5.6 ADVERTISING OF DRAFT SUSTAINABLE VINCENT FRAMEWORK AND ENHANCED ENVIRONMENT STRATEGY

Attachments:

- 1. Sustainable Vincent Framework
- 2. Enhanced Environment Strategy
- 3. Summary of Enhanced Environment Strategy Objectives & Targets
- 4. Sustainable Environment Strategy 2023/24 Progress Report
- 5. Summary of Emissions Inventory

RECOMMENDATION

That Council:

- 1. APPROVES the draft Sustainable Vincent Framework, included in Attachment 1, and the draft Enhanced Environment Strategy, included in Attachment 2, for public consultation for a period of 42 days in accordance with the City's Community and Stakeholder Engagement Policy; and
- 2. NOTES that any submissions received during the advertising period would be presented to Council for consideration.

PURPOSE OF REPORT:

To consider for the purposes of community consultation:

- The draft Sustainable Vincent Framework (SVF) included in Attachment 1; and
- The draft Enhanced Environment Strategy (EES) included in Attachment 2.

DELEGATION:

Section 2.7(c) of the *Local Government Act 1995* sets out the role of Council as being to plan strategically for the future of the district.

The Local Government Act 1995 states the term 'local government' refers to the elected Council.

There is no delegation to Administration to prepare a strategy or framework.

BACKGROUND:

Review of Sustainable Environment Strategy

The <u>Sustainable Environment Strategy 2019-2024</u> (SES) was adopted by Council in June 2019. This set out operational and community targets across the themes of energy, transport, waste, water, and urban greening and biodiversity.

The SES reached its end of life in 2024. A progress update against the targets of the SES is included in **Attachment 4** and is summarised below.

Theme	Progress	
Waste	42 percent reduction in landfill waste, driven by the rollout of the FOGO program in 2021.	
Water	22 percent increase in City facilities water use, linked to a 70% increase in Beatty Park patronage since 2017/18.	
Energy	37.7percent reduction in electricity and gas consumption due to green energy purchasing and solar panel installation programs and a 1,060 percent increase in solar energy generation in kilowatts since 2017/18.	
Greening	21.2 percent increase in street tree planting, equating to an average of 549 new street trees each year. Overall tree canopy across the City on both public and private land decreased by 3.45 percent based on the most recent 2020 State Government data.	

Proposed Approach to Sustainability at Vincent

A review of sustainability across the City was undertaken to:

- Better align the City's sustainability aspirations with the Strategic Community Plan 2022-2032 (SCP).
- Define the City's long-term sustainability commitments.
- Embed sustainability within City operations.

This was informed by preliminary engagement undertaken with the community and the City's Sustainability and Transport Advisory Group (STAG) between March and May 2024 to understand the key sustainability priorities that should be addressed.

205 responses were received, with the following key priorities being identified:

- Transition to renewable energy and reduce carbon emissions.
- Improve water capture, reuse, stormwater harvesting, and management.
- Expand tree canopy, enhance green spaces, and protect biodiversity.
- Support healthy local ecosystems by caring for urban habitats and tree canopy.
- Manage climate risks and improve air quality.

These priorities cover a range of sustainability themes. To deliver these priorities and ensure they align with the SCP and the City's Integrated Planning and Reporting Framework (IPRF), Administration proposes the following corporate documents relating to sustainability at Vincent:

- 1. **Sustainable Vincent Framework (SVF)** An overarching sustainability framework that would embed sustainability responsibilities across the organisation, and sets a Net Zero emissions target. This report details the draft SVF.
- 2. **Enhanced Environment Strategy (EES)** An enhanced environment strategy that would align with the Enhanced Environment priority area of the SCP, focusing on water, greening and waste. This report details the draft EES.
- 3. **Climate Transition Action Plan (CTAP)** A climate action plan that would align with the Innovative and Accountable priority area of the SCP. This would focus on specific climate adaptation, emissions reduction, energy efficiency and transport actions to achieve Net Zero. Preparation of the Climate Transition Action Plan (CTAP) would commence in 2025/26.

The diagram below outlines how these components fit within the City's strategic document hierarchy.



DETAILS:

Sustainable Vincent Framework

The draft SVF is included in **Attachment 1** and provides an overarching framework to:

- Respond to the Local Government Act 1995 which identifies for local governments to promote environmental sustainability, to plan for mitigating risks associated with climate change, and to consider long-term impacts on future generations in decision making.
- Embed sustainability across City operations by defining business unit responsibilities.
- Achieve Net Zero emissions by 2030 for direct and indirect greenhouse gas emissions from the City's operations.

Enhanced Environment Strategy

The draft EES is included in **Attachment 2** and sets both City and community targets related to Urban Greening and Biodiversity, Water Conservation and Management, and Resource Conservation and Waste.

A summary of the objectives and targets is included in **Attachment 3** and an overview of the key themes and opportunities of the EES is included below.

Opportunity	Targets (by 2030 unless otherwise stated)			
Urban Greening & Biodiversity				
Grow a greener future by protecting and expanding our tree canopy to cool our City, boost biodiversity and reconnect people and nature.	 Increase tree canopy through new planting by: 25 percent by 2030 and 30 percent by 2040 for public land. 12 percent by 2030 and 18 percent by 2040 for private land. Increase the retention of mature canopy trees on private land by: 5 percent by 2030 and 10 percent by 2040. Reduce the amount of hardstand in the public realm by 10 percent by 2035. 			
Water Conservation & Management				
Conserve and protect our resources to secure our water future in the face of a growing City and an increasingly dryer climate.	 Reduce overall community water use by 10 percent. Reduce scheme water use by 5 percent across the City's operations, and by 10 percent per patron at Beatty Park. Reduce groundwater consumption across City operations by 10 percent. 			
Resource Conservation & Waste				
Seizing the opportunity to build a circular economy that improves our valuation of resources to keep materials in use and out of landfill.	 Reduce waste generation by 10 percent per household. Reduce waste to landfill by 85 percent. Increase material recovery within the community to 85 percent. 			

CONSULTATION/ADVERTISING:

Public consultation would align with the City's <u>Community and Stakeholder Engagement Policy</u>. The Policy suggests a minimum period of 21 days however Administration recommends extending this to a 42-day period.

This time would provide opportunity for the community to engage with and provide informed feedback on the draft EES and draft SVF given the size of the documents and the concepts that they address.

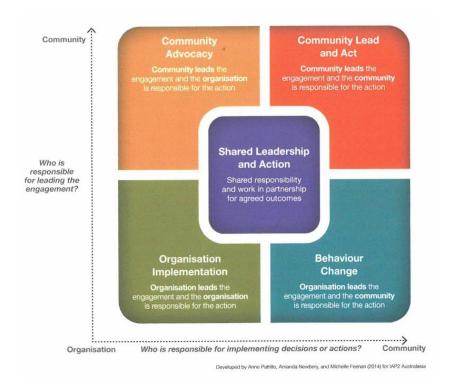
Before community consultation begins, the draft EES and draft SVF will be designed and formatted to ensure they are as clear and user-friendly as possible for the consultation process.

To empower the community to participate and provide meaningful feedback to inform the EES and SVF, the community engagement period would also include:

- Face to face 'pop up' engagement;
- Social media posts that explain the purpose and key themes; and
- Online engagement through our Imagine Vincent platform.

Consultation would be undertaken in the following ways:

- A notice published on the City's website and displayed in the Administration foyer and Library and Local History Centre.
- Social media posts to explain the purpose and key themes of the draft SVF and draft EES.
- Notify the previous participants from the preliminary engagement in 2024, and to relevant government agencies and sustainability groups including Department of Biodiversity, Conservation and Attractions Parks and Wildlife Service, Department of Water and Environmental Regulation and Water Corporation.



Behavioural Change

Organisations lead the conversation and identify the potential contributions to behavioural change.

Tension: There is no collective "why"/feeling forced/judged, undesirable impact/cost to make the change. **Mitigation:** To build the collective before the change becomes a requirement.

The engagement leader/host organisation is responsible for identifying the problem and potential contributions for behavioural change

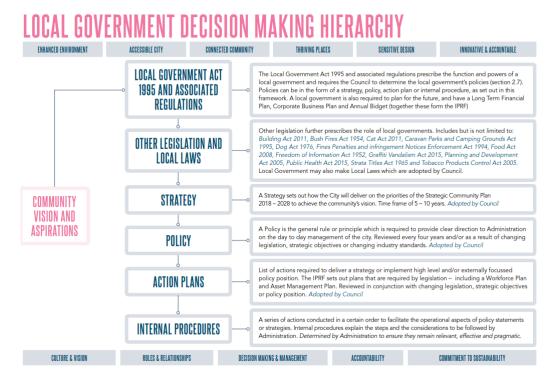
Identify which audiences need to change behaviour

LEGAL/POLICY:

Section 2.7(2)(c) of the *Local Government Act 1995* provides that Council is to plan strategically for the future of the district.

The City's Corporate Document Development Policy sets out the process for the development and review of the City's policy documents. The SVF and EES would align with section 2.2 of this:

The purpose of a strategy is to set at a high level how the City will deliver on long-term priorities of the SCP to achieve the Community's vision.



RISK MANAGEMENT IMPLICATIONS

Low: It is low risk to undertake community consultation on the draft SVF and draft EES because:

- These have been prepared to align with the existing SCP and seek to build on the City's previous SES.
- Community and expert input have informed their development.
- Council would consider all consultation feedback prior to final approval.

STRATEGIC IMPLICATIONS:

The SVF would sit alongside the SCP as a high-level strategy to operationalise sustainability across the City.

The EES would be the informing strategy for the Enhanced Environment priority area of the SCP which sets the following objectives:

Enhanced Environment

Our urban forest/canopy is maintained and increased.

Power lines are undergrounded.

Our parks and reserves are maintained, enhanced and are accessible for all members of the community.

We have improved resource efficiency and waste management.

We have minimised our impact on the environment.

SUSTAINABILITY IMPLICATIONS:

The SVF and EES build on the sustainability outcomes of the SES which reached the end of its life in 2024.

The SVF sets out six priority areas to be met in the City operationalising sustainability across its actions and decision-making. These are:

- Climate Action (Adaptation and Mitigation).
- Resilient and Low Carbon Infrastructure.
- Healthy and Thriving City.
- Good Governance and Responsible Investment.
- Resource Conservation.
- Regenerative, Green and Biodiverse.

The EES sets out objectives and targets which relate to Water Conservation and Management, Urban Greening and Biodiversity, and Resource Recovery and Waste.

PUBLIC HEALTH IMPLICATIONS:

This is in keeping with the following priority health outcomes of the City's Public Health Plan 2020-2025:

Increased mental health and wellbeing

Reduced exposure to environmental health risks

FINANCIAL/BUDGET IMPLICATIONS:

There are no financial or budget implications that come from advertising the draft SVF or draft EES. All costs associated with consultation will be met through the City's operational budget.

Any future budget allocations to implement the EES would be considered through annual budget processes.

COMMENTS:

Enhanced Environment Strategy

The draft EES outlines key objectives and targets to respond to climate change and protect natural resources for future generations.

The draft EES focuses on:

- Enhance urban tree canopy and greening.
- Protect and manage water resources through responsible consumption.
- Promote resource conservation through waste management.

These objectives and targets have been informed by and respond to feedback from community and STAG during preliminary engagement undertaken in 2024.

Urban Greening & Biodiversity

Urban greening is an effective way to reduce urban heat, support biodiversity, build resilience to a changing climate, and improve community wellbeing.

The most recent data from 2020 from the State Government shows the City has 14 percent canopy cover across public and private land, although this is likely lower today due to tree loss and development pressures.

The City continues to face challenges with tree retention, shade and biodiversity. This is particularly due to urban infill, limited regulatory powers for tree protection on private properties, and the impact of the polyphagous shot-hole borer (PHSB).

Best practice is an ideal canopy cover target of between 30 to 40 percent.

The draft EES sets out targets to increase tree canopy coverage by the following:

- 25 percent by 2030 and 30 percent by 2040 for public land.
- 12 percent by 2030 and 18 percent by 2040 for private land.
- A 5 percent increase of mature canopy trees on private land by 2030 and a 10 percent increase by 2040.

These targets have been benchmarked against other local governments within WA and interstate. The targets for public land would surpass targets of other local governments and would be comparable to the likes of the City of Melbourne and City of Sydney.

Tree canopy targets for private land also support the City's planning framework review and advocacy to the State Government to better incentivise and regulate tree retention while continuing to meet infill housing targets.

Through these targets, the City would reduce the urban heat island effect to:

- <u>Create Cooler & Greener Places</u> Increase tree planting with a focus on priority locations such as town centres, around schools and other community facilities, and along key walking and cycling routes.
- <u>Increased Value of Trees</u> Empower our community to protect and grow private canopy through education, incentives, and support for tree planting and retaining mature trees.
- <u>Improved Public Realm</u> –Reduce hard surfaces and use projects like underground power to create space for street trees and shady streets.

Water Conservation & Management

With rising water use and declining rainfall, the pressure on our water resources is high. As groundwater reserves decline, there is a need for the City to adopt innovative and sustainable water practices.

The draft EES includes targets to reduce water consumption across the City's operations and the community by:

- <u>Innovative Solutions</u> Continue to implement and adopt smart and sustainable water management practices across the City's operations.
- <u>Partnerships</u> Partnering with Water Corporation, State Government, and industry experts to develop best practice and innovative technologies.
- <u>Education</u> Leading by example to promote and educate our community on responsible water use and to make water-conscious choices.

Resource Recovery & Waste

As our population grows, unsustainable waste is piling up faster than we can recycle or manage. There is a need for smarter and more sustainable approaches to resource and waste management.

The draft EES targets go beyond those of the State Government to avoid waste, increase material reuse, and create a circular economy through:

- <u>Reduced Waste</u> Reducing household waste and minimising landfill with smart and sustainable consumption practices.
- <u>Increased Reusability</u> Collaborating with businesses to improve packaging and reduce recycling contamination.
- <u>Embed Circularity</u> Embedding circular economy principles into City operations and supply chains to reduce our environmental footprint and maximise resource conservation.

Sustainable Vincent Framework

The draft SVF embeds sustainability into the City's operations and sets a clear pathway to achieving Net Zero emissions by 2030. It would ensure the City remains a leader in environmental sustainability and features the following:

- <u>Promotion of Sustainability & Planning for Climate Change</u> The draft SVF provides a framework that
 responds to the *Local Government Act 1995* and ensures that sustainable outcomes are embedded in
 the City's operations. The SVF would sit as an overarching strategy within the City's strategic document
 framework and would inform the future review of existing and preparation of new strategies and plans.
- Accountability & Operationalising Sustainability The draft SVF recognises that responsibility, accountability and monitoring are all crucial to achieving sustainable outcomes. The draft SVF assigns sustainability responsibilities to business units across the City, ensuring accountability and consistent delivery of sustainability outcomes through monitoring as part of operational KPI setting.
- <u>Net Zero 2030</u> The draft SVF commits the City to achieving a Net Zero target for Scope 1 and 2 emissions (direct and indirect emissions from City operations) by 2030.

