

Item 3.

Public Exhibition - Planning Proposal - Performance Standards for Net Zero Energy Buildings - Local Environmental Plans and Development Control Plan Amendments

File No: X012106.011

Summary

This report asks Council to endorse for public exhibition a planning proposal and a draft development control plan (DCP) to implement the performance standards for net zero energy buildings (performance standards).

The planning proposal will amend the *Sydney Local Environmental Plan 2012* (Sydney LEP) and other relevant City of Sydney Local Environmental Plans (LEPs). The amendment will introduce a new local provision that requires the consent authority to be satisfied that development is either reduces energy use through efficiency and on-site renewables or is capable of achieving net zero energy prior to commencing use, depending on when an application is lodged. The draft DCP amends *Sydney Development Control Plan 2012* (Sydney DCP) and the *Green Square Town Centre DCP 2012* (GSTC DCP) to provide more detailed guidance on implementation of the performance standards to satisfy the LEP. The draft DCP may also operate as a design guide to ensure integration with the LEP.

Energy use in buildings is a significant contributor to greenhouse gas emissions in the City of Sydney local government area, as well as Greater Sydney. The City of Sydney has developed performance standards to reduce emissions from buildings to transition key developments to net zero energy by 2026. The standards bring together energy efficiency, on-site renewables and off-site renewables and are to be implemented in stages through planning controls. They have been developed for new office, shopping centre, hotel and multi-unit residential developments, as well as major refurbishments of and additions to these development types.

Implementation of the performance standards will help the City achieve its target for net zero emissions by 2040 and priorities and actions in *Sustainable Sydney 2030*, *Environmental Action 2016-2021: Strategy and Action Plan* and *City Plan 2026*, the City's local strategic planning statement. It will also contribute to the NSW Government's objective to achieve net zero emissions by 2050 and priorities in their plans and strategies, such as the *NSW Electricity Strategy* and the *Greater Sydney Region Plan*. The performance standards have been developed for use throughout the Greater Sydney Region and can help other councils respond to the Greater Sydney Region Plan's 'low carbon city' objective and ensures consistency in energy performance standards for the region.

In addition to the environmental benefits of reducing emissions, the implementation of the performance standards will contribute to a positive and sustainable business recovery for Greater Sydney and improve building resilience. The staged implementation in the planning proposal and draft DCP also provide industry with time to adjust and certainty when planning for net zero energy development.

The implementation of the performance standards will reduce running costs for developers, owners and occupants of buildings and improve the comfort for occupants now and in the future when we expect further impacts from climate change. For example, annually office owners will save \$2,750 per 1000 square metres of floor area and hotel owners \$170 per hotel room. Total savings are estimated to be over \$1.3 billion for building investors, business and occupants. There are also additional public benefits and savings through avoided health, energy network and emissions costs, estimated to be about \$1.8 billion. Implementation also supports the NSW Government's renewable energy zones through investment and job creation and creates demand for jobs and new skills in energy efficiency.

A robust independent evidence base informed the development of the performance standards and timing of their implementation. A consortium of consultants completed energy modelling, construction costing and a cost benefit analysis on a range of development types for office, shopping centre, hotel, multi-unit residential and mixed-use development. The analysis was based on typical development types and sizes in the city and Greater Sydney now and expected in the future to meet Greater Sydney Region Plan growth targets. A broader public benefits analysis was also completed.

Extensive engagement with industry and government stakeholders also informed the evidence base and the proposed performance standards. Engagement started with industry and government forums in 2018 and continued to this year with stakeholder workshops, an external advisory group, briefings with Greater Sydney councils and individual meetings with developers, NSW Government agencies and peak. In March 2021 a briefing of industry and government concluded the engagement and identified support for implementing the performance standards.

The purpose of the planning proposal and draft DCP is to implement the performance standards to net zero energy. These will apply to office, shopping centre and hotel development types. The planning proposal and draft DCP do not include performance standards for multi-unit residential development. In the NSW planning framework, BASIX sets the performance requirements for residential developments. The performance standards will be provided to the NSW Government to inform future amendments to BASIX.

