City of Albany
YOUR CITY

Corporate Power Plan

2023 – 2028

The City of Albany respectfully acknowledges the Menang Noongar people as the traditional custodians of the land on which the City conducts its business, and pays respect to elder past, present and emerging.

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Contents

Executive Summary

The City of Albany is proud to present the Corporate Power Plan – the first of its kind for the municipality. The plan outlines the City's commitment to transition to 100% renewable energy for City-owned buildings by 2030.

Prior to the origin of the Corporate Power Plan, the City's Climate Change Action Declaration was launched. The City's Youth Advisory Council steered the development of this Declaration in 2019 with passion and determination, to ensure that the local environment is protected for their generation and all those who follow.

Establishment of the Climate Change Action Declaration reinforced the positive work achieved through the City's Carbon Footprint Reduction Strategy in 2014. More recently in 2017, the City implemented the Environmental Policy that commits to action on climate change, and recognises the evidence of existing climate science.

The Albany community has decided that climate action is a priority through the 2021 Community Scorecard survey of over 1400 residents. The message is clear – climate action is a shared responsibility. The City of Albany can play a key role, leading by example in how it manages its business, and also by advocating for action by other agencies on behalf of the Albany community.

This Corporate Power Plan is the framework to guide the City of Albany towards its goal of powering City-owned buildings by 100% renewable energy before 2030. This is a key focus for the organisation and it is determined to deliver for the community, the environment and a shared future.

The purpose of the Plan is to guide the transition of City buildings to 100% renewable energy by 2030.

Introduction and Background

This is the City of Albany's first Corporate Power Plan. The purpose of the Plan is to guide the transition of City buildings to 100% renewable energy by 2030. This plan is one of the outcomes of the City of Albany Climate Change Action Declaration (2019), developed in collaboration with the Youth Advisory Council. It supersedes the Carbon Footprint Reduction Strategy (2021).

While the greenhouse gas emissions produced from the City of Albany's corporate operations are a fraction of the total community emissions, actions undertaken represent strong commitment and demonstrated leadership to act on climate change.

Outside the scope of the Corporate Power Plan, the City of Albany has also been working with the South Coast Alliance to address community emissions and develop a Regional Community Roadmap to Net-Zero(1). Completed in June 2022, the Community Roadmap to Net-Zero is a tool to guide the important next step of developing a Community Net-Zero Action Plan. This will identify ways for the City of Albany to work together with neighbouring local governments, state government, industry sectors, individuals, developers, and energy and transport providers to reach net-zero emissions by 2050.

NOTE ON TERMINOLOGY:

'Corporate' refers to operations undertaken by the City of Albany in council-owned and operated assets.

'Community' is used to broadly reflect municipal or city-wide energy use outside of the City of Albany operations.

Climate Change

Australia's climate has warmed on average by 1.44 degrees since national records began in 1910, which has led to an increase in the frequency of extreme heat and weather events, and rising sea levels [2]

The CSIRO has projected that in the coming decades Australia will experience continued warming (more extreme hot days and fewer extremely cold days), a decrease in cool season rainfall leading to more time in drought, longer fire season with an increase in the number of days with dangerous fire weather days, more intense short-duration heavy rainfall events and ongoing sea level rise with more frequent extreme sea levels.

In 2016, Australia became a signatory to the United Nations Paris Agreement, with the aim to limit global warming to well below 2 degrees above pre-industrial levels, and to pursue efforts to limit the increase by a further 1.5 degrees.

In October 2021, the Australian Government committed for the first time to achieving net-zero emissions by 2050.

The WA Climate Policy (November 2020) has also committed to transition WA to net zero emissions by 2050. This policy recognises opportunities for all sectors of the community to work together towards a prosperous and resilient low-carbon future [3].

Local Government plays a key role in reducing carbon emissions to achieve state and national targets. The City of Albany is strongly committed to demonstrating leadership and action in the use of renewable energy.

Strategic Context

A MARKYT Community Scorecard completed by 1429 community members in March 2021 highlighted climate action as the top priority for the Albany community [4].

Community members requested greater promotion and adoption of sustainable practices, such as eco-building, solar panels, rainwater tanks, wave energy, electric vehicles, e-bikes, reduction in single use plastics, and more.

The Corporate Power Plan aligns with the Strategic Community Plan 2032 (2021) [5].

PILLAR:

Planet

ASPIRATION:

We are leaders in sustainability with a shared commitment to climate action and protecting our beautiful, natural environment

Outcomes

Shared responsibility for climate action

Objectives

Reduce water usage

Work towards net zero greenhouse gas emissions

Develop a sustainable, low waste, circular economy

Sustainable Development Goals

The City of Albany Corporate Business Plan 2021-2025 (2021) [6] outlines Council's service and delivery programs which align with the Community Strategic Plan.

