeking inclusion and unity*

### **Whānau**

*Family relationships and connections*

### **Wairua**

*The spiritual dimension to life*

### **Manaakitanga**

*Generous giving, hospitality and care*





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# FOREWORD

## RICHARD KIRKMAN

CEO and MD of Veolia Australia and New Zealand

Every day, the 6,500 employees across Australia and New Zealand support our customers in achieving their sustainability ambitions. Put simply, we exist to promote human progress without unacceptable costs to nature and the environment. Safeguarding our planet requires a fundamental shift towards depolluting, regenerating and decarbonising at scale.

We call this collective action for the betterment of our planet 'ecological transformation'. As a global company with almost 220,000

employees, we also represent a significant contribution to the global economy. Around the world, we are committing to significantly reducing our emissions by 2032, and reaching net zero no later than 2050.

This commitment is fully aligned with our Purpose - which is to contribute to human progress by firmly committing to the Sustainable Development Goals set by the UN, to achieve a better and more sustainable future for all.



Climate change is a systemic risk which impacts all of our stakeholders. Our research tells us that 62% of Australians are convinced that climate change is occurring and that humans are the cause, with 1 in 4 Australians feeling anxious or distressed about the future<sup>(1)</sup>.

Collectively, it's still possible to address these challenges if we move quickly and take accountability for our actions. It's in this spirit that we present this plan.

In early 2024, Veolia released its new strategic program, **Green-Up**, which aims to accelerate the decarbonisation of our economy, depollute our ecosystems, and regenerate resources to be used again and again.

Alongside our strategic program and our purpose of Ecological Transformation, our net zero ambitions start at our own doorstep.

As our Group CEO, Estelle Brachlianoff said in 2023 at our Capital Market Day event, "The responsibility [for decarbonisation] obviously begins with us. Because how could we claim to offer solutions to others if we do not first put them into practice within our own group?"

What many don't realise is that due to the nature of our business, we are the net recipient of the carbon emissions of individuals and businesses that we service. As an example, the collection and treatment of waste, and recycling of materials all result in emissions.

Despite being more desirable than pollution or using virgin material, these activities in fact form part of our 'Scope 1' and 'Scope 2' emissions. Therefore, we strongly advocate for recognition of Scope 4 emissions (or 'erased emissions') as another lens we must consider when looking at decarbonisation. Scope 4 recognition will enable us to take into account the holistic impact and benefit our industry plays in the proper treatment of waste, avoiding use of virgin materials (through more recycling) and the assistance provided to organisations in the process of transitioning to less carbon intensive operations. While the industry at large is still grappling with this concept, we will continue to push for this to be recognised for a fuller picture.

**In the meantime, it is my pleasure to present our first net zero roadmap for our ANZ business. We are truly energised by the opportunities that lie ahead to make the much needed impact for our future.**

(1) <https://www.anz.veolia.com/ecological-transformation-barometer>

# INTRODUCTION

## KATE MOONEN

Chief Marketing, Communications & Sustainability Officer



The world population is projected to reach 8.5 billion in 2030, and increase to 9.7 billion by 2050. At a time when everyone is working towards net zero, this presents immense challenges. We must accelerate the rate at which we protect our biodiversity and reverse the impact of high emissions industries. There is really only one way to reach our audacious global targets; and that is to adopt a new way of thinking - which we call 'ecological transformation'.

'Ecological transformation' means thinking differently about how we use, replenish and renew our precious resources. We know the old way of 'use and dispose' isn't sustainable. We need a new approach - one where every product has inherent value. We reject the notion that it's acceptable for resources to be scarce in one part of the world, only to be wasted in another. We believe that we must plan the lifecycle of a product before we produce it, re-use before we dispose and recycle where we can so resources can be used again and again.

The good news is that the solutions to achieve these things already exist. Now is the time to scale these solutions as quickly as possible. And that's where we come in.


Many of our customers are demanding solutions that will help them decarbonise, depollute and regenerate.

