

19 December 2016



Dear Sir/Madam,

Re Draft plan to save NSW money and energy

PIAC would like to thank the NSW Government for the opportunity to provide feedback on the the *Draft Plan for NSW to Save Money and Energy*. The Draft Plan aims to produce annual energy savings of 16,000 gigawatt hours (GWh) by 2020. PIAC considers this a positive step in assisting NSW households to reduce energy consumption and lower bill costs through energy efficiency measures.

PIAC encourages the NSW Government to explore long term solutions for *all* residential households to access energy efficiency benefits, including those on a low income. As the NSW energy market evolves, households are exposed to more energy efficient products and services and information on how to better manage their energy consumption. However, not all households can access these measures. There is a risk that social inequality may exacerbate if NSW does not give appropriate consideration to how all households can fairly access the benefits of advanced technology.

PIAC believes the NSW Government must prioritise support for low-income and vulnerable consumers when implementing its energy and climate policies and advocating for policy solutions before the Commonwealth Government and COAG Energy Council. A large proportion of the NSW population resides in private and public tenancies where the split incentive issue remains. Furthermore, household energy efficiency programs, rebates and schemes are often complicated, difficult to access and subject to frequent change, making support for vulnerable households inconsistent.

In this submission, PIAC argues a thorough review of existing policy, regulations and legislation will assist the NSW Government to deliver an effective plan to NSW residents. PIAC would like to thank the NSW Government for the opportunity to provide comment. If you require further information, please contact PIAC's Policy Officer, Jessica Mutton on (02) 8898 6525.

Yours sincerely

A handwritten signature in black ink, appearing to read "Deirdre Moor", written in a cursive style.

Deirdre Moor

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DRAFT CLIMATE CHANGE STRATEGIC PLAN AND A DRAFT PLAN TO SAVE NSW ENERGY AND MONEY – SUBMISSION FORM

First name	Deirdre
Surname	Moor
Organisation	Public Interest Advocacy Centre
Type of organisation	Vulnerable communities and tenants
Type of organisation (if other, please specify)	Consumer advocate
Email	dmoor@piac.asn.au
Is this a confidential submission?	No [Note: All submissions will be published on our website unless confidentiality is specifically requested]
Would you like to be kept up to date with the development of action plans?	Yes, please keep me updated.

Instructions

Thanks for taking the time to provide feedback on the [Draft Climate Change Fund Strategic Plan](#) and [A Draft Plan to Save NSW Energy and Money](#).

Please use this submission form template to comment on any of the specific potential actions in the draft two plans. There is a section at the end of the form where you can provide comment on the overall strategic approach we have taken.

- We invite you to provide comment on each of the three priority investment areas in the *Draft Climate Change Fund Strategic Plan*. For each priority area, we are interested in
- whether and how we should refine and deliver the potential actions identified
 - whether there are other actions that should be considered to deliver the government's priority investment areas.
- We have also asked more specific questions on the potential actions in *A Draft Plan to Save NSW Energy and Money*.

Note: You do not need to complete all the fields in the form: Feel free to comment on all of the potential actions, or only the ones you are most interested in.

The submission template is divided into four sections for targeted submissions:

1. Accelerating advanced energy
2. National leadership in energy efficiency (including *A Draft Plan to Save NSW Energy and Money*)
3. Preparing for a changing climate
4. General comments

Please upload your completed form online in Microsoft Word format [here](#). Submissions close at **5pm on 16 December 2016**.

1. Accelerating Advanced Energy

Please provide any comments on specific potential actions below:

Sections and potential actions	Questions	Responses
<p>2.1 Maximise investment under the national Renewable Energy Target</p> <ul style="list-style-type: none"> investigate a competitive 'contracts for difference' funding model to guarantee a minimum price for output from up to 250 MW of new large scale renewable energy, providing benefits to local communities build on the New South Wales 50 MW solar power purchase agreement (PPA) to expand PPAs to cover all of the renewable energy procurement commitment under the Government Resource Efficiency Policy support initiatives to make it easier for businesses, institutions and local government to buy electricity from renewable energy projects in New South Wales, such as WWF's 'Renewable Energy Buyers Forum' work with the COAG Energy Council to investigate minimum emissions performance standards for new power stations and the role of government in securing an orderly exit of the existing power station fleet advocate for stability and certainty in Commonwealth Government renewable energy policy sponsor energy market reforms to improve network connection processes. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to support our advanced energy transition?</p>	<p>N/A</p>
<p>2.2 Attract investment in advanced energy demonstration projects</p>	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to support our advanced energy transition?</p>	<p>N/A</p>

