



SUBMISSION:

Discussion Paper: A Housing Strategy for NSW

NSW Department of Planning, Industry and Environment

Western Sydney Regional Organisation of Councils

July 2020

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1. INTRODUCTION

Western Sydney Regional Organisation of Councils (WSROC) welcomes the opportunity to provide a response and submission to the **Discussion Paper: A Housing Strategy for NSW** released by the NSW Department of Planning, Industry and Environment.

WSROC fully supports the need for a holistic housing strategy and are pleased to see the prominence of the four central themes of *supply, diversity, affordability* and *resilience*. Ensuring balance is achieved across these four themes will be the critical challenge to ensure safe, affordable and resilient housing for all.

1.1 About WSROC

The Western Sydney Regional Organisation of Councils (WSROC) is a membership organisation representing seven councils in Greater Western Sydney (GWS). Members include Blacktown, Blue Mountains, Cumberland, Hawkesbury, Lithgow, Liverpool and Parramatta.

With a reputation for considered policy analysis and bipartisan advocacy, WSROC brings a collective voice to those issues which are crucial for Western Sydney's growing population. WSROC's primary role is to represent the councils and communities of Greater Western Sydney as well as developing resource sharing and other co-operative projects between Greater Western Sydney councils.

Current projects include the NSW EPA funded [Western Sydney Regional Waste Avoidance and Resource Recovery Strategy](#), [Western Sydney Energy Program](#) and [Turn Down the Heat Strategy and Action Plan](#) which takes a collaborative approach to urban heat adaptation and mitigation in the region.

1.2 About this submission

Please note that this submission is prepared on behalf of WSROC member councils. Some of our councils will make their own submission. This document should be viewed in addition, and complimentary to those submissions.

This submission consists of two parts:

- The first part contains general feedback on the package.
- The second part is a detailed assessment of waste management considerations

WSROC would welcome an opportunity to further discuss this submission. Should there be any questions regarding this submission, please do not hesitate to contact WSROC CEO, Mr Charles Casuscelli on charles@wsroc.com.au or 02 9671 4333.

1.3 An overview of recommendations:

Below is a summary of recommendations presented throughout the general feedback and waste management considerations:

- That housing affordability measures be expanded to consider the ongoing cost of running a dwelling in addition to the purchase price – lifecycle affordability – and that this be considered in the context of local climatic conditions for both current and future climate scenarios.
- That passive survivability be considered in all new housing and prioritised in affordable and social housing to ensure that such housing supports an acceptable level of thermal performance in the absence of mechanical cooling devices.
- That the NSW Government work with social housing providers to develop retrofit and renewal programs that help tenants adapt to environmental hazards such as heatwaves. Where appropriate, these can include:
 - Cool roof treatments
 - Insulation
 - Window shades
 - Efficient appliances
 - Energy autonomy/grid resilience (e.g. solar PV and battery storage)
- That measures to ensure housing resilience look beyond the immediate dwelling, to consider neighbourhood context and access to services and amenity. This will assist the NSW Government in realising its 30-minute city objectives and creating more liveable and healthy places.
- That cool roofing options be mandated for all new developments.
- That measures to include vegetation consider the relative qualities of different species including their tolerance of future climate conditions and their ability to meet resilience goals in different applications e.g. heat, biodiversity.
- That the BASIX framework be improved by:
 - Reviewing governance, evaluation of outcomes and compliance.
 - Ensuring revenue generated from certificate generation be used to continually refine and improve the tool and framework.
 - Including new areas (comfort and resilience) and that revenue generated from certificate generation be used to refine and improve the tool and framework.
 - Supporting councils by changing the BASIX SEPP to allow higher than minimum standards.

- That a NSW housing strategy puts measures in place to ensure any developments are future-proofed by integrating low-carbon interventions into the strategic planning and infrastructure decisions for the region. E.g. incorporating EV charging infrastructure, accessibility-based parking strategies, looking at reducing energy need and investing in alternative energy opportunities and recycled water supply, etc.
- The selection process for future supply locations, acknowledges that not all transport infrastructure/services provide equal access to the opportunities our city provides due to variation in reliability, frequency, and connectivity.
- That careful consideration be given to ensuring that new housing does not encroach on essential land uses such as industrial and agricultural lands, and that measures are put in place to protect these essential uses.
- That the best use of government-owned land be approached on a case-by-case basis and consider less-profitable, yet essential land-uses which the market is less incentivised to deliver.
- That Government-owned land be used to showcase best practice in urban design where it is used for housing.
- Waste and resource recovery infrastructure (for both collection from the household, and waste processing) must be provided to support future housing and residential precincts.
- Environmental sustainability and resilience considerations should be expanded to include sustainable waste management practices.
- Greater collaboration with the waste industry (including state and local governments) is needed to achieve recycling targets.