You will see in this report that we're responding to those demands. We are investing heavily in technology and solutions so we can move faster, we are broadening our client offering to scale impact, and we are finding ways to truly reduce our emissions - without relying heavily on offsets to get there. In fact, a recent report from the National Waste and Recycling Council<sup>2</sup> shows that our industry has been proactively reducing its emissions for over 30 years - and punching above its weight.

As our population grows, we will have no choice but to preserve, treat and renew our precious resources in order to protect our planet for generations to come. Now is the time for us to embrace these solutions, and act for ecological transformation.

(2) <https://www.nwric.com.au/2023/11/15/report-ghg-emissions-in-australias-waste-and-recycling-sector/>  
 (3) Veolia Integrated report, 2022-23 "Ecological transformation: Time to act"





**“To contribute to the fight against climate change, Veolia has committed itself and its customers to rolling out solutions for reducing greenhouse gas (GHG) emissions: energy efficiency, heating and cooling networks, renewable energy production, the recovery of waste and water, and adaptation solutions such as water recycling.”<sup>3</sup>**



# NET ZERO EXPLAINED

**‘Net Zero’ is achieved when the organisation has first reduced its emissions to the maximum and then neutralised its residual emissions.**

**According to Science Based Targets Initiative <sup>4</sup> human activity must reach ‘net zero’ emissions no later than 2050 in order to limit global warming to 1.5 degrees.**

**This mission is critical, because global warming above 1.5 degrees will have significant impacts on weather patterns, biodiversity (including mass extinctions and the permanent loss of habitat), all leading to long term complications for the comfortable survival of humanity as we know it<sup>5</sup>.**



# OUR COMMITMENT

Veolia recognises the special role it plays in decarbonising the essential services we provide across waste, water and energy within our own business, but also by helping customers reach their own net zero ambitions.

The waste sector alone contributes to approximately 2.9% of Australia's greenhouse gas emissions<sup>6</sup>. As the largest environmental services provider in the ANZ region (and a net 'recipient' of emissions from consumers and industry), we see it as our role to lead in the area of decarbonisation.

We also believe we have the skills, know-how and technology to achieve this.

In 2019, Veolia globally committed to a 22% reduction in its greenhouse gas emissions (Scopes 1 and 2) over 15 years, that is by 2034, compared with the operational scope of the 2018 baseline year. This was compatible with United Nations Paris Agreement ambitions (below 2°C trajectory) and validated by the SBTi (Science Based Targets initiative).

In 2021, Veolia increased its goal and signed the Business Ambition for 1.5°C of the SBTi and joined the UNFCCC Race to Zero.

In accordance with this commitment, Veolia globally has published our global roadmap at the end of 2023 and has taken into account the major change in Veolia's scope of consolidation with the acquisition of SUEZ in the first quarter of 2022.

In 2023 Veolia's Greenhouse gas emissions were 1,282 kt CO<sub>2</sub> eq within Scopes 1 and 2 in Australia and New Zealand<sup>7</sup>. Our current ANZ target is in line with Veolia Groups commitment to a 50% reduction in its scope 1 and 2 emissions and a 30% reduction across 67% of scope 3 by 2032 (compared to 2021). These targets have been approved by the SBTi. Veolia has also committed to set long-term emissions reduction targets with the SBTi in line with reaching net-zero by 2050. To achieve this, our decarbonisation plan includes a practical approach underpinned by investment which is embedded within our Strategic Plan.

