



## SUBMISSION

**WSROC Submission to the NSW Government regarding the proposed *Draft Climate Change Fund Strategic Plan* and *A Draft Plan to Save NSW Energy and Money*.**

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**December 2016**

**Western Sydney Regional Organisation of Councils Ltd**

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## 1. Introduction and background

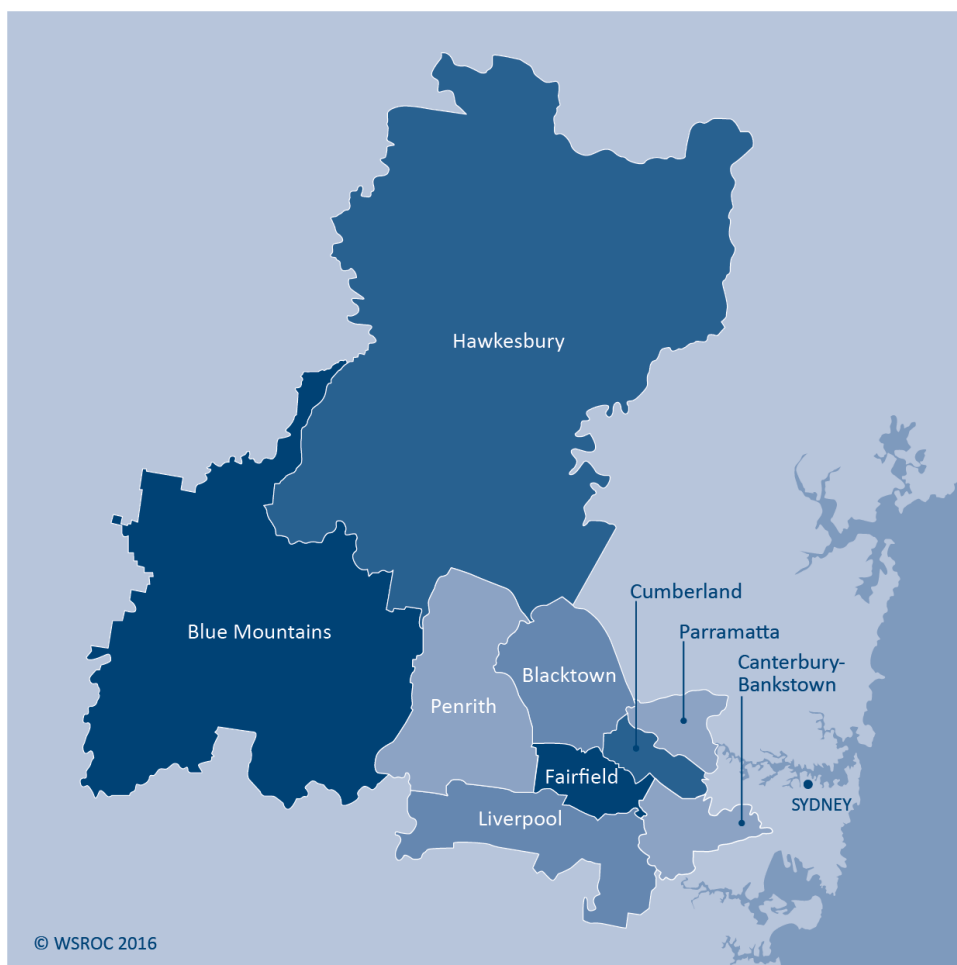
### About WSROC

Thank you for the opportunity to provide a submission to the proposed NSW Draft Climate Change Fund Strategic Plan and A Draft Plan to Save NSW Energy and Money.

The Western Sydney Regional Organisation of Councils (WSROC) represents nine councils in Western Sydney which together provide services for over 5,500 square kilometres, ranging from densely populated metropolitan areas to rural lands and the World Heritage Area of the Blue Mountains. The region's population is 1.8 million and is expected to increase by almost 1.6 million over the next 20 years.

WSROC provides a strong voice for the residents of Western Sydney to improve quality of life. The organisation has a reputation for considered policy analysis and advocacy on a wide range of issues affecting the residents of Western Sydney. WSROC also manages a number of projects, which are either funded jointly by its members or from external sources.

We welcome the opportunity for WSROC and its councils to provide ideas, information and expertise to assist in developing viable and effective programs to tackle climate change.



## **This Submission**

Please note that this submission focuses mainly on issues of greatest concern to our member councils and is not a comprehensive review of all elements of the proposed strategic plan. Lack of comment on other elements of the proposed reforms does not imply WSROC support for those elements.

## **2. General comments**

WSROC congratulates the State Government for its acknowledgement of the challenges of climate change, and the strong statement of intent outlined by the draft documents. WSROC agrees that targeted action from all levels of government is needed to maximise the economic, social and environmental wellbeing of our residents, and ultimately creating a more resilient NSW in the context of a changing climate.

WSROC is very supportive of the target to achieve zero net emissions by 2050, which is both necessary and achievable. However, we note that the current target is aspirational. Even though we understand the considerations for an aspirational target, we would argue that to ensure real and effective change, the NSW Government mandates its targets and some of the actions as plans and programs progress. WSROC and its councils would further like to see, and be involved in, developing an ambitious but realistic timeline of targets to guide local government in developing programs and objectives to achieve the overall target by or before 2025.