2. GENERAL FEEDBACK

2.1 Summary

WSROC fully supports the need for a holistic housing strategy and are pleased to see the prominence of the four central themes of *supply, diversity, affordability* and *resilience*. Ensuring balance is achieved across these four themes will be the critical challenge to ensure safe, affordable and resilient housing for all. The general thrust of the discussion paper is promising, particularly the increased focus on resilience, which must be ingrained in the built environment. However, there are several matters pertaining to cost-of-living, resilience, urban design and waste management that require further consideration, and these are outlined below. Finally, WSROC expects that the development of a NSW Housing Strategy will be conducted in full consultation with local government to ensure it supports effective local service provision, and reflects the recent LEP and DCP review process. State and local planning instruments work in unison and strong dialogue between them is essential to ensure state policy results in the intended outcomes at the grass roots level.

Affordability

WSROC agrees that housing affordability should be a central concern of any future NSW Housing Strategy and WSROC fully supports inclusion of this element as part of the Vision. However, WSROC supports a more holistic view of housing affordability and housing stress than the measures currently used. The lifecycle costs of owning and running a dwelling – not simply its initial purchase or rental price – should be considered as a measured component of affordability. This is particularly important in the case of social housing tenants who are not impacted by the purchase price of a dwelling but will need to manage higher running costs during their tenancy.

Resilience

WSROC commends the NSW Government for its strong consideration of natural hazards and resilience as part of a future NSW Housing Strategy. WSROC strongly supports the use of clauses relating to cool roofing, water and vegetation to improve urban cooling, the use of bushfire-resistant materials and designs, and using the planning system to locate new housing away from high-risk locations however, it should be acknowledged that individual housing design alone cannot create resilient communities. The resilience of households is highly dependent on the surrounding neighbourhood and community.

Supply

WSROC agrees that housing should be prioritised in areas where residents have good access to transport infrastructure and other services. At present, the delivery of many greenfield estates in Western Sydney fall well short of the stated ideal that infrastructure and housing go hand-in-hand. Further, attention should be paid to balancing the relationship between housing and other land uses. As the city expands, industrial and agricultural lands are gradually being encroached by residential development. This can lead to conflicts between residential and other land-uses with relation to

noise, odour, or emissions. WSROC commends the NSW Government's commitment to delivering best practice through Government-led development, and agrees that a Government-led development offers a significant opportunity to showcase best practice urban design and would welcome any opportunity to work with the state government on such a project. That said, WSROC cautions against the assumption that housing is always the best use of government-owned land.

Diversity

WSROC supports the exploration of diverse housing models but maintains that all housing, regardless of its form should adhere to the resilience and affordability principles outlined above. This is particularly important when designing homes for vulnerable groups such as the elderly, those living with a disability or those living in social housing.

2.2 Housing affordability and stability: A holistic approach

WSROC agrees that housing affordability should be a central concern of any future NSW Housing Strategy and WSROC fully supports inclusion of this element as part of the Vision. However, we suggest a more holistic view of housing affordability and housing stress than the measures currently used (i.e. a household has an income in the bottom 40 per cent of income distribution and is paying more than 30 per cent of its income in housing costs) is necessary to better achieve affordable cost of living whilst establishing more resilient, liveable homes.

Housing affordability should be thought of in terms of the lifecycle costs of owning and running a dwelling, not simply its initial purchase price. Focusing solely on reducing the purchase price of a dwelling is likely to encourage affordable construction methods which ultimately reduces the performance of a building; leading to higher running costs related to energy, water and gas. This ultimately has flow-on effects for the resilience of public infrastructure and services relating to energy, water, social security and healthcare.

Lifecycle affordability is particularly critical in the case of private rental properties and social housing. Private and social tenants are not greatly impacted by the purchase price of a dwelling but will need to manage ongoing running costs during their tenancy.

Housing affordability, BASIX and NCC

WSROC fully supports the discussion paper's notion that regulations such as BASIX can be leveraged to deliver better resilience, comfort, affordability (through reduced bills) and carbon reduction benefits to occupiers and the broader community. However, current BASIX standards will need to be reviewed to take into account a changing climate and allow for mitigation and adaptation to extreme heat, a compounding issue, especially for Western Sydney residents, which currently not sufficiently integrated into the standard.