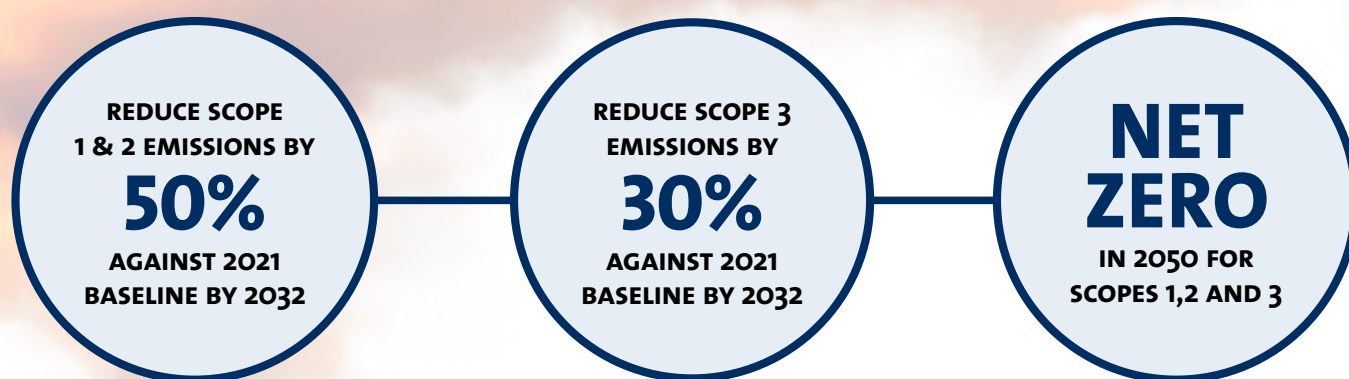
(4) <https://sciencebasedtargets.org>

(5) Intergovernmental Panel on Climate Change, <https://www.ipcc.ch/sr15/chapter/chapter-3/>

(6) Quarterly Update of Australia's National Greenhouse Gas Inventory: December 2022, Department of Climate Change, Energy, the Environment and Water

(7) Veolia Reporting tool. see page 22.

## OUR DECARBONISATION COMMITMENTS IN FIGURES:



### SCOPE 1:

#### EMISSIONS WE DIRECTLY GENERATE

Direct emissions from sources controlled or owned by us. This includes fugitive emissions from our landfill operations, wastewater and

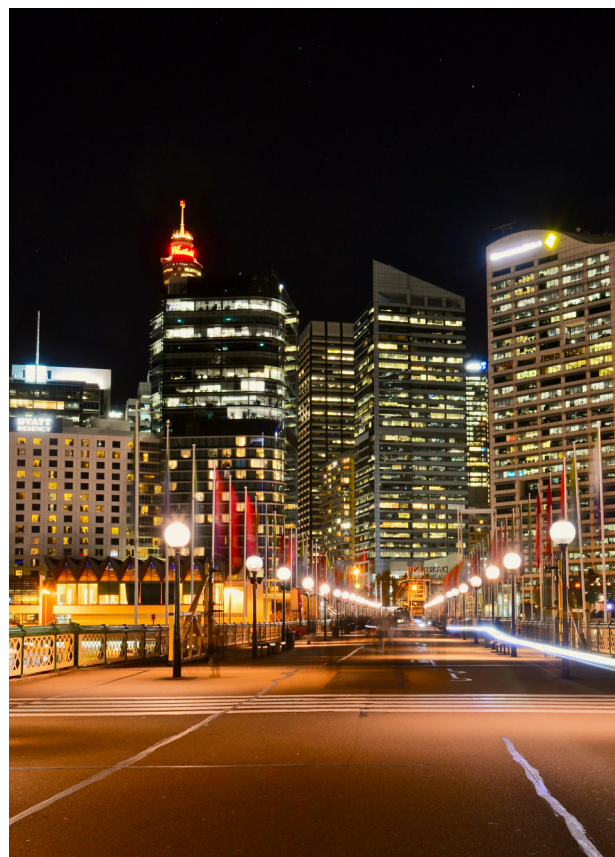


water treatment facilities, Veolia owned and operated industrial sites as well as use of fuel for waste collection and transport.

### SCOPE 2:

#### EMISSIONS WE INDIRECTLY GENERATE THROUGH POWER CONSUMPTION

Indirect emissions produced as a result of the electricity we consume.







### SCOPE 3:

## **OTHER INDIRECT EMISSIONS**

Emissions (not included in scope 1 or 2) that occur within our broader corporate value chain, and the supply chain of our customers.