We also recommend that ongoing consultation with stakeholders such as local government, public sector agencies and others, should prioritise the development of medium and short term targets. This firm approach would place NSW in a leadership role regarding the Paris Agreement's target of zero net anthropogenic emissions in the second half of this century.

Regional Organisations of Councils (ROCs) such as WSROC are well placed to assist local government to implement climate change and energy efficiency initiatives on a regional scale. There will be merit in the State Government considering supporting the establishment of a capability within ROCs to do so.

With adequate resourcing, WSROC and its member councils are well placed to host and support a range of demonstration projects. Western Sydney's vulnerability to increased heat, our pockets of socio-economic disadvantage, our cultural diversity as well as our rapid development offer multiple opportunities for pilot projects with immediate benefit and learning for use in similar areas or circumstances. Our region includes strong existing community groups and networks and sizable manufacturing, logistics, storage and commercial sectors, which offer opportunity for partnerships and demonstration projects in energy efficiency and use of renewable technologies.

WSROC fully supports the NSW Government's objective to transition to a low carbon economy. However, WSROC urges the NSW Government to ensure funding is available to assist local government with the anticipated transition costs, including the building of knowledge bases and skill sets within local government as well as the capital needed for systems and infrastructure upgrades, and in some cases financial incentives for the implementation of innovative practices.

There remains some uncertainty regarding how the proposed programs and projects are delivered. We therefore ask the State Government to continue to liaise with local governments and other stakeholders in order to design effective programs. A framework to support councils to implement meaningful climate change programs or projects should be considered. The model of the previous Waste and Sustainability Improvement Payments (WASIP) has been mentioned as an example of a successful program which allowed councils control over feasible long term sustainability projects.

WSROC would like to seek clarification from the Government as to whether the \$240 million “of confirmed funding to help landholders and land managers reduce the impacts of climate change on natural ecosystems” (Strategic Plan p5) is the same \$240 million that is “for a new private land conservation program” (<https://www.landmanagement.nsw.gov.au>). WSROC stresses that both actions require adequate funding and stresses that it would be detrimental to the outcomes to expect the \$240 million to deliver both objectives.

WSROC also notes the conflict between the intent to manage climate change risks and the current changes to biodiversity legislation, which fails to prevent broad scale land-clearing, a major source of carbon emissions in Australia. The priority of “conserving private land to reduce the vulnerability of ecosystems to climate change” (Strategic Plan s1.1) is clearly not supported by these other reforms.

Finally WSROC would like to comment that even though the current draft policy framework is to be commended, unless the overarching initiative is embedded within and supported by the NSW Government as a whole, the framework will not deliver optimum outcomes. The predicted social, economic and health impacts of climate change merit an approach that is driven by a range of State Government agencies. The proposed initiatives further need to be linked within other initiatives, such as those of the Greater Sydney Commission.

### 3. Priority investment areas relevant to local government

Priority Area 1 - Accelerating Advanced Energy	
Section	Response
2.1 - Maximise investment under the national Renewable Energy Target	<p>WSROC is very supportive of the State Government's proposal to make it easier for business, institutions and local governments to procure electricity from renewable energy projects. We further support the Government's intention to advocate for stability and certainty in the Commonwealth Government's renewable energy policy; this is much needed to ensure a supporting environment for investment and growing emerging industries. We recognise the benefits that growing these new industries might bring to Western Sydney, in terms of investments and job growth.</p> <p>WSROC would also be interested to discuss opportunities for pilot projects in Western Sydney. Western Sydney's current growth plans provide a substantial number of opportunities for trialling innovative renewable energy initiatives such as solar farms or smart technology suburbs.</p> <p>In this context, WSROC would like to raise the opportunity for the State Government to support acceptance and promotion of Virtual Net Metering (VNM) for solar PPA. Local councils have lots of smaller scale sites such as Community Centres that can be joined in this manner to make it commercially feasible.</p> <p>WSROC supports the action for energy market reforms, but would recommend that the reform should be broader than just improving network connection processes.</p> <p>We further see a need to encourage innovative funding for renewable energy such as CEFC loans (repayments from savings).</p> <p>Lastly, WSROC would like to express its support for the NSW Government's commitment to grow new industries. And we note that providing at least kick-start funding for energy productivity improvements would assist with this.</p>
2.2 - Attract investment in advanced energy demonstration projects	<p>The gas price for our councils is expected to rise considerably over the next six months, which has a substantial impact on the cost to operate community facilities and other major and minor sites and residential properties. WSROC would recommend the State Government includes a focus on gas in the strategy to alleviate the expected financial burden on councils and ultimately the community.</p> <p>WSROC notes that the potential contribution of the government's role in developing policy for and influencing the waste and recycling sector has not been addressed in the Draft Climate Change Fund strategic plan and Policy Framework. Waste related emissions account</p>