WSROC councils highlight the need for improvements to the BASIX framework, including governance, evaluation and compliance. We specifically note the potential to use revenue generated from

certificate generation to continually refine and improve the tool and framework. In addition, we recognise the need for greater focus on compliance to ensure that the policy is being met, that dwellings are being built to a higher standard, and delivering greater outcomes for occupiers.

Overall, WSROC recommends the NSW Government support councils by changing the BASIX SEPP to allow higher than minimum standards, particularly for growth areas and planned precincts. This will not only help to deliver the District Plan's planning priorities, but also the NSW Government's net-zero emission target.

WSROC further shares the Paper's expectation that the updates to the National Construction Code will include new thermal performance measures. However, our councils have expressed concern that the 'whole of house' amendments will not adequately apply to apartment development, where much future housing growth will be.

Prioritising passive survivability

WSROC commends the NSW Government on prioritising mitigating and adapting to extreme heat and urban heat as part of the discussion paper. WSROC wants to highlight that interventions targeting heat often rely on the use of mechanical cooling devices such as air-conditioning, heaters and fans. It is noted that tenants on lower incomes, many of whom may be at greater risk of heat-related illness, may be reluctant to use mechanical cooling devices due to fear of bill shock¹. As such, principles of lifecycle affordability and the need to design buildings that exhibit passive survivability in the absence of mechanical cooling are especially important in affordable and social housing.

Social housing renewal

The discussion paper notes that *"Renewal of social housing reduces maintenance costs, provides more and better homes, and enables more vulnerable families to access a safe and affordable place to live."* (p. 67). WSROC's Turn Down the Heat Strategy and Action Plan 2018², developed in partnership with 55 organisations, identified social housing retrofit and renewal as one of 16 critical actions for addressing the impacts of heat in Greater Western Sydney. The recommendation from the multi-sector group which included councils, state agencies, utility providers and community organisations, was that social housing retrofit and revitalisation was necessary to assist low-income groups adapt to heatwaves. Suggested programs included the installation of high efficiency air-conditioning in partnership with solar panels should be prioritised for older and other vulnerable residents. In community surveys conducted by WSROC and Resilient Sydney³, residents in rental and public housing expressed frustration at being unable to retrofit their homes to adapt to climate for

¹ Schlosberg et al. (2018). Insights into community urban resilience experiences. Resilient Sydney. Available from: <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKewig45bNhOXqAhUIxTgGHXPSDEoQFjABegQIBRAC&url=http%3A%2F%2Fsydney.edu.au%2Fenvironment-institute%2Fwp-content%2Fuploads%2F2019%2F07%2FCRIP-Report-Final.pdf&usg=AOvVaw0dgHJ70n67sFIXGZB5OD10>

² WSROC (2018). Turn Down the Heat Strategy and Action Plan 2018. Available from: <https://wsroc.com.au/media-a-resources/reports/summary/3-reports/286-turn-down-the-heat-strategy-and-action-plan-2018>

³ WSROC survey is yet to be published. Results of Resilient Sydney survey provided in Schlosberg et al. (2018).

example installing, external shading, or plant trees etc. Prioritising resilience in rental housing is critical to improve quality of life, tenant safety and building performance.

Alternative housing models

The Discussion paper also outlines a range of alternative housing models such as rent-to-buy, co-housing, and shared equity as options to improve housing affordability for lower income groups. While exploring innovative housing models is generally supported by WSROC, it should be noted that the financial capacity of any low-income group to participate in these schemes will be significantly limited by the running costs of their dwelling.

Recommendations:

- That housing affordability measures be expanded to consider the ongoing cost of running a dwelling in addition to the purchase price – lifecycle affordability.
- That lifecycle affordability be considered in the context of local climatic conditions for both current and future climate scenarios.
- That passive survivability be prioritised in affordable and social housing to ensure that such housing supports an acceptable level of thermal performance in the absence of mechanical cooling devices.
- That the NSW Government work with social housing providers to develop retrofit and renewal programs that help tenants adapt to environmental hazards such as heatwaves.
- That the BASIX tool be augmented to include new areas (comfort and resilience) and that revenue generated from certificate generation be used to refine and improve the tool and framework. In addition, NSW Government to support councils by changing the BASIX SEPP to allow higher than minimum standards.