### SCOPE 4:

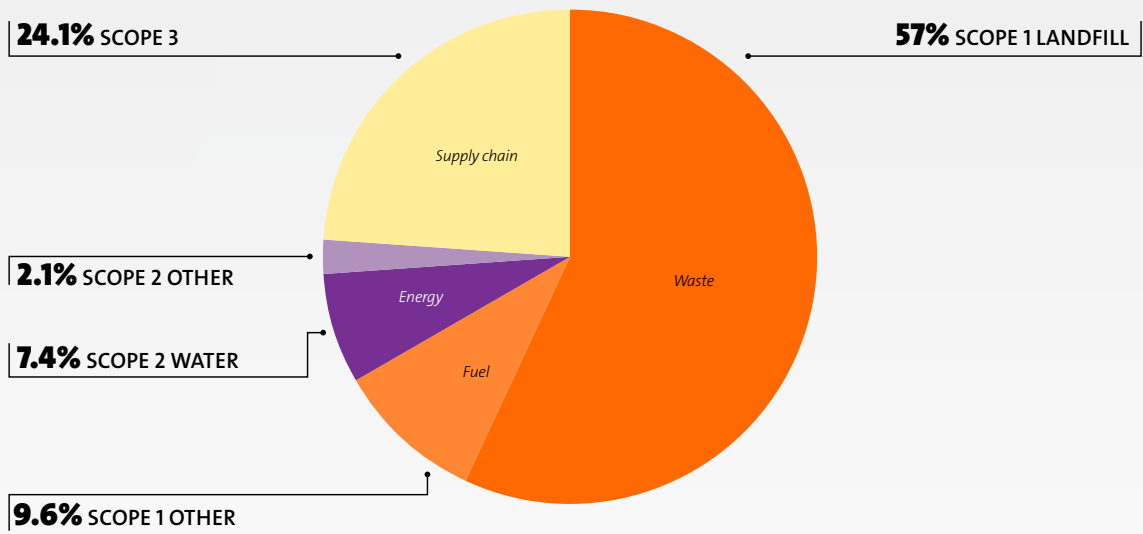
## **ERASED EMISSIONS**

Scope 4 is an appropriate way to account for decarbonisation efforts, corresponding to the reductions in emissions brought about by an organisation's activities, products or services when these reductions occur outside the scope of its own business. An example of this is where emissions are created by running a PET (plastic) recycling plant, however, emissions are 'erased' downstream, because recycled PET has a lower carbon impact than producing virgin PET.