	<p>for 2% of the national total, and reductions from 4.6% in 1990 have been mainly driven by technological advances in methane gas capture at landfills. There is greater potential for reduction in emissions from improvement technologies in advanced waste treatment and energy from waste technologies, and behaviour change programs addressing consumption and increased waste generation by NSW residents. Addressing landfill emissions are especially important as waste disposed to landfill creates emissions lasting decades as the waste gradually decomposes, creating an emissions legacy for future generations. The management of waste should also be considered under the banner of policy direction for growing new advanced energy technologies and industries in NSW.</p>
2.5 - Build capacity of local communities to deliver and own renewable energy	<p>WSROC is supportive of the State Government's intention to build on the capacity of local communities to deliver and own renewable energy.</p> <p>WSROC encourages and would be willing to partner to deliver demonstration projects in Western Sydney. We recognise there are options that could be explored for regional networking and forums to share knowledge and skills. However, for these initiatives to be sustainable and make a lasting impact, proper resourcing would be required.</p> <p>We would further suggest that one of the ways to assist with community scale renewable energy projects is to regulate the feed-in tariffs for energy sent back to the grid. An example of this was the 16c net feed in tariff instituted by the Federal Government. Although this initiative was a bit too expensive, it increased the rate of renewable energy uptake and could be reviewed as part of the current Climate Strategy.</p> <p>One program that could potentially be replicated is the South Sydney Regional Organisation of Councils (SSROC)'s <a href="#">our solar our future</a> program which empowers residents to make decisions on their own solar power, solar hot water and heat pump options. Costs are currently prohibitive for most WSROC councils to participate in this program, but councils recognise the need for sound information provision regarding renewable options for communities.</p> <p>Another opportunity is to roll out the Urban Solar Atlas tool as developed by Urban EP (through funding from the State Government). This tool can assist communities and councils in their decision and approval processes for solar investment on their buildings. The tool assists in identifying which buildings are prime candidates for installing solar PV systems, based on solar potential, rooftop area, and energy consumption profile.</p> <p>The NSW government could further look to adopt a place-based approach by providing seed funding to community organisations to deliver and own renewable energy. Support sponsoring energy market and financial regulation reforms through AEMO and COAG to make it easier for community led-renewable projects as well as encourage local generation and sharing.</p> <p>One of the challenges remains to reach those residents who are not owner-occupiers of single dwellings, such as tenants, multi-unit residents, low income earners, CALD and vulnerable people such as the frail elderly who would benefit greatly from solar power. The State Government should consider developing a tailored approach to reach these communities.</p>

