

ITEM 1

PUBLIC EXHIBITION - DRAFT WOLLONGONG DCP CHAPTER A2 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

On 15 December 2009, Council adopted the Wollongong Development Control Plan (DCP) 2009. The DCP came into force on 3 March 2010, following the commencement of the Wollongong Local Environmental Plan (LEP) 2009.

The DCP includes Chapter A2: Ecologically Sustainable Development. A review of the chapter has been undertaken in response to actions detailed in the Sustainable Wollongong 2030 – A Climate Healthy City Strategy, and Climate Change Mitigation Plan 2023 -2030. The chapter review also aligns with actions in the Climate Change Adaptation Plan 2022 and Urban Heat Strategy 2023.

It is recommended that Council endorse the draft Wollongong DCP Chapter A2: Ecologically Sustainable Development for public exhibition.

RECOMMENDATION

- 1 The Draft Wollongong Development Control Plan 2009 – Chapter A2: Ecologically Sustainable Development be exhibited for a minimum of 28 days commencing in early 2025.
- 2 Following the exhibition period, a report outlining the submissions received from the public exhibition process be prepared for Council's consideration.
- 3 The General Manager write to relevant State Government Ministers seeking -
 - An expansion of its consideration of ESD to include urban heat, health and social equity objectives and specific provisions in relevant State planning instruments, and
 - to clarify its position in relation to banning the use of gas where other alternatives such as electricity are available

REPORT AUTHORISATIONS

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ATTACHMENTS

- 1 draft Development Control Plan Chapter A2 - Ecologically Sustainable Development
- 2 Climate Friendly Planning Framework Review Discussion Paper
- 3 Community Engagement Report

BACKGROUND

The Wollongong Development Control Plan (DCP) 2009 came into force on 3 March 2010, following the commencement of the Wollongong Local Environmental Plan (LEP) 2009.

On 21 November 2016, Council adopted Chapter A2: Ecological Sustainable Development which commenced on 14 December 2016. The chapter was introduced following a sustainability review of the DCP. Seven other DCP chapters were also updated as part of the 2016 review.

The Sustainable Wollongong 2030 – A Climate Healthy City Strategy, Climate Change Mitigation Plan 2023 -2030, Climate Change Adaptation Plan 2022 and Urban Heat Strategy 2023 contain actions related to the review of Council's Development Control Plan detailed in Table 1 below -

Document	Action
Sustainable Wollongong 2030 – A Climate Healthy City Strategy	L3 Incorporate sustainability principles, requirements and standards into all decision making, including strategic planning projects and documents, asset management planning, procurement processes, licence and lease agreements for Council-owned facilities.

Document	Action
	<p>L4 Review and update development controls and associated policy to encourage environmentally sustainable development, including water efficiency, energy efficiency, use of renewable energy, and integrated transport management.</p> <p>L5 Advocate for stronger sustainability requirements in Federal and State Government planning controls.</p> <p>C3 Update the Water Sensitive Design chapter in the DCP.</p>
Climate Change Mitigation Plan 2023 – 2030	<p>EC5 Review Council's planning documents and guidelines to increase sustainability principles where feasible.</p> <p>EC6 Provide sustainable buildings guidelines.</p> <p>EC11 Increase public and active transport availability and options via delivery of infrastructure, strategies and planning provisions.</p>
Climate Change Adaptation Plan 2022	<p>Strategic land use planning must ensure adequate new greenspace is provided as part of land releases and protect riparian corridors from urban development.</p> <p>Strategic and statutory planning to consider open space, land use and design requirements to address heat.</p>
Urban Heat Strategy 2023	<p>Consider urban heat more clearly and comprehensively in updates to DCP and other urban planning documents.</p>

Table 1: Key supporting documents and relevant endorsed actions related to the review of Council's DCP

In late 2021, the Sustainable Planning Framework Review Project was initiated. This included a review of comparable local, state and federal government planning provisions and associated research. Some of the themes that emerged related to the health and cost benefits relating to the use of electricity rather than gas for cooking and heating. These saving come from rising costs due to aging gas network infrastructure, reduced electricity costs from increased renewable energy penetration (ie, solar photovoltaic systems), and greater efficiencies from electric appliances. From a social perspective, a well-managed transition to electrification will ensure equitable access to the known cost saving.

The Sustainable Planning Framework Review Project led to the Climate Friendly Planning Framework Discussion Paper being developed, which was exhibited in June 2022. The Discussion Paper presented five key focus areas: Landscaping and Urban Greening, Solar and Energy Efficiency, Material, Building Form and Waste, Transport and Car Parking, Policies, and Incentives (Attachment 2).

Twenty-six submissions were received, and the responses were used to improve our understanding of community priorities for sustainability reforms (Attachment 3).

A project control group comprising relevant managers from across the organisation was subsequently established. Several workshops were held in May and June 2024 with Council staff and industry representatives.

PROPOSAL

Chapter A2 – Ecologically Sustainable Development is an introductory chapter of the DCP. It serves to provide context for how Council considers the principles of ESD as part of its decision-making process. The chapter has been updated to outline the principles and key objectives relating to ESD considerations and provides examples of how to satisfy the objectives. When lodging a Development Application, the proponent is required to demonstrate how the principles of ESD have been incorporated into their building design and / or construction principles.

The draft Chapter A2 is provided as Attachment 1. The chapter has been substantially rewritten rather than amended given the recent change in DCP format. The draft chapter provides relevant legislative context and removes provisions which are duplicated elsewhere in the DCP.

The ESD principles and objectives applicable to residential development are summarised in Table 2 below:

ESD Principle	Objective
Indoor amenity	Ensure building occupants health and wellbeing is protected Improve indoor air quality and avoid the generation of harmful airborne byproducts associated with the consumption of natural gas or other fossil fuels
Equitable access to low emission equipment and appliances and renewable energy	Support development that demonstrates a high level of energy efficiency through energy sourcing, storage and equitable access by occupants.
Reduced building operational costs and promote a transition to a low waste and emissions lifestyle	Promote the health and economic benefits of living sustainably. Encourage and enable a transition to a low waste and emissions lifestyle. Encourage and enable opportunities for on-site food production.
Reduce the negative impacts of urban heat	Promote urban cooling and minimise the heat island effect. Support the health of occupants by designing buildings to perform well in hot and extreme weather events.

Table 2: ESD Principles and Objectives as outlined in draft Chapter A2

Examples of how to satisfy the ESD principles and objectives are provided in the draft Chapter A2 to guide applicants in addressing ESD in their development applications.

In addition to Chapter A2, there are general ESD and sustainability provisions throughout the DCP. Some of these provisions were introduced as part of the 2016 DCP review and others have been introduced more recently. For example, Chapter B2: Residential Subdivision has an objective relating to ESD and provisions relating to lot layout for aspect and solar access, and Chapter D13: Wollongong City Centre Precinct includes objectives relating to creating a sustainable urban environment as well as provisions relating to energy efficiency and water conservation for residential and non-residential development.

It is proposed that individual chapters of the DCP be reviewed over time to incorporate contemporary sustainability controls. This approach is expected to lead to timely integration of key controls related to electrification, local renewable energy production, reduction of urban heat and EV charging requirements.

The schedule of DCP Chapter reviews underway as described in Table 3 below -

DCP Chapter	Scheduled Review
A1: Introduction	On 28 October 2024 Council resolved to exhibit updated draft DCP chapter. Draft chapter exhibited 4 November – 9 December 2024.
D13: Wollongong City Centre	Due to be reported to Council in early 2025.
D16: West Dapto	Regularly updated as new stages of West Dapto Urban Release Area are initiated.

DCP Chapter	Scheduled Review
E3: Car Parking, Access, Servicing/Loading Facilities and Traffic Management	Currently under review. Expected to be reported to Council in early to mid-2025.
B1: Residential Development	Currently under review. Expected to be reported to Council in late 2025.
B4: Development in Centres and Peripheral Sales Precincts	Currently under review. Expected to be reported to Council in mid to late-2025.
B5: Industrial Development	Currently under review. Expected to be reported to Council in late 2025.
E7: Waste Management	Currently under review. Expected to be reported to Council in mid to late-2025.
E15: Water Sensitive Urban Design	Currently under review. Expected to be reported to Council in mid to late-2025.

Table 3: List of Wollongong DCP Chapters relevant to ESD currently scheduled for review

It should be noted that the draft Chapter A2 provisions will relate to the assessment of new development. A retrospective application of the provisions to existing development is not proposed.

It is acknowledged that additional technical material will be necessary to inform the building design process and detail the outcomes required for certain sustainability provisions (ie, appropriate solar reflective index for roofs, additional setback to support airflow etc). Such information will be made available on Council's website as they are developed. The technical material will improve public education and will be available to also influence those developments that progress through the complying development certification planning approval pathway.

It is proposed that the draft Chapter A2 – Ecologically Sustainable Development be exhibited for a minimum of 28 days

CONSULTATION AND COMMUNICATION

The draft Chapter A2 is an output of a broader piece of work which has included the public exhibition of a Climate Friendly Planning Framework Discussion Paper in June 2022 and multiple workshops with internal staff from May to June 2024. The sustainability review has been led by a project control group including representatives from across the Planning and Environment Division of Council.

Further consultation will occur with staff as draft sustainability controls are proposed for other DCP chapters scheduled for review.

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Our Wollongong 2032 Objectives “We value and protect our environment” and “We have a healthy community in a liveable city”. It specifically delivers on the following –

Community Strategic Plan	Delivery Program 2022-2026
Strategy	Service
Goal 1 - We value and protect our environment	Land Use Planning
1.5 Maintain the unique character of the Wollongong Local Government Area, whilst balancing development, population growth and housing needs	
Goal 5 - We have a healthy community in a liveable city	
5.2 Urban areas are created and maintained to provide a healthy and safe living environment for our community.	