2.3 Ensuring resilient housing extends beyond the immediate dwelling

WSROC commends the NSW Government for its strong consideration of natural hazards and resilience as part of a future NSW Housing Strategy. New housing stock is likely to be in place for many decades and as a result must be resilient to current and future conditions. The NSW Government will be aware that many of WSROC's members are at particular risk of heatwave and that special risk profiles exist in terms of flood (Hawkesbury, Liverpool and Parramatta) and bushfire (Blue Mountains, Hawkesbury, Lithgow and Liverpool).

WSROC strongly supports the use of clauses relating cool roofing, water sensitive urban design, and vegetation to improve urban cooling, the use of bushfire-resistant materials and designs, and using the planning system to locate new housing away from high-risk locations however, it should be acknowledged that housing design alone cannot create resilient suburbs or cities. The resilience of households is also highly dependent on the surrounding neighbourhood and community, this might include: household awareness and preparedness for hazards, community cohesion, or the availability

and capacity of evacuation routes, emergency shelters and refuges. As such WSROC strongly suggests that any such clauses be considered holistically including any potential disbenefits to resilience. For example:

- Raising floor-levels for housing in flood-prone areas may create implications for evacuation where this allows additional dwellings to be built adjacent to flood-prone areas.
- The use of bushfire-resistant materials and designs should not create an undue sense of safety or justify increased residential densities where this would inhibit evacuation.
- Improving heatwave resilience requires more than heat-mitigating homes, it requires infrastructure for community refuge, energy resilience and transport.

Heatwave resilience

Below is further detail on resilience to heatwaves. WSROC has completed significant work in this space including current efforts to develop standard LEP and DCP clauses for use by local government.

WSROC's work on urban heat and heatwave resilience suggests that the integration of housing, public spaces, public buildings, and infrastructure are critical to ensuring the passive survivability of neighbourhoods. Not only can a well-designed public domain improve heat-resilience via cool materials, water in the landscape and greening, but the public domain should also provide places of refuge for the community during extreme weather events and heatwaves. Such places should be easily accessible on foot or via public and community transport. Such 'refuges' which may take the form of community centres, libraries, and swimming pools, are within the domain of local government to provide, however current funding mechanisms restrict the degree to which this infrastructure can be delivered in a timely, equitable manner.

Cool roofs

WSROC strongly supports the mandate of cool roofing in new builds. This is one of the most straightforward urban cooling measures to implement. We also support consideration of 'cool facades' for multistorey buildings and recommend the work completed by City of Parramatta Council in this area.

Landscaping

WSROC commends the report's consideration of landscaping as a measure to shade homes and reduce ambient temperatures – increasing both resilience and comfort. However, in the context of reducing block sizes, climate change and drought, special consideration must be given to:

- Portion of the block dedicated to greenspace and permeability.
- The management of water to support green infrastructure. WSUD approaches are recommended.
- In high-density developments where private space is inadequate to support urban canopy, increased verge width is required to provide shade and cooling for dwellings.
- Species selection must be thoroughly considered for different applications. For example, native species offer biodiversity benefits, often perform better in drought and future climate

scenarios however they provide far less urban cooling benefit and may have more vigorous root systems that are problematic to surrounding structures and infrastructure. Research by Western Sydney University has noted the relative ability of various species to:

- Survive future climate scenarios
- Survive in harsh urban environments – with limited soil, water, high pollution etc.
- Cool the urban environment
- Provide for biodiversity outcomes
- Ensure minimal interference with infrastructure and services.
- Ongoing maintenance requirements including watering, arboriculture etc.

Water in the landscape

WSUD is expressly supported as a way of providing additional cooling, supporting canopy growth, and mitigating against drought conditions. Greater uptake of passive irrigation systems that capture and hold stormwater run-off to support street tree development is supported.

Energy resilience

Energy inequity is a major concern for Western Sydney and has been collectively identified as an area of regional priority by WSROC councils. While environmental factors contribute to higher energy demandⁱ, Western Sydney's residents often have less access to opportunities and technological improvements compared to other areas in Sydney. Both energy reliability and costs are areas of concern for Western Sydney. We therefore again stress the need to prioritise design that puts passive survivability front and centre.

WSROC further recognises the need to ensure any new housing to be able to respond to a changing energy landscape. Opportunities include:

- Review and address current barriers to distributed energy and microgrids and develop policies to incentivise increased resilience of energy generation and reliability.
- Develop consistency in planning controls to ensure that EV charging considerations are included from the onset of any design.