This Plan also aligns with the following key documents:

- **Climate Change Action Declaration (2019)** [7]
- **Carbon Footprint Reduction Strategy (2021)** [8]

At a glance -

Federal, state and local government action on Climate Change:

Council actions

2010

Environmental (Climate Change) Policy (2010)

Environmental (Climate Change) Council Action Plan (2010)

2014

Carbon Footprint Reduction Strategy (2014)

2015

Rooftop solar PV systems installed at Albany Regional Daycare Centre and North Road Administration 31.35kW (Aug 2015)

2016

Introduction of Electric Vehicles in COA Fleet (2016)

2017

Installation of 20kW solar at Mercer Road Depot (April 2017)

2018

Biofuel system at ALAC commissioned (Dec 2018)

2019

Renewable Energy Generation Feasibility Study commenced (April 2019)

2020

Joined the Cities Power Partnership Program

City of Albany Climate Change Action Declaration endorsed by Council (Oct 2020)

Council endorsed business case for installation of rooftop solar PV on 11 City of Albany buildings (Dec 2020)

2021

South Coast Alliance (SCA) selected to participate in the Regional Climate Alliance Program

2022

Installation of 31kW solar PV at Albany Public Library (May 2022)

Installation of 88kW solar PV at Albany Airport Terminal Building (May 2022)

Installation of 300kW solar PV at Albany Leisure and Aquatic Centre (December 2022)

State and federal government actions

2016

Australia became signatory to the Paris Agreement (2016)

2019

Climate Health WA Inquiry (March 2019)

Energy Transformation Strategy (March 2019)

WA Aspiration to Net Zero Emissions by 2050

2020

Energy Transformation Taskforce: Whole of System Plan (Aug 2020)

DER Roadmap (April 2020)

EV Strategy (Nov 2020)

WA Climate Policy (Nov 2020)

2021

Australian Government commitment to reach net zero by 2050

Energy Supply

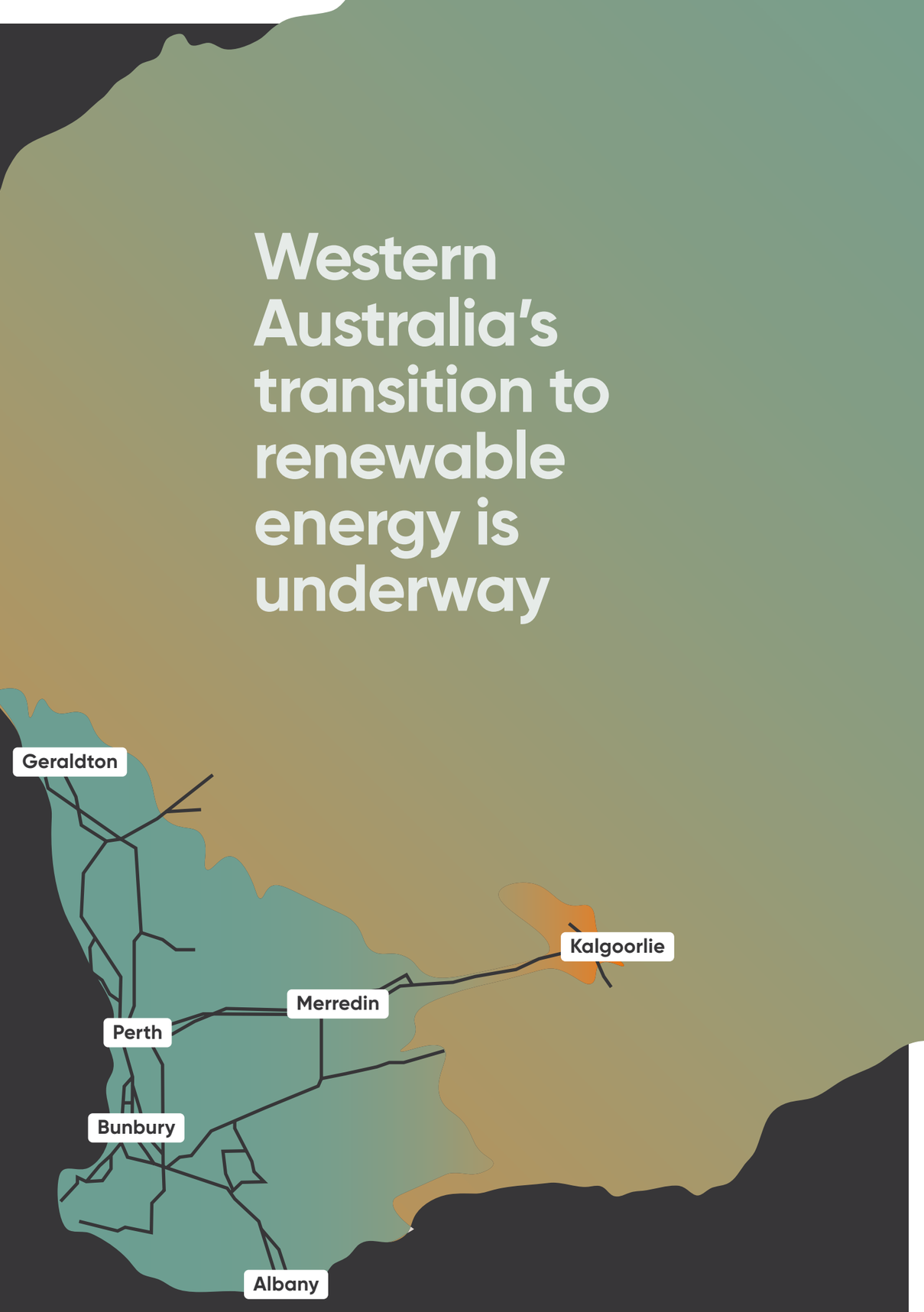
The energy sector remains one of Australia's largest contributors to greenhouse gas. The energy sector in WA has traditionally been supplied to consumers through a fossil fuel based linear supply chain of generation, transmission, distribution and retail.