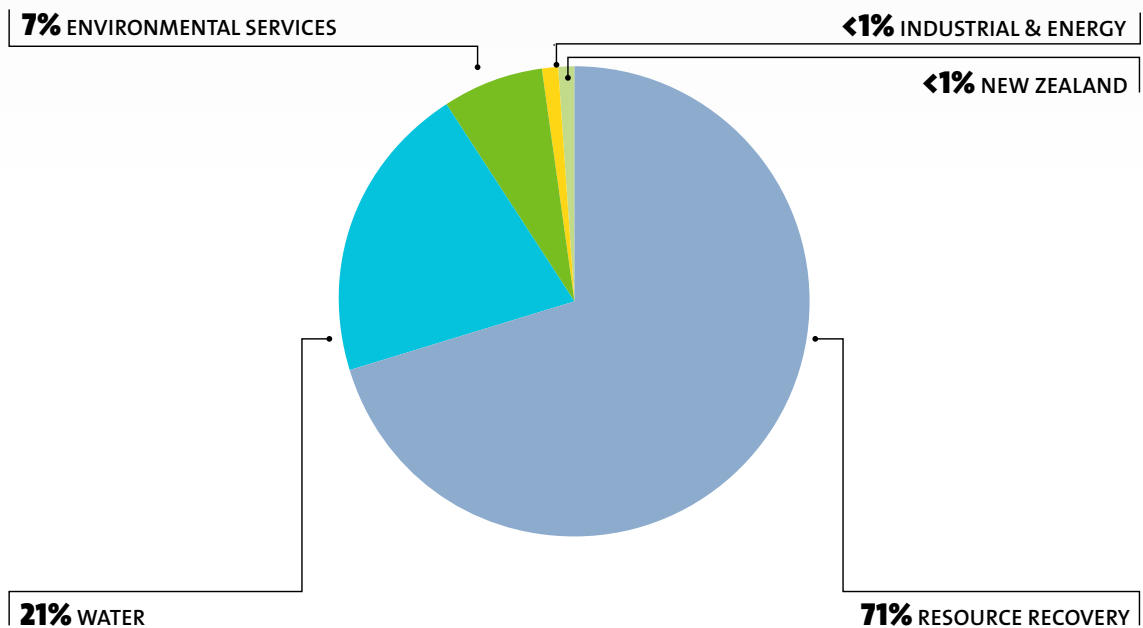
# WHERE WE ARE TODAY

Landfill gas (Scope 1) represents the majority of our emissions ('fugitive gas emissions' from landfill), therefore the bulk of our efforts will be focused on reducing these.

PERCENTAGE OF EMISSIONS BY SCOPE 2023



SCOPE 1, 2 EMISSIONS PER VEOLIA BUSINESS UNIT









# HOW WE'LL GET THERE: FOUR PILLARS TO NET ZERO



## PILLAR 1: CAPTURE

Reduce Scope 1 emissions by improving **landfill gas capture**: our most material emissions source (80% of our scope 1 emissions).

As a net recipient of our customers waste, we are reducing the overall emissions generated at our landfill sites. Decomposing waste in landfill produces methane, one of the most potent greenhouse gases (28 times the potency of carbon dioxide). A recent report by the National Waste and Recycling Industry Council (NWRIC) modelled that the waste and recycling sector in Australia has voluntarily reduced its greenhouse gas emissions produced from our collective activities by 45% over the past 30 years. According to the Australian National Life Cycle Inventory Database, the current industry average gas capture rate is 46.2%<sup>(8)</sup>. At Veolia Australia and New Zealand, we achieve an average gas capture rate of greater than 60% across our landfill sites.

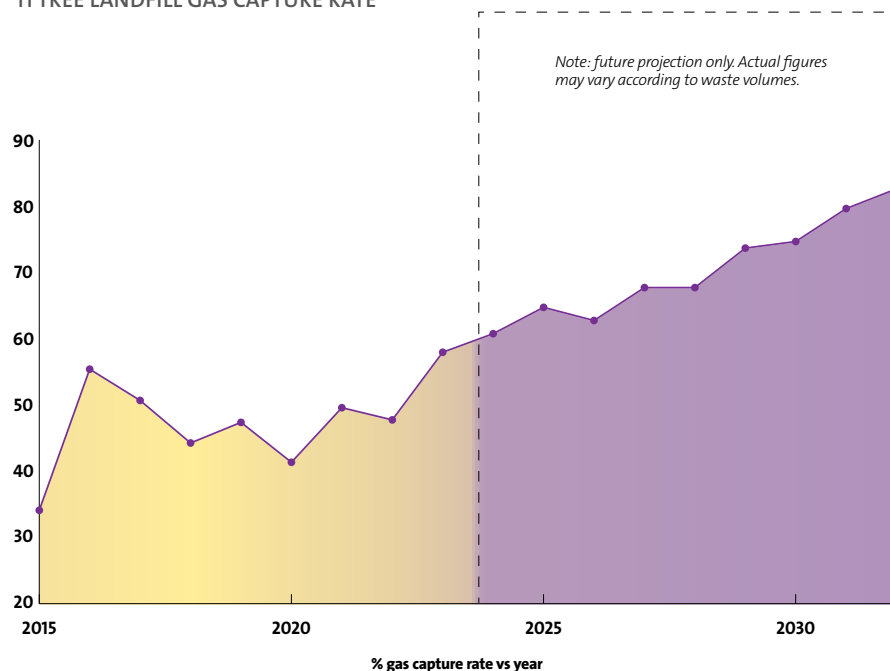
**By 2032, our goal is to reach an average 75% capture rate of methane at our landfills.**

### FOCUS

#### TI TREE BIOENERGY FACILITY

The Ti Tree Bioenergy facility, located in Ipswich Queensland, uses best practice technology to stabilise waste whilst capturing methane and converting it into electricity. The 4 onsite engines and 2,500m<sup>3</sup> flaring capacity creates an extensive gas extraction process through the network of gas wells across the landfill cells. The planned ramp up of extraction of gas, to reduce our overall emissions from the site will ensure the capture rate increases toward 2032.