Recommendations:

- That measures to ensure housing resilience look beyond the immediate dwelling, to consider neighbourhood context and access to services and amenity.
- That cool roofing options be mandated for new developments.
- That measures to include vegetation consider:
 - the relative qualities of different species and their ability to meet resilience goals in different applications e.g. heat, biodiversity;
 - appropriate verge widths, soil depth and passive irrigation to support tree growth; and
 - Ongoing maintenance and costs.

- That a review of energy infrastructure is conducted to review both current capacity and reliability during heatwave conditions, and opportunities to future-proof infrastructure to accommodate micro-grids and EV infrastructure.

2.4 Housing supply in the right locations

Delivering housing in-line with infrastructure

WSROC agrees that housing should be prioritised in areas where residents have good access to transport infrastructure and other services. At present, the delivery of many greenfield estates in Western Sydney fall well short of the ideal of infrastructure and housing going hand-in-hand. Most greenfield sites are developed well beyond the reach of existing transport infrastructure networks, and, once in place, are likely to remain serviced or underserviced for many decades; with resulting impacts on local road networks. Further, a future housing strategy should acknowledge that not all infrastructure services provide equal reliability, frequency or connectivity to the opportunities our city provides.

The right location for housing, industry and agriculture

Further, as identified, attention should be paid to balancing the relationship between housing other land uses. As the city expands, industrial and agricultural lands are gradually being encroached by residential development. This can lead to conflicts between residential and other land-uses with relation to noise, odour, or emissions. As noted in the previous sections, such conflicts create challenges with regards to land available for new infrastructure such as waste facilities. While population growth is increasing demand for housing, careful consideration must be given to supplying housing in the right locations and ensuring that other essential land uses (e.g. industrial) are protected.

Government-led development

WSROC commends the NSW Government's commitment to delivering best practice through Government-led development (p.39). WSROC agrees that a Government-led development offers a significant opportunity to showcase best practice urban design. WSROC and its councils are currently working through a range of projects to promote best practice in urban heat mitigation including through the current local planning review and the development of a "Cool Suburbs" voluntary ratings in partnership with Resilient Sydney and Greater Sydney Commission. Demonstrating best practice cool design could lead the way for increased resilience in future urban developments. We would welcome any opportunity to work with the state government on such a project.

The Strategy also outlines a priority to better utilise available NSW Government-owned land for housing (p. 38). Government land provides opportunities to showcase best-practice residential, and particularly affordable/social housing development, however WSROC cautions against the assumption that housing is always the best use of government-owned land. It must be acknowledged

that in certain areas (particularly densifying, infill areas) residential development is already adequately incentivised via market mechanisms. In such instances, WSROC argues that NSW Government land should be reserved for less-profitable, yet essential land-uses – such as public open space and community facilities – which the market is less incentivised to deliver.

Recommendations:

- In selecting appropriate supply locations, a future housing strategy must acknowledge that not all transport infrastructure/services provide equal access to the opportunities our city provides due to significant variation in reliability, frequency and connectivity.
- That careful consideration be given to ensuring that new housing does not encroach on essential land uses such as industrial and agricultural lands, and that measures are put in place to protect these essential uses.
- That Government-owned land be used to showcase best practice in urban design.
- That the best use of government-owned land be considered on a case-by-case basis considering less-profitable, yet essential land-uses which the market is less incentivised to deliver.

3. WASTE MANAGEMENT CONSIDERATIONS

3.1 Summary of Waste and Recycling Considerations

A review of the Discussion Paper: A Housing Strategy for NSW has been undertaken in the context of waste management planning and supply. The focus of the review has sought to identify potential gaps in the considerations within the Discussion Paper as well as the policy directions that will underpin the future Housing Strategy.

The focus of the review is from a waste and resource recovery perspective and has been undertaken to accord with councils' commitments to support a planned and collaborative approach to waste management and to continue the region's advocacy for the consideration of waste as an essential service.

A focus of the review of the Discussion Paper has sought to ensure that waste management is considered as an essential service, akin to water and energy. The review has also sought to ensure that sustainable waste management outcomes are secured and embedded as policy directions within any future housing strategy.

Waste as an essential service

Waste, like water and electricity, is an essential service. It is an essential service that is delivered almost solely by local government in collaboration with the private sector. It is a function of local government regulated under the Local Government Act 1993.

Local councils are determined to deliver safe, efficient and effective waste services all whilst balancing challenges associated with increases in residential populations, changes to housing diversity and increased generation of waste per household. In addition, the ability of local councils to deliver affordable and sustainable waste services can be significantly impacted by external pressures such as changing recycling markets.