SUSTAINABILITY IMPLICATIONS

The draft Chapter A2 provides clear principles, objectives and examples of how to satisfy the objectives to guide proponents when considering ESD as part of their development proposal. The DCP provisions seek to facilitate a transition to a low waste and emission lifestyle with building occupants able to enjoy the health and cost benefits associated with living in a sustainable building.

RISK MANAGEMENT

The draft Chapter A2 aligns with Council's current supporting documents such as the Sustainable Wollongong 2030, Climate Change Mitigation Plan and Climate Change Adaptation Plan.

The DCP provisions will assist Council to meet its legislative obligations under the *Local Government Act 1993* and *Environmental Planning & Assessment Act 1979* to consider ESD principles in decision-making about environmental planning and assessment.

When the draft Chapter A2 is exhibited, it is important to explain the sustainability measures being considered for various relevant chapters of the DCP and that these chapters will be exhibited separately.

FINANCIAL IMPLICATIONS

There is no financial implication for Council to progress this work. All resourcing cost have been covered by the operational budget for the City Strategy Division.

CONCLUSION

A review of the Wollongong DCP Chapter A2: Ecologically Sustainable Development has been conducted as part of a broader review of how Council development controls can support the sustainability of our community. The chapter has been amended to highlight the key objectives of ecologically sustainable development in the Wollongong LGA. Detailed development controls related to sustainability are planned to be integrated into scheduled updates of relevant chapters of the DCP.

It is recommended that the draft Chapter A2: Ecologically Sustainable Development be endorsed for exhibition for a minimum period of 28 days. Following the exhibition period, all submissions will be reviewed, and any post exhibition amendments will be reported to a future Council meeting for consideration prior to adoption.



Part A – Introduction

Chapter A2 Ecologically Sustainable Development

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Document Control

Rev No.	Adoption Date	In Force Date	Revision Details
	21/11/2016	14/12/2016	New Chapter resulting from sustainability review of DCP.
	Insert date	[Comments]	

Chapter A2 Ecologically Sustainable Development

1. INTRODUCTION

Under the *Local Government Act 1993*, the consideration of Ecologically Sustainable Development (ESD) principles is a guiding principle for Council's when exercising their decision-making functions. The four pillars of ESD are environmental, social, economic and governance considerations.

The *Environmental Planning and Assessment Act 1979* (EP&A Act) similarly requires ESD considerations in decision-making about environmental planning and assessment. The EP&A Act also seeks to promote good design and amenity of the built environment with an aim to protect the health and safety of their occupants.

The DCP provisions relating to ESD are consistent with the vision and goals in our Community Strategic Plan relating to a healthy community and liveable city.

Wollongong City Council has developed several supporting documents related to achieving ESD including:

- Sustainable Wollongong 2030 A Climate Healthy City Strategy
- Wollongong Climate Change Mitigation Plan 2023-2030
- Wollongong Climate Change Adaptation Plan 2022
- Wollongong Urban Heat Strategy 2023
- Wollongong Urban Greening Strategy 2017-2037
- Wollongong Waste and Resource Recovery Strategy 2024-2034
- West Dapto Open Space Design Manual
- West Dapto Open Space Technical Manual.

Council has an ongoing program of developing and updating supporting documents to ensure they remain relevant. Council's website should be consulted for the latest list and version of supporting documents that may be relevant to your proposal.

2. BACKGROUND

In NSW the sustainable performance of buildings is largely governed by the National Construction Code and State policy.

The Building Sustainability Index (BASIX) was introduced in 2004 to measure the sustainability performance of households. Over time the development thresholds (i.e. type of building and value of construction) to which the BASIX requirements apply, have evolved to capture more development. The sustainability targets applied to development have also increased over time. The BASIX requirements now form part of the Sustainable Buildings State Environmental Planning Policy (SEPP) which commenced on 1 October 2023.

The SEPP includes a provision that gives no effect to an environmental planning instrument or DCP that seeks to further reduce consumption of mains-supplied potable water or greenhouse gas emissions related to the use of a residential building. The BASIX requirements do not stipulate a specific product or solution to meet the sustainability targets but maintains the freedom to choose amongst various options. This includes options relating to the household energy source(s).

The provisions of this DCP Chapter seek to inform design choice by highlighting the health and economic benefits of living in a sustainable and all-electric household. Council also encourages applicants to go beyond the minimum requirements for their development to increase the sustainability and environmental performance of our built environment.

Chapter A2 Ecologically Sustainable Development

3. OBJECTIVES

The objectives of this Chapter are:

- a) To support development that contributes to the sustainable future of our City and Wollongong community target of net zero greenhouse gas emissions by 2050.
- b) Require proponents to demonstrate that ESD principles have been considered in the built form design of proposed development.
- c) Encourage and promote development that sets new benchmarks for the resilience, health, and wellbeing of building occupants through:
 - i) improvement to indoor air quality
 - ii) equitable access to low emission equipment and appliances
 - iii) reduced building operational costs and encourage a transition to a low waste and emissions lifestyle
 - iv) measures to reduce the negative impacts of heat.

4. HOW TO USE THIS CHAPTER

When determining a development application, a consent authority is required under section 4.15 of the EP&A Act, to consider the likely impacts of that development, including environmental impacts on both the natural and built environments, the social and economic impacts in the locality and the public interest.

Council expects the principles of ESD to be a consideration for all relevant development in Wollongong Local Government Area.

This chapter outlines the ESD principles and objectives that proponents for new development must consider and address as part of their development application. Examples of how to satisfy the ESD objectives are also provided in this chapter. The listed examples are not meant to be exhaustive and a proponent may nominate alternative sustainable design elements for consideration.

5. RELATIONSHIP WITH OTHER PLANS AND POLICIES

Development controls that align with the principles of ESD have been integrated into relevant sections of this DCP. This chapter must be read in conjunction with other relevant chapters. This chapter reflects recent developments in federal and state government policies as well as the strategic direction of Wollongong City Council. ESD principles are considered in each update of the Wollongong DCP.

6. PRINCIPLES

6.1 Residential Development (including subdivisions)

In deciding whether to grant consent to residential development, Council requires an application to demonstrate how ESD principles have been considered as part of the building design and fit out to enhance the health and safety of its future occupants.

Applicants must demonstrate that consideration has been given to incorporation of the following options into any new development:

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6.1.1 Indoor Amenity

Objectives

- a) Ensure building occupants health and wellbeing is protected with suitable choices being made at building design and construction phase.
- b) Improve indoor air quality and avoid the generation of harmful airborne byproducts associated with the consumption of natural gas or other fossil fuels.

Examples of how to satisfy the objectives

- 1) Provide all-electric appliances for indoor cooking and heating
- 2) Ensure habitable rooms are provided with natural ventilation and cross ventilation where possible
- 3) Include ceiling fans to facilitate greater ventilation and air flow

6.1.2 Equitable access to low emission equipment and appliances

Objectives

- a) Support development that demonstrates a high level of energy efficiency through energy sourcing, storage and equitable access by occupants.

Examples of how to satisfy the objectives

- 1) Design building orientation, envelope, and openings to increase energy efficiency
- 2) Select energy efficient systems, equipment and appliances
- 3) Support the generate of renewable energy onsite through solar photovoltaic systems and / or purchase offsite renewable energy
- 4) Incorporate appropriate roof structures to accommodate and access equipment for cleaning and maintenance on relevant buildings
- 5) Consider spatial and equitable access requirements for renewable energy storage or other energy management systems
- 6) Consider the provision of infrastructure that promotes active and low emission transport options including electric vehicle and e-bike charging facilities
- 7) Residential subdivision in urban release areas are designed to promote active transport as the primary choice for short journeys and demonstrate key connections to public transport
- 8) Residential subdivision design in urban release areas include appropriate allocated space and land easement requirements to house associated renewable energy infrastructure such as community batteries and solar photovoltaic systems

6.1.3 Reduced building operational costs encourage a transition to a low waste and emissions lifestyle

Objectives

- a) Promote the health and economic benefits of living sustainably.
- b) Encourage and enable a transition to a low waste and emissions lifestyle.

Chapter A2 Ecologically Sustainable Development

Examples of how to satisfy the objectives

- 1) Rationalise household energy sources to promote all-electric buildings and avoid gas supply and disconnection charges
- 2) Prioritise passive solar design to maximise thermal comfort and minimise energy consumption for heating and cooling
- 3) Use materials that are durable, reducing the need for replacement
- 4) Consider a flexible approach to the allocation and suitable adaptable use of car parking spaces for occupants that do not rely upon vehicle ownership for their transportation needs
- 5) Specify water efficient fixtures, fittings and equipment
- 6) Support access to Food Organics (FOGO) waste collection through building design
- 7) Integrate opportunities for food production into medium to high density residential development including planter boxes, roof-top gardens and irrigation
- 8) Consider landscaping that incorporates edible plants such as fruit trees, nuts and herbs
- 9) Residential subdivisions in urban release areas include the installation of energy storage technologies such as community batteries to maximise the use of locally generated renewable electricity

6.1.4 Measures to reduce the negative impacts of heat

Objectives

- a) Promote urban cooling and minimise the heat island effect.
- b) Support the health of occupants by designing buildings to perform well in hot and extreme weather events.