TI TREE LANDFILL GAS CAPTURE RATE



(8) Australian National Life Cycle Inventory Database

## PILLAR 2: INVEST

Reduce Scope 1 & 2 emissions by **investing in recycling and recovery infrastructure** to increase diversion of waste, especially organics and residual waste, from landfill;

Implementing new technologies, such as green hydrogen, energy from waste, as well as the capture, storage and utilisation of biogas and carbon produced in our operations will also contribute to both direct offsets and avoided emissions.

This also includes assessing the carbon impact of newly proposed projects (and the carbon benefit from new investments) as part of the investment assessment criteria.



### FOCUS

## EARTHPOWER

In New South Wales, Veolia has invested \$17m to upgrade our food waste bioreactor, EarthPower. The facility converts food waste from commercial kitchens, supermarkets, food manufacturers, councils and more into rich fertiliser and produces enough electricity to power 4,800 homes.

EarthPower is specifically designed to process five waste streams: solid organic waste, organic sludges, liquid wastes, grease trap waste, and selected packaged wastes.

The high-tech facility offers one of the most environmentally sustainable ways of disposing of solid or liquid food waste, significantly cutting greenhouse gas emissions when compared to other methods. At its peak, the new EarthPower facility is expected to process 62,500 tonnes of waste every year.



## PILLAR 3: OFFER

Offer our customers **solutions to monitor and reduce carbon emissions** in their own operations;

### FOCUS

#### UNIVERSITY OF SUNSHINE COAST

Alongside our partner The University of Sunshine Coast, Veolia built, installed and operates 5,800 rooftop solar panels and a 4.5 megalitre water storage tank to cool water for air conditioning. The initiative is expected to save more than 100,000 tonnes of CO<sub>2</sub> emissions over 25 years.



## PILLAR 4: GENERATE

Increase the use of green energy sources within our own operations, **moving towards energy self sufficiency**. In addition, generate renewable energy that can be sold into the grid, replacing coal based generation.

### FOCUS

#### SITE DECARBONISATION

Veolia has accelerated its site decarbonisation by investing in our sites to enable their energy self-sufficiency. Currently there are 15 sites in Australia with solar panels installed equalling a total reduction of 830 tonnes of CO<sub>2</sub> per year which is 49% of the 15 sites electricity usage. Veolia is continuing to install solar panels with 5 projects currently being scheduled and more under consideration.

# OUR ACTIONS AT A GLANCE

**ACTION 1**  
MEASURE AND  
TACKLE OUR  
MATERIAL  
EMISSION SOURCES



**ACTION 2**  
REDUCE LANDFILL  
EMISSIONS



SCOPE 1

**ACTION 3**  
DECARBONISE  
ELECTRICITY  
SOURCES



SCOPE 2

**ACTION 4**  
PROMOTE THE USE  
OF ALTERNATIVE  
FUEL VEHICLES



SCOPE 1

**ACTION 5**  
INVEST IN CLIMATE  
INNOVATION &  
RESOURCE RECOVERY  
INFRASTRUCTURE



SCOPE  
1, 2  
AND 4

**ACTION 6**  
SCALE OUR  
DECARBONISATION  
OFFER FOR  
CUSTOMERS



SCOPE 1,  
2, 3  
AND 4





### ACTION 1:

## MEASURE AND TACKLE OUR MATERIAL EMISSION SOURCES

We commit to measuring and monitoring our Scope 1, 2, and 3 carbon emissions to create a reduction against the 2021 benchmark, 1,260 kt CO<sub>2</sub>e, which will be measured again in 2025. In addition, we will continue to calculate erased emissions as a result of our activities (Scope 4).



### ACTION 2:

## REDUCE LANDFILL EMISSIONS

Our landfill operations represent over 80% of our Scope 1 emissions. The majority of these emissions are 'fugitive', as they are released through the waste decomposition process.