The Wholesale Electricity Market (WEM) operates within the South West Interconnected System (SWIS) in WA. The SWIS is geographically and electrically isolated, with no interconnections to other transmission systems. It was planned and developed around centralised, large-scale, dispatchable generation.

Western Australia's transition to renewable energy is underway, with the rapid rise of solar power leading to the two remaining coal plants becoming less viable. In June 2022, the Western Australian government announced it will shut its last coal-fired power unit before the end of the decade. State-owned Synergy will oversee the investment of an estimated $3.8bn in "new green power infrastructure around the state" including windfarm and new storage.

Rooftop solar systems, batteries, electric vehicles, microgrids and other technologies are transforming Western Australia's electricity system. These small-scale devices, known as Distributed Energy Resources (DER) present both challenges and opportunities for the way we produce, manage and consume electricity in our State [10].

Western Australia's transition to renewable energy is underway



Renewable Energy in Albany

Due to geographical location, significant thermal losses, and the abundance of wave and wind energy generation opportunities, Albany is the ideal location to adopt renewable technology.

Renewable energy options include:

Wind energy

Albany has been at the forefront of renewable energy technology since 2001 with the first large-scale windfarm in Western Australia. When originally built with 12 wind turbines, the Albany Wind Farm was the largest of its kind in Australia. In 2011, six additional turbines were installed, forming the Grasmere Wind Farm.

Albany Grasmere Wind Farm is an accredited supplier for the GreenPower program. The 18 wind turbines have a maximum generating capacity of 35.4 MW of electricity [11].

Solar PV energy

It is estimated that around 20% of households in Albany have already installed rooftop solar [12]. Supporting community uptake of solar PV is explored further in the Regional Community Roadmap to Net-Zero.

The City of Albany has been active in implementing a schedule of roof top solar Photovoltaic (PV) systems across its council controlled facilities. The program is further detailed in **Key Priority 1: Renewable Energy** section of this plan.

Bioenergy

The bioenergy system installed at the Albany Leisure and Aquatic Centre is the primary heat source of heating at the centre, and is the only one of its kind being used to heat swimming pools in Western Australia. As the solar PV energy generation is lowest during the winter months, bioenergy provides an integrated solution that can feasibly generate an alternative renewable energy resource.

Waste to energy

Technology to convert waste that would otherwise go to landfill into energy including electricity, heat and fuel has been adopted around the world. While the City of Albany has not yet found a solution for the relatively low waste feedstock available, this option will continue to be monitored as smaller scale designs may come onto the market in future years.

POWERING CITY OPERATIONS

The energy that powers the City's operations currently originates from a mixture of renewable and non-renewable energy sources.

The majority of the City's corporate emissions are via grid-supplied energy, gas, and fuel in the form of diesel and petrol. The City has already implemented a number of initiatives to reduce energy consumption and transition to clean energy. Completed and planned actions are outlined in Key Priorities section of this Plan.

Partnerships

Cities Power Partnership

The Climate Council's Cities Power Partnership is Australia's largest network of local councils leading the way to a thriving, zero emissions future. In WA, the City of Albany is one of 31 Local Government Areas that have joined the program. Benefits include increased opportunities to collaborate with other councils on climate and energy initiatives on a national level.

In 2020, the City of Albany joined the Cities Power Partnership Program, making the following five action pledges to tackle climate change:

As a CPP member, the City of Albany completes an annual Reporting and Feedback Survey on progress toward our Cities Power Partnership pledges and to give feedback that helps inform the future of the program. This report summarizes the results from the 138 councils who completed this year's survey. The latest report 'Tracking Progress: 2020 Snapshot of Council Action on Climate Change' can be viewed at the Cities Power Partnership website[13].

Renewable Energy

Install renewable energy (solar PV and battery storage) on council buildings.

Sustainable Transport

Support cycling through provision of adequate cycle lanes, bike parking and end-of-ride facilities.

Renewable Energy

Power council operations by renewable energy, and set targets to increase the level of renewable power for council operations over time.

Work Together and Influence

Develop procurement policy to ensure that the practices of contractors and financers align with council's renewable energy, energy efficiency and sustainable transport goals.

Energy Efficiency

Adopt best practice energy efficiency measures across all council buildings, and support community facilities to adopt these measures.

Regional Climate Alliance Program

An initiative of the Western Australia Climate Policy, the Regional Climate Alliance Program aims to support Local Governments in Western Australia to take action on climate change, energy and sustainability through regional partnerships.

In 2021, two Regional Climate Alliances were selected to participate in the Regional Climate Alliance Program - the South Coast Alliance (SCA) and the Goldfields Voluntary Regional Organisation of Councils (GVROC)

The South Coast Alliance is a leader in sustainable and economic development through collaboration in regional Western Australia. The SCA works with its four local government members – City of Albany, Shire of Denmark, Shire of Plantagenet and Shire of Jerramungup – to respond to and mitigate climate change in the South Coast region.