Examples of how to satisfy the objectives

- 1) Generate and store renewable energy onsite and minimise peak electricity demand supplied from the electricity network / grid
- 2) Select appropriate roof colours for the locality to maximise the solar reflective index
- 3) Encourage the retention of existing mature trees and use of native landscaping in residential subdivision design
- 4) Locate landscaping and green cover to maximise cooling of the private open space and adjoining public realm
- 5) Optimise urban cooling through green infrastructure placement and street orientation to catch prevailing breezes
- 6) Subdivision design in urban release areas include appropriate allocated space for an interlocking tree canopy to be established over time
- 7) Incorporate additional building setbacks to support airflow in urban areas

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6.2 Non-residential Development

In deciding whether to grant consent for certain non-residential development, Council requires an application to address the relevant assessment provisions outlined in the Sustainable Buildings SEPP. An extract of the SEPP provisions that must be addressed is provided below:

- (a) the minimisation of waste from associated demolition and construction, including by the choice and reuse of building materials,*
- (b) a reduction in peak demand for electricity, including through the use of energy efficient technology,*
- (c) a reduction in the reliance on artificial lighting and mechanical heating and cooling through passive design,*
- (d) the generation and storage of renewable energy,*
- (e) the metering and monitoring of energy consumption,*
- (f) the minimisation of the consumption of potable water.*

In addition to this requirement, applicants are encouraged to consider if any of the examples provided under the residential development section of this chapter can be incorporated into their non-residential development plans.



Wollongong City Council

Climate Friendly Planning Framework Review Discussion Paper



Acknowledgement of Country

We acknowledge the Traditional Custodians of the land on which our city is built, Dharawal Country. We recognise and appreciate their deep connection to this land, waters and the greater community. We pay respect to Elders past, present and those emerging and extend our respect to all Aboriginal and Torres Strait Islander people who call this city home. We recognise Aboriginal and Torres Strait Islander people as the first people to live in the area. We respect their living cultures and recognise the positive contribution their voices, traditions and histories make to the city.

What is the Local Planning Assessment Framework?

The local planning assessment framework is an array of legislation, policies, guidance materials and checklists used to support the NSW planning system.

Wollongong City Council has its own planning assessment framework which is informed by the State Government, primarily through the Environmental Planning and Assessment Act 1979 and State Environmental Planning Policies (SEPP)'s.

Council's core planning framework includes -

- The Wollongong Local Environmental Plan 2009 (LEP)
- The Wollongong Development Control Plan 2009 (DCP).



Alongside these plans, we have several policies and guidelines which relate to planning and development across the Local Government Area (LGA). These include the Wollongong Local Strategic Planning Statement 2020, Wollongong City-Wide Development Contributions Plan 2021, the West Dapto Vision, and the Community Participation Plan 2019.

We are in the process of reviewing and improving this local planning assessment framework, using community consultation and industry best practice as a guide. The aim of this review is to increase environmental sustainability, improve climate change adaptation, and reduce greenhouse gas emissions where possible and feasible to provide better outcomes for our community and help us achieve the goals and objectives of the Wollongong Community Strategic Plan.



Why is Council proposing to amend our local planning assessment framework?

Our planning assessment framework needs to be updated periodically to ensure its currency with NSW planning legislation and policy, to correct errors, omissions or provide clarity of content as identified through the day-to-day use of the plans. Importantly, it also needs to align with or complement the goals and objectives for the city of Wollongong and community aspirations.

Council has adopted net zero greenhouse gas emissions targets of:

- Net zero greenhouse gas emissions by 2030 for Council operations
- Net zero greenhouse gas emissions by 2050 for the city.



To guide our efforts towards achieving these targets, Council has adopted the Climate Change Mitigation Plan 2020-2022 and the Sustainable Wollongong 2030 strategy.

We are also currently developing the next Climate Change Mitigation Plan which is envisaged to project our pathway towards net zero.

These strategic documents recognise the significant potential to increase sustainability and climate resilience through improved and effective development controls and supporting instruments, and the role that development and town planning will play in contributing to net zero. Thus, they prescribe actions for a review and update of Council's planning assessment framework.

Apart from industrial emissions, the majority of the Wollongong community's emissions are from the stationary energy sector (78%), which is mainly electricity consumed by residential, commercial and institutional facilities, and manufacturing and construction activities. Second to this are emissions from our transport sector (19%). See Figure 1 for an overview of the emissions profile for the Wollongong Local Government Area.

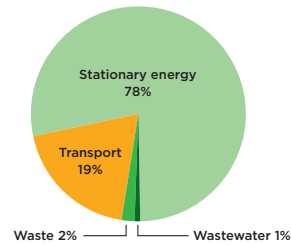


Figure 1. Emissions profile for the Wollongong Local Governmental Area 2019/20, excluding industrial processes (Source: Ironbark Sustainability, 2022)

With this in mind, if we facilitate developments that are more energy efficient, less vulnerable to extreme weather conditions, allow for full electrification and the shift to electric vehicles and reduced vehicle usage, we will enable the transition to net zero emissions and help our community prepare and adapt to a changing climate.



What is a Climate Friendly local planning framework?

A climate friendly planning framework is one that is centred around -

- Sustainable development
- Contributing towards the net zero emissions targets
- Preparedness and adaptation for a changing climate.

Sustainable development is development that meets the needs of the present without compromising the ability of the future generations to meet their own needs. Sustainable developments exist harmoniously with the natural environment and considers the social, environmental, and economic aspects of decisions.

'Net Zero' means achieving a balance between the amount of greenhouse gas emissions produced and those removed from the atmosphere in order to limit climate change. Development that reduces energy consumption needs and/or off sets consumption contributes towards net zero emissions.

Development that is prepared for climate change can cope with the key hazards that climate change presents for the Wollongong LGA, as identified in Council's adopted Climate Change Adaption Plan. This includes hotter days, more extreme rainfall events, more frequent and intense bushfires, and drought. It also means that development is better able to adapt to changing technology and energy sources.

We aim to promote development that is climate friendly across our planning framework through LGA specific environmental controls, enhancements to existing controls, guidance materials and tools and improved compliance measures.





What is the purpose of the Discussion Paper?

The purpose of this document is to provide a brief snapshot on the focus areas for proposed changes within our local planning assessment framework, the proposed key objectives for change and discussion points. As this is a discussion document, nothing is locked in, options are open for input and ideas.

A review of other planning frameworks across NSW, Australia and internationally has helped us identify options which are most relevant to Wollongong.

We will use the community and stakeholder feedback on the paper to make decisions on what changes could be incorporated into the framework and how best to proceed. These changes may include amendments to existing controls and guidelines across the planning framework or the implementation of additional supporting tools and materials to help guide and inform people making considering development on how they can be climate friendly.

What changes are proposed to be made to Council's planning framework?

At this current stage, opportunities for changes to the planning framework are being examined for certain residential and non-residential chapters of our DCP. We are also exploring supporting materials such as guidelines and tools that can assist our community to make informed decisions to improve resilience, reduce emissions and progress towards net zero.

We aim to integrate these changes across the planning framework to display how being climate friendly is cohesive and holistic across all sectors. This approach acknowledges how people, place and environment are interrelated and interdependent.

The focus areas for change and initial concepts have been informed by Council's supporting documents (such as our Climate Change Mitigation Plan and Climate Change Adaptation Plan).

How is the Discussion Paper set out?

The paper is an easy-to-navigate overview on the five focus areas and their objectives and discussion points.

Objectives are targets that we can aspire to, whereas discussion points are more specific thoughts, actions and amendments. These may apply to the entire planning framework, or individual policies and plans.

What are the Focus Areas and ideas for change?

The current focus areas for change are as follows -

- Landscaping and Urban Greening
- Solar and Energy Efficiency
- Materials, Building Form and Waste
- Transport and Car Parking
- Policies and Incentives

Ideas for change are outlined below according to the relevant focus areas.

Landscaping and Urban Greening

Effective landscaping and urban greening can help improve microclimates, combat air and noise pollution, efficiently cool and shade cities and decreases the urban heat island effect, helping our city to adapt to a changing climate and reduce energy requirements for heating and cooling. Council has already adopted the Urban Greening Strategy 2017-2037 and has several development controls across the DCP focused on landscaping and greening. However, we believe that there is an opportunity to do more in this space.

Objectives

- Maximise the quality and quantity of healthy tree canopy coverage across the LGA.
- Ensure that tree canopy cover is considered and provided appropriately in each development
- Improve the diversity and abundance of locally indigenous flora and fauna species across the LGA.
- Ensure the protection of trees
- Encourage green infrastructure across all development types
- To ensure that new and existing streets provide street trees and canopy cover to help cool our houses and suburbs and improve climate resilience.

Discussion Points

- Tree retention is prioritised within an evidence-based assessment framework.
- Public domain design should optimise for maximum achievable canopy cover. This will boost canopy cover in neighbourhoods, provide liveable streetscapes, improve air quality and public amenity.
- Provide canopy trees and landscaping in public spaces as early as possible to establish long-term amenity and thermal comfort
- Select appropriate plant species for the site conditions with consideration given to trees providing shade in summer and allowing sunlight in winter, or to provide habitat.
- Provide a diversity of tree species, including indigenous local provenance species (trees, shrubs, and groundcovers) in riparian corridors and ecological buffers.
- Encourage green roofs or green facades where possible
- Avoid and minimise the clearing of native vegetation and rehabilitate remaining native vegetation
- Development must assess impacts of climate change and increased rainfall intensities, particularly when located near waterways.
- Provide both new guides and support materials and improvements to existing resources on tree planting for developers and residents



Solar and Energy Efficiency

Council supports increased energy efficiency and the use of renewable energy. We have already taken steps to enter into a Power Purchase Agreement for Council facilities, allowing us to access 100% renewable energy for the majority of our electricity use, and have installed solar panels at various Council properties. We are keen to support the community taking similar actions. Transitioning to more renewable energy sources such as solar and using energy more efficiently will guide us on our path to reach net zero emissions by 2050 for the city.