Our focus will be on further increasing the capture of methane gas in our landfills so they are not released into the atmosphere. This methane can then be converted into CO<sub>2</sub>, and used as a source of energy generation at our facilities replacing fossil fuel generated energy.



### ACTION 3:

## DECARBONISE ELECTRICITY SOURCES

We are uniquely placed through our energy business to increase energy efficiency at a number of other operational sites. There are plans to increase green energy generation from some of our key sites so that these become a net contributor to the grid, and even a stream of revenue generation for our business.

We are introducing renewable energy into our operations through:

- Purchasing renewable energy at 50% of our Industrial, Energy and Water and 100% of our New Zealand sites;
- Operating a 2.5MW solar array at Woodlawn Bioreactor
- Installing 4.77 MW with 2.5 MWh in Batteries of renewable generation assets on our large sites across all states. The first phase will see us invest further, and generate an additional 17MW of energy - enough to mitigate Scope 2 emissions across our business



#### ACTION 4:

### PROMOTE THE USE OF ALTERNATIVE FUEL VEHICLES

With over 4,000 vehicles across our fleet, it will take time and investment to transition to a no (or low) carbon fleet. We have begun a customer trial, and will continue to promote the use and uptake of no or low emission vehicles for our Municipal collection customers. We will also champion for the broader uptake of alternative fuels such as bio fuel.



#### FOCUS

### ELECTRIC VEHICLE TRIAL IN CANBERRA

Veolia recently trialled a green electric powered Volvo garbage truck in Canberra at the beginning of 2024 as part of a trial with Volvo.

We gathered data from the trial, testing the vehicle's performance to ensure we understand the benefits of EV in our fleet and to know what changes we need to consider to bring them into the business.

The Canberra trial is just one part of Veolia's mission of ecological transformation to achieve a sustainable future as part of our business plans to reduce carbon emissions.



#### ACTION 5:

### INVEST IN CLIMATE INNOVATION & RESOURCE RECOVERY INFRASTRUCTURE

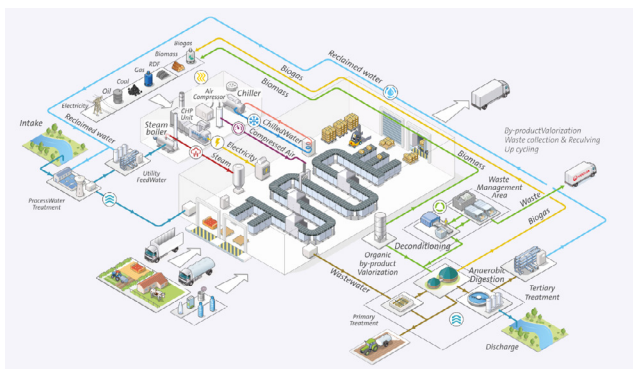
We recognise the need for continuous innovation in order to achieve these targets. In 2024, we are investing \$4m with a focus on technology and site improvement.

From **2023**, we have committed to reviewing and documenting the carbon impact of all new major projects as part of the investment decision making process.





## ACTION 6: **SCALE OUR DECARBONISATION OFFER FOR CUSTOMERS**



Through our waste, water and energy services offering we have the ability to help customers improve their energy efficiency, divert waste from landfill and into recycling (or another form of less carbon intensive recovery), improve operational efficiency, and beneficially re-use by-product (such as wastewater sludge, compost or biogas), to either reduce fugitive emissions or replace fossil fuel generated energy.



## FOCUS

### LAUNCHING 'ON TRACK' FOR OUR CUSTOMERS

In 2023, Veolia launched its comprehensive sustainability offering, On Track, which supports customers to achieve their sustainability ambitions, including decarbonisation. Veolia developed OnTrack: a services package which brings together all the tools and offers provided by our Sustainability Services and Products team.

OnTrack provides a simple, holistic approach for customers wanting to achieve sustainability targets. The offer breaks down into the three broad stages of customer journey:

- Review stage, in which assessments are performed and planning takes place;
- Perform stage, in which we activate the plan and enhance it on an ongoing basis; and
- Accelerate stage, where we provide customers with supplementary resources to accelerate the success of sustainable solutions

For more information, visit [veolia.com/anz/ontrack](https://veolia.com/anz/ontrack).