The City's first Emissions Inventory was completed in 2024. A summary of this key outcomes of this is included in **Attachment 5** and shows that the City has made significant progress since 2017, including:

- o 51 percent reduction in Scope 1 emissions; and
- o 87 percent reduction in Scope 2 emissions.

Capturing accurate baseline data through the Emissions Inventory is an important milestone. It supports ongoing tracking of emissions reductions and ensures that the City's progress towards Net Zero can be effectively measured and reported in future years.

Sustainable Vincent Framework 2025-2028

1

ACKNOWLEDGEMENT OF COUNTRY

Vincent kaadatj Whadjuk Noongar moort Whadjuk Noongar boodja-k. Ngalak koordookayin Noongar Birdiya koora koora, yeyi wer boordakan.

Ngalak koodjir kaadatj bandang Aboriginal wer Torres Strait Islander Birdiya ali ngalang nakolak-kadak wer malayin-kadak.

Whadjuk Noongar moort kalyakoorl baalabang malayin wer nakolak yanginy. Ngalak kalyakoorl Birdiya-kadak waangkaniny.

Noongar boodja baal kaalykoorl Noongar moort boodja.

Vincent acknowledges the Traditional Owners of this land, the Whadjuk people of the Noongar nation and pay our respects to the Elders past and present. We recognise the unique and incomparable contribution the Whadjuk people have made, and continue to make, to our culture and in our community. We would also like to acknowledge all Aboriginal and Torres Strait Islander Elders for they hold the memories, the traditions, the culture and hopes of Aboriginal and Torres Strait Islander Australia. We will continue to seek the input of the Traditional Owners.

The land on which we live, meet and thrive as a community always was and always will be Noongar land.

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Introduction

We are in the middle of a climate emergency, where the impacts of climate change are intensifying both globally and locally.

The evidence is clear: global temperatures are rising, weather patterns are shifting, and natural systems are being disrupted.

The scientific consensus confirms that human activities, particularly the burning of fossil fuels, deforestation, and industrial agriculture, have driven these changes.

If everyone on earth was to live like the average Australian, we would need 4.5 earths to sustain ourselves.¹

In Australia, every decade since 1950 has been progressively warmer, with rising temperatures observed year-round. This trend is contributing to more extreme weather events, including heatwaves, bushfires, droughts, and flooding. This trend is a stark reminder that the window for meaningful action is rapidly closing; climate change is no longer a distant threat.

The need for immediate sustainable action is more critical than ever. To secure a safe operating space for humanity, we must take immediate and substantial steps towards reducing emissions, improving resilience, and adapting to unavoidable climate impacts. Climate action needs to be embedded at the heart of all societal systems, from governance and policy to business practices and individual behaviour.

The Intergovernmental Panel on Climate Change (IPCC), the world's leading authority on climate science, has issued a critical warning: we must limit global warming to well below 2°C, and ideally closer to 1.5°C, in alignment with the Paris Agreement, to avoid the worst impacts of climate change for future generations.

The most recent IPCC Sixth Assessment Report² reinforces this clearly with the message:

- 'Human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming'
- 'Climate change is a threat to human well-being and planetary health. There is a rapidly closing window of opportunity to secure a liveable and sustainable future for all.'

¹ Global Footprint Network

3

² IPCC_AR6_SYR_SPM.pdf

Sustainable Vincent Framework

The Sustainable Vincent Framework (Framework) builds on the success of the Sustainable Environment Strategy 2016-2024. This Framework embeds sustainability as a core function of Vincent's operations and directly assigns responsibility to the relevant business units.

This is a bold approach which means sustainability would be put at the forefront of all decisions made by Vincent and that all employees are accountable for sustainable practices.

Recognising the necessity for immediate action and the interconnected nature of sustainability, this Framework has six priority areas:

- Climate Action (Adaptation and Mitigation)
- Resilient and Low Carbon Infrastructure
- Healthy and Thriving City
- Good Governance and Responsible Investment
- Resource Conservation
- Regenerative, Green and Biodiverse

This Framework will ensure sustainability is a function of everything we do as a local government.

Vincent's Role

Local governments play a crucial role in advancing sustainability and climate action by implementing adaptation and mitigation strategies to build resilient communities.

Vincent is a progressive leader in sustainability but cannot solve the global climate crisis alone. Addressing this challenge requires coordinated action across all levels of government, the private sector, and not-for-profit organisations.

However, this is not business as usual. Vincent is committed to setting bold, aspirational targets and driving meaningful change, ensuring that our actions go beyond the minimum requirements to create a truly sustainable future.

Here is what we can do:

Lead	Showing courage by making strategic decisions and prioritising	
	sustainable outcomes.	
Do	Directly implementing initiatives to promote sustainability and	
	climate action within the organisation and our community.	
Advocate/Influence	Representing and advancing the interests of Vincent's community to	
	other levels of government and external organisations.	
Support	Support Building capacity and empowering individuals, community groups	
and organisations to act sustainably.		
Educating Providing information and resources to help people better		
understand and engage with sustainable outcomes.		
Collaborate	Working together with other stakeholders, including government	
	agencies, businesses, and community groups to achieve	
sustainability goals.		

4

Our Legislated Driver

Local governments are at the forefront of the climate crisis and deal firsthand with the effects of climate change on our communities.

Local governments have a crucial role in building resilient communities, reducing carbon emissions, and advocating for more climate action from the state and federal governments.

Acting sustainably has become a core commitment for all local governments and is required by the *Local Government Act* 1995.

3.1 General Function

- (1) The general function of a local government is to provide for the good government of persons in its district.
- (1A) Without limiting subsection (1), the general function of a local government must be performed having regard to the following
 - (a) the need
 - (i) to promote the economic, social and environmental sustainability of the district; and
 - (ii) to plan for, and to plan for **mitigating**, **risks associated with climate change**; and
 - (iii) in making decisions, to consider potential long-term consequences and impacts on future generations

Item 5.6- Attachment 1 Page 13

STRATEGIC CONTEXT

The Framework sets our direction for the fulfillment of the key priorities of The City of Vincent's Strategic Community Plan 2022-2032 (SCP). This is our overarching strategy which guides all other strategic work undertaken, as per Figure 1. The Framework will be supported by the development of further strategies and plans including:

- The Enhanced Environment Strategy (EES) which focuses on water, greening and waste outcomes; and
- A Climate Transition Action Plan (CTAP) which will be developed in 2025 to outline steps towards achieving operational Net Zero and detail how we can help our community address and build resilience in the face of climate change.

Figure 1: Integrated Planning and Reporting Framework (to be updated in designed document)



6

Sustainable Development Goals

The 17 Sustainable Development Goals (SDGs) provide a globally recognised framework for driving collective action towards a more sustainable and equitable world.

Established in 2015 as part of the United Nations 2030 Agenda for Sustainable Development, they were adopted by 193 countries, including Australia, marking a significant international commitment to tackling critical global challenges. These goals address a broad range of issues, from poverty, inequality, and education to climate action, sustainable cities, and responsible consumption.

The SDGs acknowledge that sustainability is interconnected – requiring social, economic, and environmental inputs.

At Vincent, we have a key role in contributing to the local delivery of the SDGs. Our SCP outlines a vision for 2032 where Vincent is a vibrant, sustainable, and diverse place to live.

The six priority areas of the SCP align closely with the SDGs, ensuring our policies and initiatives contribute to broader sustainability goals (as per Figure 2).

These priority areas are interlinked, meaning that strengthening one part of the plan can have a positive reinforcing effect on the others.

By using the SDGs as a reference point, we can ensure our strategies reflect state, national, and global priorities while addressing the unique needs within Vincent.

Item 5.6- Attachment 1

Figure 2: The SDGs as they relate to Vincent's Strategic Community Plan (to be updated in designed document)



THE 17 GOALS | Sustainable Development (un.org)

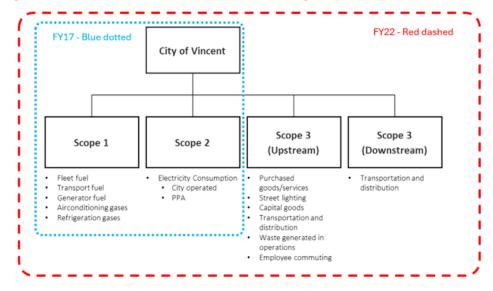
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Vincent's Emissions

Vincent has been tracking major sources of operational Greenhouse Gas Emissions since 2017. An emissions inventory was completed in 2024 using the internationally recognised Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. This has meant we can now quantify our Scope 1, 2 and 3 emission sources as per Figure 3.

- Scope 1 are emissions which are directly a result of the City of Vincent operations.
- Scope 2 emissions are from grid- supplied electricity purchased.
- Scope 3 emissions are emissions that occur outside the direct control of the City of Vincent but occur because of our operations.

Figure 3: Vincent Emissions Sources (to be updated in designed document)



9

Vincent's Net Zero Pledge

Globally, the movement to net-zero emissions by 2050 is both underway and rapidly accelerating – with the Australian Government pledging a 43% reduction of 2005 levels by 2030, and net-zero by 2050³.

For simplicity Vincent will refer to net zero in the following ways: 4

Operational Net Zero as achieving net zero emissions within an organisation's direct operations (Scopes 1 and 2)

Net Zero is defined by the Science Based Targets as:

- including the collection of Scope 3 emissions
- an emission reduction pathway in alignment with a 1.5oC trajectory,
- maximum number of offsets limited to 10%, and
- requiring the sequestering of emissions past net-zero.

In this way, through minimal reliance on offsets, net zero ensures that organisations maximise emissions reductions first.

Vincent's Net Zero Pledge

As per the Net Zero in Government Operations Strategy⁵, the City of Vincent has committed to reaching operational Net Zero (Scope 1 and 2) by 2030. This commitment means quantifying our emissions scoped by our operational boundaries and reducing our energy and pollution footprint where we have control.

Within our CTAP, which is to be developed in 2025/26, Vincent will be reviewing our emissions accounting and will make a Net Zero pledge, for scope 1, 2 and 3, with an implementation plan. This is important as Vincent recognises the need to rapidly decarbonize as quickly as possible.

Vincent will explore a Net Zero Community target within the CTAP. This ensures that there is a continued focus on supporting our community to reduce emissions and embed climate action into the fabric of Vincent.

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³ Climate Change Bill 2022

⁴ SBTi Corporate Net-Zero Standard

⁵ Net Zero Government Operations Strategy

Decades of Progress

Our recent journey towards an embedding sustainability into our organisation began in 2011 with our first formal Sustainable Environment Strategy.

Date	Action		
2011	Vincent adopts first Sustainable Environment Strategy		
2011	Vincent starts eco-zoning in underutilised turfed areas		
2012	Vincent completes first Climate Risk assessment with City of Perth and the		
Metropolitan Redevelopment Authority			
2013	First fully Electric Vehicle (EV) purchased		
2014	Vincent adopts first Greening Plan 2014		
2015	10-year anniversary of Native Plant Sale for Vincent residents		
2016	Vincent adopts second Sustainable Environment Strategy, setting an		
	ambitious Net Zero 2030 target (one of only two Local Governments in WA at		
	the time to do so)		
2017	Beatty Park is endorsed as a Waterwise Aquatic Centre		
2017	Vincent achieves Platinum Waterwise Council Status for 2016/2017		
2018	Vincent adopts second Greening Plan 2018-2023		
	Vincent trials low Global Warming Potential (hydrocarbon) refrigerants at		
	Beatty Park		
2019	Over 115 kW of Solar is installed at Beatty Park, with Renewable Energy		
	Credits retired annually		
2019	Beatty Park is upgraded to geothermal energy for indoor space heating		
2019	Vincent joined the Cities Power Partnership, joining Australia's largest network		
	of local councils acting on climate change		
2019	Vincent adopts third Sustainable Environment Strategy		
2020	The City's first hybrid electric truck becomes operational		
2021	Vincent adopts FOGO, diverting food organics waste from landfill		
2022 Purchased 100% renewable energy for contestable sites through the			
	PPA		
2022	Vincent's passenger car fleet became 100% hybrid or electric		
2024	SES Strategy finishes, significant achievements include:		
	- Natural gas consumption reduced by 80%		
	 Over 400kW of Solar installed on City Buildings 		
	- 82,227 square meters of Eco-Zoning completed		
	- Number of street trees increased to 15,445		
2024	Vincent supports the provision of a fast Electric Vehicle Charger to be installed		
	in the Chelmsford Road Carpark.		
2024	Vincent launches GreenTrack priority assessment service for residential		
development applications.			
2024	Vincent wins National Planning Institute of Australia award in the Climate		
Change and Resilience category for GreenTrack.			
2025	Vincent expands GreenTrack to extend the priority assessment service to		
development applications which propose the retention of signifi			
	private land.		
2025	Vincent celebrates 11 years as a Gold Waterwise Council		

11

Priority Objectives

The following outlines the six priority areas of the Sustainable Vincent Framework.

Priority Objectives	Goal			
Climate Action	All-encompassing goal, to educate and facilitate our community and			
(Mitigation and	organisation to build resilience in the face of climate change.			
Adaptation)				
. ,	This objective prioritises the identification of local climate hazards, the			
	risk profile, and implementing necessary adaptation and mitigation			
	measures. Our actions towards Net Zero form our mitigation strateg			
	while adaptation strategies that are risk specific are required to help us			
	prepare for and respond to local climate impacts.			
Resilient and Low	Develop and enhance the City's infrastructure to be adaptable,			
Carbon	resilient and robust against climate impacts.			
Infrastructure				
	This objective prioritises energy and water efficiency measures and			
	electrification in our operational buildings and promotes			
	Environmentally Sustainable Design in our City. It will address			
	renewable energy and build resilience in our infrastructure to			
	withstand increase climate shocks and stressors.			
Healthy and Support and influence our wider City to maintain sustaina				
Thriving City	leadership and create thriving places.			
	This objective prioritises positive health outcomes for our			
	communities, empowers local businesses to be more sustainable,			
	promoting liveable urban areas that balance priorities.			
Good Governance Lead and demonstrate accountability, transparency and ethical				
and Responsible decision making, considering strategic sustainability approaches.				
Investment				
This objective prioritises compliance with legislation, emissions				
	monitoring and sustainable, fossil fuel free investments. This aims to			
	create long-term value add for our organisation while positively			
	impacting our community.			
Resource	Educate, facilitate and lead our community and organisation to			
Conservation	conserve resources, working towards a circular economy.			
	This objective prioritises circular economy principles, addressing our			
	consumption habits of valuable resources. This objective also			
	promotes the reduction in fuel consumption of the City's fleet,			
	encouraging mode shift in our community.			
Regenerative,	Lead, advocate and collaborate to restore and enhance our local			
Green and	ecosystems and environment.			
Biodiverse				
	This objective prioritises the regeneration and resilience in our local			
	ecosystems through improving urban greening and promoting local			
	biodiversity. It will address water conservation, promoting water reuse			
	and recycling measures.			