This report recommends Council approve the planning proposal to be submitted to the Minister for Planning and Public Spaces with a request for a Gateway determination and public exhibition. It also recommends that Council approve the public exhibition of the draft DCP.

Recommendation

It is resolved that:

- (A) Council approve the Planning Proposal – Performance Standards for Net Zero Energy Buildings, as shown at Attachment A of the subject report, to be submitted to the Minister for Planning and Public Spaces with a request for a Gateway determination;
- (B) authority be delegated to the Chief Executive Officer to make any variations to the Planning Proposal – Performance Standards for Net Zero Energy Buildings, following receipt of the Gateway determination;
- (C) Council approve the Planning Proposal – Performance Standards for Net Zero Energy Buildings, as shown at Attachment A of the subject report, for public authority consultation and public exhibition in accordance with any conditions imposed under the Gateway determination;
- (D) Council seek authority from the Minister for Planning and Public Spaces to exercise the delegation of all the functions under section 3.36 of the *Environmental Planning and Assessment Act 1979* to make the local environmental plan and to put into effect the Planning Proposal – Performance Standards for Net Zero Energy Buildings;
- (E) Council approve the Draft Development Control Plan 2012 – Performance Standards for Net Zero Energy Buildings 2021, shown at Attachment B of the subject report, for public authority consultation and public exhibition as both a development control plan and design guide concurrent with the planning proposal; and
- (F) authority be delegated to the Chief Executive Officer to make any minor variations to the Draft Development Control Plan – Performance Standards for Net Zero Energy Buildings 2021 to correct any drafting errors and ensure it is consistent with the planning proposal following the Gateway determination.

Attachments

- Attachment A.** Planning Proposal - Performance Standards for Net Zero Energy Buildings
- Attachment B.** Draft Development Control Plan - Performance Standards for Net Zero Energy Buildings 2021
- Attachment C.** Performance Standards for Net Zero Energy Buildings Project Report
- Attachment D.** Planning for Net Zero Energy Buildings Briefing, 11 March 2021 - Summary Report
- Attachment E.** Letters of support for the performance standards from Stockland, Frasers, Lendlease, Crown Group, Dexus and Mirvac

Background

There is strategic direction to reduce greenhouse gas emissions

1. The City has a target for net zero emissions in the council area by 2040. The City's Community Strategic Plan, *Sustainable Sydney 2030*, includes objectives of "greenhouse gas emissions are reduced across the city" and "the city's buildings, infrastructure, emergency services and social systems are resilient to the likely impacts of climate change". In response to this, *Environmental Action 2016-2021: Strategy and Action Plan* (Environmental Action) includes an action to "develop a pathway for the City's current planning controls to be strengthened over time to deliver net zero building standards". The planning statement also includes an action to "reduce greenhouse gas emissions by implementing the performance standard pathways framework to achieve net zero energy buildings".
2. The NSW Government has an objective to achieve net zero emissions by 2050. The NSW Government's *NSW Electricity Strategy* and *Net Zero Plan, Stage 1: 2020-2030* include priorities and actions that contribute to reducing greenhouse gas emissions. In addition, the Greater Sydney Region Plan includes a 'low carbon city' objective, which is given effect through the objectives of the district plans. The district plans include the objective of "A low-carbon city contributes to net-zero emissions by 2050 and mitigates climate change".
3. Other councils in Greater Sydney have net zero emissions targets or greenhouse gas emission reduction objectives and sustainability actions in their community strategic plans and local strategic planning statements.
4. Many developers have net zero targets in their corporate strategies.