On review, it is a missed opportunity of the Discussion Paper that there is no recognition of waste as an essential service. The Discussion Paper is silent on the need for future housing to have access to safe and appropriate waste infrastructure and to ensure local councils can continue to provide services that are affordable, do not impact on resident amenity and are sustainable into the future.

It is also a concern that sustainability and environmental performance of future housing has not captured the need to provide sustainable waste management practices.

Waste management and resilience

It is agreed that housing needs to be resilient. The Paper's expressed need for future housing to be designed so that the environmental impacts are minimised is supported. Despite this, it is concerning that there is a lack of recognition of waste (and resource recovery) within considerations surrounding

the environment and resource availability within the Discussion Paper. These considerations need to be expanded beyond energy and water and include the need for future housing to minimise waste generation during demolition/construction and future residential occupancy.

The Discussion Paper identifies that household waste comprises 33% of total waste in NSW, yet there is no direction for the future Housing Strategy to minimise waste in accordance with the waste hierarchy and the need to achieve recycling targets.

At the very least, waste management and resource recovery should be a key component of Theme 4 'Responsive and resilient housing.'

Industry and private sector organisation collaboration

There is a significant need for the demolition and construction industry to prioritise waste management according to the waste hierarchy. There needs to be a significant shift within the industry to prioritise waste avoidance and rely less on the practice of diverting waste to landfill.

The Discussion Paper recognises that residential construction and demolition waste comprises 37 per cent of total waste in NSW. Yet despite these figures, the Discussion Paper has missed an opportunity to mandate industry change and shift focus from the end of life processing/disposal to waste avoidance.

The Housing Strategy supporting this industry change will align with the NSW State Governments commitment to a circular economy and achieve recycling targets for demolition and construction waste.

3.2 General Comments on Waste and Resource Recovery in the Discussion Paper

The focus of the Discussion Paper based on four central themes of *supply, diversity, affordability and resilience* are welcomed inclusions to drive and influence outcomes and policy directions for a Housing Strategy for NSW.

The inclusion of environmental considerations within the Vision and the intended outcomes is supported.

"Housing that supports security, comfort and choice for all people at all stages of their lives, achieved through supply that meets the demand for diverse, affordable and resilient housing and responds to environmental, cultural, social and economic contexts)." (page 10)

It is pleasing to see a high-level commitment to ensuring quality and environmental housing design as well as an acknowledgement that *"...planning for housing and infrastructure go hand-in-hand..."*. However, it is unclear how these high level statements will be translated to sustainable outcomes,

particularly concerning waste and resource recovery.

It is disappointing that the Discussion Paper provides no high-level recognition that waste management is an essential household service and waste planning solutions are also important sustainability considerations and need to be included within any future Housing Strategy.

It is concerning that despite the best intentions of the Discussion Paper to strengthen the environmental performance of future housing and residential precincts, that there is no real commitment for the Housing Strategy to include policy directions for waste and resource recovery, despite noting the NSW Waste Strategy (Discussion Paper) as a key component of this documents' strategic policy context and is a key initiative of the NSW Governments work to deliver responsive and resilient housing.

Key recommendations for the Discussion Paper and future policy directions of the Housing Strategy are:

- **Waste and resource recovery infrastructure (for both collection from the household, and waste processing) must be provided to support future housing and residential precincts;**
- **Environmental sustainability and resilience considerations should be expanded to include sustainable waste management practices, and;**
- **Greater collaboration with industry and the private sector is needed to achieve recycling targets.**

There is no detail within the Discussion Paper on how sustainable waste management practices will be implemented through targeted policy directions for delivering sustainable and resilient housing.

Establishing clear policy directions for waste and resource recovery would support waste targets contained within the NSW Waste and Resource Recovery (WARR) Strategy and would strengthen the alignment within the existing strategic planning framework such as the Greater Sydney Regional Plan and District Plan. It would also align with the NSW State Government's commitment to a circular economy established within NSW Circular Economy Policy.

It is important for the future housing strategy to recognise that providing sustainable and efficient waste management services is paramount in delivering future housing and residential precincts with high environmental amenity.

Local councils have been working collaboratively with public sector agencies and the private sector to ensure that the role of waste management and resource recovery is elevated in its consideration within the strategic planning system and that it is recognised as an essential service. Specifically, Western Sydney councils have implemented a number of waste initiatives that will:

- Facilitate the shaping of waste and resource recovery policy,
- Contribute to the NSW Government 20 Year Waste Strategy,
- Provide a sound basis for waste infrastructure planning, and
- Deliver progress towards a circular economy.