Objectives

- Apply principles and processes that contribute to ecologically sustainable development (ESD).
- Ensure that greenhouse gas emissions will be reduced
- Encourage solar panels and energy efficient lighting for developments
- Promote electrification of products over gas appliances

- Increase the resilience of development to the effects of climate change and grid disruption.
- Replace intensive carbon power sources with low carbon and renewable energy.
- Enable developments to maximise solar access and energy efficiency design
- To facilitate the achievement of a community that can achieve net zero carbon emissions by 2050

Discussion Points

- Encourage new developments to be designed to minimise energy consumption
- Developments are to be designed and constructed to reduce the need for active heating and cooling by incorporating passive design measures such as -
 - orientating buildings to maximise winter solar access
 - introducing thermal mass and insulation to retain heat in winter
 - appropriately locating glazing, and using additional performance glazing where necessary

- utilising shading to manage solar access in summer including horizontal shading for northern sun, vertical shading for western sun, and the use of vegetation
- maximising natural ventilation through a variety of means including cross ventilation, stack ventilation, and ceiling fans where necessary
- Additional landscaping and canopy where possible to reduce the urban heat island effect
- New buildings are encouraged to be designed to maximise opportunities for cross flow ventilation and passive cooling.
- Where practical, developments should be designed to minimise the need for air conditioning
- Consideration should be given to using north-facing pergolas and facades treatments to shade walls and windows
- Developments should seek to incorporate on-site renewable energy sources to supplement energy needs during daily peak energy use
- Lighting for streets, parks and any other public domain spaces provided as part of a development should aim to use solar or energy efficient LED lighting.
- In multi-tenant or strata-subdivided developments, electricity sub-metering is to be provided for lighting, air-conditioning and power within each tenancy or strata unit. Locations are to be identified on the development plans.
- Allow for the consideration of community micro-grids and battery storage.
- Where possible proposals for new buildings, alterations and additions and major tree plantings are to maintain solar access to existing photovoltaic solar panels having regard to the performance, efficiency, economic viability and reasonableness of their location.
- Discourage gas connections in all developments, in particular greenfield developments.
- Support tools and information packages for homeowners and developers
- Council to invest in solar and energy efficiency decision support tools for residents



Materials, Building Form and Waste

Research shows that using renewable, recycled, and sustainable building materials can reduce an enormous amount of energy and waste that normally goes into the manufacturing process. Sustainable materials, such as timber and bamboo have lower environmental impacts throughout the production, placing and maintenance stages compared to other building materials, they also have efficient thermal properties compared to metals.

Objectives

- i. Reduce the cause and impacts of the urban heat island effect.
- ii. Increase the use of products from recycled sources.
- iii. Conserve energy
- iv. Encourage the use of more sustainable building and construction materials and methods
- v. Reduce the environmental impact from building materials through reduction, re-use and recycling of materials, resources and building components.
- vi. Encourage renovation and retrofitting
- vii. Promote the use of materials with low embodied energy
- viii. Increase recycling of waste and use of products from recycled sources.

Discussion Points

- (1) Where possible, developments should use recycled and renewable materials
- (2) Provide developers and homeowners with support materials and guidelines for choosing sustainable materials eg. Sustainable materials index
- (3) Food waste (FOGO) collection and/or composting provisions for multi-dwelling style developments should be considered.

- (4) Retrofitting and renovation of buildings is highly encouraged where possible.
- (5) Lighter coloured roofs and use of lighter coloured and non-reflective materials and finishes on main external parts of the building is required where possible.
- (6) Materials that are likely to contribute to poor internal air quality and those containing Volatile Organic Compounds should be avoided.
- (7) Encourage and prioritise low-carbon low-emission materials and processes such as -
 - (a) Recycled bricks
 - (b) Green steel and concrete
 - (c) Bamboo
 - (d) Sustainably harvested timber
 - (e) Recycled cladding
 - (f) Minimise cut and fill
- (8) Reduce the amount of materials used in the construction of a building wherever possible. Examples of potential methods include -
 - (a) reduced footprint and overall scale of the development
 - (b) exposing structures to reduce the use of floor, ceiling and wall cladding and finishes
 - (c) naturally ventilating buildings to reduce ductwork;
 - (d) providing waterless urinals to reduce piping and water use;
 - (e) using prefabricated components for internal fit outs; and
 - (f) providing only one bathroom for every two bedrooms in residential developments.
- (9) Council to provide guidance material and/or support for sustainable building material options and housing design



Transport and Car Parking

Transport is the second largest contributor of greenhouse gas emissions in the Wollongong LGA, responsible for 19% of emissions. With efforts to reduce emissions in this area and transition to net zero, Council recognises the development framework should also be updated to encourage more sustainable transport planning and design.

Objectives

- i. To encourage the use of public transport
- ii. To support the installation of infrastructure for charging electric vehicles

- iii. To reduce greenhouse gas emissions produced by transport and private car use
- iv. To ensure development is adaptable and planned to support future transport needs.

Discussion Points

- (1) Encourage walkable and cycling friendly centres, particularly in CBD's
- (2) Developments, where possible, should contribute to minimising car trips and car travel distances by:
 - (a) supporting access to public transport
 - (b) restricting the surplus of private car parking

- (3) Encourage developments to show connections and options for utilisation of public transport where possible
- (4) Provide and encourage rideshare or car share opportunities within the City
- (5) Increase electric scooter and bicycle parking provisions
- (6) Requirement for significant developments to include Electric Vehicle ready charging spaces.

- (7) Neighbourhood Plans for West Dapto and DCP provisions for Tallawarra and Calderwood must demonstrate how bus routes and bus movements are to be accommodated for each stage of the development.
- (8) Certain developments to be well connected to various facilities including park/playground, bus stop, village





Policies and Incentives

There are a range of environmental assessment rating schemes that applicants can use when assessing developments such as NABERS and Green Star. We want to encouraging our community to go above standard government requirements in order to increase environmental sustainability and reduce emissions. We are also looking at opportunities to incentivise our community to take action.

Objectives

- To encourage greater engagement and utilisation of recognised sustainability assessment measures
- To encourage developments to exceed sustainability standards set by State and Local government policies
- Recognise and support developers and individuals who exceed these standards

Discussion Points

- In NSW, State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 (BASIX SEPP) mandates provisions that aim to reduce consumption of mains-supplied potable water, reduce emissions of greenhouse gases and improve thermal comfort across residential development. The BASIX SEPP sets the minimum standards that a development is to achieve. The BASIX SEPP also mandates

that a DCP cannot include provisions which require a development to exceed its minimum standards. However, where voluntarily proposed, Council encourages development to exceed minimum BASIX scores.

- Encourages applicants to use an environmental building rating tool, such as Green Star or any similar rating tool shown below, to demonstrate enhanced environmental performance of a proposed development.
- Provide incentives for those who choose to exceed standards
- Introduce a 'raising the bar' section across the planning framework for those wishing to go above and beyond standards
- Promote developers and individuals who exceed mandatory requirements
- Council to provide guidance material on how developers and individuals can exceed mandatory requirements and what the lifecycle cost benefit of these actions is likely to be.

Minimum Performance Standards	Information and Incentive Programs
<ul style="list-style-type: none"> Minimum Energy Performance Standards (MEPS) NSW Building Sustainability Index (BASIX) National Construction Code (NCC) Section J 	<ul style="list-style-type: none"> Commercial Building Disclosure Green Star Program Well Rating National Australian Built Environment Rating Scheme (NABERS) NSW Energy Savings Scheme - financial incentives for businesses and households to be more energy efficient NSW Manufacturing Efficiency funding NSW Environmental Upgrade Agreements NSW Sustainable Advantage

What is the process for making changes to the local planning assessment framework?

The planning framework is primarily regulated under the Environmental Planning and Assessment Act 1979. As the planning framework is so broad and includes various policies and plans, requirements for each component can differ.

Our aim is to amend the planning framework through a 3-stage approach. These stages include:

- Stage 1: Consultation
- Stage 2: Development
- Stage 3: Implementation.

The Discussion Paper is a key component of Stage 1 of this approach. Once feedback is received from the community, comments will be considered and the amendment process, or Stage 2, will begin.

We are here:

1. Consultation

Engage with our community and internal and external stakeholders
Options analysis, sharing our initial ideas and thoughts to receive feedback and advice before we proceed with drafting any changes.

2. Development

Use the feedback provided in Stage 1 to draft changes across our planning framework and supporting tools.
Develop a cost-benefit analysis to inform draft changes.
Publicly exhibit plan and proposed changes.

3. Finalisation and implementation

Finalisation of changes; adoption and implementation of controls and development of supporting materials and tools.
Development of an engagement and stakeholder support program.

CBA is an analytical tool used to assess the costs and benefits of regulatory proposals. Costs and benefits are examined from the perspective of the community as a whole to identify the proposal with the highest net benefit. The costs and benefits considered are incremental, that is, they reflect only the additional costs and benefits incurred as a result of the proposed policy change.

This will likely be prepared once the changes and enhancements are drafted and will be considered as a supporting document alongside the amended framework.

What if I already have a development application approval before the changes are made?

Any development applications or planning assessments lodged after any changes are made will need to address the new standards.

If you submit or gain approval for a development before that time, there is no obligation to comply with the new standards, unless on a voluntary basis.

How can I make comment on what is proposed?

We highly value the opinions and feedback of our community and development sector and aim to guide them on a smooth transition to progress towards net zero and climate preparedness, working collaboratively alongside Council.

We encourage feedback on all aspects of the Discussion Paper. Comments and feedback can be made via our engagement page.