There is an opportunity to reduce greenhouse gas emissions

5. Energy (electricity and gas) used in buildings is a significant contributor to greenhouse gas emissions in the city and in Greater Sydney. In the city, existing offices, hotels and apartments contribute to 68 per cent of building greenhouse gas emissions.
6. There is an opportunity to improve the environmental performance of buildings in cities beyond that required by the *National Construction Code* (NCC). Energy modelling that informed the NCC used development typologies that were reflective of average development across Australia, not necessarily that of higher density development or the range of development typical of Sydney. The city, like other cities across Australia has a high number of mid to high rise buildings compared to low and mid-rise buildings found in smaller cities and regional parts of Australia. As a result, the NCC energy modelling doesn't reflect the range of developments found in large cities. Increasing the energy performance requirements beyond that of the NCC for cities will see a greater reduction in greenhouse gas emissions and provide a greater contribution to achieving the City's and NSW Government's net zero emissions targets sooner.
7. The City's planning controls currently embed energy performance targets only for new office buildings, which now align with the 2019 update to the NCC. There are no targets for other emission intensive development types such as hotels and shopping centres. Other councils in Greater Sydney also lack energy performance targets in their planning controls for all or many development types.

8. *State Environmental Planning Policy (Building Sustainability index: BASIX) 2004* (BASIX) currently sets energy performance for residential developments, with councils having no ability to set higher performance requirements except for when incentives are offered. BASIX was established in 2004 with minimal updates to the performance requirements occurring since then, with the last being in 2017. The current requirements are below what industry can achieve and there is opportunity to increase the performance requirements and amend the tool, such as introducing additional height bands, to achieve greater greenhouse gas emission reductions.

The performance standards will deliver net zero energy buildings

9. Land use planning has a role to play in reducing greenhouse gas emissions and making buildings more resilient, as well as responding to local government and NSW Government plans and strategies. There is an opportunity to transition buildings to net zero energy across Greater Sydney through planning controls.
10. The City has developed performance standards for net zero energy buildings for use in local and state planning controls. The performance standards bring together energy efficiency, on-site renewables and off-site renewables. The increases in energy performance are implemented through two step changes to transition to net zero energy buildings by 2026. They cover new office, shopping centre, hotel and multi-unit residential developments, as well as major refurbishment of and additions to existing buildings in these development types.
11. Off-site renewable energy procurement is a key part of the performance standards. It is extremely challenging for mid to high-rise developments to achieve net zero energy through energy efficiency and on-site renewables alone. Higher energy use in larger buildings, limited roof space and shading impacts the ability for these buildings to generate enough renewable energy on-site to offset operational energy use. Purchasing off-site renewable energy can offset the remaining energy.
12. The planning proposal and draft DCP will implement the performance standards for office, shopping centre and hotel developments. They will ensure the City's planning framework delivers on the strategic directions in *Sustainable Sydney 2030*, and implements actions in Environmental Action and in the City's planning statement. The proposed controls will help deliver environmental and economic benefits from development.
13. The planning proposal and draft DCP do not include performance standards for multi-unit residential development. In the NSW planning framework, BASIX sets the performance requirements for residential developments. The performance standards will be provided to the NSW Government to inform future amendments to BASIX Energy.
14. The performance standards, evidence base and draft planning controls can be used and adapted by all Greater Sydney councils, as well as the NSW Government to respond to their net zero emissions or greenhouse gas emission reduction targets.

The performance standards are for key development types and to be implemented in stages with options for demonstrating performance

15. The performance standards have been developed for office, shopping centre, hotel and multi-unit residential developments of new buildings, refurbishments and additions over a certain size (development threshold). The standards for offices and shopping centres apply to base buildings (not tenancies) while hotels and multi-unit residential standards are for the whole building.