12

Joint Responsibilities

Sustainability is an integral part of everything that we do as an organisation in carrying out our day-to-day operations. The Framework ensures climate action and resilience remains at the forefront by formalising the relationship between our operations and the SDGs.

Theme	Responsible Managers	Sustainable Development Goal	
Operational Net Zero	Chief Executive Officer	SDG 13 - Climate action	
Advocacy on Key Issues	Chief Executive Officer	SDG 17 - Partnerships for the goals	
Climate Risk and Adaptation	Chief Executive Officer	SDG 13 - Climate action	
Resilient and Low-Ca			
Energy Efficiency and Sustainability in City Buildings	Manager of City Buildings/ Asset Management Manager of Community Facilities Manager of Strategic Planning and Sustainability	SDG 7 – Affordable and Clean Energy SDG 13 - Climate action	
Renewable Energy and Storage	Manager of City Buildings/ Asset Management Manager of Community Facilities Manager of Strategic Planning	SDG 7 – Affordable and Clean Energy SDG 13 - Climate action	
Climate Resilience and Infrastructure Adaptation	Manager of City Buildings/ Asset Management Manager of Engineering Manager of Community Facilities	SDG 13 - Climate action	
Sustainable Built Form	Manager of Development and Design Manager of Strategic Planning and Sustainability	SDG 11 - Sustainable cities and communities SDG 13 - Climate action	
Healthy and Thriving	City		
Equitable access and inclusion	Manager of Communications and Engagement	SDG 5 – Gender Equality SDG 10 – Reduced Inequalities	
Air Pollution and Public Health	Manager of Public Health and Built Environment	SDG 3 – Good Health and Wellbeing SDG 13 - Climate action	
Supporting local businesses to act sustainably	Manager of Corporate Strategy and Governance Manager of Waste and Recycling Manager Strategic Planning	SDG 8 – Decent Work and Economic Growth SDG 9 – Industry Innovation and Infrastructure SDG 13 - Climate Action	
	d Responsible Investment		
Legislative Compliance	Manager of Corporate Strategy and Governance	SDG 16 – Peace, Justice and Strong Institutions SDG 13 - Climate Action	
Communications and Community Engagement in Sustainability	Manager of Communications and Engagement	SDG 16 – Peace, Justice and Strong Institutions	
Corporate Emissions Inventories and Offset Purchasing	Manager of Financial Services	SDG 12 – Responsible Consumption and Production SDG 13 - Climate action	

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		SDG 16 – Peace, Justice and Strong Institutions	
Sustainable Procurement, Finance and Divestment	Manager of Financial Services	SDG 12 – Responsible Consumption and Production SDG 13 - Climate action SDG 16 – Peace, Justice and Strong Institutions	
Internal Capacity Building and Staff Training	Manager of Human Resources	SDG 4 – Quality Education	
Resource Conservat	ion		
Decarbonisation of the City's Fleet to reach Net Zero target	Manager of Waste and Recycling	SDG 11 - Sustainable cities and communities SDG 13 - Climate action	
Sustainable Transport/ Mode Shift/ Electric Vehicle Provisions	Manager of Engineering	SDG 3 – Good Health and Wellbeing SDG 11 - Sustainable cities and communities SDG 13 - Climate action	
Resource Recovery and Responsible Waste Management	Manager of Waste and Recycling	SDG 12 – Responsible Consumption and Production SDG 13 - Climate Action	
Regenerative, Green	and Biodiverse		
Water Conservation	Manager of Parks Manager of City Buildings/ Asset Management Manager of Community Facilities Manager of Engineering Manager of Strategic Planning and Sustainability	SDG 6 – Clean Water and Sanitation SDG 13 - Climate action SDG 14 – Life Below Water	
Urban Greening and Biodiversity	Manager of Parks Manager of Strategic Planning and Sustainability Manager of Development and Design Manager of Engineering	SDG 13 - Climate action SDG 15 - Life on Land	
Liveable, Walkable and Cool Town Centres	Manager of Parks Manager of City Buildings/ Asset Management Manager of Community Facilities Manager of Engineering Manager of Strategic Planning and Sustainability Manager of Development and Design Manager of Ranger Services Manager of Waste and Recycling	SDG 11 - Sustainable cities and communities SDG 13 - Climate action	

We acknowledge that opting for more sustainable options might involve higher initial costs. Over time, these choices could lead to equilibrium or even substantial cost savings. Managers are responsible for evaluating these factors and making decisions that support long term financial sustainability. Strategic actions to deliver these responsibilities are delivered across Vincent's strategies and plans.

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Key Stakeholders and Knowledge Partners

Sustainable government requires continual collaboration and engagement with external parties and stakeholders.

Vincent has fostered many important relationships with its community and government organisational bodies who are all key stake and interest holders.

Notable stakeholders include:

- Department of Water and Environmental Regulation
- · Department of Planning, Lands and Heritage
- Department of Biodiversity, Conservation and Attractions Parks and Wildlife Service
- · Department of Energy, Mines, Industry Regulation and Safety
- Water Corporation
- Western Australian Waste Authority
- Environmental Protection Authority
- Western Australian Local Government Association
- Conservation Council of Western Australia
- Mindarie Regional Council
- Whadjuk Aboriginal Corporation
- Sustainability and Transport Advisory Group
- Local community and interest groups

ENHANCED ENVIRONMENT STRATEGY 2025 - 2030

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ABBREVIATION LIST

CPTED Crime Prevention Through Environmental Design

CSIRO Commonwealth Scientific and Industrial Research Organisation

CTAP Climate Transition Action Plan

DBCA Department of Biodiversity, Conservation and Attractions

DWER Department of Water and Environmental Regulation

EES Enhanced Environment Strategy

GL Gigalitre

HSISS Housing Supply and Infrastructure Servicing Study

IPCC Intergovernmental Panel on Climate Change

kL Kilolitre

LCA Life Cycle Assessment

SCP Strategic Community Plan

SDG Sustainable Development Goal
SVF Sustainable Vincent Framework

Vincent City of Vincent

WSUD Water Sensitive Urban Design

3

Figure 1: Overall path to an enhanced environment

(Description – an image outlining how Vincent will achieve the objectives set in the strategy, to be provided with designed document)

4

ACKNOWLEDGEMENT OF COUNTRY

Vincent kaadatj Whadjuk Noongar moort Whadjuk Noongar boodja-k. Ngalak koordookayin Noongar Birdiya koora koora, yeyi wer boordakan. Ngalak koodjir kaadatj bandang Aboriginal wer Torres Strait Islander Birdiya ali ngalang nakolak-kadak wer malayin-kadak. Whadjuk Noongar moort kalyakoorl baalabang malayin wer nakolak yanginy. Ngalak kalyakoorl Birdiya-kadak waangkaniny. Noongar boodja baal kaalykoorl Noongar moort boodja.

Vincent acknowledges the Traditional Owners of this land, the Whadjuk people of the Noongar nation and pay our respects to the Elders past and present. We recognise the unique and incomparable contribution the Whadjuk people have made, and continue to make, to our culture and in our community. We would also like to acknowledge all Aboriginal and Torres Strait Islander Elders for they hold the memories, the traditions, the culture and hopes of Aboriginal and Torres Strait Islander Australia. We will continue to seek the input of the Traditional Owners.

The land on which we live, meet and thrive as a community always was and always will be Noongar land.

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AN ENHANCED ENVIRONMENT

OUR VISION

Now and into the future, Vincent grows as a climate resilient community where people and the natural environment thrive together. The protection and conservation of water, a flourishing urban forest, and the operation of a circular community to support resource recovery will be prioritised, driving innovation and promoting environmental leadership.

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ABORIGINAL AND TORRES STRAIGHT ISLANDER PEOPLES KNOWLEDGE

Vincent is deeply committed to ongoing consultation and collaboration with the Traditional Owners of the land, the Whadjuk people of the Noongar Nation. This commitment is reflected in Vincent's active efforts to build strong, respectful relationships with the Traditional Owners, ensuring their voices and perspectives are heard. Through regular engagement, and cultural consultation, Vincent seeks to honour the Whadjuk people's enduring connection to the land and support the recognition of their cultural heritage.

The Whadjuk Aboriginal Corporation plays a crucial role in fostering the relationship between Vincent and the Whadjuk Noongar people by ensuring that the cultural, social, and economic rights of the Traditional Owners are respected and upheld. This Corporation acts as a representative body for Whadjuk people, providing a platform for meaningful consultation and collaboration with Vincent on issues related to land use, heritage, and community development.

Vincent has developed a range of policy and strategic documents that reflect its commitment to recognise, respect and preserve Aboriginal and Torres Strait Islander cultures. These include:

- The Stretch Reconciliation Action Plan, which outlines steps to foster meaningful relationships and opportunities for Aboriginal and Torres Strait Islander peoples.
- The Recognition of Noongar Boodjar Culture and History through Welcome to Country and Acknowledgement of Country Policy that provides guidance and direction to individuals, groups and organisations who are planning and facilitating a Welcome to Country or an Acknowledgment of Country.

These documents are a few ways Vincent demonstrates its dedication to promoting cultural understanding, enhancing Aboriginal and Torres Strait Islander peoples representation, and to preserving the rich heritage of the land's Traditional Owners.

Aboriginal and Torres Strait Islander peoples have a spiritual connection to the land, viewing it not just as a physical environment but as a source of identity, culture, and tradition. For many Aboriginal and Torres Strait Islander peoples, the land is deeply intertwined with their spiritual beliefs with each feature of the landscape, such as rivers, trees, and rocks, holding stories, history, and significance passed down through generations.

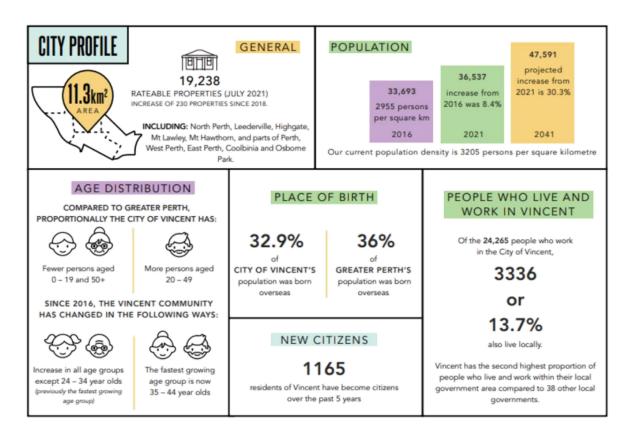
For Vincent, recognising and respecting this connection is vital in ensuring that Aboriginal and Torres Strait Islander cultures are acknowledged, celebrated, and preserved for future generations.



Aboriginal and Torres Strait Islander Engagement Guidelines 2023-2028

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VINCENT: NOW AND FUTURE



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THE CONTEXT OF CLIMATE CHANGE

The world is warming, but what exactly does that mean for Vincent? To understand this requires us to take a closer look at the climate change science.

Since the industrial revolution, human activities have increased the release of greenhouse gases (namely carbon dioxide, methane and nitrous oxide) into the atmosphere. These gases trap infrared radiation in the atmosphere, causing temperatures to rise.

The term climate specifically refers to the long-term trends in the weather; generally averaged out over a 30-year timeframe. With climate change, there will still be day to day fluctuations in the weather (as shown in Figure 2), however, the long-term temperature average will increase and there will be more extremely hot days and less extremely cold days.

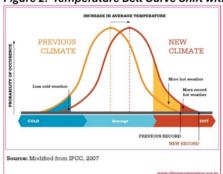


Figure 2. Temperature Bell Curve Shift with Climate Change

Adapted from: AR4_wg1

The CSIRO and the Bureau of Meteorology¹ have reported that since records began in 1910, Australia's climate has warmed by 1.51°C. Climate scientists have further projected that, under a high-emissions scenario, temperatures could rise by up to 2.4°C by 2030, leading to severe and widespread consequences for ecosystems, human health, and socio-economic stability.

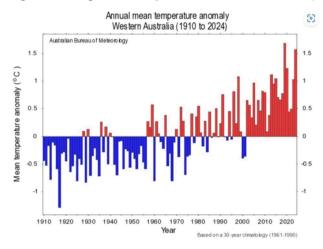
¹ State of the Climate - CSIRO

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These climate trends are reflected in recent temperature records. The warmest year on record in Western Australia was 2019, and eight of the nine hottest years have occurred since 2013. This pattern is shown in Figure 3.

Figure 3. Average Mean Temperature in Western Australia (from Australian climate variability & change - Time series graphs)



Australia is the driest inhabited continent, and a warming climate is intensifying this challenge by increasing evaporation, intensifying the water cycle, reducing surface water flows, and limiting groundwater recharge. These impacts have far-reaching effects on our natural assets, including trees and biodiversity.

Effective waste management is equally crucial to prevent further environmental degradation.

It is well recognised that we are in a Climate Emergency. The time to act is now, and we all have a part to play.

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GLOBAL PRIORITIES

Sustainable Development Goals

17 Sustainable Development Goals (SDGs) were adopted by the United Nations in 2015 and provide a global framework for ending poverty, protecting the planet, and ensuring peace and prosperity for all. These goals are deeply interconnected, reinforcing the need to balance social, economic, and environmental sustainability. Progress in one area inevitably influences outcomes in others.

The EES aligns with the following SDGs:

- SDG 3 Good health and well-being
- SDG 6 Clean water and sanitation
- SDG 11 Sustainable cities and communities
- SDG 12 Responsible consumption and production
- · SDG 13 Climate action
- SDG 14 Life below water
- SDG 15 Life on land
- SDG 17 Partnerships for the goals.

While the EES focuses on the environmental impacts of water, greening, and resource conservation, the interconnected socio-economic factors will be addressed in Vincent's future Climate Transition Action Plan (CTAP). Our Sustainable Vincent Framework (SVF) also explores the relevance of the SDGs to our work, ensuring a holistic and integrated approach to sustainability across Vincent.

