Scan to access the engagement page, or go to www.wollongong.nsw.gov.au

What is the timeline for finalising changes and implementing them?

The timeline for finalising changes will vary depending on the policy tool. There may be different timelines for different focus areas or planning instruments, with this in mind the approach may not be linear. As documents are updated and changes made, we will check in periodically with the community and provide further opportunities to comment.

What will the cost of these changes mean for me?

We understand that the community may have some questions and concerns surrounding the cost of these changes.

In the next stage of the consultation process our aim is to prepare cost benefit analyses (CBA) for proposed changes, to examine how the costs of these changes and enhancements may be offset by the benefits and future savings.





From the mountains to the sea, we value and protect our natural environment and will be leaders in building an educated, creative, sustainable and connected community.

We value and protect our environment

We have an innovative and sustainable economy

Wollongong is a creative, vibrant city

We are a connected and engaged community

We have a healthy community in a liveable city

We have affordable and accessible transport

OUR WOLLONGONG

JOIN THE CONVERSATION

Climate Friendly Planning Framework Discussion Paper Community Engagement Report

July 2022

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The information in this report is based on data collected from community members who chose to be involved in engagement activities and therefore should not be considered representative.

This report is intended to provide a high-level analysis of the most prominent themes and issues. While it's not possible to include all the details of feedback we received, feedback that was relevant to the project has been provided to technical experts for review and consideration.

Document id.22237916 Climate Friendly Planning Framework Discussion Paper - Engagement Report (July, 2022)

Executive Summary

Council is committed to reducing the threat of climate change to the Wollongong community as much as we can at a local level. To deliver on this commitment and protect our environment, we are undertaking a review of our Local Planning and Assessment Framework. As the first stage in this review, we developed the Climate Friendly Planning Framework Discussion Paper. This Discussion paper presents ideas about how we can make updates to this Framework so developments in our city can be more climate friendly. We asked the community to provide their feedback on the objectives and ideas presented in the Discussion Paper, along with any other ideas they may have about how developments in our city could be more climate friendly.

Methods and Stakeholders

The community was invited to share their feedback and ideas via a feedback form, which was open from 2 June - 1 July 2022. We published a project webpage on our.wollongong.nsw.gov.au which included the feedback form, Q&A forum and frequently asked questions. Emails containing the link to the webpage and a copy of the FAQs were sent to the following stakeholders -

- Neighbourhood Forums
- Register of Interest – Business, Environment
- Urban Development Institute Australia
- Business Illawarra
- Illawarra – Property Council of Australia
- Northern Illawarra Chamber of Commerce
- Port Kembla Chamber of Commerce
- Business Dapto

The engagement was promoted by email to targeted stakeholders and to the broader community by issuing a media release, publishing Facebook posts, and including information in the Illawarra Mercury Community Update.

Feedback

Twenty-six people shared their feedback on the Discussion Paper as well as other ideas they had about how development in Wollongong could be more climate friendly. Overall, respondents were supportive of most of the objectives and discussion points outlined in the Discussion Paper. Below is a summary of the feedback:

Landscaping and Urban Greening	<ul style="list-style-type: none"> • An increase in greening across the local government area, and greater emphasis placed on the planting of local natives and edible plants. • More communications and community education about the benefits of increased plantings and the planting local native plants. • Increased clearing of invasive species. • A strategic approach to the clearing and retention of trees to ensure that there is an appropriate number of trees in the right locations. • Consideration given to how the shade from trees may impact the effectiveness of solar panels. • Greening new buildings – roof-top gardens, green roofs, and green facades. • More permeable ground surfaces to be used in brownfield and greenfield developments.
Solar and Energy Efficiency	<ul style="list-style-type: none"> • Greater encouragement for the use of heat pump hot water heaters, instead of gas. • More information to be shared about helping consumers to find the best electric/climate solutions. • Council to work with local energy providers to facilitate the establishment of micro-grids and battery storage.

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	<ul style="list-style-type: none"> • Solar panels double glazing and external shutters to become a requirement for new developments. • Greater consideration given to the use of water recycling, grey water use, and water-sensitive urban design. • Developers to be required to identify the NABERS and Green Star levels of their proposals.
Materials and Building Form and Waste	<ul style="list-style-type: none"> • Several respondents were unsupportive of the idea of providing only one bathroom for every two bedrooms in residential developments. • Consideration to be given to waterless/composting toilets. • Greater uptake in the use of sustainable and renewable materials, with some saying they should become a requirement or highly incentivised. • While people were supportive of the idea of sustainable and renewable materials, there were concerns about the cost of these materials compared to other, commonly used materials. • Consideration given to the use of building materials in a “circular materials economy”. • The Passive Housing Standard to be listed in the Paper and for Council to provide incentives for people whose homes are built or retrofitted to meet this Standard. • Light roofs to become a requirement for new developments. • Multi-storey developments to provide infrastructure to enable the separation and collection of recyclables, food and garden waste.
Transport and Car Parking	<ul style="list-style-type: none"> • Electronic vehicle charging stations to become a requirement of all new developments. • The inclusion of charging stations for E-bikes and E-scooters, shade covers and on-roof solar panels in public and private car parks. • The discussion point about restricting private car parking provision was not supported by several respondents. • Raise awareness of active transport options • Council to further explore and provide park-and-ride options. • Council to continue to improve pathways and cycleways throughout the local government area. • Ensure subdivision design prioritises pedestrian pathways and cycleways over vehicles. •
Policies and Incentives	<ul style="list-style-type: none"> • Council to assess all Objectives and Discussion Points in the Paper against existing planning policy requirements which already contain provisions to address climate change, to avoid overlap and confusion. • Council to encourage climate-friendly outcomes with controls that are flexible enough not to stifle development, increase the cost of housing. • It was suggested that higher construction costs could be offset by things like such as greater development density/height or FSR bonus or alike. • Creation of various policies that support positive climate actions and positive environmental or personal health outcomes. •

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Background

Wollongong City Council has a target of net-zero greenhouse gas emissions by 2050 for our City and net zero emissions by 2030 for Council operations. Except for industrial emissions, 78% of emissions produced in the Wollongong Local Government Area are from the stationary energy sector. This includes the energy we use in our homes and use to run our local shops, cafes, schools, and office buildings.

It's important that homes and other infrastructure built in our local government area are energy efficient and can withstand the challenges of climate change such as hotter days, rising sea levels, and more extreme weather events. One way we can achieve this is by reviewing our Local Planning Assessment Framework to encourage people building developments in our city to consider climate-friendly design.

Council developed the Climate Friendly Planning Framework Discussion Paper as the first stage of the review of our Local Planning and Assessment Framework. The Discussion Paper presents ideas about how developments in our City can be made more climate friendly. The feedback and ideas captured through community engagement will help Council make decisions about what we should focus our review on. The feedback and ideas shared will also help inform any changes that may be incorporated into our Local Planning Assessment Framework.

This report provides details about the stakeholders targeted as part of this engagement, our communication methods, as well as a high-level summary of the major themes of the feedback captured through the various engagement methods.

Stakeholders

Stakeholders identified prior to the start of the engagement period included:



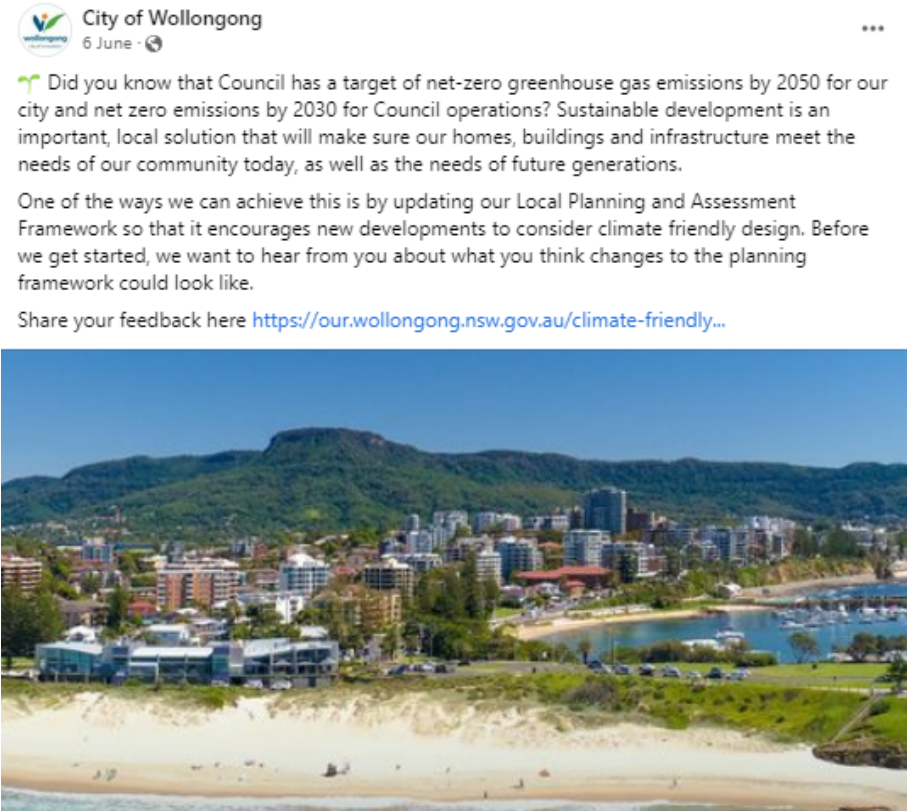
Methods

Our Methods



Table 1: Details of Communication and Engagement Methods

Methods	Details of Methods
Communication Methods	
Email to key stakeholders	An email outlining the details of the project, the feedback form and FAQ was sent to key stakeholders identified through an analysis process.