16. To transition buildings to net zero and allow industry time to adapt and innovate the standards are proposed to be implemented in two steps. The first step will apply to development proposals from the beginning of 2023 and the second step from the beginning of 2026.
17. The performance standard for Step 1 can be achieved through energy efficiency and on-site renewable energy. The standard for Step 2 achieves net zero by increasing the energy efficiency and on-site renewable target plus offsetting any remaining energy use through the purchase of off-site renewables.
18. At each step there are three options for demonstrating performance. These include NABERS and Green Star, two industry standard rating tools, and an energy intensity target of energy used per square metre over a year. NABERS and Green Star require third party verification and simplify the development application assessment process. To demonstrate compliance with the energy intensity target proponents will use the NABERS Independent Design Review Panel to formally verify energy modelling. Residential development is the exception as the standard is expressed using the BASIX targets.
19. Proponents can choose one of three options to procure off-site renewables. They can purchase and retire large-scale generation certificates, purchase GreenPower certificates or they can enter into a new, or augment an existing, power purchase agreement. A condition of consent will require the proponent to enter into a contract that involves the procurement of the off-site renewables each year for five years.
20. The development thresholds and performance standards for each step are shown below in table 1.

Table 1: Development thresholds and performance standards

Development	Development thresholds for performance standards	Performance standards	
		Applications submitted between 1 January 2023 – 31 December 2025 (Step 1)	Applications submitted from 1 January 2026 onwards (Step 2)
Office (base building)	a new office building containing a net lettable area (NLA) of 1,000m ² or more	maximum 45 kWh/yr/m ² of Gross Floor Area (GFA), or 5.5 Star NABERS Energy Commitment Agreement (CA) + 25%, or	maximum 45 kWh/yr/m ² of GFA, or 5.5 Star NABERS Energy CA + 25%, or certified Green Star Buildings rating with a “credit achievement” in Credit 22: Energy Use, or
	a refurbishment* to an existing office building that contains a NLA of 1,000m ² or more	certified Green Star Buildings rating with a “credit achievement”	equivalent

	an existing office building of 1,000m ² NLA or more with an addition of 50% or more NLA	in Credit 22: Energy Use, or equivalent	and renewable energy procurement equivalent to “net zero energy” or a maximum of 45 kWh/yr/m ² of GFA
Retail (applies to shopping centre base building only)	a new shopping centre containing a gross lettable area – retail (GLAR) of 5,000m ² or more	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	maximum 45 kWh/yr/m ² of GFA, or 5 star NABERS Energy CA, or certified Green Star Buildings rating with “exceptional performance” in Credit 22: Energy Use, or equivalent and renewable energy procurement equivalent to “net zero energy” or a maximum of 45 kWh/yr/m ² of GFA
	an existing shopping centre of 5,000m ² GLAR or more with an addition of 50% or more GLAR		
Hotel (whole building)	a new hotel of 100 rooms or more	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, or equivalent	maximum 240 kWh/yr/m ² of GFA, or 4 star NABERS Energy CA + 10%, or certified Green Star Buildings rating with a “credit achievement” in Credit 22: Energy Use, or equivalent and renewable energy procurement equivalent to “net zero energy” or a maximum of 240 kWh/yr/m ² of GFA
	a refurbishment* to an existing hotel that contains 100 rooms or more		
	an existing hotel of 100 rooms or more with an addition of 50% or more hotel rooms		

Multi-unit residential (whole of building)	6-10 storeys	BASIX Energy 40	BASIX Energy 45 AND renewable energy procurement equivalent to “net zero energy” or a maximum of 85 kWh/yr/m ² of GFA
	11-20 storeys	BASIX Energy 35	BASIX Energy 40 AND renewable energy procurement equivalent to “net zero energy” or a maximum of 90 kWh/yr/m ² of GFA
	21-30 storeys	BASIX Energy 30	BASIX Energy 35 AND renewable energy procurement equivalent to “net zero energy” or a maximum of 95 kWh/yr/m ² of GFA
Mixed use	the above thresholds for each proposed use apply	the above performance standards apply for each proposed use	the above performance standards apply for each proposed use

* 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.

The performance standards are supported by a robust evidence base

21. The performance standards and timing of the step changes are informed by a robust evidence base. A consortium of consultants completed energy modelling, construction costing and a cost benefit analysis for development which is characteristic of the city and Greater Sydney. See Attachment C for the project report.