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VINCENT'S CHANGING CLIMATE

Like much of Boorloo (Perth), Vincent has already experienced a changing climate. This will continue to intensify in the next 20 to 50 years with shifts in temperature, rainfall, and water availability affecting both the natural and built environment. While these changes present challenges, thoughtful planning and adaptation can help build resilience and protect Vincent, its inhabitants, its ecosystems and associated biodiversity. Key climate considerations for the area include²:

	Rising Temperatures and Urban Heat More frequent and intense hot days, along with an increase in extreme heatwaves, are expected.		Flood Risk from Extreme Rainfall Although overall rainfall is decreasing, intense storm events are becoming more frequent. This will heighten flood risk in vulnerable areas.
1,1,11,11,11,11,11,11,11,11,11,11,11,11	Reduced Water Availability Rainfall decline (particularly in the cooler months) will lead to longer dry periods and drought conditions.		Biodiversity and Ecosystem Health Changing rainfall patterns and higher temperatures will put pressure on local flora and fauna, particularly in wetlands and remnant bushland.
	Oceans and Sea Level Rise Sea level rise will impact estuarine and river environments, leading to erosion, habitat loss, and saltwater intrusion into freshwater systems.	*	Community Health and Wellbeing Outcomes Poorer health outcomes, economic strain and human impacts from extreme weather events and water scarcity are all linked to climate change.
955	Impact on Local Water Bodies Declining rainfall and rising temperatures will affect wetlands, rivers, and groundwater systems, and lead to reduced streamflow, drier wetlands, and increased pressure on aquatic ecosystems.		Bushfire Risk and Landscape Resilience While Vincent is not at high risk for bushfires, the extended fire season and harsher conditions due to longer, drier summers still require careful consideration for preparedness and resilience.

While these climate trends present challenges, they also provide opportunities to enhance sustainability and resilience through innovative urban planning, water conservation, and biodiversity protection. By integrating climate-responsive strategies into policy and community initiatives, Vincent can adapt to a changing climate while maintaining a thriving, liveable environment for residents.

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² climate_adaption_strategy_220623.pdf

WHAT DOES THIS STRATEGY DO?

We have an obligation to protect the earth's natural balance and ecological integrity for generations to come.

The EES was developed in recognition of the urgent need to protect the valuable and vulnerable ecosystems within Vincent. It reflects a commitment to a sustainable future, decisive action and collective effort.

The EES addresses three key environmental focus areas:

- 1. Greening and Urban Canopy Enhancing tree cover, biodiversity and green spaces.
- 2. Water Protection Safeguarding water resources and improving efficiency.
- 3. Waste / Resource Conservation Moving toward a circular economy and promoting sustainable consumption.

The EES structure comprises 11 Objectives and 20 targets across these focus areas to set measurable goals and drive meaningful change.

An internal action plan would be developed to monitor and track progress that outline specific steps to achieve the targets and objectives.

Vincent will monitor performance against targets and actions annually, with biennial reviews for select targets.

A formal review in 2027/28 will assess overall progress to evaluate progress, and communicate achievements, and identify focus areas for improvement.

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Figure 4: Document hierarchy

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CONNECTING DOCUMENTS

Vincent's overarching document, the Strategic Community Plan 2022-2032 (SCP), places a strong emphasis on environmental sustainability.

'The natural environment contributes greatly to our inner-city community. We want to protect and enhance it, making best use of our natural resources for the benefit of current and future generations.'

As shown in Figure 5, the SCP has an Enhanced Environment priority area which will be informed by the EES.

Sustainable
Vincent
Framework

Industrial Function

Figure 5: Vincent's Integrated Planning and Reporting Framework

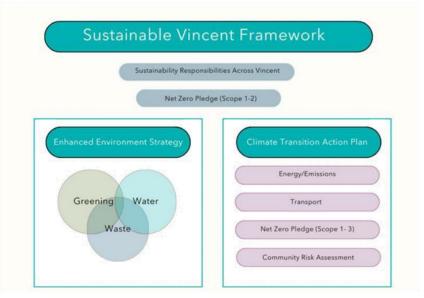
The EES forms part of a suite of documents which map out Vincent's pathway to a sustainable future, including the Sustainable Vincent Framework (SVF) and the CTAP.

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The SVF will sit alongside the SCP to reflect its overarching importance as it embeds sustainability across the organisation, by clearly assigning roles and responsibilities to internal teams.

The EES and CTAP will sit under the SVF and will delineate themes as per below.

Figure 6: Relationship of documents

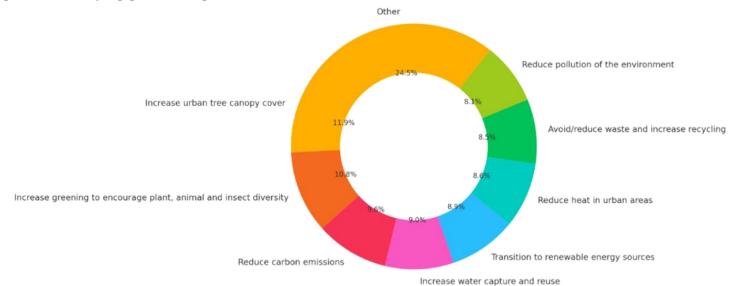


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PRELIMINARY ENGAGEMENT

In March 2024, Vincent consulted the community through a survey to understand the environmental issues that matter most to them. We received 205 responses, with the key priorities highlighted:





An internal sustainability forum was also held in March 2024 to discuss and prioritise the next generation of sustainability themes and topics. Attendees included representatives from Sustainability, Strategic Planning, Engineering, City Buildings & Asset Management, Parks (Strategy & Projects) and the Waste & Recycling teams. The outcomes of this forum have been incorporated into the EES.

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INTERCONNECTED OBJECTIVES

Figure 8: Objectives



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WATER CONSERVATION & MANAGEMENT – A WATER SENSITIVE VINCENT



Our Water Future

Water is essential to sustaining ecosystems, communities, people, and economies.

The Gnangara Aquifer provides most of Vincent's groundwater, supporting both local water needs and surrounding ecosystems. However, it is increasingly under pressure from several factors:

- Reduced rainfall: since 1975, Boorloo's (Perth's) rainfall has decreased by 15%, limiting the aquifer's ability to replenish.
- Reduced dam inflows: annual inflows have dropped from 420 GL in 1975 to just 25 GL.
- Population growth: Vincent's population is projected to increase by 11,000 people by 2041.
- Climate change impacts: rising temperatures are accelerating evaporation rates, while shifting seasonal patterns and more frequent extreme
 heat events further strain water availability.

In response, Boorloo (Perth) operates two desalination plants, with a third currently under construction. However, water conservation remains a crucial strategy in reducing reliance on desalination.

In addition to these pressures, the increasing frequency and intensity of storms heightens the risk of flooding in roads, buildings, and river foreshores, further emphasising the need for climate-resilient built environments.

Traditional owners

The deep knowledge systems of Aboriginal and Torres Strait Islander peoples have long recognised water's natural cycles and its role in sustaining ecosystems and communities. By partnering with the Whadjuk Aboriginal Corporation and embedding their perspectives, we can develop more sustainable and responsive strategies that respect Country and support both ecosystems and communities.

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A Water-Sensitive Vincent

Figure 9: Water Sensitive City

A Water Sensitive City is



What is a water sensitive city? - CRC for Water sensitive cities

Vincent aspires to be a water-sensitive city, where sustainable water management supports healthy ecosystems, enhances livability and builds resilience; whilst. This approach encompasses every stage of the water cycle—rainfall, stormwater, groundwater, and wastewater.

Vincent takes a whole of organisation approach, ensuring our teams work together to deliver effective water solutions. Vincent leads by promoting responsible water use, water quality protection practices, educating and empowering residents and businesses to make water-conscious decisions that align with state targets and benefit our local environment.

The State Government's Kep Katitjin – Gabi Kaadadjan Waterwise Action Plan 3 (Kep Katitjin 3) guides Vincent's water management approach³. Kep Katitjin 3 outlines ambitious 2030 targets, focusing on water efficiency, conservation, and innovative technologies. Vincent is committed to not only meeting these targets but surpassing them wherever possible, by embedding best practices into our planning, operations, and public spaces. This requires collaboration between all relevant stakeholders. Vincent works closely with:

- The Water Corporation
- State Government agencies
- Industry leaders
- · Community groups and residents.

³ Kep Katitjin – Gabi Kaadadjan Waterwise action plan 3

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Objective 1

Waterwise Community and Council

Every Drop Has a Story

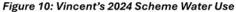
When people understand the value of water and feel connected to their local water ecosystems, they are more likely to respect it, protect it and use it wisely.

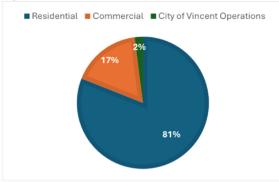
Over the next five years Vincent aims to take a leading role in educating staff, residents, and children; in collaboration with key partners who will offer valuable guidance and expertise.

Increasing water literacy will empower both staff and residents to make informed decisions that support a sustainable future.

Every Drop Counts - Residential Scheme Water

Understanding our current scheme water use is key to tracking progress toward becoming a water-sensitive city. Currently 81% of scheme water in Vincent is consumed by residents, 17% by commercial premises and 2% by Vincent's operations, as per Figure 10.





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Water use per person in Vincent has ranged between 88 and 76 kilolitres (kL) per person per year since 2014, with a gradual downward trend, as per Figure 11. In 2024, the average was 80kL per person.

Vincent will aim for a 10% reduction in use per resident. Further reductions would help conserve precious water resources and support long-term sustainability.



Figure 11: Scheme Water Use per person, per year in Vincent (in kL)

Analysis on a per property basis, shows that Vincent's residential properties consumed an average of 284kL of scheme water per year in 2023-24.

This is 18% higher than Boorloo (Perth) metro average of 241kL. Whilst Kep Katitjin 3 aims to 'achieve a static or decreasing trend in the average volume of residential water supplied per property,' Vincent will work towards reducing scheme water use per property by 10% to align more closely with Boorloo's (Perth's) average.

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Every Drop Counts - Residential Ground Water

Irrigation is one of the largest contributors to water consumption in Boorloo (Perth). The Water Corporation states that households use an average of 35.9% of their scheme water outdoors, with 31.2% allocated to sprinklers, irrigation, and hand watering. This underscores the importance of waterwise gardens in reducing demand on water resources.

Since residential bores are not metered, a direct analysis of residential groundwater consumption is not possible. Vincent acknowledges our role in providing education and resources to support more sustainable water practices and greater awareness of water-wise planting. As a result, this has been identified as a key focus area and reinforces the importance of verge programs.

2030 Targets

10% reduction in water use per person, and per property

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Objective 2

Water Efficient Vincent

Water efficiency is a key element of sustainable water management, and it is essential for reducing both demand on resources and operational costs. Vincent is committed to improving water efficiency across all operations, ensuring that every aspect of water use is carefully managed and conserved.

Vincent's current water challenges and considerations include:

- Exceptionally hot weather (such as the 2023/24 summer) places additional pressure on groundwater resources to sustain turf and gardens.
- Vincent has an annual groundwater allocation of 646,110 kL. With an increasing total area of public open space under management and enhancements to existing green spaces, this allocation must now be distributed more widely
- Parks and reserves visitation has risen significantly, placing additional strain on public green spaces. For example, Charles Veryard Reserve
 experienced a 74% increase in attendance in 2023/24 compared to the previous year. Higher foot traffic, increased sporting activities, and
 greater overall use contribute to more rapid wear and tear on grass and gardens. Subsequently, additional water is required to maintain turf
 quality and support plant health
- Higher visitor numbers at sporting reserves have also increased scheme water consumption, particularly in showers, drinking fountains, and kitchen facilities.

To safeguard our water resources and ensure the sustainability of public green spaces, long-term, adaptive groundwater and scheme water management strategies will be implemented as a priority.

Guarding our Groundwater

Groundwater irrigation accounts for approximately 90% of Vincent's total operational water use, based on 2023/24 data, with our current use being shown in Figure 12. In line with the 2022 Gnangara Groundwater Allocation Plan⁴, Vincent's groundwater allocation will be reduced by 10% in 2028, necessitating proactive preparation.

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⁴ Gnangara groundwater allocation plan 2022

City's Groundwater Use (Parks Team)

120%

100%

80%

60%

20%

14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-24

Year

Figure 12: Vincent's Operational Groundwater Use (100% being our full allocation)

The Parks team is proactively improving water efficiency through several key initiatives, including:

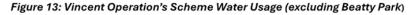
- An ecozoning program which converts underutilised turfed areas into gardens with local or Australian plants to reduce water demand.
- A systematic irrigation renewal program to replace aging irrigation systems that are at the end of their lifecycle to enhance efficiency and ensure optimal water distribution.
- Installation of a central control irrigation system which allows water usage to be monitored in real time and ensure responsible management. It is supported by a weather station and soil moisture probes that were purchased from a DWER grant.
- An enhanced turf renovation program and a tailored fertiliser strategy to support targeted fertiliser applications that promote healthy, waterefficient green spaces.

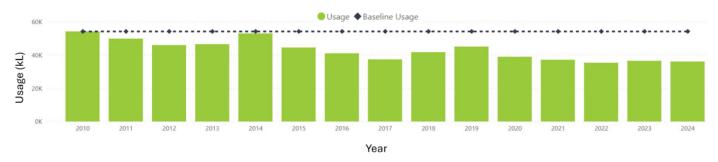
25

Tapping into Scheme Water

Vincent's operations (excluding Beatty Park) have maintained a relatively stable scheme water use of approximately 35,000–39,000 kL per year, since 2020, as per Figure 13. Existing scheme water efficiency measures have enabled Vincent to sustain this consistent usage despite a growing population.

Vincent remains committed to further improving water efficiency and will conduct a 2025 water audit and benchmarking workshop to be led by the Water Corporation which would inform the preparation and implementation of a targeted action plan.





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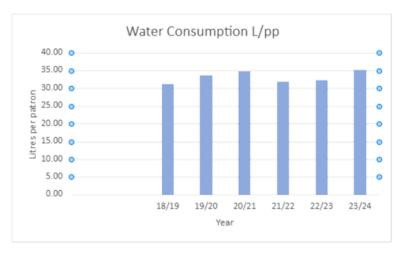
Beatty Park

In 2024 Beatty Park Leisure Centre accounted for 52% of the City's total scheme water usage. As a high-consumption facility using over 20,000 kL of water annually, it submits yearly reports to the Water Corporation as part of the Business Audit. Between 2019 and 2024, annual patronage at Beatty Park increased by 45%, reaching nearly 1.3 million visitors per year.

Given this growth, assessing water use on a per-patron basis is essential for accurate reporting. Data shows that per-patron water consumption has remained relatively stable, ranging from 31 to 35 litres per person since 2018/19, as per Figure 14.

Fluctuations have primarily been linked to specific factors, such as pool refills following re-tiling or renovations.





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Repurposing Every Drop

Vincent has been actively exploring innovative ways to reduce water consumption and received a grant from the DWER in 2024 for a feasibility study on wastewater recycling options at Beatty Park. The study recommended repurposing pool backwash for irrigation, with implementation requiring at least \$60,000 in equipment costs, plus additional installation expenses.