As part of this program, the South Coast Alliance (SCA) on behalf of all four local governments commissioned a consultant to provide the following deliverables:

1. **Undertake a Regional Community Net-Zero Emissions Roadmap (May 2022)**
2. **Develop a Greenhouse Gas Emissions Inventory Tool (Calculator) for reporting and monitoring of energy use and emissions (Jun 2022)**
3. **Develop an outwards facing community emissions dashboard that will measure and provide performance against targets for progress towards Regional Community Net-Zero by 2050. Partly funded by LotteryWest, this project is due for completion in the last quarter of 2023.**

The South Coast Climate Alliance was successful in its application to WALGA (WA Local Government Association) of the project titled Future Proofing the South Coast through Sustainable Building Design. This project aims to:

1. **Undertake a built environment desktop audit of 10 facilities to analyse the energy and water usage over the past 3 years. This will include 3 facilities in the City of Albany.**
2. **Use the desktop audit to prioritise a total of 8 facilities (two from each of the four LGA's) to undergo a detailed on ground audit that will identify retrofitting actions based on Environmentally Sustainable Development (ESD) principles.**
3. **Provide recommendations including cost benefit analysis and a prioritisation for each of the eight facilities with works to be included into building maintenance schedules.**
4. **Monitoring of retrofitted buildings annually against the baseline 2022FY data.**

The project will be completed by 1 May 2023.

City assets chosen for this project include:

- **Mercer Road Office Depot**
- **Vancouver Arts Centre**
- **Albany Public Library and Visitors Centre**

Major Achievements

Power Purchase Agreement

The City of Albany was one of 51 local governments to join a Power Purchase Agreement in late 2021. The joint energy purchasing arrangement, enables the group to purchase locally sourced renewable energy derived from the Albany Grasmere Wind Farm, Collgar Wind Farm and Emu Downs Windfarm. The City commenced the Power Purchase Agreement in April 2022 and opted to pay the extra premium for 100% renewable power for contestable sites from year 1. By entering into this agreement, the City is on track to meet approximately 70% of its target of 100% renewable by 2030. This has been estimated based on electricity being the City's largest carbon emission source.

Site Name
Albany Airport Terminal Building
Albany Leisure and Aquatic Centre
Library and Visitor Centre
Mercer Road Depot
North Road Administration Office
National Anzac Centre
Alison Hartman Gardens, Library parking, Town Square
Willyung Hill Telecommunication Facility
Middleton Beach Foreshore Area
Centennial Stadium
Cricket and Soccer Pavilion

TABLE 2: CONTESTABLE SITES UNDER THE POWER PURCHASE AGREEMENT WITH 100% RENEWABLE POWER

THE CITY OF ALBANY HAS JOINED A POWER PURCHASE AGREEMENT WITH 100% RENEWABLE ENERGY.

Council adoption of Solar PV Installation Business Case:

In April 2018, Council unanimously resolved that the City of Albany continue to explore renewable energy generation opportunities to become self-supporting in its corporate energy requirements. As a result, two integrated renewable energy feasibility studies undertaken in 2019 by independent consultants Blue Sky Renewables (BSR) and Thales New Energy (TNE). Investigations identified potential savings through energy efficiencies opportunities, tariff optimisation, and renewable energy solutions.

This information was used to develop a Business Case to install renewable power systems (PV) on City facilities.

- **Phase one - Installation of solar PV cells on City owned and operated buildings.**
- **Phase two – Installation of solar PV on City owned and leased buildings.**
- **Phase three – Virtual Power Plant (VPP) and storage batteries.**

In December 2020, Council endorsed Phase one of the business case that proposed installation of solar PV on 11 City of Albany buildings to be adopted within the annual budget.

These buildings were selected because they are City owned and operated and have sufficient building load scale and roof suitability.

Building	System Size kW
2020-21	
Library	31
2021-22	
Albany Airport Terminal Building	88
Albany Leisure & Aquatic Centre (on track for completion October, 2022)	300
2022-23	
National ANZAC Centre	75
North Road Administration Centre (expansion)	68.5
2023-24	
Hanrahan Road Waste Facility:	
Fossicker's Tip Shop	6.8
Aware Centre	6
Weighbridge Office	6.8
Mercer Road Depot (expansion)	20
2024-25	
Vancouver Arts Centre	12.2
Mercer Road Office	30
Total	**644.3**

TABLE 1: THE PHASE ONE SOLAR PV INSTALLATION PROGRAM. GREEN SHADED BOXES DENOTE COMPLETED INSTALLATIONS.

At the time of adoption of the business case it was agreed that phases 2 and 3 of the solar installation program would not be included until further investigation into the cost of changes to current lease agreements and the viability of the VPP energy systems over the next 5 years.

Albany Leisure and Aquatic Centre Biofuel system

In December 2018, the biofuel system at the Albany Leisure and Aquatic centre was commissioned, replacing gas as the main source of energy to heat the pools. While the system was initially used to heat the pools, it is now the primary source for all heating at ALAC. The bioenergy system has reduced the ALAC's reliance on gas by about 80%.

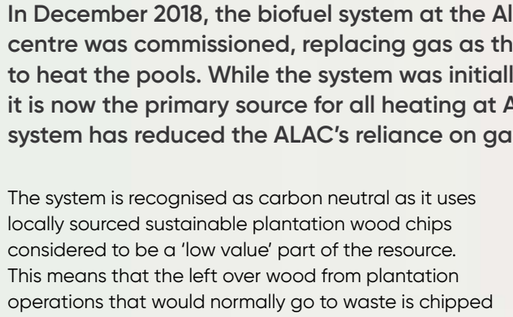
The system is recognised as carbon neutral as it uses locally sourced sustainable plantation wood chips considered to be a 'low value' part of the resource. This means that the left over wood from plantation operations that would normally go to waste is chipped and used to produce a sustainable source of energy.