	<p>WSROC would recommend for the State Government to work closely with local government and community organisations in designing potential programs.</p> <p>The <a href="#">Leaders for Sustainability</a> program targeted to Western Sydney and subsidised by OEH has been highly valued by the council staff and community leaders that attended the course. WSROC would recommend similar initiatives to be rolled out to increase skills and expertise of Western Sydney communities and professionals.</p>
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Priority Area 2 – National Leadership in Energy Efficiency:	
Section	Response
3.1 – Expand investment under the Government Resource Efficiency Program	<p><b><i>Q28 – What are the best policy options to facilitate the installation of energy efficient public lighting?</i></b></p> <p>Public lighting represents a major cost to Local Government. It accounts for approximately 55 % of WSROC Councils’ energy costs and around 5 % of total budget expenditure. WSROC successfully completed a public lighting replacement project called Light Years Ahead which replaced just under 15,000 old mercury vapour lighting with LED’s.</p> <p>Although attractive long term savings helped mitigate capital costs in the project, significant financial planning and preparation and implementation effort was required. Within Endeavour Energy’s footprint only 11% street lights have been replaced with LED on p-category roads. There is a demonstrable opportunity to reduce costs, increase efficiencies and reduce emissions especially within the public lighting domain.</p> <p>Although attractive long term savings helped mitigate capital costs in the project, significant financial planning and preparation and implementation effort was required. Within Endeavour Energy’s footprint only 11% street lights have been replaced with LED. There is a demonstrable opportunity to reduce costs, increase efficiencies and reduce emissions especially within the public lighting domain.</p> <p>WSROC notes the State Government’s Public lighting Detailed analysis report, and commends the Government for the research done in this space. WSROC confirms that the challenges and barriers as outlined in the report are the ones our councils face. In brief:</p> <ul style="list-style-type: none"> <li>• <b><i>Lack of clear governance:</i></b> Councils have legal responsibility for street lighting yet have little control over key aspects of its delivery, maintenance programs, technology choice or service improvement. Responsibilities for these aspects of street lighting are shared with the distributors. There are no service-level contracts, no binding service regulation and only a voluntary and limited NSW Public Lighting Code.</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Misalignment of interests:</b> The separation of ownership and responsibility has led to misalignment of interests with financial and nonfinancial costs to the community; where the distributors aim to maximise profit and minimise liability, whereas councils have a wider set of street lighting priorities, including reducing costs and emissions.</li> <li>• <b>High capital costs.</b> Currently, street light replacement programs are costly to embark upon, because councils are exposed to the full cost of the upgrade including the unrecovered cost of the old streetlights (residual values of old street lights).</li> </ul> <p>WSROC therefore supports option 5 as outlined in the street light analyses report, which includes:</p> <ul style="list-style-type: none"> <li>• Expanded role for Accredited Service Providers for procurement, installation and/or maintenance services for public lighting assets</li> <li>• Code changes for energy efficiency thresholds and reporting WSROC notes that the public lighting code is currently being reviewed for updating. This process should be finalised promptly by June 2017. WSROC strongly argues that the updated code should be mandatory and facilitate reporting back to councils (i.e. accuracy, timeliness and relevance). The code should further: <ul style="list-style-type: none"> <li>○ provide for council and RMS involvement in equipment choice</li> <li>○ include performance management criteria for non-delivery or sub-standard delivery of services and</li> <li>○ consider limits on retrospective charges consistent with other utility services. The new code should be mandatory and one of its objectives should be to facilitate reporting (i.e. accuracy, timeliness and relevance) back to Council.</li> </ul> </li> <li>• A targeted NSW Government grant program to support accelerated replacement by councils. WSROC notes that although such a grants program is desperately needed, lack of internal resourcing and expertise can be problematic for councils. The WSROC Light Years Ahead program was successful mainly due to the collaborative approach of the project and it being run through a Regional Organisation of Councils. This could be a consideration when the Government designs the program as funding would be needed, not just for capital replacement costs, but also negotiations, planning, design and performance manage these projects.</li> </ul> <p>Additional concerns regarding street lighting are:</p> <ul style="list-style-type: none"> <li>• <b>Lack of pricing and data transparency:</b> NSW energy provider's confidentiality claims, with respect to public lighting, severely compromise councils' ability to understand the basis of public lighting pricing, public lighting investment proposals and make informed decisions about lighting choice.</li> </ul> <p>It is important to ensure the Local Government get the best value for money when it comes to public street lighting contracts,</p>
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	<p>Regional Organisation of Councils can group together on contracts, negotiations on bringing down costs for street lighting, including maintenance charges and supply and installation costs are currently hindered because of the lack of transparency of the factors, criteria and decisions underpinning the pricing framework.</p> <p>WSROC recommends providing funding for independent stakeholder engagement for The Office of Environment and Heritage working closely with Australian Energy Regulator, The NSW Department of Industry and energy utilities, driving industry reform to ensure local Government has access to the sort of information that allows them to prosecute negotiations as a well-informed client.</p> <ul style="list-style-type: none"> <li>• <b><i>Slow uptake new technologies.</i></b> Adaption of LED street lighting and other new technologies has been slow for NSW utilities compared to council owned networks. There is also discrepancy among providers across NSW as to what technology is available. WSROC argues that the State Government can play a role in accelerating new technologies. We would further like to see “Smart street lighting” upgrades be considered in the Save NSW Energy and Money Plan, as an option for funding. These lights have special features as to increase efficiencies, and services. Smart street lighting upgrades consists of LED’s which can be dimmed, data collection sensors such as weather monitoring and communication technology. Street lighting providers and higher density Councils are now starting to install this new technology and this may increase as it becomes more economical.</li> </ul> <p>WSROC commends the NSW Government’s focus on residential street lighting in the draft strategy, but would also like to stress that now is the time to consider energy efficiencies for V-Category roads (main roads) which are managed by RMS. Current technology now allows the high pressure sodium lights on these roads to be replaced by LEDs, which has the potential to achieve major energy and emission savings.</p> <p>WSROC would welcome the opportunity to work with the Government to provide further input into the design of future street lighting programs.</p> <p><b><i>Q29 – What is the best way to support councils to apply GREP?</i></b></p> <p>WSROC is supportive of the State Government’s intention to support local government in implementing targets for cost effective actions to save energy. However, WSROC requests the State Government to review the proposed GREP model to ensure its relevance to local government and ensure that the compliance burden on councils is not increased. As an example the need to annually certify office buildings as 4 star NABERS will add significant cost for councils, particularly if this is expected to be done externally. We would prefer to see any such reporting requirement covered within the existing Integrated Planning and Reporting framework. WSROC would further recommend that the Government consult with councils about what the targets should be and their application. . This is because the capacity and opportunities to reduce emissions will differ between councils.</p> <p>In addition, councils should be provided with a dedicated access to grant/finance program to assist adopt GREP recommendations. It</p>
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	<p>could also include additional support from the Energy Efficient Business and the Sustainability Advantage teams at the Office of Environment and Heritage. The State Government's (OEH) training courses for council staff to save energy are highly valued and should continue. WSROC and our councils are happy to provide feedback in order for the Government to further target and enhance these courses.</p> <p><b><i>Q31 – are there any other ways to save energy through government procurement?</i></b></p> <p>WSROC flags the role of procurement in renewable energy. It is our councils' experience that agencies such as Local Government Procurement currently cannot adequately cater for renewable energy offerings. WSROC would therefore be supportive of funding additional staff and up-skilling of LGP to enable them to put together models and deals for energy efficiency packages and renewable energy contracts.</p> <p>Local Government energy contracts are largely short term (2yr), and price driven – this can create barriers and inhibit participating in Power Purchase Agreements (PPA).</p> <p>Also, currently driving down GHG emissions / value of reducing GHG are not included in energy contract considerations as the primary consideration in procurement regulations and the Local Government Act is "value for money". Sustainability and energy efficiency can be built into the procurement process by requiring suppliers to demonstrate their commitment to energy savings and sustainability. Models can be explored where costs savings are shared between the buyer and supplier.</p> <p>WSROC would further welcome support from the NSW Government to help councils negotiate corporate PPA with energy generator.</p>
<p>3.2 – Improve energy productivity for households and business</p>	<p>WSROC supports the Government's intention to reduce energy costs for households and businesses. We recognise the financial pressures our communities face, which are exacerbated by high energy costs. Climate change impacts such as extreme heat are already a reality for our region, and are set to worsen over the coming years. Ensuring our communities are equipped with the right information and tools to make considered long term energy efficiency decisions has the potential to greatly reduce our emissions and save our residents money. As a region with pockets of considerable socio-economic disadvantage, we especially welcome the focus on vulnerable households and home-renters.</p> <p>We would further encourage additional focus on assisting small businesses, including those who rent premises in improving efficiency and accessing renewable energy. Smaller businesses are often at a disadvantage in upgrading for efficiency and in accessing renewable energy – yet they are important to the economy and account for considerable employment. Like renting householders, those renting business premises face the split disincentive – with owners having little incentive to make upgrades as tenants pay the power bills. Our member councils can offer support for energy efficiency through promotion and engagement with relevant community and business groups and residents. However, proper resourcing is required to ensure the best possible outcomes.</p>