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Register of Interest	Information about the feedback from was sent to 775 participants registered on the Our Wollongong website with an interest in business and 1892 participants registered with an interest in environment.
Our Wollongong website	The project webpage hosted background information and supporting documents: <ul style="list-style-type: none"> • Frequently Asked Questions • Climate Friendly Planning Framework Review Discussion Paper • Climate Change Mitigation Plan 2020-2022 • Climate Change Adaptation Plan 2022 • Sustainable Wollongong 2030: A Climate Healthy City Strategy
Community Update	A notice appeared in Council's Community Update page, printed in the Illawarra Mercury, on the following dates: <ul style="list-style-type: none"> • 15 June • 22 June
Media release	A media release about the exhibition was distributed on 14 June 2022.
Social media	Facebook posts promoting the engagement were published on the City of Wollongong Facebook page on 6 and 14 June 2022. <div>  </div>

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	<div data-bbox="470 376 1348 1254">  <p>City of Wollongong 14 June at 12:22 · 🌐</p> <p>We know our community loves the natural environment of Wollongong! One of the ways we're working to protect our environment, make our city more energy efficient and prepare our community for the future is by encouraging climate friendly design.</p> <p>It's an ambitious goal, and to get started we're calling for your ideas on how Council can encourage sustainable development in homes, buildings and other infrastructure.</p> <p>To start the conversation, we've drafted a discussion paper that explains some of the ideas we want to focus on. Now it's up to you. Read our discussion paper and share feedback on what can be improved and let us know if you have any ideas on what you'd like to see happen.</p>  <p>OUR.WOLLONGONG.NSW.GOV.AU</p> <p>Climate Friendly Planning Framework</p> <p>Council is committed to reducing the threat of climate change to the Wollon...</p> <p>Learn More</p> </div>
Engagement Methods	
Our Wollongong website	<ul style="list-style-type: none"> • An online feedback form was used to capture participants' comments and ideas. • An online Q&A forum was provided for participants to ask questions about the project.
Email	People emailed in their open, written submissions.

Results

All stakeholders and the wider community were invited to provide feedback on the discussion paper and share any ideas about how developments in our city could be more climate friendly. Some stakeholders promoted the public exhibition via their email networks and social media profiles, and several community members shared the posts made on the City of Wollongong Facebook page. Across the two Facebook posts published on the City of Wollongong Facebook page, a total of 109 comments were left. The overall sentiment and engagement with the posts was positive and supportive. The comments made in relation to the Discussion Paper were very similar to the feedback received via the formal engagement methods.

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Engagement Participation

This section provides details on the participation in engagement activities and feedback received during the engagement period. Details of the number of participants for each engagement activity are presented in Table 2.

Table 2: Participation in Engagement Activities

Engagement Activities	Participation
Emails	8
Online Participation	
• Aware – Total number of people who viewed the project webpage.	412
• Informed – Total number of people who clicked a hyperlink, e.g. to download the draft plans.	157
• Engaged – Total number of people who actively contributed to the project, e.g. by submitting comments via the feedback form or posting a question to the Q&A.	18

Submission Results

Twenty-six people shared their feedback on the Discussion Paper and their ideas about how development in Wollongong could be more climate friendly.

Table 3: Submission Types

Submission Type	Number of Participants
Open – Email	8
Online – Feedback form	17
Online – Q&A forum	1
TOTAL	26

People contributed many ideas and comments in different ways. Below is a summary of all the feedback and ideas we received via the various methods -

Open feedback received via email

Individual Submissions

We received 4 individual submissions from community members. The feedback and ideas shared in these submissions have been summarised under the following themes:

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Landscaping and Urban Greening

A call was made for Council to require knockdown rebuilds in well-established residential areas to retain existing native trees within substantial gardens.

We heard that greater support needs to be given to encourage residents living close to weed-infested public spaces, containing remnant native vegetation, to manage these areas. It was mentioned Council's Bushcare groups could be better resourced enabling them to play a more active role in providing advice to community and to undertake more plantings across the city.

A respondent shared that they would like to see consideration be given to the inclusion of edible trees and vegetation in public spaces. They would also like to see some of the objectives of the Illawarra Local Food Strategy incorporated into future Planning Framework updates.

Solar and Energy Efficiency

It was mentioned that many new developments have gas-fed, instant hot water systems, most likely because they require less floor space than a heat pump hot water system. A suggestion was made for the DCP to be amended to require all plans to reserve more floor space for tanks for heat-pump systems and to include 15-amp wiring adjacent to instant heater installations as this would make retrofits cheaper and convenient. Another respondent would like Council to discourage the installation of gas lines in new developments. It was suggested that Council could undertake an educational campaign promoting the benefits of induction cooking technology as a means of discouraging people from utilising gas cooktops in their homes.

A request was made for more consideration to be given to community energy efficiency initiatives. Some people are unable to install solar panels on their homes due to tree canopy cover but would still like an opportunity to contribute to the installation of solar panels and batteries on other buildings, like Council-owned buildings. It was suggested that people who contributed to these community panels could receive some form of compensation for the energy generated by these community panels.

A suggestion was made for Council to facilitate the establishment of micro-grids and battery storage.

It was mentioned that greater consideration should be given to the use of water recycling, grey water use, and water-sensitive urban design.

Materials and Building Form and Waste

A respondent would like to see Council liaise directly with developers about sustainable building material options and housing design well in advance of submitting their development applications.

It was suggested that consideration be given to the use of building materials in a "circular materials economy". It was also mentioned that regenerative fibres such as strawbale, hemp and other products should be included in the list of low-carbon, low-emission building materials.

Transport and Car Parking

In addition to requiring charging stations in new developments, we heard that Council could set a good example by committing to the installation of a small number of electric vehicle charging stations. We also heard a suggestion for a campaign promoting the benefits of electric vehicles and dispelling potential myths.

Other Comments

A call was made for Council to consider the effects of concrete-sealed ground. Concerns were shared about how concrete-sealed ground greatly contributes to flash flooding and increases the height of the flood peak. There is a perception this poses a far greater risk than more natural conditions where water is

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able to soak into the landscape. We heard that having more natural or porous ground covers would also contribute to long-term soil water and plant growth and could help manage extreme heat. It was suggested that planning controls need to reduce the use of concrete in private and public land to reduce the amount of water that ends up in our streets and homes due to flash-flooding events.

A respondent would like to see a greater emphasis on the use of rainwater tanks, to reduce reliance on mains water supplies and also reduce the amount of water going into stormwater systems during severe rain events.

Group Submissions

We received detailed submissions from four groups. The full submissions have been provided to the project team for consideration. This section presents a high-level summary of each.

A local resident action group provided a detailed submission. Following is a summary of their comments:

Landscaping and Urban Greening

- Green roofs or green facades should be mandated on buildings three stories and above.
- Deep planting zones should be mostly on the street side of the development to reinforce the streetscape and vegetated corridors for wildlife in the city.
- More emphasis to be placed on aesthetics when pruning street trees.
- Hard surfacing on public land should be minimised and environmentally sound surfaces maximised.

Solar and Energy Efficiency

- Solar panels or other on-site renewable energy sources should be mandated on buildings three stories and above.
- Developers should be mandated to identify the NABERS and Green Star levels of their proposals.

Materials, Building Form and Waste

- The discussion point about including one bathroom for every two bedrooms in residential developments is not supported as many older couples need a bathroom each.
- Multi-storey developments should provide infrastructure to allow for the separation and collection of recyclables, food and garden waste.

Transport and Car Parking

- Promote active transport and facilitate and provide supportive infrastructure it requires.
- The discussion point about restricting private car parking provision is not supported as it is the use of cars which is critical not their ownership. There are concerns that this will result in more cars parking on the street.
- Council should reverse its policy to encourage medium-density developments in relatively remote locations as people living in these areas will be required to drive long distances for work or shopping, resulting in more greenhouse gas emissions.

A community coalition focused on fair and sustainable food solutions told us they would like to see greater consideration given to urban food-growing spaces. They would like to see greater support for urban food-growing as this will increase the availability of healthy and sustainable food, whilst mitigating climate change. It was suggested this can be achieved by -

- Providing space for growing food within new developments.
- Updating landscape policies to encourage the inclusion of edible plants such as fruit, nuts and herbs in all major developments.
- Facilitating local groups to start a community food growing space.

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- Protecting food growing spaces in and around our local area under threat from a proposed development.
- Using land for food growing on a temporary basis, for example in spaces that are waiting to be redeveloped.

A local not-for-profit concerned with the creation of healthy communities provided a detailed submission. Following is a summary of their comments:

Landscaping and Urban Greening

- Add an objective about ensuring that the area of permeable surface is maximised in both greenfield developments and brownfield developments.
- Add an objective about providing support for urban food growing as this will increase the availability of healthy and sustainable food, whilst mitigating climate change.

Solar and Energy Efficiency

- Require subdivision layouts to maximise the number of residential blocks which have their long side facing north.
- Council could do more to encourage the use of heat pump hot water heaters, instead of gas.
- The objective relating to shade and canopy could be more explicit, ensuring this is applied for existing neighbourhoods as well as new developments.

Materials, Building Form and Waste

- Add an objective about encouraging the use of local building materials and services as this will reduce transport demands and stimulate the economy.

Transport and Car Parking

- The focus area be renamed to 'Transport and Movement' to broaden the scope to better include active transport.
- Add an objective about creating an urban environment where active transport becomes the primary choice for short journeys.
- Add a discussion point about the importance of all streets being pedestrian and cycle friendly.
- Ensure subdivision design prioritises pedestrian pathways and cycleways over vehicles.
- Residential development should occur in areas close to, or with active transport access to town centres and public transport nodes.