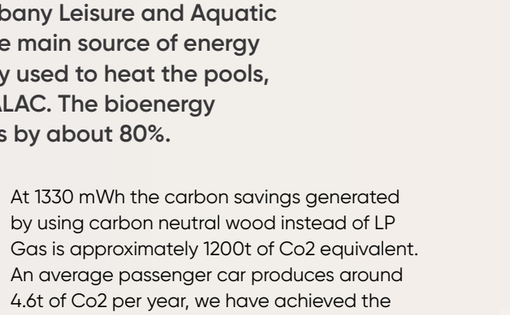
The biofuel system delivers a minimum of 1,330 mWh of thermal energy per annum and has an upper capacity limit of 4,000 mWh.

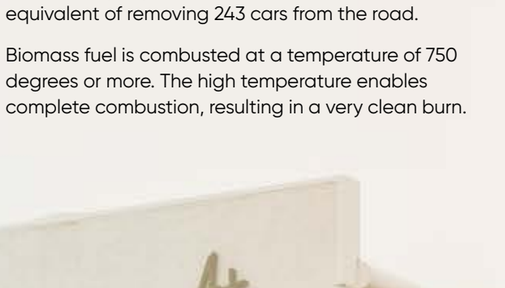
The system uses approximately 750 tonnes of woodchip per year to deliver the minimum 1330 mWh.

At 1330 mWh the carbon savings generated by using carbon neutral wood instead of LP Gas is approximately 1200t of Co2 equivalent. An average passenger car produces around 4.6t of Co2 per year, we have achieved the equivalent of removing 243 cars from the road.

Biomass fuel is combusted at a temperature of 750 degrees or more. The high temperature enables complete combustion, resulting in a very clean burn.







The bioenergy system has reduced the ALAC's reliance on gas by about 80%.

Opportunities and Challenges

LED Street lighting

LED and smart-lighting technologies provide many benefits to the community, including making roads safer, saving money by using energy more efficiently, lowering energy and maintenance costs and cutting greenhouse gas emissions by more than half.

The City has 3980 streetlights which are unmetered and under the control of Western Power. 94% of these lights are are compact fluorescent, mercury vapour, metal halide and high pressure sodium.

The energy demands for LED lamps are 80% less than the current lamps in the street lighting network, with significant greenhouse gas savings. The existing 3,980 streetlights use 1.4MWh of electricity annually, with electricity consumption predicted to fall to 0.592MWh by changing to LED luminaires.

Importantly, the new LED luminaires will result in a 57.8% decrease in carbon emissions from a current 969 tonnes of C02e annually, to 409 tonnes C02e annually.

Western Power released an LED street light product in early 2019. However, transition has been slow as street lights are only replaced when the existing luminaires fail, with around 6% having been replaced to date. Most luminaires would be replaced after 8-10 years, but could take up to 20 years to replace them all. Waiting to replace these would impact the City's ability to significantly reduce corporate emissions.

Work to date:

In an effort to aid the transition to more efficient LED street lighting, the South West Group of Councils (comprised of 5 local governments, being the Cities of Albany, Armadale, Canning, Cockburn and Melville) and WA Local Government Association (WALGA) engaged consultant Ironbark to develop an LED bulk street lighting change business case. The business case proposed replacement of the streetlights to more energy efficient and low maintenance LED luminaires, funded by participating councils.

Additionally, the City commissioned SAGE Consulting to undertake a peer review of the LED Street Lighting Business Case and supported the recommendations of the LED Street Lighting Business Case.

Bulk replacement of streetlights was previously endorsed by Council for Financial Year 2021/22 budget, subject to successful grant funding application. The City applied for grant funding of $625,000 to contribute to this project, from the Round 2 of Clean Energy Future Fund (CEFF) (14). The residual amount was to be included in the City's proposed 2021/22 FY budget if the CEFF grant application was successful. Unfortunately the City was unsuccessful in its grant application from CEFF, as were all other street lighting applications for this grant.

In August 2022, Council approved the replacement of Western Power owned Luminaires with Smart Enabled LED Luminaire Streetlights including the iTron smart control system. The LED replacement will be the single greatest energy reduction project the City has implemented.

The expected cost of the replacement program of $2,615,000 to be considered as part of the 2023/24 and 2024/25 budgets.

A Lighting Master Plan and Detailed Design Plan are the next steps to be undertaken. This will determine the level of illumination required on major and minor roads. This will result in increased lighting quality (colour temperature and light distribution) and reliability of public lighting.

- **Additional environmental benefits include lower waste to landfill through longer life-cycle and elimination of harmful mercury from the environment, especially landfill**

Fleet

In 2014, the City of Albany introduced the first two battery electric vehicles to the Light fleet.

The City now has an additional 1 Plug-in hybrid vehicle and 3 Hybrid vehicles (HEV) out of a total of 80 light fleet vehicles, with 6 charging stations installed across 3 worksites.

An electric forklift has also been added to the plant fleet at the Hanrahan Waste site.

The City is expanding the number of electric vehicles and hybrid vehicles to further reduce emissions. There are 3 BEV's and 7 HEV's currently on order, due to arrive mid-2023. This order covers the replacement of the two current BEV's and 1 PHEV, while introducing 1 additional BEV and 6 additional HEV's to the fleet.