22. Energy use was modelled for each land use and a corresponding baseline was established. The baseline is the energy efficiency requirements under Section J of the NCC for office, shopping centre and hotel developments, and BASIX for multi-unit residential. For each land use, three typologies representative of typical developments in the city and Greater Sydney were analysed. Energy reduction measures were applied to each building typology to identify the maximum potential on-site energy improvement. Energy reduction measures were selected based on current technologies and practices. The increased capital expenditure associated with each measure was individually costed for each typology.
23. A cost benefit analysis was completed for each of the energy efficiency measures identified through the energy modelling and the off-site measures. This determined the potential profitability of the investment in the measures over 15 and 25 years. The analysis also forecast the change in costs and benefits over time, identifying when efficiency measures will become more cost effective.
24. Using an iterative energy modelling and cost benefit analysis process, the performance standards and timeframes were developed, determining the most energy efficient and cost-effective steps for each typology. The most conservative result for the three typologies analysed was selected for the performance standards ensuring all development for each land use could achieve the performance standards.
25. In the project, energy includes gas, electricity and thermal energy, and excludes diesel used for emergency back-up generation. Other emissions, such as those from refrigerants and embodied energy, are not included.

The cost benefit analysis demonstrates a positive financial return

26. The cost benefit analysis identified development could achieve a positive financial return for each step change as shown in table 2 below. A positive internal rate of return (IRR) and a very small capital expenditure (CapEx) increase were identified for each energy efficiency measure. An IRR above zero makes a profit. A CapEx increase is the additional cost to meet the performance standard as a percentage of the full cost of development. The CapEx increase ranges from 0.11% to 1.56%. For further information see the project report at Attachment C.

Table 2: IRR and CapEx results

Development	Height range (storeys)	Step	IRR	CapEx increase
Office	-	first	10-37%	0.11%-0.58%
		second	16-28%	0.16%-0.52%
Shopping centre	-	first	2-23%	0.16%-0.42%
		second	9-11%	0.95%-1.28%
Hotel	-	first	17-20%	0.15%-0.35%
		second	9-10%	0.24%-0.86%
Multi-unit residential	6-10	first	28%	0.64%
		second	20%	1.56%
	11-20	first	23%	0.64%
		second	18%	0.79%
	21-30	first	22%	0.64%
		second	20%	0.67%

Extensive stakeholder engagement has informed the performance standards

27. Extensive engagement with industry and government stakeholders informed the evidence base that supports the performance standards.
28. In May and November 2018, two forums were held that started the conversation with industry and government to identify issues and opportunities to transition to net zero energy developments through land use planning.
29. The City engaged with industry and government on the energy reduction measures, initial energy modelling, cost-benefit analysis, the draft performance standards and timeframes, development thresholds and integration of off-site renewables. This happened through the following:
 - (a) July 2019 to February 2020 - three meetings with an external industry and government advisory group