Policies and Incentives

- Creation of a policy that doesn't allow advertisements on public amenities, that contains messaging that is not supportive of positive climate actions or positive environmental or personal health outcomes.
- Creation of a policy to control, protect and increase the number and the diversity of types of food retail outlets – such as hot food take-aways, small shops and markets - locally, and within easy walking distance of communities, or by public transport.
- Local incentive programs for retailers to enable the phasing out of takeaway coffee cups by offering discounts for the use of 'keep cups' etc.

An industry body representing the NSW property development sector called for greater consideration to be given to how the implementation of these objectives may negatively contribute to the housing and rental market in the Illawarra. It was suggested this approach should be undertaken with a view to streamline the current onerous planning processes, reduce development costs and lessen any further impacts on the housing delivery pipeline.

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The recommendations included in their submission are summarised as follows -

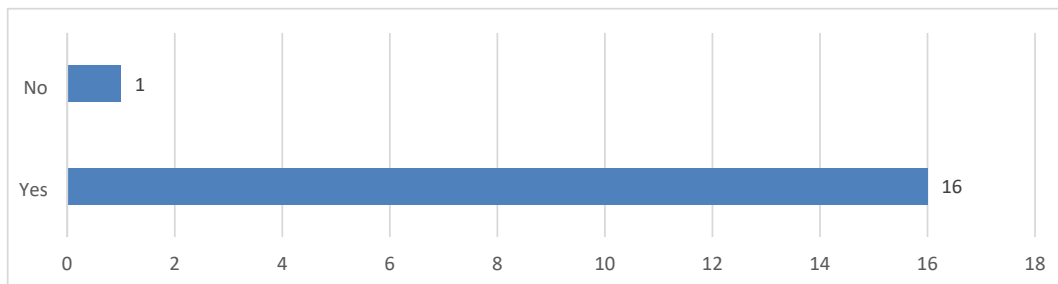
- Council to assess all Objectives and Discussion Points against existing planning policy requirements which already contain provisions to address climate change, to avoid overlap and confusion.
- Council to prepare a feasibility assessment on the potential cost impacts due to high-risk Objectives and Discussion Points.
- Council to work with industry to implement the changes through an incentives-based approach.
- Council to review the need for key Discussion Points which are typically undertaken during the master planning process.
- Council to lead on certain initiatives covering climate change.
- Council to engage further with industry prior to implementation of proposed Objectives and Discussion Points into the local planning assessment framework.

Online – Feedback Form

We received a total of 17 feedback forms. Some responses to the questions are graphed and others are presented under themed headings.

Landscaping and Urban Greening

Do you support the objectives for Focus Area 1: Landscaping and Urban Greening?



Increased Greening

Some people said they would like to see more verge gardens. It was suggested Council could encourage people to incorporate Indigenous plantings, native ground covers, garden vegetables and herbs along the kerbside of roads and combine them with the front gardens of their houses. This is to significantly green the streets and provide shelter and food for local birds.

Respondents mentioned their support for minimising the clearing of native vegetation. In addition, they would like to see Council focus on expanding and increasing the areas of native vegetation across the local government area.

The planting of trees and inclusion of greening new buildings was another idea shared. It was mentioned this could be a key area in improving our air and noise quality as well as the general streetscape. They would also like to see Council encouraging rooftop gardens on unit blocks and including water tanks on new homes. We also heard that cycleways and parklands are essential to allow residents to enjoy their local environment.

We heard that the clearing and also protection of trees should be approached strategically, as this would ensure that there is an appropriate number of trees in the right locations. It was mentioned that retaining small pockets of vegetation in development zoned areas is not necessarily a good outcome as it could generate a substandard/inefficient development pattern. It was suggested that the removal of trees should be followed with compensatory planting in more appropriate locations.

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Some shared that while they are supportive of the increased planting of trees, they would like consideration to be given to how the shade from trees can impact the effectiveness of solar panels and outdoor clotheslines.

Impacts of Invasive Species

We heard a call for increased efforts for the clearing of invasive flora species, particularly around waterways. It was mentioned that in addition to the clearing of invasive flora, native/non-invasive species should be re-planted in other, more appropriate areas.

A respondent shared that they live in an area set underneath an overgrown canopy of trees covered in lantana and other introduced flora. They experience little sunlight in winter, damp and mould-related issues. They said that without sunlight, air conditioning, dehumidifiers, fires, chemicals, clothes dryers and lighting is a necessity. They would like this considered as part of the review.

Education and Communication

A suggestion was made for the Wollongong Botanic Garden - Greenplan Nursery to provide advice to residents looking to plant trees in their yards. It was mentioned that good advice from experienced gardeners could assist in effective plantings that allow for decent summer shading, winter sun ingress and clear roofs for solar panel efficiency. We also heard a call for more communications and community education about the benefits of increased plantings and also planting local native plants.

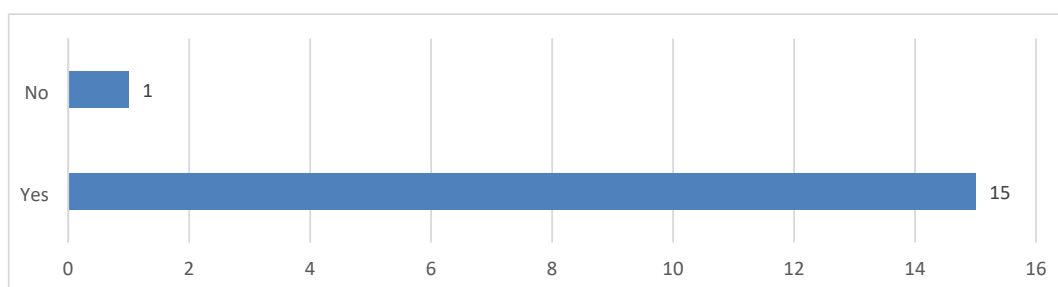
Other Comments

Other ideas and feedback for this focus area included -

- Limiting/reducing the use of concrete and other impermeable surfaces on public land.
- More focus on water sensitive-design.
- Veggie and herb planter boxes in public areas.
- All playgrounds to have shade canopies and be surrounded by large-canopied trees.
- Safe water features in the Mall to create a cooling effect.

Solar and Energy Efficiency

Do you support the objectives for Focus Area 2: Solar and Energy Efficiency?



Units

Some respondents would like double glazing and external shutters to be compulsory for new developments. We also heard calls for a ban on embedded networks, as well as a ban on gas stoves and hot water systems.

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Community Battery Storage and Solar Energy

Several respondents would like to see Council liaise with local energy providers to create local grids and community batteries to store energy collected from residential solar panels. A call was made to strengthen the wording of discussion point 10, so it reads “encourage and facilitate community micro-grids and battery storage with incentives for developers”. It was suggested this initiative could be part of an affordable housing development, or an integrated new area such as the Corrimal Cokeworks site.

Some would like to see solar and energy-related products become a requirement for new building projects in the Illawarra. It was also mentioned that Wollongong Council residents who reside under the escarpment are unable to change to solar due to the overgrown canopy and suffocation of lantana and other introduced flora that inhibits the sunlight.

Brownfield and Greenfield Development

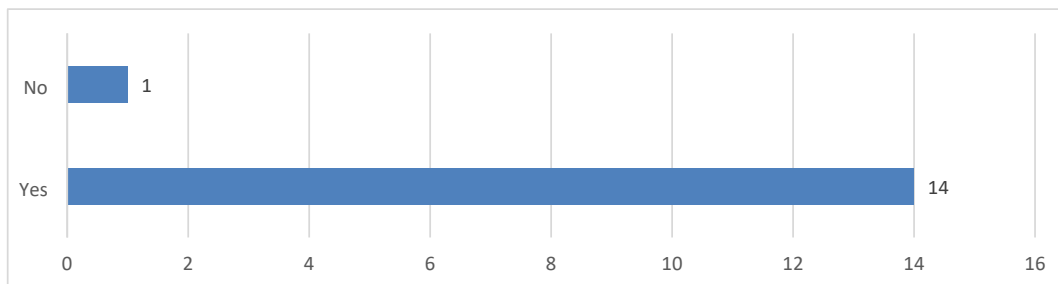
We heard the controls for brownfield and greenfield developments may need to be considered differently. It was said that not all sites in brownfield areas will have the orientation or frontages to easily maximise passive outcomes due to the existing/historical development patterns of the area. However, it’s thought greenfield areas can be designed with orientations that maximise the opportunity for solar panels.

Education

Greater emphasis on education and engagement was another theme. Suggestions were made for more information to be shared via workshops and websites about helping consumers to find the best electric/climate solutions.

Materials and Building Form and Waste

Do you support the objectives for Focus Area 3: Materials and Building Form and Waste?



Housing Design

We heard calls for the Passive Housing Standard to be listed among the objectives and discussion points in the Paper. Some respondents would like to see more family houses built to these standards or existing houses to be retrofitted to meet these standards. It was suggested Council could provide incentives for those whose homes meet the Standard.

Several respondents said they would like Council to make light-coloured roofs a requirement.

Bathrooms and Toilets

Some respondents were unsupportive of the discussion point about providing only one bathroom for every two bedrooms in residential developments. It was mentioned that a two-bedroom property could occupy anywhere from 1 – 4 people and it is likely that one-bathroom wouldn’t be enough for a 4-person household. Some were concerned this would no longer allow for the inclusion of a powder room or water

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closet. Some said they feel this is a necessary feature in their home, especially if they often have visitors. Another mentioned they thought it would be necessary for townhouses to have access to a toilet both upstairs and downstairs. It was suggested this discussion point may be too restrictive, and that it should allow for greater flexibility. There were concerns expressed that if this were to become a requirement, it may come with an unintended consequence of developers designing houses and apartments with more bedrooms.