The next step to further this project would require a feasibility study (including a financial and life-cycle environmental analysis).

2030 Targets

5% reduction in scheme water consumption across Vincent's operations (excluding Beatty Park)

10% reduction in water usage, per patron, at Beatty Park

10% reduction in ground water consumption across Vincent's operations

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Objective 3

Water Sensitive Urban Design

Where Water Meets Design

Vincent has made WSUD a core component of its sustainable water strategy and a key step to becoming a water-sensitive city. The Cooperative Research Centre for Water Sensitive Cities⁵ defines WSUD as an approach to the planning, design and maintenance of urban landscapes that will deliver water sensitive cities through protecting and enhancing natural water systems and integrating the management of the total water cycle. WSUD principles use nature-driven solutions that work with, rather than against, natural systems to protect and restore water ecosystems and manage water efficiently.

By embedding water management into urban planning, WSUD helps to:

- Reduce overall water consumption
- Prevent water pollution and improve stormwater and groundwater quality
- Enhance flood resilience and protect biodiversity
- Support alternative water sources such as rainwater harvesting, greywater reuse, and wastewater recycling
- Improve urban amenity and resilience to climate change.

WSUD ensures that urban development conserves water and actively supports natural water ecosystems rather than disrupting them. Vincent uses practical solutions such as permeable pavements that allow rainwater to soak into the ground, biofiltration systems that treat stormwater via plants and soils, and water-efficient landscaping that reduces irrigation needs. These strategies enhance urban cooling, protect and enhance local biodiversity, improve waterway and wetland health, and provide infrastructure upgrades and flood protection.

Vincent supports residents in reducing water use by integrating WSUD into their planning framework, such as through encouraging new developments to carry out a LCA tool. This helps assess how design and construction choices affect long-term water consumption, making water efficiency a key consideration in development. Moving forward, Vincent will enhance its baseline data with more up-to-date information, replacing the current 2017 dataset.

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⁵ Vision and Transition Strategy for a Water Sensitive Greater Perth - CRC for Water sensitive cities

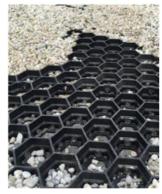
Vincent has developed its own certified stormwater calculator, which allows new developments and major renovations to calculate water storage volumes for use in the integrated WSUD process for stormwater drainage design. Through these initiatives, Vincent aims to reduce water consumption by 50% for residential properties and 25% for commercial properties compared to the average Boorloo (Perth) residence.

Smart Water, Sustainable Spaces

The Parks and Engineering team play a crucial role in managing water within Vincent's operations and implement WSUD principles in POS. Recent projects demonstrate how these principles can be applied effectively:

- At Menzies Park, instead of capturing the water flow with pits and pipes and discharging it into Lake Monger, a WSUD design will infiltrate
 stormwater runoff into the ground to help replenish the groundwater levels. Construction commenced in March 2025. A permeable surface
 (called Geohex with a gravel infill) will be installed around the periphery of the park. This surface will enable additional parking for the
 community, while allowing stormwater runoff to be infiltrated through the pavement and further replenishing groundwater levels.
- The Macedonia Car Park upgrade features local and Australian plantings, permeable surfaces, and flush kerbing, enhancing water efficiency and improving stormwater quality and management.
- The turf renewal project at Leederville Oval is designed to mitigate drainage issues and improve water efficiency and resilience, enhancing both the aesthetic and environmental sustainability of the space.
- The Robertson Park Stage 1B works (commencing April 2025) will see a series of raingardens constructed between the tennis courts. These will
 work in combination with subsoil drainage cells to capture and manage stormwater runoff, with capacity for 1-in-100-year rainfall events. Plants
 will work as biofilters to improve water quality as it moves down through the soil to recharge groundwater. The raingardens are designed for
 minimal ongoing maintenance, relatively self-sufficient plants, gravel mulch that doesn't break down quickly (like organic mulch), and
 supplementary drip-line irrigation for the warmer months.
- In 2022, the Engineering Operations team completed a business case that identified efficiency and cost savings associated with bringing
 drainage maintenance in house. Starting in 2025, the team uses its newly purchased vacuum truck for cleaning Vincent's pits and pipes. This
 will provide more frequent and cost-effective services of cleaning pits and pipes, which will ensure that flood-prone areas remain well
 maintained.

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Geohex



Macedonia carpark upgrade



Vincent's new drainage truck



Leederville Oval turf renewal project

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Making Water Work Smarter

Irrigation is one of the largest contributors to water use, so the greatest water benefits come from reducing irrigation demand. Beyond this, sustainable water management solutions, such as rainwater tanks and greywater reuse systems, are crucial in Boorloo (Perth) to support its water-stressed climate. Furthermore, the Vincent community has made it clear that water capture and reuse is a priority to them.

Currently residential greywater reuse in Vincent remains low, with only three applications for new systems submitted in the past ten years. Vincent will investigate this further to better understand the challenges and develop strategies to make greywater reuse more accessible and practical for residents.

Vincent will also explore opportunities to implement WSUD features, such as rainwater harvesting, within its own buildings and facilities. By leading by example Vincent aims to demonstrate best practices in sustainable water management while supporting the broader community's efforts.

Future-Proofing our Water

As Vincent works to make water use more efficient, future planning must also account for the city's ongoing growth. Higher-density development plays a crucial role in reducing per-property water consumption and supporting sustainable urban growth. Vincent's local planning framework facilitates infill development and promotes apartments and mixed-use housing that typically use less water per dwelling than traditional homes. By encouraging well-designed urban infill, Vincent can:

- · Optimise water efficiency through compact, resource-conscious development.
- Support state and local water reduction targets.
- Enhance liveability by integrating green infrastructure and water-sensitive urban design.

The Housing Supply and Infrastructure Servicing Study (HSISS) is an initiative aimed at understanding how population growth will impact future infrastructure demand. By examining potential flood risks and identifying areas that need future infrastructure upgrades, the HSISS will provide Vincent with the critical data needed to plan for a more sustainable future. This strategic approach ensures Vincent can continue to grow while sustainably minimising water demand and creating vibrant, well-connected communities.

Vincent is proactively addressing the future impacts of climate change and will include a risk assessment and community climate resilience plan within its future CTAP.

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2030 Targets

Embed WSUD principles for all projects to improve the management, capture and reuse of stormwater drainage and infiltration in City buildings, parks and assets

50% reduction in scheme water use for new residential developments and 25% for new commercial developments compared to Boorloo's (Perth's) average

Include climate change impacts and undertake a community risk assessment as part of the CTAP

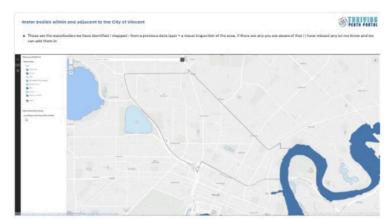
Objective 4

Healthy Waterways and Thriving Ecosystems

Nurturing Waterways and Wetlands, Protecting Ecosystems

Vincent is committed to protecting its local waterways and wetlands by addressing key environmental issues while enhancing their social values for recreation, community connection, and the enjoyment of nature. Key waterways and wetlands include a small section of the Derbal Yirragan (Swan River), Hyde Park, Smiths Lake and Warndoolier (Banks Reserve), which are illustrated in Figure 15. Vincent is responsible for the water health in Hyde Park and up to the water line in Smiths Lake and Warndoolier (Banks Reserve), and partners with the authorities who manages the water in the latter two. Despite Lake Monger being in the Town of Cambridge's Local Government Area, Vincent has a shared responsibility for Lake Monger as Vincent's drainage pipes discharge into the swale adjacent to Lake Monger.

Figure 15. City of Vincent Waterways and Wetlands



Thriving Perth Portal 2025, The Thriving Perth Portal website, accessed March 2025 < https://thrivingperthportal.com.au/ >

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Caring for our waterways and wetlands requires attention to various factors that can affect water quality and the health of the plants and animals that rely on these water ecosystems. For example:

- Fertilisers can enter water ecosystems and elevates nitrogen and phosphorus levels, harming water quality and promoting harmful algae growth.
- Stormwater runoff often carries pollution into water ecosystems.
- Industrial runoff can introduce harmful chemicals into waterways and wetlands.
- Human activities, such as removing vegetation along water edges, can lead to erosion, disrupt water filtration, and negatively impact plants and animals within and adjacent to water ecosystems.
- The urban heat island effect can raise water and air temperatures, decreasing oxygen levels within water ecosystems, increasing stress and death rates of aquatic and terrestrial plants, and threatening biodiversity.

Vincent's Parks team play a critical role in enhancing the waterways and wetlands. For example, they:

- · Ensure fertiliser is applied responsibly and keep it away from water bodies to protect water quality
- Collaborate with university groups to monitor biodiversity (with further biodiversity monitoring being identified as an area for future attention within the EES).
- Are responsible for Vincent's biofiltration systems. These systems provide an effective and sustainable way to improve water quality by
 naturally filtering pollutants while also helping to manage stormwater and reduce flood risks. In Hyde Park, a biofiltration system is in place to
 ensure effective water quality treatment and water quantity management, helping to control floodwaters during storm events. The system uses
 sand, woodchips, local plant species, and a synthetic liner, to filter water and remove pollutants from stormwater. The system has effectively
 improved water quality since its installation in 2013. A review of its effectiveness, along with recommendations for improvements, was
 conducted in 2022. The short-term recommendations have been completed, and the long-term recommendations are currently being
 progressed.

Item 5.6- Attachment 2



Hyde Park

Respect for the River

The DBCA is the management authority for developments and activities affecting foreshore and river reserves within the Swan Canning Development Control Area. Vincent manages a small section of the Derbal Yirragan (Swan River) together with DBCA, who partners with several local governments to develop and implement a Locality Plan for the stretch of river extending from Windan Bridge upstream to Guildford. This policy document will work towards the objectives and principles of the Swan and Canning Rivers Management Act 2006, such as for ecological restoration and intergenerational equity, all while fostering a more respectful connection to the river. Vincent recognises DBCA's guidance as central to improving water quality, protecting and restoring vegetation and biodiversity, improving amenity, and activating the foreshore area.

DBCA is also undertaking a foreshore risk identification and mapping project for the Swan Canning Riverpark. The project will identify erosion, inundation, and climate risks for the Riverpark, which includes the Derbal Yirragan (Swan River) and the Djarlgarro (Canning River). Risk mapping will

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illustrate anticipated foreshore hazards over a 100-year planning period. Understanding erosion and inundation risk across the Riverpark is essential for future foreshore planning and management in the context of a changing climate. Results from the project will be communicated to public foreshore land managers through a series of interactive workshops (at the end of 2025), for specific river reaches of the Riverpark. Their input will help to manage and mitigate current and future risks to Riverpark assets.

Targets

2030 Target

Protect and enhance the health of the Derbal Yirragan (Swan River) and the local and surrounding wetlands (Hyde Park & Lake Monger)

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URBAN GREENING & BIODIVERSITY - A GREENER VINCENT

This section will improve the City's performance in SDGs:







Planting a Nature Based City

Canopy trees and vegetation are powerful and cost-effective tools for protecting against our changing climate. They cool our cities, clean our air, and create spaces where people and wildlife can thrive.

Research confirms that cities with 30-40% tree cover enjoy healthier communities and stronger ecosystems.

In 2020, Vincent had just 14% canopy cover—19% on public land and 9% on private. Increasing this requires shared responsibility across both sectors.

An urban forest of mature trees and understorey offers remarkable benefits to an urban environment, enhancing its vibrancy, liveability and environmental resilience in the face of climate change.

Canopy trees are often referred to as 'nature's air conditioners', and for good reason. Trees can lower the temperature of a space by shading it from direct sun and can also cool the air through the release of water vapour from their leaves, known as evapotranspiration. This cooling effect provides one of the most effective natural defenses against summer heat, reducing temperatures in urban areas by up to 10 degrees.

Did you know that damp soils can also cool the surrounding air by up to 5 degrees? This is useful for us in reversing the urban heat island effect. This is why we have committed to switch out at least 10% of our existing hard surfacing for water permeable surfaces.

More greenery means happier, healthier people. Studies show that leafy streets reduce stress, encourage social connections, and even increase property values. People instinctively seek out vibrant, green spaces and dwell longer in public spaces shaded by canopy.

Trees, along with the rich soils that sustain them, serve as powerful carbon sinks⁶, which will play a vital role in Vincent's journey toward Net Zero by 2030. Together, vegetation and soils create thriving habitats, offering refuge for wildlife and strengthening the biodiversity of our City through food, habitat and refuge. Every tree retained or gained, brings us closer to a resilient, thriving place to be.

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⁶ National Soil Strategy

Figure 16: Benefits of Urban Forests

(Description – an image showing the benefits of trees in an urban area, to be provided with designed document)

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Can Money Grow on Trees?

Trees and vegetation provide a wide range of economic benefits to communities, businesses, and households. Here's how:

- Lower Energy Costs Trees provide shade in summer and act as windbreaks in winter, helping to reduce heating and cooling bills for homes and businesses.
- Reduced Stormwater Infrastructure Costs Trees absorb rainfall and reduce runoff, easing pressure on drainage systems and lowering the need for costly infrastructure upgrades.
- 3. **Boosted Local Business** Green, well-landscaped town centres attract people, encouraging them to stay longer and spend more in local shops and cafes.
- 4. Increased Property Values Properties near mature trees or in leafy streetscapes can see a value increase of 5–15%.
- 5. Public Health Savings Access to green spaces is linked to better physical and mental health, which can reduce demand on healthcare services.
- 6. Urban Heat Reduction Canopy cover helps cool entire suburbs, reducing energy use during heatwaves and easing demand on the power grid.
- 7. Extended Lifespan of Infrastructure Trees shade roads and pavements, lowering surface temperatures and prolonging the life of public assets.
- 8. Tourism & Civic Appeal Attractive, green streetscapes and parks support tourism, outdoor events, and community pride.
- 9. Valuing Trees with Data Tools now exist to assign a dollar value to individual trees based on size, species, health, and services provided (e.g. carbon capture, air purification, aesthetic value). This helps the City and community to understand the true value of their urban canopy—especially on private land.

Trees for Microclimate

A microclimate is the unique weather conditions in a small area, which can be different from the broader surrounding environment. Things like wind, sunlight, and water interact with the land to create these unique conditions. A microclimate is influenced by different factors, such as the shape of the land, the trees, plants, and buildings around it.

Every place has its own microclimate, so understanding it is important when designing homes or gardens. If we cut down large, mature trees, we can change the microclimate considerably, making the area less stable and less able to handle climate change.

Trees are the backbone of a stable microclimate. They act like natural air conditioners, keeping our homes cool by providing shade and reducing heat from the sun. Their thick canopies block harsh winds, making our surroundings more comfortable in winter. Trees also help control moisture levels by absorbing and releasing water, which helps keep the air fresh and balanced.