Type	Number	Planned number in 2023
Battery Electric Vehicles (BEV)	2	3
Plug in Hybrid Electric Vehicles (PHEV)	1	0
Hybrid Electric Vehicle	3	10
Jungheinrich Electric Forklift	1	1

Additionally, the City has three pedal assist e-Bikes on offer for staff use.

Challenges for increasing EV's in our fleet

The City of Albany has been a leader in introducing EV's into its fleet, however there are some significant barriers to overcome. These include:

- **Cost**
- **Limited availability of electric vehicles to purchase through local car yards and the City's buy-local policy**
- **Not having like for like replacements for 4wd/utility vehicles**
- **Technology may not be suitable for heavy fleet, including range issues and remote locations**
- **Hydrogen technology options are not yet available or financially feasible**
- **Supply chain issues with vehicle wait times up to 12 – 18 months**
- **Lack of data to identify low use, short distance vehicles to be replaced with EV.**

The City acknowledges these barriers, and will continue to investigate options to increase EV inclusion in the City's fleet.

THE FIRST TWO BATTERY ELECTRICAL VEHICLES (BEV'S) WERE INTRODUCED TO THE CITY FLEET IN 2014.

Completed Actions

- **Light fleet review (2013)**
- **Maximum carbon emission levels set**
- **Introduction of 6 electric vehicles to light fleet**
- **Electric forklift added to Plant Fleet**
- **Three e-Bikes introduced to reduce vehicle usage**
- **7 Hybrid and 3 BEV's currently on order due to arrive mid-2023**

Future Actions

- **Develop new fleet strategy**
- **Investigate implementation of a telematics software system to enable the accurate measurement of whole of fleet emissions**
- **Measure current fleet emissions and demonstrate continuous reduction going forward**
- **Periodic reporting on fleet utilization and trend analysis**
- **Driver education/monitoring to promote more sustainable driving practices to reduce emissions**
- **Where possible, strive to procure "best in class" energy efficient Heavy Fleet items, subject to budget constraints and remaining fit for purpose.**
- **Advocacy to local car dealerships to stock EV's**

Key Priorities

1 RENEWABLE ENERGY

- Solar PV Rooftop Installation
- Power council operations by renewable energy, and set targets to increase the level of renewable power for council operations over time.
- Power Purchase Agreement

2 ENERGY EFFICIENCY

- Street lighting
- Asset lighting
- HVAC

3 DATA & REPORTING

- GHG emissions and energy data capture
- Annual Reporting

4 ENGAGEMENT

- Corporate Power Plan
- Cities Power Partnership
- Staff education and training

Renewable Energy

The City aims to transition its buildings and facilities to be powered by 100% renewable energy sources by 2030.

KEY TARGETS	
	100% corporate renewable energy for Council owned and operated buildings and facilities by 2030
	Investigate future opportunities (battery storage, hydrogen, waste to energy)
	Negotiate renewable options for contestable energy agreements

Completed Actions

- Three rooftop solar PV systems installed totaling 55kW (2015 – 2017) on the North Road Administration Office, Mercer Road Depot and the Albany Regional Daycare.
- Installation of Biofuel system at Albany Leisure and Aquatic Centre to replace traditional gas fired pool heating systems (2018)
- Integrated Renewable Energy System Feasibility study undertaken by independent consultant Blue Sky Renewables, for the Albany Leisure and Aquatic Centre (2019).
- Solar hot water systems installed on Mercer Road Depot and Senior Citizens Centre
- Council endorsed a Solar PV Installation program for 11 solar PV systems to be installed over a 5 year period totalling 600kW, with the first two buildings (Library and Albany Regional Airport) now completed (2022), and the third (ALAC) due to be finished before the end of 2022.
- The City commenced the Power Purchase Agreement in April 2022 and opted to pay the extra premium for 100% renewable power for contestable sites from year 1.

Future Actions

- Continue to implement the Solar PV Installation Program, as per the schedule. Project completion due in 24/25 FY.
- Explore options for installing solar PV systems on leased City buildings.
- Explore other options to achieve net-zero for City-owned buildings that are leased where consumption of energy is outside of the City's control.
- Continue to work with WALGA to ensure best value for contestable energy agreements.

Energy Efficiency

The City of Albany aims to reduce energy consumption by using smart technology to ensure efficiency of its operations.

KEY TARGETS	Adopt best practice energy efficiency measures across all Council buildings, and encourage community facilities to adopt these measures
	LED street lighting upgrades

Completed Actions

- **Energy Audits in 2010 & 2015, focusing on City building assets including North Road Administration Centre, Mercer Road Operations Depot, Vancouver Arts Centre, Albany Airport, Albany Regional Daycare Centre, Albany Public Library and the Albany Leisure and Aquatic Centre. Common finding from the reports recommended upgrades to building insulation, lighting, Heating Ventilation and Air Conditioning (HVAC) and staff engagement.**
- **Vancouver Arts Centre HVAC upgrade (19/20).**
- **LED lighting installations. See Table below.**
- **LED Street lighting retrofits on City-owned carpark and public open space lighting (ongoing through maintenance).**
- **Installation of LED lighting to hockey field.**
- **Council endorsement for a bulk LED street lighting upgrade (Western Power owned asset).**

