INNER WEST

Appendix 10 – Parramatta Road Corridor High Performance Buildings

March 2022

Contents

1.0 Background

Inner West Council Planning Proposal: Parramatta Road Corridor Stage – 1 (LEP2A) includes incentive provisions to enhance the performance of new developments in the Parramatta Road Corridor Urban Transformation Strategy (PRCUTS) Leichhardt, Taverners Hill and Kings Bay precincts. These requirements have been devised to implement the Parramatta Road Corridor Sustainability Implementation Plan and go one step further to enhance the building performance requirements where PRCUTS has gaps and can be improvised. The key purpose of this approach is to facilitate the implementing of PRCUTS sustainability objectives and ensure that current practise is enhanced, and future best practice is not precluded.

In preparing the Planning Proposal, Council has considered:

1. The existing situation - Energy and water requirements as detailed in State Environmental Planning Policy 2004 BASIX for residential developments and the National Construction Code for other building types.
2. The requirements agreed through the NSW Government endorsed PRCUTS that, when adopted in 2016, acknowledged the need to increase the energy and water performance of new buildings. These requirements (extract provided in the below section) were informed by the work by Kinesis in preparation of the *Parramatta Road Corridor Sustainability Implementation Plan.*
3. The 2018, *Metropolis of Three Cities* Greater Sydney Regional Plan 2018, specifically Principle 6 Sustainability and Resilience that identifies ambitious targets for the reduction of energy and water and further endorses the PRCUTS requirements.
4. Inner West Council's adopted *Pathway to Zero Emissions Strategy* (May 2019) that incorporates a Strategic Direction to identify and develop standards for low carbon precincts with three key actions:
    a. Identify Low Carbon Precincts, as per Objective 33 of Greater Sydney Region Plan [A low-carbon city contributes to net-zero emissions by 2050 and mitigates climate change]. Identified Precincts include the Parramatta Road Corridor.
    b. Set performance standards and requirements through performance-based delivery mechanisms including higher BASIX targets, NABERS incentives or mandates, parking and transport strategies.
    c. Incorporate standards into appropriate planning controls (including Local Strategic Planning Statements, LEP, DCP).
5. *Our Place Inner West* (March 2020), Council's endorsed Local Strategic Planning Statement that identifies the Inner West as a zero emissions community (Planning Priority 2). This priority includes an action to update planning controls to improve the overall environmental performance of new buildings and precincts by:
    a. Working with State Government to increase BASIX targets for energy use.
    b. Facilitating renewable energy uptake, particularly the installation of solar panels.
    c. Raising minimum sustainability requirements for commercial and industrial developments using existing standards such as NABERs or Green Star.
    d. Working with relevant stakeholders to develop planning controls to establish low carbon, high performance precincts including the Parramatta Road Corridor.
6. The City of Sydney (CoS) endorsed *Planning Proposal – Performance for Net Zero Buildings* (May 2021). The Planning Proposal and supporting technical project report *Planning for net zero energy buildings* demonstrate that PRCUTS recommendations for

commercial uses are outdated and require refinements to increase NABERs requirements for non-residential uses above 1000-sqm Net Lettable Area (NLA).

These recommendations have been developed through engagement with industry and government. The report includes cost-benefit analysis (CBA) which determines whether it is economically viable to proceed with a project. Measured through metrics such as internal rate of return (IRR), a CBA can determine how likely the investment is to give a return and how quickly the return will be realised.

The CBA:

- estimates the private and public benefits of different energy efficiency measures in newly constructed buildings and major refurbishments, and how these benefits vary over time
- determines the cost effectiveness of these measures based on construction costs and calculates benefits to inform the development of the performance standards
- estimates the net costs and benefits at a metropolitan scale based on estimated costs and benefits, and expected levels of new construction and major refurbishments in Greater Sydney.

The analysis includes both costs and benefits to developers, owners and occupants, and indirect benefits to the public arising from energy savings. These public benefits include:

- avoided network costs, realised through the reduction in energy network infrastructure and maintenance costs
- avoided generation costs, realised through the reduction in costs associated with the generation of energy, particularly in terms of fuel and facilities required to generate electricity
- avoided costs to health services, realised through reduced pollution from the reduction in burning of fossil fuels
- avoided greenhouse gas emission costs, realised through the reduction in offset credits required to be purchased in order to meet requirements.