If waste (and resource recovery) is not elevated in its considerations, the ramifications for residents and local councils will result in adverse environmental and economic consequences. Failure to recognise waste as an essential service will impact the amenity of residential communities and reduce the ability to divert waste from landfill.

It is also paramount that securing vital waste and resource recovery infrastructure is considered and form part of policy directions within any future housing strategy for NSW.

3.3 Housing is supported by waste and resource recovery infrastructure

The Discussion Paper outlines that:

“Wherever new homes are built, infrastructure should also be part of the planning. This includes schools, libraries, community centres, open spaces and new transport. Access to these opportunities and services lead to a greater sense of community and mean people are less likely to need to travel long distances. This is in addition to essential infrastructure such as sewerage and water, which also needs to be resilient.” (Page 28)

- It is agreed that ensuring housing and new residential precincts that are integrated with infrastructure and essential services are critical in delivering well-planned and sustainable communities.
- It is concerning that the Discussion Paper has failed to consider the provision of waste as an essential piece of infrastructure (and service) akin to energy, water and wastewater, and that councils are not recognised in this document as critical service providers, given the requirement for councils to collect waste from residential households in NSW.
- It is critical that residential dwellings, particularly medium and high-density developments, are constructed with the appropriate waste storage, and collection servicing infrastructure to allow waste services to be delivered to households safely, efficiently, and economically for residents. The Discussion Paper notes that well designed homes contribute to an area’s attractiveness, and appropriate waste storage infrastructure is key to ensuring building amenity including issues of odour, noise, litter, and prevention of kerbside dumping.
- The Discussion Paper recognises that the NSW Housing Strategy will need to plan for new homes to be located near infrastructure. This high-level statement has not been supported within the Discussion Paper with any commitment that will translate to securing vital waste disposal and recycling infrastructure for new homes and residential precincts. This is critical given that the Discussion Paper identifies that Greater Sydney will need an additional 1 million new homes to support the 2041 predicted population of 7 million.
- The Housing Strategy needs to clarify that securing waste and resource recovery infrastructure is vital for future housing supply. This would align with current NSW Government commitments under the WARR Strategy and the Greater Sydney Regional Plan which specifically calls for protection of existing waste infrastructure, planning for growth and consideration of the way we service development.

- The majority of waste infrastructure (landfills, materials recovery facilities and organic processing facilities) are located within the Western Sydney Region. These facilities not only service Western Sydney but metropolitan Sydney. As the need to provide new and additional housing increases, so does the pressure on the existing facilities.
- These facilities face pressures associated with the need to increase capacity (as a result of an increase in waste generation) as well as encroachments from urban development.
- Despite the extensive high-level strategic planning undertaken, there has been a significant lack of commitment to deliver outcomes that will secure vital waste infrastructure to support residential population increases.
- The NSW Government can support wider planning reforms to ensure waste and resource recovery is given appropriate consideration in the planning for residential development to support local government provision of safe, resilient and sustainable housing.

Recommendation:

The considerations and future directions of the Housing Strategy should be expanded to consider waste and resource recovery driven priorities that:

- Include waste and resource recovery considerations within any future Housing Strategy.

This would strengthen the ability of future housing and residential precincts in achieving both essential servicing, sustainability objectives and planning directions that are currently embedded within the Greater Sydney Regional Plan and District Plans.

The need to efficiently managing waste has been captured within regional and district level strategic plans. These plans have recognised that reducing waste and managing waste efficiently is essential in delivering liveable, productive and sustainable communities.

- Establish policy directions that support the delivery of waste and resource recovery infrastructure and give effect to circular economy principles.

This could include a commitment to deliver much-needed waste and resource recovery infrastructure that would support future residential and housing growth. This could also include ensuring future planning reforms give priority to the approval pathway for waste infrastructure and supports securing suitable lands for waste infrastructure.

3.4 Sustainable Waste Management Practices

The Discussion Paper identifies a number of potential directions for the Housing Strategy including:

-Continually approve the quality and resilience of new housing.

-Improve the environmental sustainability of existing housing.

-Improve environmental sustainability and resilience in residential precincts.