WSROC is supportive of strengthening BASIX for all new buildings to gain energy efficiencies and we would suggest that mandating high standards is the way to drive improvements. However other considerations such as increasing urban greening also need to be considered in this context, WSROC strongly urges the State Government to look into mandating and enforcing urban greening in all future developments.

***Q8: what is the best way to keep BASIX standards up to date?***

Review BASIX every 2-3 years in addition to consultation with designers and architects about new materials and methods of improving energy efficiency. Standards need to take account of the likely climate in future (i.e. urban heat island, heatwaves and extreme heat) and the fact that buildings have a 50-100 year life. A good way to improve the BASIX requirement is to reduce the “thermal comfort caps” this will require improvements to insulation, glazing and other construction methods and materials that reduce the energy required to bring the building to a comfortable temperature.

***Q9: How can better information on BASIX performance help consumers and industry to understand the benefits of better designed and more energy efficient homes***

WSROC is supportive of the proposed increase of the BASIX requirements as it is a positive step to reduce greenhouse gas emissions and reduces the operating expense of a dwelling. . It is also an adaptation measure for addressing the impacts of extreme weather and heatwaves.

However, WSROC councils would like to receive more information regarding the proposed changes. It is unclear if the BASIX changes are additional to those made to thermal comfort in May 2016 - <https://www.basix.nsw.gov.au/iframe/about-basix/news/articles/518-updates-to-the-thermal-comfort-protocol-may-2016.html> A Plan to Save NSW Energy and Money s2.3 states that “In July 2017, the NSW Government will implement recommendations to update BASIX energy targets.” It is not clear whether these updates have already been identified, or whether they will be identified in the first part of 2017 through a consultation process.

WSROC asks the Government to support any changes with appropriate information provision to builders and developers. Councils can potentially assist in disseminating clear and succinct information and education to enable developers to adapt to changes, however appropriate resourcing needs to be provided to enable councils to do so.

Suggestions for driving improvements:

- Publish the energy efficiency performance and cost savings achieved in buildings with BASIX.
- Create a certification system that builders can put on their buildings to advertise the building’s rating.
- Equate ratings with the types of annual savings a household could achieve.

A scheme for separate, detailed review of sustainability performance of developments (including BASIX compliance) such as that being