<ul style="list-style-type: none"> • support research and demonstration projects for emerging advanced energy technologies that could provide flexible electricity generation • support research and demonstration projects for renewable alternatives to natural gas and transport fuels in industrial applications, including concentrated solar thermal, biomass, electrification and hydrogen. 	<p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there other opportunities for advanced energy we should be encouraging?</p>	<p>N/A</p> <p>N/A</p>
<p>2.3 Provide start-up funding to accelerate innovation in advanced energy</p> <ul style="list-style-type: none"> • work with established business incubators to provide dedicated programs for entrepreneurs and start-ups developing, demonstrating and deploying clean energy and supporting technologies and services • sponsor energy innovation events to facilitate collaboration among universities, industry, government and investors • develop tools to share information, connect collaborators and promote energy innovation in New South Wales • monitor the development of technologies, community attitudes, price signals and share information to encourage investment and support market growth. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to support our advanced energy transition?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there other opportunities for advanced energy we should be encouraging?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>
<p>2.4 Put the New South Wales vehicle fleet on the path to doubling energy productivity</p> <ul style="list-style-type: none"> • advocate for higher national fuel efficiency standards • investigate appropriate incentives to encourage the purchase of fuel efficient light vehicles and to retire inefficient vehicles, including through stamp duty and registration charges 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to support our advanced energy transition?</p>	<p>N/A</p>

<ul style="list-style-type: none"> • provide the right 'real-world' information so that businesses and individuals can choose fuel efficient light and heavy vehicles • work with vehicle suppliers and clean energy providers to make zero emission and flexible fuel vehicles available to the New South Wales vehicle market • investigate and consider how the government could best invest in a fleet of electric vehicles, including for public transport, and charging infrastructure at government sites • investigate the case for public investment in electric vehicle charging infrastructure and the requirements for renewable energy power supply • review and extend the Green Truck Partnership approach to demonstrate new technologies for low-emissions light vehicles and freight (road, rail and other). 	<p>Are there particular issues we need to consider to ensure these actions are effective?</p>	<p>N/A</p>
<p>2.5 Build capacity of local communities to deliver and own renewable energy</p> <ul style="list-style-type: none"> • build capacity in councils in regional areas to provide advice to their communities on advanced energy 	<p>Are there other opportunities for advanced energy we should be encouraging?</p>	<p>N/A</p>
<p>2.5 Build capacity of local communities to deliver and own renewable energy</p> <ul style="list-style-type: none"> • build capacity in councils in regional areas to provide advice to their communities on advanced energy 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to support our advanced energy transition?</p>	<p>N/A</p>