- The above directions are agreed upon. However, it is concerning that the considerations within these directions have not captured the need for sustainable waste management practices.
- The Discussion Paper recognises that domestic waste generation is high and represents 33% of total waste generated in NSW.
- WSROC has modelled waste and resource recovery growth for the Western Sydney Region and has found that waste generation has increased to 7.87kg/capita/week (2018/2019).
- There is a great opportunity for the Housing Strategy to be supported by directions that promote innovation in good design that support waste stream separation that is essential in achieving recycling targets.
- New housing developments must be designed and planned to deliver effective waste management systems that can be integrated with the local council's waste service. The need for this to occur is heightened due to the increase in the diversity of housing be delivered across the community.
- Well-designed and functional waste management systems (within residential developments) encourage appropriate action and behaviour among building residents and occupants. This increases the potential to improve resource recovery and reduce domestic waste generation but will also increase the amenity and environmental performance of the development.
- The Discussion Paper would benefit from expansion of the environmental sustainability considerations to support sustainable waste management practices.
- There is also an opportunity for the inclusion of potential directions that support best practice for waste management in residential developments. The design, construction and ongoing management of residential developments that incorporate best practice can result in greater participation of services provided (waste stream separation), a reduction in waste generation and increased resource recovery.
- Facilities for general waste and recycling are essential aspects of a development, yet they are often overlooked or undervalued within residential developments.
- Waste management systems are often considered too late in the design process. This can result in poor environmental and built form outcomes for housing developments and across residential precincts.
- It is the common experience across Western Sydney councils, where the recovery level from multi unit developments (such as town houses, residential flat buildings etc.) is often significantly less than traditional detached dwellings.

- It is therefore important for the Housing Strategy to consider in moving forward that any increase in housing diversity being provided (for example manor homes) there is a need to incorporate innovative and well-designed waste management systems. This is needed to increase resource recovery but also to safeguard future residential amenity.

Recommendation:

- The considerations and future directions of the Housing Strategy should be expanded to consider waste and resource recovery driven priorities that:
 - Elevate the importance of securing waste management systems across all housing types that deliver sustainable waste management systems and practices.
 - Support innovation and new technologies in residential precinct planning to facilitate increased resource recovery and reduce reliance on landfill facilities.

3.5 Collaboration with industry and private sector

The Discussion Paper calls on the support of industry and private sector in delivering housing sustainability. The Discussion Paper calls up industry to “...adopt approaches to improve thermal comfort energy and water efficiency...”. (page 78)

- Western Sydney councils support collaboration with broader industry groups and the private sector, however, cautions against excluding waste and resource recovery from sustainability considerations, and urges the recognition of local government as an essential service provider.
- There is a significant need for the demolition and construction industry to prioritise waste management in accordance with the waste hierarchy. There needs to be a significant shift within the industry to prioritise waste avoidance and rely less on the practice of diverting waste to landfill.
- The Discussion Paper recognises that residential construction and demolition waste comprises 37% of total waste in NSW. Yet despite these figures, the Discussion Paper has missed an opportunity to support industry change and shift focus from the end of life processing/disposal to waste avoidance. This aligns with the circular economy principles embedded within the broader strategic planning framework.
- There is a need for sound leadership at the State Government level to support circular economy principles and achieve recycling targets across the demolition and construction industry.
- There are commendable examples (Mirvac has recently released its plan to *Send Zero Waste to Landfill by 2030*) of strong commitments within the private sector to move towards a circular economy and reduce waste going to landfill. However, there is a need for collaboration with the demolition and construction industry, particularly with smaller

organisations, to identify how the government can support waste avoidance and increasing resource recovery in residential construction.

Recommendation:

- The Discussion Paper would benefit from considerations being expanded to support:
 - Increased use of recycled products in all phases of construction to drive market demand. For example, crushed glass (problematic to kerbside recycling systems) can be used as a substitute for virgin sand in civil works construction.
 - Sustainable procurement policies to ensure strong domestic markets for recycled material. This could include mandating the inclusion of sustainability in tenders to improve market for recycled content and reduce recycled content.
 - Expansion of sustainability considerations in the assessment of applications (under both Part 4 and 5 of the Environmental Planning and Assessment Act 1979. Currently, the *Built Environment Sustainability Scorecard* (BESS) is an assessment tool created by Victorian local governments that assists builders and developers at the planning approval stage to show how a development demonstrates sustainable design. Waste is identified as one of the nine environmental categories BESS assesses.

ⁱ Sydney Water. (2018). *Cooling Western Sydney: A strategic study on the role of water in mitigating urban heat in Western Sydney*. Available from: https://www.sydneywater.com.au/web/groups/publicwebcontent/documents/document/zgrf/mty4/~edisp/dd_168965.pdf