	<p>implemented by councils in the Melbourne metropolitan region would provide developers with support and guidance in relation to sustainability performance of new builds and help ensure BASIX requirements were being met.</p> <p><b><i>Q11: what is the best approach to achieve energy and bill savings from common areas and shared services in apartment buildings?</i></b></p> <p>WSROC recommends the Government reviews the <a href="#">Smart Blocks</a> program, there may be merit in the Government supporting local government to participate in/deliver the Smart Blocks program.</p> <p>New apartment buildings should be required to meet standards for energy efficiency.</p> <p>Other options:</p> <ul style="list-style-type: none"> <li>• Free audits</li> <li>• Assistance to implement energy efficiency improvements identified by the audits.</li> <li>• Certificate which can be used by the strata and apartment owners to demonstrate that the building is energy efficient (for renting and sales of units).</li> </ul> <p><b><i>Q12: Could the NSW Government achieve energy savings from precinct-scale developments, high-growth areas and by partnering with local government areas?</i></b></p> <p>An option to achieve energy savings at a precinct scale or high growth area is for State Government to consult with local government about what standards to achieve and then legislate this. Standards should also be consistent with other state and/or national energy efficiency goals (e.g. the GREP).</p> <p><b><i>Q13: what would be the benefits and impacts of encouraging precinct scale or local government area energy savings for new homes and other buildings?</i></b></p> <p>WSROC is very supportive of precinct scale energy savings. This can be done by showcasing areas, demonstrate and promote the market value of energy efficient homes and buildings (business and community). The Government should develop a method for rating the environmental and financial benefits of buying in these developments (e.g. carbon footprint measures, NABERS, Green Star Communities). However, WSROC notes that broad-based rating schemes require committed resources to establish and then run them effectively. .</p> <p>Well-constructed precinct-scale projects are likely to normalise energy saving. When these projects are holistic and iterative in nature, and the outcomes measurable, they can be used to send out normative messages for different target groups – developers, builders, prospective buyers, buyers, residents, local businesses, etc. These messages could say things like ‘did you know that the majority of homes in this precinct are being designed for energy efficiency? Did you know that the majority of prospective buyers for this estate were interested in the energy efficiency innovations? The evidence based research indicates that – as long as the messages are honest</p>
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	<p>and verifiable – these kinds of ‘nudges’ are likely to be effective<sup>1</sup>.</p> <p>Precinct scale energy savings also provide the opportunity to address the urban heat island effect through urban greening and natural cooling, which can in turn assist in creating healthier and more active communities.</p>
3.3 - Support Industry to realise cost-effective energy productivity opportunities	<p><b><i>Q26: What opportunities may be available to the NSW Government to further promote waste heat recovery?</i></b></p> <p>Heat recovery could also be a significant opportunity for precinct-level heating infrastructure. Heat recovery provides an opportunity to help drive further energy savings from industry and other large energy users.</p> <p>The NSW Government should consider recovering the energy contained in non-recyclable waste, by capturing calorific value of waste otherwise destined for landfill, as per the NSW Energy from Waste Policy Statement.</p> <p>We note that support for industry is most effective when tied to regulation. However, support should be offered as a prelude to legislated tighter emission standards / requirements for key industries.</p>
3.4 – Drive clean energy upgrades for rental households	<p>WSROC welcomes the focus on investing in energy productivity for home-renters, as it will reduce costs to renters and will go some way to address the current housing affordability issues our region faces. However, we do note that to be successful, costs should not be passed on to tenants, as this would be counterproductive. Care should be taken when designing this policy to ensure it does not exacerbate social disadvantage where the only affordable housing is housing that is not energy efficient.</p> <p>WSROC sees the split incentive as the main barrier to this proposal; the current lack of affordable housing means that landlords don’t have an incentive to invest in their housing, unless there is a minimum energy efficiency rating that needs to be achieved before they can let their properties.</p> <p>Environmental Upgrade Agreements for residents should be explored to help homeowners and tenants undertake major upgrades to improve their liveability. Implementing an easily understood energy efficiency rating for rental properties (including commercial) would further assist potential tenants to understand likely costs of running the property.</p> <p>WSROC however notes that legislation will go a long way to ensuring compliance. Without mandatory standards, local government has little opportunity to drive improved efficiencies.</p>

<sup>1</sup> There is a considerable body of research indicating that people are strongly influenced by ‘norms’ – i.e. the actions of most other people, especially other people they perceive as being like themselves. See Nolan, J., Schultz, P.W., Cialdini, R.B., Goldstein, N.J. & Griskevicius, V. 2008. Normative Social Influence is Under detected. *Personality and Social Psychology Bulletin*, 34 913-923. For further examples, see more of Robert B. Cialdini’s work (such as *Influence*)

	<p>We further argue that reducing energy use in residential houses requires a holistic approach, and should include green cover and natural cooling strategies to increase thermal comfort indoors.</p> <p><b><i>Q1: what are the best approaches to deliver a ratings program in a way that will drive implementation of energy efficiency and grow the market for energy efficient homes and upgrades?</i></b></p> <p>The State Government could mandate to place energy and water efficiency rating on homes that must be advertised similar to the office space leasing program. The <u>EPC program in Spain</u> is an example of this. This would require education and engagement with builders and developers early on in the process, and may require capacity building of council staff to assist with this.</p> <p><b><i>Q4: what are the best approaches to reduce energy bill pressures for tenants without increasing housing costs and why?</i></b></p> <ul style="list-style-type: none"> <li>• Implement energy and water efficiency ratings for homes that must be advertised similar to the office space leasing program. The EPC program in Spain is an example of this.</li> <li>• Provide incentives for property owners to upgrade their properties to a more energy efficient standard.</li> <li>• Work with Housing NSW to develop programs to install solar PV</li> <li>• Councils could be resourced to provide information to renters on ways to reduce energy consumption.</li> <li>• ROCs and Councils could also partner with NSW Government to deliver a Home Savings Power Program (or similar) aimed at vulnerable communities (e.g. CALD, low social economic status).</li> </ul> <p><b><i>Q6: What are the best approaches to deliver a ratings program for tenanted homes in a way that will drive implementation of energy efficiency and grow the market for energy efficient homes and upgrades?</i></b></p> <p>A voluntary system will be ineffective, and WSROC would propose a mandated program which determines minimum standards.. The program would require landlords to obtain an energy efficiency rating before being able to lease their properties.</p> <p>We note that given the shortage of affordable rental housing in Sydney, it is unlikely that an energy efficiency rating system in rented homes would “empower and protect NSW renters”, since they have minimal choice in the rental market.</p>
3.5 - Support vulnerable communities to access energy efficiency	<p><b><i>Q10: what is the best approach to help vulnerable households save energy and money?</i></b></p> <p>As a region with pockets of considerable socio-economic disadvantage, we welcome the focus on vulnerable households. WSROC commends the positive outcomes of the Home Energy Action program and would recommend a continuation of this program.</p> <p>In addition, consideration should be given to targeted CALD community engagement. Language and cultural barriers can be addressed, but will require a separate approach with dedicated resources. One example of a project that could be considered for replication is</p>