Council supports the CoS findings and seeks to implement the findings in its Planning Proposal. For reference, *Planning for net zero energy buildings* is provided as an Appendix to support these requirements.

In addition to support the implementation of these requirements, Council has assumed additional design and construction costs in its economic feasibility testing, value sharing study and affordable housing contribution scheme.

2.0 Proposed requirements

The tables below outline provide a comparison of PRCUTS and LEP2A proposed requirements.

Table 1 - Residential development – comparison of building performance BASIX

	Current BASIX	**PRCUTS**	**LEP2A Planning Proposal (seeking to implement PRCUTS)**
Water			
All dwellings	40	50 (and up to 60 where recycled water is available	50 (and up to 60 where recycled water is available)
Energy			
Residential building 2 to 3 storeys	35	55	55
Residential building 4 to 5 storeys	30	50	50
Residential building 6+ storeys	20	40	40
Residential as a component of mixed-use development			As above relevant to the number of storeys

Table 2 – Non residential development – comparison of building performance standards

	PRCUTS	**LEP2A Planning Proposal**
Water		
All listed below	NABERS 4-star (5-star where recycled water is available)	NABERS 4-star (5-star where recycled water is available)
Energy		
Commercial	**Whole Building:** • NABERS 5-star	**Base Building:** • Maximum 45 kWh/yr/m2 of Gross Floor Area (GFA) or, • 5.5 star NABERS Energy Commitment Agreement (CA) + 25% or, • Certified Green Star Buildings rating with a "credit achievement" in Credit 22: Energy Use, or • Equivalent
Shopping centre	**Base Building:** • NABERS 5-star	**Whole Building**: • Maximum 55 kWh/yr/m^2 of GFA or, • 4 star NABERS Energy CA, or • Certified Green Star Buildings rating achieving the "minimum expectation" in Credit 22: Energy Use,or • Equivalent

Hotel	Not included	**Whole Building:** • Maximum 245 kWh/yr/m^2 of GFA or, • 4 star NABERS Energy CA, or • Certified Green Star Buildings rating achieving the "minimum expectation" in Credit 22: Energy Use, o • Equivalent
Mixed Use	Not included	• As above relevant to proposed uses and the Table 1 for residential development.

Table 3 – Non residential development - Comparison of Development Thresholds

Development Thresholds for Performance Standards	**PRCUTS**	**LEP2A Planning Proposal**
Water		
All development	As per the development thresholds for energy performance.	As per the development thresholds for energy performance.
Energy		
Commercial	• Development ≥10,0000m^2 GFA	• A new commercial building ≥ 1,000m^2 NLA or more, • A refurbishment to an existing commercial building that contains a NLA or 1,000m^2 or more • An existing office building of 1,000 m^2 NLA or more with an addition of 50% or more NLA
Shopping centre	• Not included	• A new shopping centre containing a gross lettable area – retail (GLAR) of 5,000m^2 or more • An existing shopping centre of 5,000m^2 GLAR or more with an addition of 50% or more GLAR
Hotel	• Not included	• A new hotel of 100 rooms or more • A refurbishment to an existing hotel that contains 100 rooms or more
Mixed Use	• Not included	• The above thresholds for each proposed development apply

These energy and water targets will only have to be met if a proposed development relies on FSR and HOB bonus incentives. This incentives-based approach is consistent with the City of Sydney Council Planning for Net Zero Buildings Technical Report recommendations for LEP amendments and the State Environmental Planning Policy 2004 – BASIX.

The energy and water performance targets for residential developments are based on the Parramatta Road Corridor Sustainability Implementation Plan and Parramatta Road Corridor Planning and Design Guidelines. An extract of the targets is shown in Section 4 of this report.

PRCUTS recommends sustainability targets for large scale commercial and shopping centre developments greater than 10,000sqm. It relies however on existing targets in the National Construction Code for commercial and retail developments below 10,000sqm. Council seeks to expand the development threshold for the energy and water performance standards in accordance with Table 3 as most of the development anticipated in Inner West will be below 10,000 sqm.