## FOCUS

### LAUNCHING OUR GLOBAL 'RESOURCE PLAN'

To adapt to global energy challenges, we developed a Global 'ReSource plan', which commits us to reducing our own and customers' energy consumption by 5%, and increasing our green energy production by 5%.

**To achieve this objective, Veolia Group is investing €150 million in Europe alone by 2024 and boosting the rollout of concrete solutions.**



# GOVERNANCE AND REPORTING FRAMEWORKS

Veolia is built on a solid foundation of Governance and committed to ‘walking the talk’ when it comes to achieving ‘net zero’. Our net zero roadmap is governed in line with organisational decision making and investment protocols, including our multifaceted performance objectives, investment steering committee, and Board accountability. Veolia’s Net Zero steering committee meets regularly and oversees Veolia’s emission reduction strategy.

## OUR

## FOCUS

### PERFORMANCE

1

SAFETY &  
ENVIRONMENT

Stakeholder Group:  
HR | Environment

2

BUDGET, EFFICIENCY  
& GROWTH

Stakeholder Group:  
Financial | Commercial

3

COMPLIANCE

Stakeholder Group:  
Environment | Social

### PRIORITIES

1

A GREAT PLACE  
TO WORK

Stakeholder Group:  
HR | Social

2

INNOVATING FOR  
CUSTOMERS

Stakeholder Group:  
Environment | Commercial

3

GETTING TO NET ZERO

Stakeholder Group:  
Environment | Commercial



## OUR MULTIFACETED PERFORMANCE

Underpinning our purpose, is our Multifaceted Performance - a framework which guides our activities and strategic objectives to achieve Ecological Transformation, recognising that it is a shared approach between all stakeholders, and a balance between impact areas.

2022 marked the beginnings of developing our net zero plan, through the Climate Change Priority Steering Group. In 2023, getting to net zero continues as an important organisational priority under our 'Priorities and Performance' objectives for the year:

## OUR INVESTMENT COMMITTEE

Our investment committee is responsible for assessing the viability of investment required to get to net zero, considering both operational and capital expenditure required to meet these goals.

## COLLABORATIVE TEAMWORK

Achieving 'net zero' is a collaborative effort across both our operational teams, and support functions including Technical and Innovation, Sustainability and Procurement. These teams work together to drive the net zero initiatives within the business, but also for our customers.

We are focused on supporting operational leaders across the business to recognise opportunities, develop business cases, estimate investment plans, foster innovation and drive awareness and change within the organisation.

## DISCLOSURE AND REPORTING

This roadmap is a first and important step in communicating our plans to reach net zero across our business in Australia and New Zealand.

This will form an important part of Veolia group's global commitments and net zero target, noting its ongoing support and commitment to the United Nations Paris agreement.

The 2023 Global Report campaign and resulting data required for Veolia Group's publications was audited and approved by the Group's external auditor, KPMG. This is a mandatory annual audit. The waste activities (collections and resource recovery) in Australia were selected in the testing this year, including indicators for carbon emissions and any material differences identified from the previous reporting campaign. The outcome of the audit was successful, with no findings advised.

We intend to evolve this plan and reassess at regular intervals (at least every 2-3 years).

In the meantime we will:

- Continue the Net Zero steering committee aligned to our strategic Priorities, consisting of representatives from Sustainability, Technical, Innovation, Operations and Procurement
- Provide a formal progress report to the Board as required, and at least annually, on progress against our targets
- Align our carbon targets with individual performance incentive schemes
- Incorporate our net zero actions and commitments into customer & employee communications
- Revise our baselines and targets in 2025, 2028 and 2030 to incorporate new data and calculation methods as they improve; and
- Detail progress towards our net zero targets in our annual ESG Report, which is externally validated by an independent auditor

To follow our net zero progress, visit [anz.veolia.com/netzeroroadmap](https://anz.veolia.com/netzeroroadmap)

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