ADMINISTRATION BUILDINGS	PUBLIC FACILITIES	COMMUNITY SERVICE BUILDINGS
Mercer Road Office	Albany Visitor Centre	Albany Regional Daycare Centre
	ALAC internal lighting (in progress)	SES building (under construction)
	Changing Places Restroom	Vancouver Arts Centre
	Town Hall - internal lighting	Waste Facility Hanrahan Rd – Materials Recovery Facility 3
North Road Administration – internal lighting	Town Hall Public Toilets	Wellstead Emergency Services Facility
	Queen's Park Rotunda	
	Youth Park Public Toilet & Club Storage	

Future Actions

- **Develop best practice energy efficiency standards for new builds and retrofits of City-owned buildings.**
- **WALGA South Coast Alliance Project Grant – Sustainable Built Design. Undertake a sustainability audit of the following City of Albany assets to understand opportunities for improving energy and water efficiency retrofits:**
  - **Mercer Road Office Depot.**
  - **Vancouver Arts Centre.**
  - **Library/Visitors Centre (Desktop audit only).**
- **Progress the transition of Western Power-owned street lighting to LED.**
- **Conduct building audits as required and continue to implement measures to increase energy efficiency.**

Data & reporting

Emissions and energy data should be managed in one central system to improve accuracy and access to data for strategic decision making and reporting.

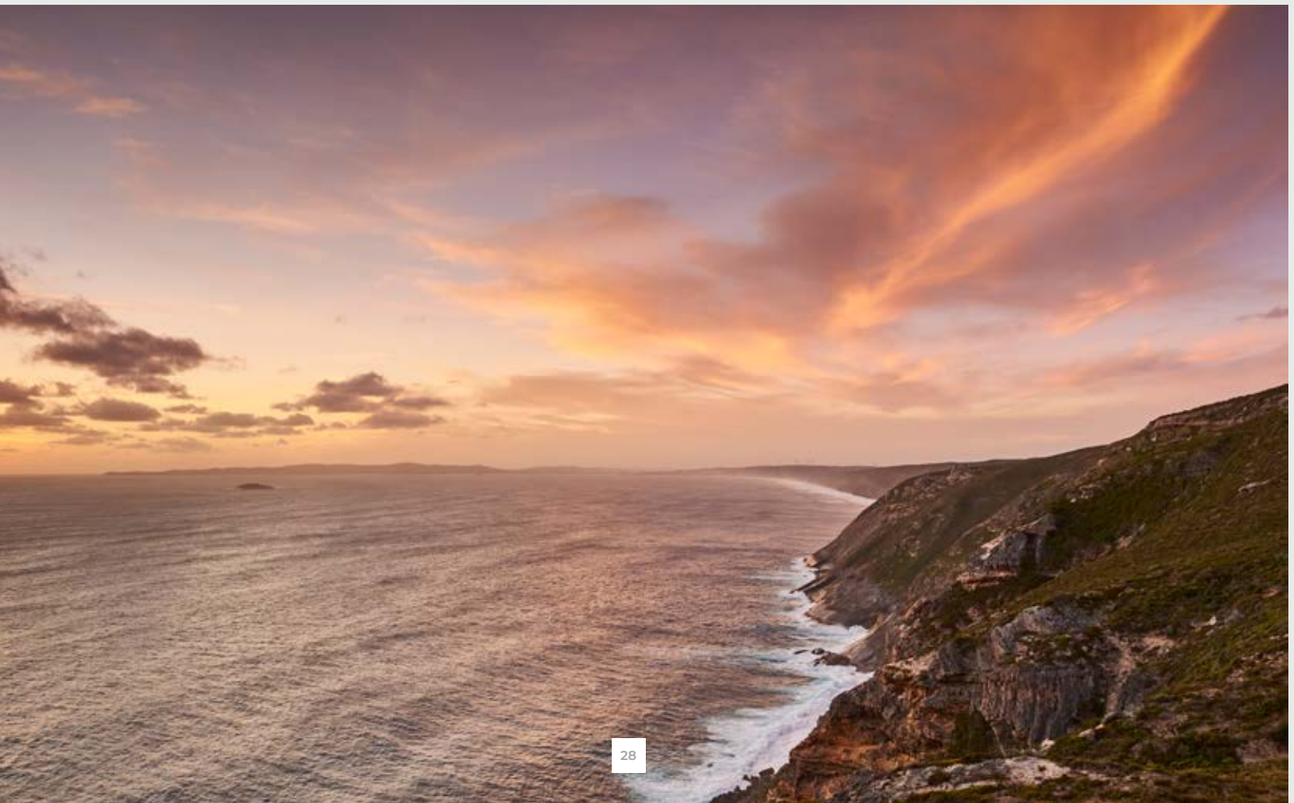
KEY TARGETS	Determine reporting parameters on Corporate Emissions
	Investigate methods to automate energy data collection
	Report Corporate energy and emissions data to council annually

Completed Actions

- **Review of 55 City of Albany buildings to identify opportunities for voltage optimisation, meter upgrades, tariff rates and renewable energy technology.**
- **Assessment of available software packages to monitor and track emissions**
- **South Coast Alliance engaged Ironbark Sustainability to develop a Corporate GHG emissions calculator to provide a baseline for corporate energy usage and emissions (20/21FY)**

Future Actions

- **Develop reporting tool for Corporate energy usage and emissions**
- **Report annually to Council on emissions and energy production and consumption, to evaluate progress towards the 100% corporate renewable energy target**
- **Set interim greenhouse gas emissions reduction targets**



Engagement

The City of Albany aims to educate and engage with Councilors, Executive and staff to reduce energy consumption and carbon emissions. The City will promote progress and learning internally and with the Albany community.