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When mature trees are removed, the microclimate of an area can change dramatically—temperatures rise, winds become stronger, and the land becomes less able to handle extreme weather. Keeping trees in place helps maintain a steady and resilient environment, making sure our homes and neighborhoods stay safe and comfortable.

Maximising Tree Benefits in an Urban Area

More is better when it comes to canopy trees, however research shows that there are ways we can maximise the benefits of trees within a constrained urban area.

Seven Ways to Maximise Tree Benefit

1. Retain Mature Trees

Mature trees deliver far more benefits than young ones and require less water to survive. Since it takes 25–40 years for a new tree to provide the full range of ecosystem services, preserving existing mature trees is one of the most impactful actions we can take. Tree retention is a core focus of Vincent's urban forest strategy.

2. Apply the 3-30-300 Rule

The 3-30-300 rule is an evidence-based formula indicating the optimal pattern and concentration of trees to achieve peak benefit. Tree locations need to be considered at a granular scale rather than just a blanket percentage. This rule helps to ensure equal distribution of trees at the household and neighbourhood scale

3 Trees - Visible from every home

30% - Canopy cover over each neighbourhood precinct

300m - To the nearest greenspace for all residents

This approach ensures benefits are delivered at both the individual and community scale—not just by total canopy percentage, but through smart placement.

Item 5.6- Attachment 2

Figure 17: 3-30-300 Rule



Trees and Design Action Group (TDAG), 2023. Trees, Planning and Development: A Guide for Delivery – Section Two

3. Tree Density

Benefits like cooling, air purification, and habitat provision are greatest when trees are planted within communities, close to where people live and work. These benefits scale with tree density—the more trees in an area, the greater the cumulative impact on comfort, biodiversity, and livability.

4. Build and Maintain Healthy Soils

Soil health underpins the health of the entire urban forest. Nutrient-rich, well-aerated soils with strong microbial activity improve water retention, disease resistance, and root development—making trees stronger and more resilient in urban conditions.

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5. Species Diversity

Using a wide variety of species along streets and in parks is crucial to biodiversity and resilience outcomes. Historic planting traditions tended towards the homogenous planting of European species for visual continuity along a streetscape. Vincent has moved away from this practice opting for great diversity and planting of a minimum of 75% Australian native species.

6. Create Biodiversity Corridors

Greening efforts are most effective when connected. Biodiversity corridors link patches of vegetation, enabling wildlife movement, breeding, and adaptation to urban and climate changes. They transform scattered greenery into thriving, functional ecosystems.

7. Design Multi-Use Green Spaces

In an urban setting, where space is at a premium, vegetation areas should allow for multi-use such as re-wilded spaces which also offer opportunities for children to play and explore.

These principles will be embedded in Vincent's approach to greening and project planning over the next five years and into the future.

Urban Rewilding

The City has managed a 'rewilding' or 'eco-zoning' program since 2012 and will continue to dedicate underutilised land to native vegetation in collaboration with the community.

Rewilding is the process of allowing native plants and ecosystems to grow and thrive in urban areas with minimal human intervention. Allowing these areas to grow 'wild' as they would in nature can dramatically increase their biodiversity and habitat value. This approach allows nature to regenerate, with minimal maintenance, while offering opportunities for people, especially children, to engage with the environment in meaningful ways.

Between 2012 and 2024 the City has rewilded (previously known as 'eco-zoning') 133,369 m2 of land such as on underutilised areas of turf or medians and verges which can't be used for recreation.

'Cues' such as an informative sign, a tree log lined pathway or a refuge platform for children to explore, can be introduced to a rewilded or eco-zoned area to show that vegetation is intentional, respected and cared for.

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Re-wilding for children

Children are hard wired to be curious about their world and to engage in sensory input from nature. Children who live in urban settings are particularly vulnerable to experiencing a 'deficit of nature'. Exposure and interaction with nature has been shown to be highly beneficial for children's development and our urban forest needs to be enhanced with their needs in mind as a core sector of our community.

The Role of Trees in a Net Zero Vincent

Enhancing Vincent's canopy will form an important part of our strategy to reach Net Zero by 2030. Retaining and increasing our canopy will support our pathway to net zero in the following ways:

- Tree shaded houses are cooler reducing reliance on auxiliary air conditioning
- Tree shaded streetscapes are cooler and more pleasant supporting walkability
- Trees draw carbon from the atmosphere and store it in their trunk, roots and surrounding soil (sequestering). This helps to reduce Co2 reaching
 the atmosphere.
- A single mature eucalypt can sequester between 50 to 100 kilograms of carbon per year or several tonnes of carbon over its lifetime.
- Planting of trees can be used to offset emissions.
- · Retaining mature trees can also help to enhance the carbon storage potential of surrounding soils.

The removal or death of mature trees will release substantial amounts of carbon into the atmosphere that would otherwise be permanently stored. This will work against our Net Zero ambitions.

By integrating trees into climate strategies, we can enhance carbon sequestration, support biodiversity, and contribute to the broader goal of reaching Net Zero emissions.

Underground Power Project: An Opportunity

Between 2025 and 2030, Vincent is undergrounding 90% of its existing power lines. This project delivers some big opportunities for the growth of our urban forest and canopy:

- Trees can grow taller and wider. Less pruning to make way for powerlines means bigger canopy and more shade
- More trees and larger species can be planted where they could not be before
- Switching concrete for permeable surfacing through the undergrounding power works.

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There are also challenges that will need to be carefully considered and managed during the construction phase of the project:

- Unintended damage to tree roots during works
- Root competition with new underground power cables.

These potential challenges need to be carefully considered and planned out of the construction phase of this project.

The Challenges for Greening

Vincent is an inner-City urban environment which faces unique challenges compared to less densely populated areas. These challenges increase as our areas densify, and our climate becomes hotter and drier.

Managing these competing priorities requires ongoing investment and a commitment to adopting ambitious and innovative approaches.

- Infrastructure conflicts competition between greening initiatives and essential services, such as power lines, underground utilities, and built structures, restricting root growth
- · Soil compaction through development limits root spread
- Space constraints limited availability of land and air space for trees, particularly in high-density urban areas
- · Water access balancing water conservation targets with the need to sustain trees and vegetation
- Hard surfaces extensive paving reduces water infiltration, increases root competition, and imposes clearance requirements
- Climate impacts rising temperatures and extreme weather events placing stress on vegetation
- Urban development loss of trees due to densification, infill, and subdivision
- Regulatory limitations challenges in enforcing tree retention on private land
- Landscape preferences prevailing garden styles, such as lawns that are often unsuitable for WA's climate
- Economic undervaluation limited recognition of the financial and environmental benefits of mature trees
- · Maintenance costs significant expenditure on tree management, including road closures for pruning
- Biosecurity threats increasing risks from pests and diseases, including the Polyphagous Shot Hole Borer (PHSB).

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Objective 5

Shady Spaces & Places

We know that increasing canopy cover in Vincent is essential for enhancing biodiversity, mitigating urban heat, and improving community health. Based on the latest data, the City's total canopy has declined since 2014.

Vincent's Urban Canopy

	2014 Canopy	2020 Canopy	% decrease	Target 2030	Target 2050
Whole of City	14.13 %	14%	-0.13	18.5%	27.5%
Public land	21.45 %	19%	-2.45	25%	35%

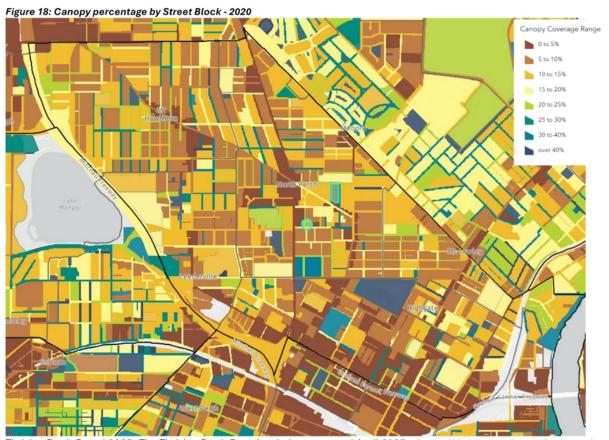
Much of Vincent's original canopy loss can be attributed to our historic relationship with Australian trees and vegetation. By the 1960s, over 99% of our remnant vegetation and natural wetlands had been cleared, replaced with lawns, European-style gardens, and non-native trees which require high water use.

Vincent is working to regenerate its urban forest and re-build its community of Australian tree canopy, prioritising those that existed on the land prior to colonial settlement. It is also important to select species which are resilient to our future climate which often means considering Australian species which thrive in Western Australian climates further north of Boorloo (Perth).

As our climate warms and our rainfall decreases, it will be increasingly difficult for new and maturing trees to survive and thrive. Our changing climate will put enormous pressure on local governments to support survivability of the urban forest.

Vincent is committed to ambitious targets growing an urban canopy which not only spans a greater area of our City but which can withstand a hotter, drier future—resilient, sustainable, and able to thrive through the challenges ahead. This strategy sets the path forward.

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Thriving Perth Portal 2025, The Thriving Perth Portal website, accessed April 2025 < https://thrivingperthportal.com.au/ >

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2030 Targets

Total tree canopy on City owned and managed land of

- 25% by 2030 or 6% above 2024 baseline*
- 30% by 2040 or 11% on 2024 baseline*

with a focus on strategic locations including town centres, key pedestrian and cyclist corridors, and around schools and other neighbourhood infrastructure to support vulnerable members of our community

*whichever is higher

90% survivability rate for new trees planted

New planting to include 75% Australian species (with a preference for Western Australian species)

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Objective 6

Greener Private Spaces

Between the year 2014 and 2020 Vincent's private land gained 2.19% canopy cover.

	2014	2020	%+	Target 2030	Target 2040
Private land	6.81	9	+2.19	12%	18%

The increase reflected above is a positive improvement on previous trends to a diminishing canopy. While this is good news, we know that 9% canopy cover is not enough.

State government statistics show that the most meaningful urban canopy cover comes from trees in private backyards where roots and canopy have space to thrive. Approximately 66% of land within Vincent is privately owned which means that we cannot achieve our set total canopy targets without help from the community.

Very large mature species are at great risk of loss on private land through infill development and subdivision as well as a widespread undervaluing of tree benefit.

Due to regulatory constraints, Vincent is not able to mandate the retention of mature canopy on private land. We will work with the community to support private landowners to retain their trees and plant new ones where they can't. Vincent will continue to raise awareness and explore opportunities and incentives for this.

It can take up to 40 years of growth for a new tree to provide its peak level of beneficial services including, shade, habitat for birds, insects and small mammals and carbon sequestration. New saplings are no substitute for a mature tree already in the earth!

Trees for Smart Design

When done right, trees and landscaping can reduce home energy bills and hugely improve the comfort and enjoyment of our homes.

Trees and vegetation placed in the right spot within a lot design, such as along the western and eastern elevations, can cool and shade the dwelling in summer and allow warming sun in winter.

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2030 Targets

Total canopy cover on private land increased to:

- o 12% total, or 3% increase on 2024 baseline, by 2030 *
- 18% total, or 6% on 2024 baseline, by 2040 *

*whichever is higher

Retention of mature canopy trees (of 2024 baseline) on private land by:

- o 5% on 2024 baseline by 2030
- o 10% on 2024 baseline by 2040

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Objective 7

Dial Down the Heat

Extreme heat is the number one threat facing Boorloo (Perth) in the face of climate change.

The urban heat island effect is a rapidly growing problem and occurs when an area is built up with heat absorbing materials like concrete and asphalt. Concreted verges, long driveways servicing subdivisions and reduced landscaping all contribute to dramatically increased temperatures within our urban areas.

Concrete and other hard surfacing, particularly when dark coloured, is high in thermal mass which means that it attracts and stores heat through the day and then releases that heat into the night giving no reprieve. This can have disastrous and even deadly impacts for our population and is a big problem for our health, the environment, social engagement and economic activity.

Perth

Figure 19: Urban Heat Map - City of Vincent

Thriving Perth Portal 2025, The Thriving Perth Portal website, accessed March 2025 < https://thrivingperthportal.com.au/ >

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Heat - A Health Issue for All of Us

Prolonged heat exposure can create physical stressors on humans and make it harder for the general population to go about their daily life. This can particularly limit the ability for the vulnerable, like the elderly and those with young children to leave their homes for much of the day. Hot streetscapes with limited canopy and lots of concrete can limit the ability for exercise, social interaction and economic activity. Unshaded concrete surfacing reradiates heat into the street and our homes into the night limiting capacity for sleep and respite from heat.

Areas Most at Risk

- Carparks
- Town Centres
- Roads and Bitumen
- Private land with large amounts of hard surfacing

- Buildings with dark materials
- Dense streets and suburbs with a high building to green space ratio
- Streets with less trees

Urban Cooling

Shaded streetscapes can reduce the experienced temperature for all living things by up to 10-15 degrees compared with a streetscape with no trees. The Key Solutions:

- · Reduce water impermeable hardstand surfacing and concrete where possible across the City
- · Introduce permeable surfaced carparks with canopy tree planting in effective locations
- Support private developers to reduce hardstand in new developments
- Consider vertical surface planting where horizontal planting is not appropriate
- Strategic placement of canopy trees and vegetation to shade footpaths and hard surfacing
- Support soil health and moisture retention damp soil is an effective air conditioner

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2030 Targets

Reduce hardstand surfaces in the public realm by 10% by 2035

Reduce urban heat island impacts through targeting the planting of new street trees along underground power routes

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Objective 8

Boost Biodiversity

Shaping a Biodiverse Vincent

Urban areas face significant challenges in supporting biodiversity, primarily due to habitat loss, fragmented habitats, degradation of soils, pollution affecting air and water quality, and the presence of invasive species that disrupt local ecosystems.

Vincent is home to a number of endangered species including the Black Cockatoo, the Western Ringtail Possum and several native bee species.

The Southwestern Snake-Necked Turtle, is found at Hyde Park and is the only native freshwater turtle found throughout metropolitan and suburban Perth. The City of Vincent has supported studies into the Hyde Park turtle colony since 2015, including creating mini beaches on the lake's central island to support the turtle population.

Perth contains a series of rich habitat areas such as Herdsman Lake, Lake Monger, Hyde Park Lake and Derbal Yirragan (Swan River) however urbanisation means that these areas are increasingly fragmented, and species are unable to move between habitats for breeding, food and seasonal migration. Urbanisation is increasingly reducing the size of remaining natural areas⁷. The smaller the natural area, the less diversity it can support. Isolated protected natural areas act like islands, each island is separate from each other and the biodiversity supported is only as much as the individual island can support.