- (b) November 2019 and February 2020 - three stakeholder workshops with industry, government and shopping centre representatives
 - (c) September and October 2020 - individual meetings with nine developers. The nine developers were Mirvac, Stockland, Lendlease, Frasers, Aqualand, Greenland, Charter Hall, Dexus and Crown Group. The meetings also sought feedback on the implementation of the performance standards given the impacts of Covid. The feedback received at these meetings was extremely valuable and informed the final performance standards and the timing of their implementation
 - (d) November 2020 - a meeting with executive directors and directors from DPIE and commissioners and staff from the GSC. Feedback from the individual meetings with developers was also discussed
 - (e) November 2020 - a meeting with staff from the Government Architect NSW
 - (f) December 2020 and January 2021 - meetings with the Western Sydney Regional Organisation of Councils, Southern Sydney Regional Organisation of Councils and the Northern Planners, a subset of Northern Sydney Regional Organisation of Councils
 - (g) December 2020 to February 2021 - meetings with representatives of the Property Council of Australia committees, peak bodies and project partners.
30. Stakeholder feedback on the draft performance standards shaped the final performance standards. It identified that some of the draft performance standards, the development thresholds and implementation timing needed to be amended.
31. Developers recommended the implementation be delayed by 1-2 years to take into account the impact of Covid, particularly on the retail and residential development markets. As a result, the planning controls will be exhibited in 2021 and the implementation of step one delayed to 2023 and step two to 2026.
32. For office developments, developers identified that step 2, being 6 star NABERS Energy Commitment Agreement or equivalent, was too challenging. Industry feedback recommended the energy efficiency and onsite-renewable component of step 2 is reduced and the amount of off-site renewables procured is increased to still achieve net zero energy. As a result, the minimum energy efficiency and onsite renewables standards of second step were reduced.
33. For shopping centre developments, developers and the Shopping Centre Council of Australia identified that steps 1 and 2 were challenging as were refurbishments. The Shopping Centre Council of Australia also raised other issues including that shopping centres are heavily regulated, owners disclose energy costs to tenants and that some owners have portfolio-wide commitments to net zero. As a result, the first step for shopping centres was reduced to 4 star NABERS Energy Commitment Agreement or equivalent and the second step was reduced to 5 star NABERS Energy Commitment Agreement or equivalent. The refurbishment threshold was removed.

34. For multi-unit residential developments, developers identified that improved energy efficiency and implementation of on-site renewable energy is challenging above 30 storeys. As the energy modelling and cost benefit analysis was completed for typologies lower than 30 storeys, the performance standards were amended to be limited to 30 storeys and height bands of 6-10, 11-20 and 21-30 were introduced. This allows the performance standards to be increased for smaller scale developments, where it is more achievable.

Industry and government have positively responded to the performance standards

35. Strong support for the implementation of the performance standards was identified at the industry and government briefing on 11 March 2021 when the final performance standards were presented. See Attachment D for a summary report from the briefing.
36. At the briefing, presentations and messages of support were given from:
- (a) the Lord Mayor, Clover Moore
 - (b) the Honourable Rob Stokes MP, Minister for Planning and Public Spaces
 - (c) the GSC's Environment Commissioner
 - (d) Executive Development Director from Lendlease
 - (e) a development manager from Stockland.
37. 185 people attended the briefing. This included:
- (a) 86 representatives from the industry, including developers, industry groups, ecologically sustainable development and planning consultants
 - (b) 19 representatives from NSW and Victorian governments.
 - (c) 75 representatives from 24 of the 32 Greater Sydney councils
 - (d) four representatives from councils outside of NSW.
38. At the briefing attendees were asked to complete a survey which identified their support for the implementation of the performance standards. Of those that completed the survey, 76% supported the implementation of the performance standards without any changes.
39. Letters of support for the performance standards have been received from six developers that provided feedback on the draft performance standards. The letters are from Stockland, Frasers, Lendlease, Crown Group, Dexus and Mirvac and are shown at Attachment E.

Planning controls to implement the performance standards

40. To implement the performance standards the City has prepared a planning proposal to amend Sydney LEP 2012, the *Sydney Local Environmental Plan (Green Square Town Centre) 2013* and *Sydney Local Environmental Plan (Green Square Town Centre - Stage 2) 2013*, as well as a draft DCP to amend Sydney DCP 2012 and Green Square Town Centre DCP. The planning proposal and draft DCP are shown at Attachments A and B respectively.