KEY TARGETS	Develop procurement policy to ensure that the practices of contractors and financers align with council's renewable energy, energy efficiency and sustainable transport goals
	Support state and federal government renewable energy transition
	Elected member and staff training on climate related issues

Completed Actions

- **City of Albany Green Team formed and work collaboratively to embed sustainable initiatives across a broad range of business areas**
- **Sustainable Building Working Group established**
- **Joined the Cities Power Partnership Program**

Future Actions

- **Develop a sustainable procurement policy to align with renewable energy, energy efficiency and sustainable transport goals**
- **Develop a Corporate Roadmap to Net Zero Action Plan**

References

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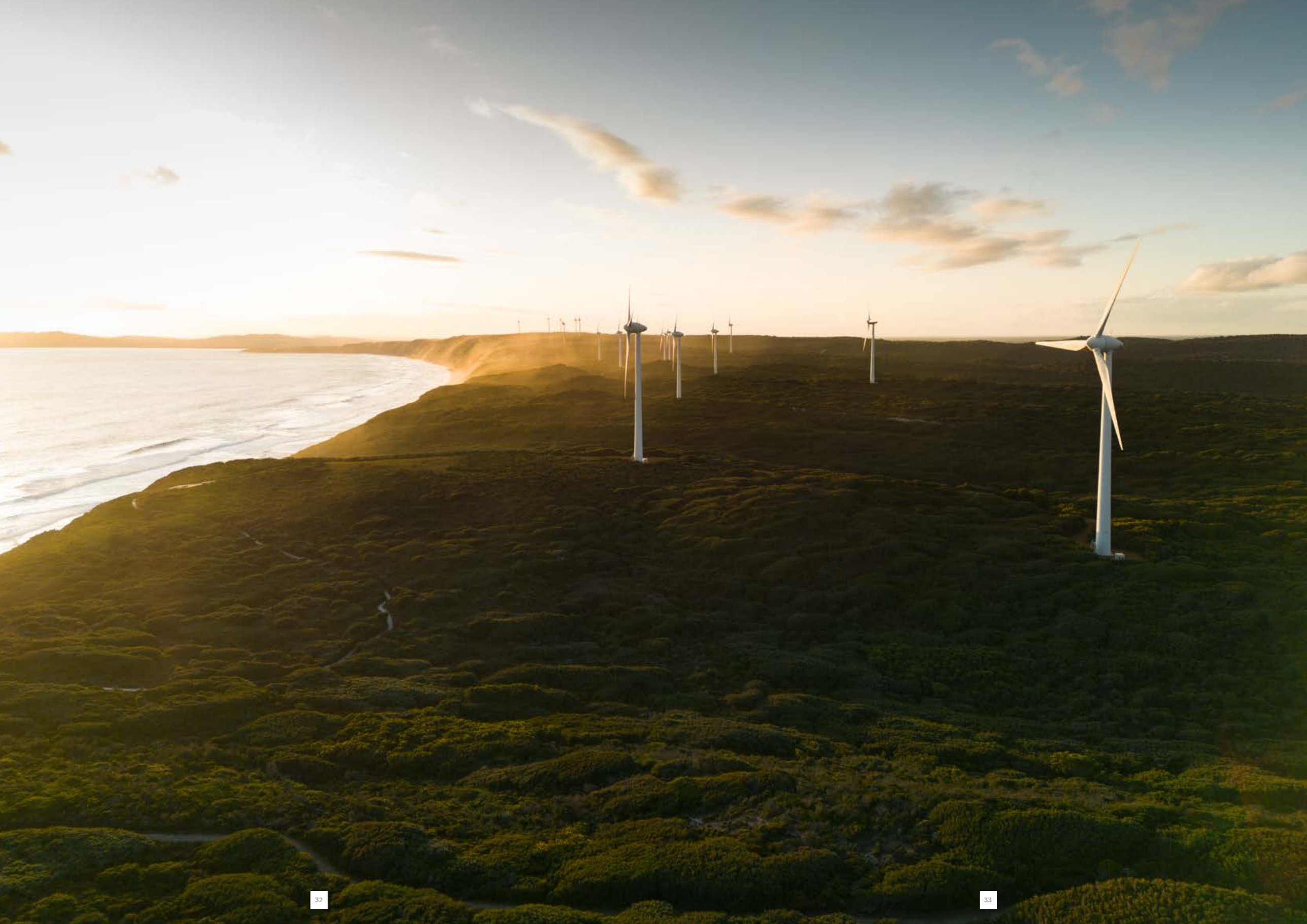
Document Approval			
Document Development Officer: Kylie Outhwaite			**Document Owner:** Paul Camins
Climate and Sustainability Project Officer			Executive Director Infrastructure, Development and Environment
Document Control			
File Number - Document Type:	CM.STD.9	Strategy	
Synergy Reference Number:	IS23488279		
Status of Document:	**Council decision: Adopted 28 Feb 2023**		
Quality Assurance:	Executive Management Team and Council		
Distribution:	Public Document		

Document Revision History

Version	Author	Version Description	Date Completed
0.1	Climate and Sustainability Project Officer	First version to be reviewed at Strategic Workshop (6/12/22)	21/11/2022
0.2	Climate and Sustainability Project Officer	Version 2 to be presented at DIS Committee Meeting (15/2/23)	03/01/23
1.0	Climate and Sustainability Project Officer	Final	13/03/23



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