Supporting biodiversity within the City means focusing on species with limited mobility to facilitate their travel between habitat areas. Many native species can only travel up to 500 metres in search of food, water, or shelter, meaning disconnected patches of vegetation can become isolated and unusable. Even larger species like the Black Cockatoo, despite their size and strength, typically won't travel more than 1,500 metres without suitable habitat connections. By enhancing biodiversity corridors within Vincent—such as planting native trees, restoring verge habitats, and protecting key green links—we can help ensure these species continue to thrive in our city.

The NatureLinks Perth initiative provides a research based approach to cohesive green networks across the city. By linking remnant bushland, street verges, and private gardens, these green corridors can support wildlife movement and enhance ecosystem resilience, ensuring that local fauna can continue to thrive in an increasingly urbanized landscape⁸. The proposed biodiversity corridor is supported by the NatureLinks research.

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Urbanisation footprint mapping by Daniel Jan Martin, 2022

⁸ NatureLinks

The Need to Support our Soil

Just like water, healthy soils are crucial to sustaining trees and vegetation and carry immense ecological value. Healthy soils are teeming with life and host one of the most diverse ecosystems on earth. Rich in life, soils support vital microorganisms, fungi, and insects that help trees absorb nutrients, retain water, and resist disease. Mycorrhizal fungi, for example, enhance trees' nutrient uptake and resilience to stress, while healthy soils reduce erosion and improve drought resistance.

In urban areas, soils degrade over time due to the lack of natural regeneration processes like decomposing leaf litter and animal manure. As a result, nutrients are depleted, and soils no longer support the organisms that trees depend on. Revitalising these soils is essential to maintaining a thriving urban canopy.

Soil biodiversity not only supports trees but also provides benefits to us all—from pollinators essential for food production to the joy of encountering wildlife like black cockatoos.

Figure 20: Benefits of biodiversity

(Description - Image of the benefits of biodiversity to an urban area and people, to be provided with designed document)

The EES seeks to address the challenges we face in supporting our biodiversity through identification of the key means that we can support biodiversity through the following across both public and private lands:

- Increased understorey vegetation planting, or Biodiversity Sensitive Urban Design in addition to tree canopy.
- Increased flora species complexity to benefit multiple species and provide varied habitat.
- Develop a biodiversity corridor to allow species to migrate and develop genetic diversity.
- Provide wildlife infrastructure such as cockatoo watering stations and nesting boxes.
- Regenerate our degraded soils through amendment and restoration.
- Allowing leaf litter, lawn clippings and natural plant debris where it falls which provides valuable habitat for beneficial bugs and insects.

Vincent will work together with its residents to develop a biodiversity corridor as one of the most effective steps we can take to enhance and support biodiversity in our locality. Significant bodies of research show that factors such as patch size (the area that insects and animals have to move and migrate) connectivity and plant species complexity have been identified as crucial to establishing high habitat quality within an urban area.

While our data collection of understorey planting will improve through the actions of the EES it is estimated that our understorey provision has greatly increased across our public land. This has been achieved primarily through Vincent's commitment to eco-zoning projects which has seen 133,369m² of understorey planted over the past five years, enhancing our habitat provision considerably.

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Vincent is committed to understanding its current biodiversity counts, focus species and the ways it can support greater species diversity through research, case studies and community involvement.

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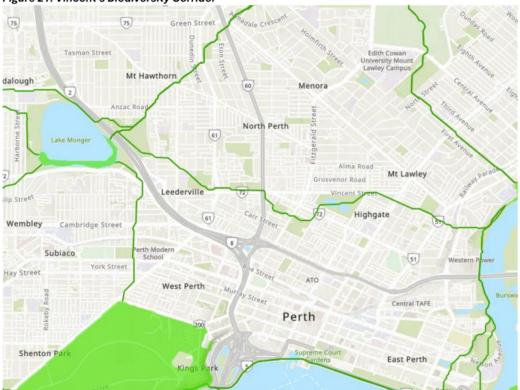


Figure 21: Vincent's Biodiversity Corridor

Source: NatureLinks

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Figure 22: Black Cockatoo Buffer Zones and Nature Link Biodiversity Corridor

Source: Thriving Perth Portal 2025, The Thriving Perth Portal website, accessed March 2025 < https://thrivingperthportal.com.au/>

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2030 Target

Improve the urban biodiversity corridor extending from Lake Monger to the Derbal Yirragan (Swan River) to support plants, wildlife and insects to thrive.

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RESOURCE CONSERVATION & WASTE - A CIRCULAR VINCENT

This section will improve the City's performance in SDGs:







What a Waste

Dealing with our waste is a collective issue.

When societies consume natural resources faster than they can regenerate and produce waste and pollutants at a rate quicker than they can be absorbed or recycled, they create unsustainable pressure on the environment.

If everyone lived like the average Australian does in 2025, it would take 4.5 planet earths to support the global population each year⁹!

Our current demand on ecological resources greatly exceeds the supporting capabilities of our planet. This is only going to get worse. The population of Vincent is projected to grow by more than 11,000 people by 2041 placing even greater pressure on our resources and waste management.

Enhancing our environment means closing the loop on our economies, reducing our overall output of waste as a community. It also means increasing the proportion of product which goes to a recycling or FOGO facility, while dramatically decreasing the amount to landfill.

Toward Circular Resource Use

Circularity refers to a system or process in which resources and materials are continuously reused and regenerated, rather than being wasted or discarded. Vincent is committed to embracing circularity within its operations and to guiding local businesses to join the transition.

In fact, by adopting the concept of circularity, we eliminate the notion of 'waste' entirely. Landfills, instead, become collections of discarded products with untapped value.

9 Planetary boundaries - Stockholm Resilience Centre

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A circular economy:

 Maximises the circulation of materials and energy, moving away from the traditional 'take, make, use, dispose' model, while fostering local recycling and reuse.

- Treats waste as a resource, prioritising waste avoidance through the waste hierarchy.
- Increases recycling and FOGO while reducing landfill. Disposing of items in landfill bypasses opportunities for repurposing, recycling, or composting.
- · Encourages repurposing, borrowing, or buying second-hand before purchasing new.
- Promotes sharing with neighbours and repairing items rather than discarding. Slowing consumption and involving children can make a circular lifestyle more attainable.

Any time we choose to throw something in our red landfill bin we are bypassing the potential for that item to be repurposed, recycled, composted or rehomed.

As a community we can significantly reduce our environmental impact by cutting waste and limiting our consumption.

Take-Make-Use-Dispose

Materials are often undervalued when it comes to waste, with many items being treated as disposable without considering their environmental or economic value.

This mindset contributes to a throwaway culture, where materials like plastics, metals, and paper are discarded without a second thought. Disposal is the least desirable option in the waste hierarchy, as shown in Figure 23, since extracting, processing, and manufacturing these materials require substantial resources.

This devaluation of materials ultimately damages the environment and wastes money and resources. If many of us knew the true value of the items we are throwing away, we might think again!

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Figure 23: The Waste Hierarchy



The Problems with Landfill

2023/24 Waste Breakdo	% of total	
Total Landfill	5563.32 tonnes	45
Total Recycled	2424.25 tonnes	20
Total composted	4420.24 tonnes	35
Total waste collected	12407.81 tonnes	100

Approximately 45% of Vincent's total waste generated goes to landfill.

The great news is that this has decreased since the previous reporting period, with big reductions seen since the introduction of the FOGO Program (three-bin system) in 2021. We have seen great successes at Vincent, but we still have a way to go to reduce our impact on the environment when it comes to waste.

While landfill is convenient for residents, it is not a long-term solution given a range of environmental and financial impacts. Landfill is a wasteful process and a very inefficient way to utilise global resources such as precious metals, plastics and paper.

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The materials in landfill will never re-enter the earths ecosystems in the same valuable way they came out meaning they are depleted of value to us but also to the environment.

Landfills pose many environmental problems, including:

- Greenhouse gas emissions. Landfills produce significant amounts of methane and carbon dioxide which contribute to global warming.
- Severe degradation of soil which might never be remediated.
- Runoff contaminants, known as leachate and nutrient runoff which can contaminate water systems and upset ecosystem balance.
- Runoff of potentially toxic substances if items like batteries or corrosives are landfilled.
- The occupation of valuable urban land.

As well as the environmental impacts, landfill are a financial drain due to the amount of time, people power and materials which go into products only to be discarded.

Money in the Bin

Collecting and disposing of waste is a costly exercise. In the period 2023/24 waste collection and associated services cost Vincent well over \$5.1 million.

The financial costs of landfill include tipping fees, charged to the local government per tonne, waste collection and transport costs and worker costs. These costs will all continue to increase in time with population increases placing a far greater burden on state and local governments.

Landfill waste also reflects the increasingly common business practice of designing and manufacturing products which are cheap to purchase and are not designed to last.

Item 5.6- Attachment 2

Understanding Embodied Energy - Life Cycle Assessment

All products, from a disposable coffee cup to an apartment building have an embodied energy footprint.

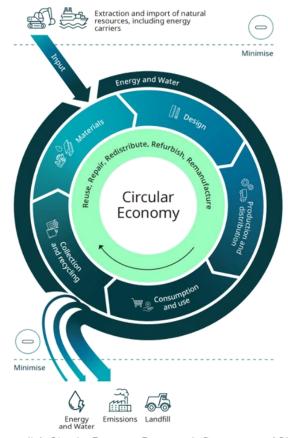
Understanding this embodied energy footprint helps us to better evaluate the value of a product and its impact upon the environment.

Methods such as LCA can help us to better assess what is referred to as the 'embodied' footprint. LCA measures the total energy and resources required to produce, use, and dispose of an item, revealing a more accurate footprint. This footprint includes all the energy required—from extracting raw materials to manufacturing, transportation, and stocking on store shelves—until the item reaches the end of its life. This full life cycle accounts for every stage from cradle to grave.

The image below illustrates this concept using the life cycle of a disposable coffee cup, which is discarded after a single use

Item 5.6- Attachment 2 Page 87

Figure 24: Life Cycle of products



Australia's Circular Economy Framework, Department of Climate Change, Energy, the Environment and Water, Canberra, December 2024

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Items made from post-consumer materials (such as second-hand goods) or those that can be easily recycled typically have a much lower environmental impact than products made from raw materials that end up in landfill.

Understanding the embodied energy in a product can help us to make more informed purchasing decisions such as using reusable coffee cups, purchasing lower intensity products or purchasing goods second hand.

Item 5.6- Attachment 2 Page 89

Is Recycling the Solution?

Recycling plays a vital role in waste management in Western Australia, but it alone is not a comprehensive solution. Recycling helps to reclaim some of that embodied energy to extend the life of the resources within a new product. In theory, recycling helps us to remove less resources from the ground and all of the energy savings that go with that.

While recycling helps reduce the amount of waste sent to landfill, conserves resources, and lowers environmental impact, it is just one part of a broader waste management strategy.

Recycling efforts to address the growing volume of waste must be accompanied by greater efforts to progress to a more circular economy, which emphasises waste avoidance, material reuses, innovative resource sharing and designing for longevity. Reducing single-use plastics, improving waste sorting, and boosting public awareness are also essential for effective waste management. Without these strategies, recycling alone won't solve the state's waste challenges.

Resource recovery options help to reclaim value from materials, thereby offsetting some of the environmental impacts of extracting and processing raw materials.

FOGO Success

Vincent's move to FOGO in 2021 has been a big success. It has resulted in a huge reduction in the amount of product sent to landfill which directly reduces our CO2 and methane emissions. Vincent has collected over 10,000 tonnes of food and organic product which would otherwise have gone to landfill since the introduction of the program.

Reclaiming food and organic matter for processing through FOGO composting is a great strategy for reducing emissions when compared with landfill, given:

- CO2: FOGO produces a very small amount of CO2 when compared with landfill.
- Methane: Unlike landfill which produces high volumes of methane, almost none is produced during composting. Methane is up to 87 times more
 potent than CO2 when measured over a 20-year period.

FOGO is also a wonderful way to localise processes as it can be collected, processed and then reused very locally unlike even recycling can. The compost produced from FOGO material can be sold to farmers and industry, used in parks and gardens or for rehabilitating land.

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Objective 9

Waste Less

Vincent is taking bold steps toward a waste-free future with new targets aimed at reducing all waste - including landfill and recycling. We will do this by embracing circular economy principles. As a community, we are committed to cutting overall waste production, encouraging reuse, repair, and sustainable consumption while phasing out unnecessary product being discarded. By investing in innovative solutions, supporting businesses in waste reduction, and engaging the community in responsible waste management, we are paving the way for a cleaner, greener, and more sustainable future.

2030 Targets

10% reduction in total waste generation per household compared to 2024 baseline

Total waste to landfill reduced by 85% compared to 2024 baseline

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Objective 10

Recover more

Recycle, Redistribute and Reuse

Vincent is committed to diverting valuable materials from landfill. This means more reuse, more to FOGO, recycling and processing facilities - and subsequently less to landfill.

Focus materials

The following materials have the greatest potential for reuse and recovery and will be a priority in the City's work and education within the community:

- · Construction and demolition materials: concrete, asphalt, rubble, bricks, sand and clean fill.
- Organics: food organics and garden organics (FOGO).
- Metals: steel, non-ferrous metals, packaging and containers.
- Paper and cardboard: office paper, newspaper and magazines.
- · Plastics: packaging and containers.

2030 Target

Material recovery increased to 85%

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Objective 11

Lead in Circularity

Sustainable and Responsible Operations

When we plan to minimise waste, we often look at the waste that we can see and that we feel we have direct control over, like the items we put into our kerbside bins. However, often unnecessary waste creation and irresponsible resource use is embedded into the manufacturing process of the items we purchase.

Sustainable procurement refers to the process of purchasing goods and services in a way that minimises environmental impact, promotes social responsibility, and supports economic viability. It involves considering the entire lifecycle of products, from sourcing raw materials to disposal, and opting for options that have lower carbon footprints, use fewer resources, and produce less waste. By integrating sustainability into procurement practices, organisations can contribute to reducing environmental degradation, supporting local communities, and encouraging businesses to adopt more sustainable and ethical practices. Ultimately, sustainable procurement helps to drive long-term value for both organisations and society.

Vincent will work hard to position itself as a leader in sustainable and ethical procurement. We will reduce our environmental footprint by considering resource conservation and waste minimisation throughout all our practices and operations.