41. The planning proposal introduces a new local provision into each LEP. The provisions require the consent authority to consider during their assessment of the development application if development is either highly efficient and reduces energy use through energy efficiency and the use of on-site renewables or is capable of achieving net zero energy prior to commencing use, depending on when the development application is lodged. It also identifies the development uses and size thresholds for new development, additions and refurbishments that the provision applies to. Lastly, it requires that consideration is given to whether the development will achieve the relevant standards in the DCP when determining if a development is either highly efficient and reduces energy use through energy efficiency and the use of on-site renewables or is capable of achieving net zero energy.
42. The draft DCP includes more detailed planning controls to implement the performance standards. The draft DCP has also been prepared as a design guide to enable an alternative option for the integration of standards in the LEP. The controls set out the performance standards for steps one and two and the dates for implementation. They also identify the development thresholds for new development, additions and refurbishments that the performance standards apply to. The controls also identify the options for demonstrating compliance with the performance standards through recognised planning and design tools, as well as an energy intensity target that all have third party verification. Lastly, they set out submission requirements for development applications.
43. The planning proposal and draft DCP do not include performance standards for multi-unit residential development. In the NSW planning framework, BASIX sets the performance requirements for residential developments. Where councils include contradictory requirements, the requirements in BASIX take precedent due to the planning hierarchy. Therefore, the City cannot implement the residential performance standards. However, the performance standards will be provided to the NSW Government to inform future amendments to BASIX Energy. The evidence base identified there is significant room for improvement from the current requirement of BASIX 25 for development 6 storeys and greater.

Key Implications

Strategic Alignment – Regional and Local Planning

44. The Greater Sydney Region Plan and *Eastern City District Plan* (District Plan) are used to shape strategic planning in metropolitan Sydney and align planning from regions down to the local area. The City's planning statement sets the land use planning strategy for the city, which is required to align with the Greater Sydney Region Plan and district plans. The City's planning controls are required to give effect to the strategic plans.
45. The Greater Sydney Region Plan, District Plan and the City's planning statement adopt planning priorities of similar themes, being infrastructure, liveability, productivity, sustainability and governance. How this proposal gives effect to these priorities is discussed in detail in the planning proposal and summarised below:
 - (a) Infrastructure - The procurement of off-site renewables in step two of the performance standards will support investment in the NSW Government's renewable energy zones. This gives effect to infrastructure objectives, particularly:

- (i) District Plan priorities
 - a. E1 - Planning for a city supported by infrastructure
- (ii) Planning statement priorities
 - a. I2 - Align development and growth with supporting infrastructure
- (b) Productivity - The results identified that net zero energy buildings will contribute to a positive and sustainable business recovery for Greater Sydney, creating demand for new skills and jobs in energy efficiency and renewables. This gives effect to productivity objectives, particularly:
 - (i) District Plan priorities
 - a. E13 - Supporting growth of targeted industry sectors
 - (c) Sustainability - The implementation of the performance standards will reduce greenhouse gas emissions through improving energy efficiency, use of on-site renewables and the procurement of off-site renewables to transition buildings to net zero energy. It will also improve the resilience of buildings, improving the comfort for occupants now and in the future when we expect further impacts from climate change. This gives effect to sustainability objectives, particularly:
 - (i) District Plan priorities
 - a. E19 - Reducing carbon emissions and managing energy, water and waste efficiently
 - b. E20 - Adapting to the impacts of urban and natural hazards and climate change
 - (ii) Planning statement priorities
 - a. S2 - Creating better buildings and places to reduce emissions and waste and use water efficiently
 - b. S3 - Increasing resilience of people and infrastructure against natural and urban hazards

Strategic Alignment - Sustainable Sydney 2030

46. *Sustainable Sydney 2030* is a vision for the sustainable development of the city to 2030 and beyond. It includes 10 strategic directions to guide the future of the city. This policy is aligned with the following strategic directions and objectives:
- (a) Direction 2 - A Leading Environmental Performer - the planning proposal and draft DCP deliver staged energy performance standards for future development which will reduce greenhouse gas emissions. It will also ensure that buildings are resilient now and, in the future, when we expect further impacts from climate change. The development of the performance standards also demonstrates leadership in environmental performance.

- (b) Direction 9 - Sustainable Development, Renewal and Design - the planning proposal and draft DCP will support more ecologically sustainable development by transitioning key development types to net zero energy. The City will also lead by example, sharing the results and evidence base with the NSW Government and other Greater Sydney councils, helping to deliver sustainable places. The performance standards will also provide for economic growth and innovation, fostering a culture of continual improvement and going beyond 'business as usual'.
- (c) Direction 10 - Implementation through Effective Governance and Partnerships – the project makes a positive contribution to the governance of metropolitan Sydney as the evidence base and results are applicable to development across Greater Sydney and will be shared with the NSW Government and Greater Sydney councils.