A request was made for Council to give greater consideration to the inclusion of waterless/composting toilets, suggesting this could be a great innovation for reducing water consumption and pollution and also enable nutrient recycling.

Cut and Fill

There was a call for more information about how minimising cut and fill would contribute to climate-friendly outcomes. It was mentioned that cutting and filling is an already expensive activity that developers currently seek to minimise. Concerns were expressed that further restrictions placed around cutting and filling may transfer costs into other areas of construction or result in other poor development outcomes.

Materials

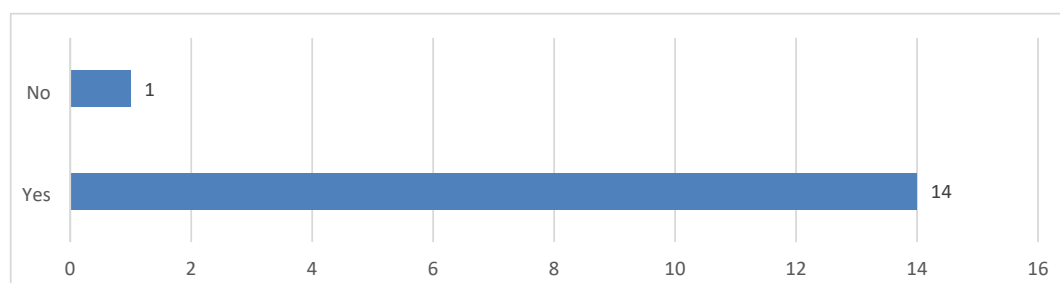
Overall, respondents would like to see a greater uptake in the use of sustainable and renewable materials, with some saying they should become a requirement or highly incentivised. It was suggested there could be a Council-run dedicated resource centre for building material collection (including, brick, timber, steel sheeting, fittings, taps, toilets etc.) that could enable the on-selling of these materials to local enterprises.

While people were supportive of the idea of sustainable and renewable materials, there were concerns about the cost of these materials compared to other, commonly used materials. It was also mentioned that maintaining, fixing and cleaning recycled materials can be expensive. It was suggested that Council could work with local suppliers to run workshops for residents providing information about how they could clean and repair these materials.

It was also mentioned that controls around the requirement for sustainable and renewable materials may need to be considered differently for multi-storey developments, as fire regulations have a great bearing on the types of materials that can be used.

Transport and Car Parking

Do you support the objectives for Focus Area 4: Transport and Car Parking?



Public Transport

We heard calls for the local bus service to become electric and for free bus travel to be provided throughout the LGA by 2025. Others would like to see better transport links, by way of public transport and non-

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powered transport, between Wollongong and the outer suburbs of the local government area. It was stated that safe, direct access to train stations in neighbourhood catchments is also important.

It was mentioned that the discussion points and objectives should be considered differently for brownfield or greenfield developments. We heard that it should not be a developer's role to demonstrate connections to public transport in brownfield areas as public transport is a government-managed issue outside of developer control. However, it was mentioned that in large-scale greenfield areas, where a developer is to provide open space and commercial centres, then developers should be required to demonstrate key connections to public transport.

We also heard a call for Council and Department of Planning and Environment to provide information to developers about future bus routes in West Dapto, as this will assist them with their planning.

Parking

We heard several calls for electric vehicle charging points to become a requirement for all new car parks, both public and private. In addition, people would like to see the inclusion of charging stations for E-bikes and E-scooters, shade covers and on-roof solar panels. It was suggested that Council could set an example by starting to install these features in their existing car parks.

Feedback about parking in apartment buildings was mixed. Some people would like to see parking space minimum requirements removed and replaced by a "Green Travel Plan". It was suggested this Plan could outline the walkable and rideable routes around the development as well as key public transport links. Others would like to see each new apartment building have at least one parking space per apartment. It was mentioned that Council should consider that these parking spaces and/or garages are not always used just as a space for residents to park their cars, they are also used as spaces to store things like bikes, boats, kayaks, canoes, surfboards, etc. It was also mentioned that people who live in the Wollongong CBD may use public transport to get to work and to do their local shopping, but they may also have a car that they use when they need to travel long distances.

Active Transport

It was suggested that an objective could be added about enabling and promoting active transport options. Some would like to see more onus placed on developers to contribute to the construction of more active transport infrastructure.

Comments were made about the opportunity to further explore and provide park-and-ride options. It was suggested there could be large-scale car parking facilities located on the fringe of our city. People could park their cars and easily access a network of pathways and cycleways that would connect them to the city centre. It was suggested these car parks could be equipped with charging stations for electric vehicles, E-bikes and E-scooters. We also heard a call for large-scale, secure bike and scooter parking and charging stations to be installed in the Wollongong CBD.

Requests were made for Council to continue to improve pathways and cycleways throughout the local government area, including the Wollongong CBD and the outer suburbs. We heard this is important in reducing car dependency amongst locals. It was mentioned that wherever possible, Council should aim to separate pedestrian footpaths and bike paths.

While we received comments in support of expanding and improving the local bike and pedestrian network, we also received comments from people who are less supportive of the recent increase in cycle infrastructure across the city. Some are unhappy that the recent popup cycleways have reduced the amount of on-street parking for residents and their visitors.

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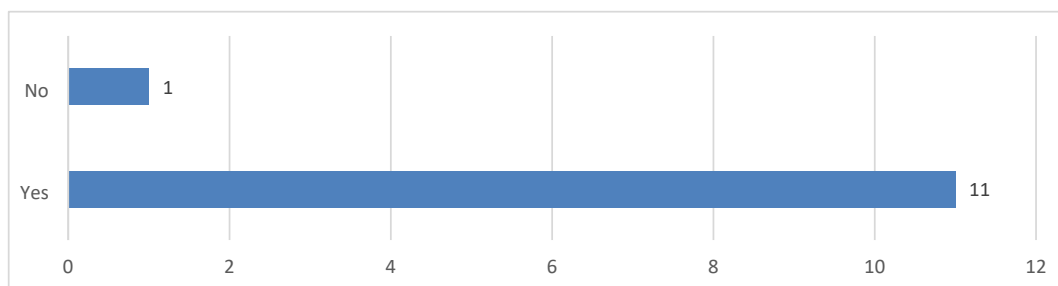
Other Comments

Other ideas and feedback included -

- Reducing parking in key spots in the Wollongong CBD.
- Using more traffic calming measures in areas well used by drivers, cyclists and pedestrians.
- Reducing the speed limit to 30km/hr on minor roads.
- Prioritising walking and cycling within 3km catchments around schools.
- Creating opportunities for developers and residents to come together to brainstorm ideas about how to include active transport options in new developments.

Policies and Incentives

Do you support the objectives for Focus Area 5: Policies and Incentives?



Policy Updates

Some mentioned it will be important for Council to encourage climate-friendly outcomes with controls that are flexible enough not to stifle development, increase the cost of housing or push more major projects to court for determination.

Incentives

We heard a call for Council to consider how updates to the Planning Framework may contribute to increased construction costs for developers. It was mentioned that higher construction costs could be offset by things like such as greater development density/height or FSR bonus or alike.

Education

It was suggested that Council can do more to educate residents about energy-efficient changes they can make to their homes. This could be done by including information with rates notices or sharing information on the Council website.

Other feedback and ideas

Respondents were provided the opportunity to share any other feedback or ideas that didn't relate to a particular focus area, at the end of the feedback form. Their comments have been summarised under the following themes -

Education

Some would like to see Council play a greater role in building climate literacy amongst both residents and the corporate sector. It was suggested there could be more information about general waste, where it goes and the impact it can have on the wider environment, particularly single-use plastics. Other suggested methods for sharing information included community conversations, competitions, workshops, forums and town hall assemblies.

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Flooding

A call was made for Council to look at flooding and water run-off from streets, footpaths and other hard surfaces. It was suggested things like road water gardens, porous driveways and car parks made from vegetation and smaller stone pavers could be investigated further.

Community Assets

We received comments about the need to consider how community assets are used during and after extreme weather events such as heavy rain, floods, high winds and hotter days. It was suggested that these extreme weather events may result in fewer people accessing outdoor facilities like playgrounds, outdoor pools, bike paths and sportsfields, placing more strain on indoor facilities like Beaton Park.

Reference Group

A call was made for the establishment of a Climate Mitigation and Adaptions reference group made up of representatives from community, industry and the university.

Other Comments

- Council should have a net zero carbon emissions by 2030.
- Council should set an ambition for Wollongong to be the first fully electrified city in the world.
- Council could focus on regenerative positive impact rather than focussing solely on reducing impact.
- Council should take care of trees that have become overgrown and dangerous.

Online – Q&A Forum

One question was asked via the online Q&A forum. The participant sought more information about what Council was doing to focus on protecting and conserving our local biodiversity and species and managing contaminated land.

A response was provided and links to the following documents were shared with the participant -

- Chapter E17: Preservation and Management of Trees and Vegetation.
- Chapter E18: Threatened Species Impact Assessment.
- Chapter E20: Contaminated Land Management.
- Chapter E23: Riparian Land Management.
- The Illawarra Biodiversity Strategy (Vol. 1 and Vol. 2).

Next Steps

The feedback and ideas collected from the engagement will be used by Council to help make decisions about what we should focus the review on. This information will be used to help inform draft changes that may be incorporated into our draft Local Planning Assessment Framework. We'll come back to the community with any draft changes and updates to our Local Planning Assessment Framework and ask for your feedback before any proposed changes go to Council for endorsement.