	<p>Blacktown Council's program which partnered with the local Migrant resource Centre and delivered workshops and information to community groups in their own language by people who are part of that community. Another example is the home energy audits as conducted by the City of Parramatta Council. ROCs and councils could also partner with NSW Government to deliver a Home Savings Power Program (or similar). These programs could be targeted to vulnerable communities (e.g. CALD, low social economic status) and rolled out across the region.</p> <p>WSROC and councils would welcome the opportunity to work with the State Government to discuss this in more detail.</p>
3.6 - Support small businesses to increase their energy productivity	<p>Having an entity that can arrange audits and then work with the audited business to implement the recommendations would overcome significant barriers to improving energy efficiency.</p> <ul style="list-style-type: none"> <li>• Offer free energy and sustainability audits</li> <li>• Offer assistance to implement the outcomes of the audits (knowledge and expertise).</li> <li>• Look at a methodology for creating ESCs for implementing a package of energy-saving measures (e.g. draft-proofing, insulation, window treatments).</li> </ul>

Priority Area 3 – Preparing for a Changing Climate	
Section	Response
4.1 - Ensure 100% of NSW Government agencies are taking action to manage their climate change risks	<p>WSROC suggests that the Government include periodic monitoring; reviewing and reporting needed to ensure action is being taken. This could potentially be done by a central “sponsoring or oversight entity”. We also believe that a stronger governance regime that directly links goals, actions, resources and outcomes will, over time, ensure 100% of agencies are effectively engaged.</p> <p>WSROC further identifies the need of Local Government to be supported with additional resources to deliver appropriate responses and undertake actions. For example through supporting local government in undertaking climate change impact and adaption studies and providing councils the resources and support to utilise tools, ratings, best practice guides, and frameworks to provide a consistent approach in addressing climate change impacts.</p> <p>The following actions should also be considered in this context:</p>

	<ul style="list-style-type: none"> <li>• Fund further development of software that rates the climate change resilience of facilities (see <a href="https://www.resilient.property/">https://www.resilient.property/</a>).</li> <li>• Review the biodiversity reform package and other relevant legislation to ensure consistency with the priority of “conserving private land to reduce the vulnerability of ecosystems to climate change” (Strategic Plan s1.1).</li> <li>• Consider policy and incentives and State or national standards on urban greening to encourage greening and reduce urban heat.</li> <li>• Adoption of a policy to bury power lines as they are renewed to encourage greening, reduce costs and problems associated with vegetation around power lines, and reduce urban heat.</li> </ul>
4.2 – Increase awareness of climate change risks in industry sectors and local governments	<p>WSROC is supportive of the proposed action to build capacity in councils and Regional Organisations of Councils (ROCs) to understand and coordinate local and regional responses to climate change impacts. However, legislation to mandate planning and action (as well as investment funding) is needed to make it happen.</p> <p>With adequate resourcing, Joint Organisations or ROCs such as WSROC are well-placed to assist member councils to up-skill in climate change risks, adaptation and preparedness for the more extreme weather expected. Our peri-urban members are particularly at risk of bushfires and floods, whereas our urban members face major urban heat impacts.</p> <p>While our councils hold considerable skills and expertise, there are gaps. Councils are at different stages in addressing climate change impact and this should be noted and considered when developing capacity building programs, as they can only be successful when tailored to councils’ current capabilities. Councils need support to undertake climate change impact and adaption studies, especially relating to hard assets and appropriate actions. Building capacity should include best practice guides, tools and financial assistance, and programs should be developed in close consultation with local government.</p> <p>In partnership with relevant NSW agencies, WSROC could host education and skills forums. We could also play a coordination role in developing a regional climate change adaptation plan.</p> <p>We stress that having access to current research and data is critical in developing appropriate responses to the pressures our region faces in view of climate change.</p>
4.4 – Assist local communities to reduce their exposure to natural hazards	<p>Even though WSROC is pleased to see the Government has announced funding for addressing coastal hazards, we would like to stress that tackling extreme heat (including urban heat island) requires equal focus. WSROC would support stronger action on greening streets and heat refuges.</p>