2030 Target

100% of City operations and projects embed circular economy principles and support sustainable supply chains

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Enhanced Environment Strategy – Summary of Objectives & Targets

OBJECTIVES	TAR	GETS
WATER CONSERVATION & MANAGEMENT - A WA	TER SE	INSITIVE VINCENT
Waterwise Community and Council	1	10% reduction in water use per person, per property.
Water Efficient Vincent	2	5% reduction in scheme water consumption across Vincent's operations (excluding Beatty Park).
	3	10% reduction in water usage, per patron, at Beatty Park.
	4	10% reduction in ground water consumption across Vincent's operations.
Water Sensitive Urban Design	5	Embed WSUD principles for all projects to improve the management, capture and reuse of stormwater drainage and infiltration in City buildings, parks and assets.
	6	50% reduction in scheme water use for new residential developments and 25% for new commercial developments compared to Boorloo's (Perth's) average.
	7	Include climate change impacts and undertake a community risk assessment as part of the CTAP.
Healthy Waterways and Thriving Ecosystems	8	Protect and enhance the health of the Derbal Yirragan (Swan River) and the local and surrounding wetlands (Hyde Park & Lake Monger).
URBN GREENING & BIODIVERSITY - A GREENER		
Shady Spaces & Places	10	Total tree canopy on City owned and managed land increased to: • 25% by 2030; and • 30% by 2040; with a focus on strategic locations including town centres, key pedestrian and cyclist corridors, and around schools and other neighbourhood infrastructure to support vulnerable members of our community. 90% survivability rate for new trees planted.
	11	New planting to include 75% Australian species (with a preference for Western Australian species).
Greener Private Spaces	12	Total canopy cover on private land of: 12% by 2030; and 18% by 2040.
	13	Retention of mature canopy trees on private land by compared to 2024 baseline data by: • 5% by 2030; and • 10% by 2040.
Dial Down the Heat	14	Reduce hardstand surfaces in the public realm by 10% by 2035.
	15	Reduce urban heat island impacts through targeting the planting of new street trees along underground power routes.
Boost Biodiversity	16	Improve the urban biodiversity corridor extending from Lake Monger to the Derbal Yirragan (Swan River) to support plants, wildlife and insects to thrive.
RESOURCE CONSERVATION & WASTE - A CIRCU	LAR VII	NCENT
Waste Less	17	10% reduction in total waste generation per household compared to 2024 baseline.
	18	Total waste to landfill reduced by 85% compared to 2024 baseline.
Recover More	19	Material recovery increased to 85%.
Lead in Circularity	20	100% of City operations and projects embed circular economy principles and support sustainable supply chains.

2023-2024 SES Update

Waste	Metric	Unit of	Baseline	2023/24	Target	Target	Status	Comment
		measure	2017/18	Update		Year	Tracking	
City	Total waste to	Tonnes	9,530	5,563.3	0	2028	Ongoing	Reduced by 41.6% from 2017/18 baseline.
Operations	landfill							
&								This was largely achieved through the City's introduction of the FOGO program in 2021.
Community								
								Large landfill reductions are challenging given the limited control over resident disposal behaviour.
	Greenhouse gas	Tonnes of	2,235	442	223.5	2028	Ongoing	Reduced by 80.2% from 2017/18 baseline.
	emissions	CO2						
	associated with the	equivalent						This is a successful reduction however it is unlikely that this target will be met. This is due to the growing
	breakdown of	per year						population of Vincent which will generate greater levels of food organics. New metrics in a future target to
	organic waste							consider emissions abated from landfill.

Water	Metric	Unit of measure	Baseline 2017/18	2023/24 Update	Target	Target Year	Status Tracking	Comment
City	Total scheme water	Kilolitres	67,356	81,987	67,356	2023/24	Did not	Increased by 21.7 percent from 2017/18 baseline.
Operations	use by City-owned	per year					meet	
	facilities						target	Many of our sporting facilities saw an increase in patronage over this time. For example, Beatty Park saw a 70%
								increase in patronage between 2017/18 and 2023/24. Increased patronage results in increased water use.
								Future reporting will consider Beatty Park separately.
	Groundwater use	Kilolitres	7,357	8,204	6,989.15	2024	Did not	Increased by 11.2% from 2017/18 baseline.
	(average across all	per					meet	
	irrigated areas)	hectare					target	Parks team continue to reduce ground water consumption. Irrigation upgrade program continues.
		per year						Th. 0000/04
								The 2023/24 summer was the longest and driest Summer on record with a total of 23 millimetres of rain
								recorded between October 2023 to end of April 2024. To maintain sports turf for public safety and to prevent
0	0	Wil a litura a	00.00	100	00	2024	Didnet	the loss of significant trees around our POS irrigation systems had to stay on longer.
Community	Community scheme	Kilolitres	96.86	103	90	2024	Did not	Increased 6% from 2017/18 baseline.
	water use	per person					meet	The 2022/24 figure of 102kl, was a significant increase on 2022/22 figure of 91kl. Prior to this there was a
		per year					target	The 2023/24 figure of 103kL was a significant increase on 2022/23 figure of 81kL. Prior to this there was a previously decreasing trend. The very hot summer of 2023/24 has influenced this data in the final year of
								comparison.
	Domestic	Kilolitres	715,000	N/A	594,279	2024	Unknown	Domestic bores are not metered and the City has been unable to source data to report on this target.
	groundwater use	per year	7 10,000	11//	004,270	2024	CHKHOWH	Domestic bores are not metered and the only has been dilable to source data to report on this talget.
	groundwater use	pc. year						

Urban	Metric	Unit of	Baseline	2023/24	Target	Target	Status	Comment
Greening,		Measure	2017/18	Update		Year	Tracking	
Biodiversity								
City	Tree canopy cover on	Percentage	21.45	19 (2020)	23.3	2023	Unknown	Decreased by 11.4 percent from 2017/18 baseline.
Operations	public land							
								The data source to track this target is the DPLH which has not published the canopy figures since 2020.
								This data was previously scheduled for issue every two years. Currently awaiting updated data to finalise
								2024 progress.
	Number of street trees	Trees	13,000	15,745	14,900	2023	Target met	Increased by 21.1 percent from 2017/18 baseline.
							and	
							exceeded	15,745 total street trees were planted by 2023/24, beyond the original target of 14,900 trees.
	Length of greenways	Kilometres	25	26.6	26.50	2023	Target met	Increased by 6.4 percent from 2017/18 baseline.
	established within the							
	City							This target was achieved by 2022/23 reporting period with no additional greenways added in 2023/24. The
								City is close to reaching capacity in its greenways extension project.
	Area of eco-zoning	Square	49,549	133,369	69,549	2023	Target met	Increased by 169.2 percent from 2017/18 baseline.
	completed	metres					and	
							exceeded	

								This was led by the highly successful eco-zoning program including the conversion of around 1 hectare of unusable turf at Charles Veryard to waterwise garden.
								unusable turi at Charles veryaru to waterwise garden.
								Around 4,000 of tube stock specimens were planted by 2023.
Community	Tree canopy cover on	Percentage	10	9 (2020)	7.5	2023	Unknown	Decreased by 1 percent from 2017/18 data.
	private land							
								The data source to track this target is the DPLH which has not published the canopy figures since 2020.
								This data was previously scheduled for issue every two years. Currently awaiting updated data to finalise
	<u> </u>							2024 progress.

Greenhouse	Metric	Unit of	Baseline	2023/24	Target	Target	Status	Comment
gas		measure		Update		Year	Tracking	
emissions								
City	Net greenhouse gas	Tonnes of	8,383	4,332	0	2030	Ongoing	Decreased 48.3 percent from 2017/18.
operations	emissions from	CO2		(2022/23)				
	operational energy,	equivalent						Currently awaiting updated greenhouse gas data to finalise 2024 progress.
	operational transport	per year						
	and municipal waste							

Energy	Metric	Unit of	Baseline	2023/24	Target	Target	Status	Comment
		Measure		Update		Year	Tracking	
City	Solar PV installed on	Kilowatts	37.50	> 434.7	400	2024	Target	Increased 1,060 percent from 2017/18.
Operations	City-owned buildings						met and	
							exceeded	A 100kw solar PV array was installed on the Department of Local Government and Communities building
								(City owned) in 2023 which supported achieving this target.
	Solar energy generation	Megawatt	58.7	526	589.80	2024	Target	Increased 796 percent from 2017/18.
	on City-owned	hours per		(2022/23)			met and	
	buildings	year					exceeded	100kw system was added as above, which indicates that the target is likely to have been exceeded.
								Currently awaiting updated data to finalise 2024 progress.
	Greenhouse gas	Tonnes of	5,374.8	3,697.2	4,434.2	2024	Target	Decreased 31.2 percent from 2017/18.
	emissions from	CO2					met and	
	electricity and gas used	equivalent					exceeded	This was supported by a very successful solar PV and green energy purchasing program.
	by the City's operations	per year						
Community	Average grid-supplied	Kilowatt	13.26	13.29	11.93	2024	Target not	Increased by 0.2 percent from 2017/18.
	household electricity	hours per					met	
	use	day					_	Values fluctuate likely due to annual climatic conditions.
	Percentage of	Percentage	10.5	16.5	15%	2024	Target	Increased by 57 percent from 2017/18.
	residential electricity						met and	As a second to a discretification of the Color Color of the color of t
	accounts with solar PV systems						exceeded	An upward trend in residential solar PV installation has contributed to target being met and exceeded.
	Estimated installed	Kilowatts	7,638	16,989	12,355	2024	Target	Increased by 122 percent from 2017/18.
	solar capacity						met and	
							exceeded	As above.
	Estimated electricity	Megawatt	12,266.6	25,540	19,842	2024	Target	Increased by 108 percent from 2017/18.
	displaced from the grid	hours per		(2022/23)			met and	
	by Vincent households	year					exceeded	As above.
	using solar PV							
	Greenhouse gas	Tonnes of	9,200	14,558	14,882	2024	Target	Increased by 58.2 percent increase from 2017/18.
	emissions avoided	CO2		(2022/23)			met and	
		equivalent					exceeded	Currently awaiting updated data to finalise 2024 progress.
		per year						

Transport	Metric	Unit of	Baseline	2023/24	Target	Target	Status	Commentary
		measure		Update		Year	Tracking	
City	Percentage of the City's	Percentage	97%	92%	50%	2024	Target	Decreased by 5.4 percent from 2017/18.
Operations	passenger vehicle fleet						not met	
	with tailpipe emissions							The City has 36 vehicles total: 33 hybrids and 3 EVs. The vehicle policy has now been reviewed, so the
								composition of the fleet will be changing with the upcoming EV transition plan.
Community	Percentage of Vincent	Percentage	33%	23%	42%	2026	Unknown	Decreased by 33.3 percent from 2017/18.
	residents who use active			(2021)				
	or public transport to							Data is based on census. 2021 census data is likely skewed from Covid-19 Pandemic. The next census is
	commute							in 2026.
	Percentage ownership of	Percentage	0.065%	0.79%	1%	2024	Unknown	Increased by 1115 percent from 2017/18.
	zero emission vehicles by			(2022/23)				
	the community							Currently awaiting updated data to finalise 2024 progress.



Our Greenhouse Gas Emissions

As part of our Sustainable environment strategy 2019-2024, we identified the reduction of greenhouse gas emissions as a Key Opportunity Area, which included setting a net zero target of 2030 for the City's operational emissions. In response to this, we commissioned work to develop a comprehensive emissions account to understand our emissions profile and to help inform our emission reductions strategy.

To support our net zero ambition, a robust greenhouse gas emissions account was built as an important foundation for understanding the quantity and sources of emissions generated by the City¹.

The City's emissions are captured as direct or indirect emissions, categorised as *emission scopes*, where each scope refers to the nature of the emissions (direct or indirect). The City's emissions include:

- Scope 1 Direct emissions from the City's consumption of natural gas, vehicle fuels and refrigerants
- Scope 2 Indirect emissions from the generation of electricity the City consumes.
- Scope 3 Indirect emissions from the City's broader value chain, including waste, procurement, employee travel, and transportation and distribution services.

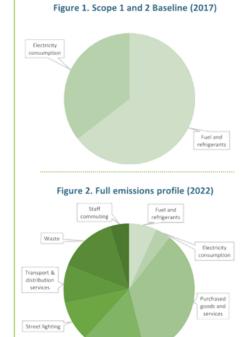
In 2017² we collected emissions data for the first time and developed an internal emissions account to understand our emissions baseline and inform emissions reduction planning; this initial work enabled us to set a net zero target for our operational (scope 1 and 2) emissions.

In 2024 we commissioned an independent review of our 2017 emissions account to formalise a scope 1 and 2 baseline and to evaluate our current progress against our net zero target. As part of this work, we have broadened our emissions account to include a comprehensive account of our scope 3 emissions, using available data beginning in 2022.

Figures 1 and 2 show the high-level relative makeup of the 2017 and 2022 emissions footprints, which form baselines against which our current and ongoing emissions reduction progress can be measured.



^{2.} Emissions account years refer to financial years July 1 through June 30.



Capital goods

How we have progressed so far

Scope 1 and 2 operational emissions have seen significant reductions, with Scope 2 emissions in particular reflecting strong policy outcomes through our purchase of 100% renewable energy for several key City assets.

Figure 3 shows the change in tonnes of $\rm CO_2\text{-}e^3$ emissions from 2017 to 2022. There was a net decrease of 51% in Scope 1 emissions from 2017 to 2022 and an 87% reduction over the same period for Scope 2 emissions.

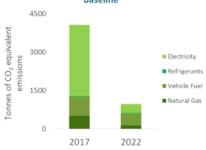
The calculation of a scope 3 baseline for 2022 is also a significant milestone in our net zero journey.

What will we do next?

We are examining a range of recommendations to improve energy efficiency and operational emissions reduction, which complement or expand upon initiatives already underway, including:

- Explore opportunities for electrification
- Procurement policies for low-carbon materials
- Adopt low global warming potential refrigerants
- Increased renewables in our energy supply
- Geothermal plant risk assessment & readiness
- Light vehicle fleet transition
- Explore streetlight conversion with our partners
- · Electrification and energy efficiency in assets

Figure 3. Scope 1 and 2 reductions from baseline



With our scope 3 baseline established, we can explore setting an ambitious and achievable net zero target for our broader value-chain emissions and develop action plans to reduce emissions that are indirectly produced by the City's activities.

As part of our commitment to reducing our emissions, we will work to continuously improve the accuracy of our emissions account, review our progress against our targets and assess whether our reduction efforts are aligned with the best interests of our community.

3. CO₂-e (carbon dioxide equivalent) is a metric that standardises various greenhouse gases based on their global warming potential (GWP) relative to CO₂, allowing emissions from different gases to be compared on a common scale.

Our emissions baselines will enable us to

- Set targets for scope 3 emissions
- · Identify decarbonisation pathways
- · Track our progress against our targets

Although emissions accounting is an important part of tackling our transitional climate related risk as a Local Government, this is only one component of the task that lies ahead for us. A more wholistic and overarching response to climate change is needed to ensure our resilience as a Local Government.

We will continue to explore a strategic response to governance processes and abatement as well as a tactical response to reporting & transparency, verification of emissions accounts and process improvements.

The City of Vincent is committed to climate action and the long-term health and vibrancy of our communities. The preservation of our planet for future generations is in our hands.