Energy performance targets for non-residential developments are based on the recent work completed by City of Sydney Council Planning Proposal – Performance for Net Zero Buildings (May 2021) (CoS PP). The CoS PP Step 1 performance standards and development thresholds shown in Table 2 and 3 respectively have been adopted for this Planning Proposal. The CoS PP performance standards is supported by robust evidence base applicable for other councils within Greater Sydney to implement into their local planning frameworks. The CoS PP also demonstrates that the PRCUTS recommendations for energy efficiency are now outdated and require refinement to ensure Inner West is a zero emissions community in the future. These energy targets are to be applied in conjunction with PRCUTS water targets for non-residential developments greater than 1000sqm.

The performance standards specified in Table 1 and 2 will be applicable to development applications submitted between 1 January 2023 or when this LEP amendment comes into effect (whichever is earlier) to 31 December 2025, consistent with timeframe indicated in Step 1 of the CoS PP. The subsequent implementation stages of PRCUTS and amendments to the Inner West LEP will incorporate a review of the proposed performance standards and feasibility analysis to determine if the targets are appropriate or require enhancement. At that time Step 2 of the CoS PP (January 2026 onwards) will be considered for implementation.
Council considers implementing these hybrid sustainability provisions based on PRCUTS and City of Sydney's latest research as a step-change towards achieving the overall goals of low carbon, sustainability, and resilience. These standards will ensure current practice is enhanced and future best practice is not precluded. Council will also consider further updates to sustainability provisions as it develops its Low Carbon Precinct plans.

3.0 Definitions

Commercial premises and hotel development uses are defined as per the Standard Instrument – Principle Local Environmental Plan. The introduction of a new definition for shopping centre uses for the purposes of this Planning Proposal, is as per the below. Other definitions relating to high performance building standards have also been provided.

Gross lettable area - retail: means the area of the building as set out in the Property Council of Australia Method of Measurement.

Net lettable area: means the area of the building as set out in the Property Council of Australia Method of Measurement.

Refurbishment: means carrying out of works to an existing building where the works affect at least half the total volume of the building measured over its external roof and walls and where there is no increase in the gross floor area. In calculating the extent of the building's volume that is being changed, the proposed works and all other building work completed or authorised within the previous three years is to be included.

Shopping centre: means two or more retail premises within a building that has shared plant and services which are managed by a single person or entity. This does not include specialised retail premises, garden centres, hardware and building supplies, landscaping material supplies, plant nurseries, roadside stalls, rural supplies, timber yards or vehicle sales or hire premises.

4.0 Parramatta Road Corridor Sustainability Implementation Plan

Below is an extract of proposed requirements from the Parramatta Road Corridor Sustainability Implementing Plan and Parramatta Road Corridor Planning and Design Guidelines. Full plan can be found at: *Parramatta Road Corridor Sustainability Implementation Plan.*

Table 3.6: Energy and Water Targets by Use

USE	ENERGY TARGET	WATER TARGET
Residential		
Single dwellings	BASIX Energy 60	
Apartment 2-3 storeys	BASIX Energy 55	▪ BASIX Water 60 for all new dwellings within the Precinct where recycled water is available
Apartment 4-5 storeys	BASIX Energy 50	▪ BASIX Water 50 for all new dwellings within the Precinct where recycled water is not available
Apartment 6+ storeys	BASIX Energy 40	
Commercial and Retail Development < 10,000m² GFA		
Smaller scale non-residential development is governed by the National Construction Code, and should demonstrate consistency with relevant requirements of the Code.		
Commercial Development ≥ 10,000m² GFA		
Base building and/or individual tenancies	NABERS 5-star	▪ NABERS Water 4-star ▪ NABERS Water 5-star should be pursued where recycled water is available
Shopping Centre Development		
Base building only	NABERS 5-star	▪ NABERS Water 4-star ▪ NABERS Water 5-star should be pursued where recycled water is available

5.0 Planning for net zero energy buildings

This is relevant to proposed requirements for non-residential uses only.