<p>4.5 – Increase canopy coverage in heat exposed suburbs and regional towns.</p>	<p>WSROC strongly supports this action. Extreme heat is one of the key challenges for our region in a changing climate. WSROC would encourage State legislation and support for green cover, including mandatory standards for developments.</p> <p>The Urban Heat Island (UHI) effect is especially striking in Western Sydney. Its unique geography and lack of sea-breeze means that the region experiences more days over 35°C than the eastern Sydney suburbs.</p> <p>The greatest increase in UHI in the near future is projected for Western Sydney, with an additional five–10 hot days by 2030.</p> <p>NSW OEH predicts that the converting of areas in the north-west and south-west of Sydney from forest and grasslands to new urban development may double the projected temperature increases from climate change in the near future.</p> <p>Western Sydney’s rising temperatures have an adverse effect on the region’s public health, biodiversity, air quality and energy use.</p> <p>Extreme heat is the number one natural killer in Australia - Heatwaves have killed more Australians than all other natural hazards combined (see <a href="#">Climate Council</a> or this <a href="#">ABC media release</a>)</p> <p>WSROC recommends the consideration of the following;</p> <ul style="list-style-type: none"> <li>• Increase urban green cover. Urban green cover is one of the most effective ways to tackle extreme heat effects. Increasing natural shade will cool the suburbs and generate breezes, with positive flow-on effects for internal environments. WSROC councils have implemented several projects that would be suited for replication across the region. <ul style="list-style-type: none"> <li>○ Blacktown <a href="#">Cool Streets Program</a> (collaborative street tree design). WSROC applied for funding to expand this project across Western Sydney, including the development of a street tree strategy for the region.</li> <li>○ Penrith City Council’s <a href="#">Cooling the City Strategy</a> (strategies to mitigate urban heat)</li> <li>○ Connecting Biodiversity Corridors – WSROC applied for funding for the mapping of existing and potential areas of vegetation and linkages which will be a valuable tool for the member councils to use in planning conservation initiatives and in implementing the Green Grid. This project would build on the successful project implemented by the Sydney Coastal Councils group and would deliver a tool which includes biodiversity mapping of the greater Sydney region.</li> </ul> </li> <li>• Changes to planning regulation and building codes. Ensuring that urban heat is recognised at the early planning phases in development is essential; ensuring enough shade cover (either through natural cover or build environment), making considered building material choices (light colours, reflecting materials, etc.) and ensuring plenty of green spaces, can make a huge difference in bringing urban temperatures down.</li> </ul>
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	<ul style="list-style-type: none"> <li>Community education. Educating communities regarding the effects of urban heat. Ensure awareness regarding health impacts, but also how they can impact outdoor temperatures (e.g. creating green spaces surrounding their residences, choices of building materials, etc.). Example of a project that could be replicated: <ul style="list-style-type: none"> <li>City of Parramatta Council's <a href="#">Cool Parramatta</a> (community campaign)</li> </ul> </li> </ul> <p>The benefits of reducing UHI are substantial, they include; :</p> <ul style="list-style-type: none"> <li>Encourage active living by creating cooler outdoor spaces with increased shade – which can lead to important physical and mental health benefits;</li> <li>Reduce the need to artificially cool indoor environments, resulting in energy cost savings for households;</li> <li>Reduce health costs. High levels of hospital admissions on hot days place a strain on the medical system and come at a large economic cost to the community;</li> <li>Increased property values associated with a high quality and amenity outdoor environment; and</li> <li>Green spaces can assist in reducing air pollution and greenhouse gases in the atmosphere through increased absorption of CO<sub>2</sub>, thereby contributing to improvements in air quality.</li> </ul> <p>We recognise that raising a general awareness regarding urban heat, its impacts and mitigation opportunities, is essential. A multi-disciplinary- cross departmental approach is needed, involving planning, asset management, environment and sustainability, health and community development. WSROC would welcome the opportunity to collaborate with the Government and other stakeholders to design a dedicated program to tackle urban heat in Western Sydney and beyond.</p>
4.6 – Improve understanding of climate change impacts in priority sectors	<p>WSROC highly values the current work done by the OEH regarding climate change research. To improve the understanding of climate change impacts, it is essential that the information used by government agencies and other stakeholders is consistent, accessible and reaches decision makers. WSROC notes that Regional Organisations of Councils could be a conduit for that information, not just for council officers working on climate change, but also to elected representatives (through our Board meetings) or senior management. Improving understanding of climate change impacts will undoubtedly reveal many additional opportunities to achieve benefits for NSW.</p> <p>WSROC further urges the NSW Government to recognise ecosystems as critical public infrastructure since they provide services that are essential to human health and well-being. Even in urban areas such as Western Sydney, biodiversity can contribute to reduced incidence of cancer, heart disease, diabetes and poor mental health</p>

## 4. Conclusion

Through this submission WSROC expresses its strong support for the proposed actions. Overall WSROC is of the opinion that the draft strategy represents a much needed focus on climate change impacts and energy efficiency in New South Wales.

We strongly encourage the State Government to consider the issues highlighted in this paper especially given the growth aspirations for Western Sydney and the threats it faces due to a changing climate.

WSROC appreciates that local government has been particularly consulted in the lead up of this submission period and we would encourage the continuation of this level of partnership.

We look forward to working with the NSW Government in the development and implementation of meaningful programs that increase the resilience of our region.