The proposal will support a positive business recovery with environmental benefits

47. The planning proposal and draft DCP will facilitate resilient, net zero energy buildings. The key benefits are:
- (a) reduced greenhouse gas emissions equating to 21% of the City of Sydney's 2030 target
 - (b) reduced running costs for developers, owners and occupants of buildings and improved comfort for occupants now and in the future when we expect further impacts from climate change
 - (c) savings in avoided health, energy network and emissions costs
 - (d) contribution to a positive and sustainable business recovery for Greater Sydney
 - (e) demand for new skills and jobs in energy efficiency
 - (f) support for investment and jobs in the NSW Government's renewable energy zones.
48. A broader cost benefit analysis was completed that considered the costs and benefits to direct participants such as developers and owners of buildings, and indirect benefits of public savings in health, energy network and emissions.
49. From development that occurs in Greater Sydney, the broader analysis identified that the performance standards will save investors, business and occupants \$1.341 billion between their implementation in 2023 and 2050. This is the result of energy bill savings minus the cost to implement the performance standards.
50. The broader analysis also identified savings to the public of \$1.811 billion between 2023 and 2050. This is through savings to NSW energy consumers of \$842 million from avoided power generation from traditional sources such as coal and \$618 million from avoided additional network infrastructure for traditional power generation. The community in Sydney, the Hunter Valley, and NSW taxpayers will also save \$35 million from avoided health costs resulting from better air quality. Lastly, the public in general will save \$316 million attributed to avoided emission costs. For further information see the project report at Attachment C.

51. A separate City analysis on the procurement of off-site renewables in step two of the performance standards is estimated to generate \$13 million for renewable energy producers from development in the city alone. This supports investment and jobs in the NSW Government's renewable energy zones.

Relevant Legislation

52. *Environmental Planning and Assessment Act 1979* (the Act)
53. *Environmental Planning and Assessment Regulation 2000*

Critical Dates / Time Frames

54. Should Council endorse the attached planning proposal and draft DCP for public exhibition, the planning proposal will be forwarded to DPIE in accordance with section 3.34 of the Act for the Gateway determination to proceed with consultation.
55. Following the Gateway determination, the typical timeframe is 21 days for public authority consultation and 28 days for public exhibition. The Gateway determination will also determine the general date for the completion for the amendment to the LEP.
56. Following public authority consultation and public exhibition, the outcomes will be reported back to Council.
57. The intention is to have the controls come into effect on 1 January 2023. As the process to change the LEP can take 12 months, it is important that Council request a Gateway determination as soon as possible to allow the implementation of the planning proposal in line with this timeframe.

Public Consultation

58. The project has been informed and shaped by an extensive engagement with industry and government, described previously in this report.
59. The public exhibition process for this planning proposal will be determined by DPIE. It is proposed that the public exhibition of the planning proposal and draft DCP run concurrently. The consultation will be in accordance with the requirements of:
 - (a) the Gateway determination issued by DPIE under section 3.34 of the Act
 - (b) the *Environmental Planning and Assessment Regulation 2000*
 - (c) the *City of Sydney Community Participation Plan 2019*.
60. It is likely that the public exhibition for the planning proposal would be a minimum of 28 days, with notification in accordance with the Gateway determination and the City's Community Participation Plan.

61. The draft DCP will be publicly exhibited online on the City's website in accordance with the *Planning and Assessment for Councils during COVID 19 guidelines* issued by DPIE in April 2020, and in accordance with the *Environmental Planning and Assessment Regulation 2000*. Key stakeholders from the community, industry and government will be notified about the exhibition.

GRAHAM JAHN, AM

Director City Planning, Development and Transport

Anja Te Wake, Specialist Planner, Strategic - Sustainability