<ul style="list-style-type: none"> • sponsor energy market and financial regulation reforms through COAG to make it easier for community scale projects to connect to the grid and share their benefits • help community energy groups to share knowledge and experience with financing and delivery models to get community energy projects off the ground • deliver connection guides and business case guides for sustainable energy community and residential projects • investigate the best ways to encourage developers to share the benefits of renewable energy projects with the local community. 	<p>Are there particular issues we need to consider to ensure these actions are effective?</p>	<p>PIAC considers that building the capacity of local communities through community renewable energy projects would facilitate the sharing of knowledge and potential energy savings.</p> <p>PIAC suggests that the NSW Government carefully consider what consumer protections are needed in local renewable energy projects, which may include micro-grids. One area of concern is protections for life support customers. Currently, the National Energy Customer Framework (NECF) only provides protections for customers of authorised retailers and it does not envisage protection for life support customers in local renewable supply situations. Under the NECF, a life support customer would go onto a register and networks and retailers are required to respond when unplanned outages occur.¹ PIAC is concerned with possible ramifications of a lack of similar protections for life support customers in new renewable energy projects or communities. The safety and wellbeing of these customers is paramount. PIAC therefore considers that life support protections are critical.</p> <p>PIAC would like information on what dispute resolution mechanism will be available for local communities with new third party retailers emerging in the energy market. It is not clear whether the Energy and Water Ombudsman NSW (EWON) will have jurisdiction. Access to free and independent dispute resolution services is a key consumer protection and PIAC urges the NSW Government to investigate options for customers in community renewable projects to have access to EWON.</p> <p>PIAC is also concerned about the impact that communities going off-grid will have on the residual customers that remain on-grid. The issue of who pays for the use of network assets will become increasingly pertinent as more customers become less reliant on</p>
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		<p>the grid for supply. There is a risk that customers who cannot afford to go off-grid will be left to pay for the cost of the network and its stranded assets, further exacerbating the issue of affordability.</p>
<p>2.6 Identify low-emissions pathways for emissions intensive sectors</p> <ul style="list-style-type: none"> partner with researchers and industry to identify and assess the potential for heavy industrial sites to reduce emissions work with industry to share knowledge of emissions reduction technologies and practices based on a 'learning by doing' approach. 	<p>Are there other opportunities for advanced energy we should be encouraging?</p>	<p>N/A</p>
<p>2.7 Reduce emissions in NSW to support achievement of Commonwealth objectives</p> <ul style="list-style-type: none"> Coal Innovation NSW continuing to support research into low emissions coal technologies and encouraging the development and implementation of these technologies, including investigating ways for coal mines to reduce their fugitive emissions, 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to support our advanced energy transition?</p>	<p>N/A</p>
<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to support our advanced energy transition?</p>	<p>N/A</p>	
<p>Are there particular issues we need to consider to ensure these actions are effective?</p>	<p>N/A</p>	
<p>Are there other opportunities for advanced energy we should be encouraging?</p>	<p>N/A</p>	

¹ National Energy Retail Rules, Part 7, Life support equipment.

<p>including via the Commonwealth Government's Emissions Reduction Fund</p> <ul style="list-style-type: none"> strengthen emissions-performance requirements and monitoring in land-use planning and major project-planning approvals processes advocate for Commonwealth, COAG and international action consistent with the Paris Agreement advocate for improvements to Commonwealth policy and programs to address key emissions sources in New South Wales such as agricultural production systems and transport support farmers and the agricultural industry to reduce emissions or enhance carbon sequestration and attract funding from the Commonwealth Emission Reduction Fund. 	<p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there other opportunities for advanced energy we should be encouraging?</p>	<p>N/A</p> <p>N/A</p>
<p>2.8 Make Sydney the Asia-Pacific's carbon market hub</p> <ul style="list-style-type: none"> seek to make Sydney the Asia-Pacific's carbon market hub by extending Sydney's financial and business infrastructure, scaling-up Sydney's carbon market workforce and encouraging international businesses to headquarter in Sydney. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to support our advanced energy transition?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there other opportunities for advanced energy we should be encouraging?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>
<p>2.9 Identify cost-effective pathways to reduce greenhouse gas emissions to achieve net zero</p> <ul style="list-style-type: none"> model emissions pathways and their economic impacts taking account of national and international carbon constraints and trends in both government policies and private sector action monitor and predict the impact of current and new policy initiatives on the state's emissions performance develop a plan for New South Wales to achieve net zero emissions. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to support our advanced energy transition?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there other opportunities for advanced energy we should be encouraging?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>

2. National leadership in energy efficiency

A *Draft Plan to Save NSW Energy and Money* provides a greater level of detail on some potential actions in the *Draft Climate Change Fund Strategic Plan*. There are more detailed consultation questions in *italics* with numbering corresponding to A *Draft Plan to Save NSW Energy and Money*.

Please provide any comments on specific potential actions from the *Draft Climate Change Fund Strategic Plan AND A Draft Plan to Save NSW Energy and Money* below:

Sections and potential actions	Questions	Responses
3.1 Expand investment under the Government Resource Efficiency Policy <ul style="list-style-type: none"> support councils to upgrade public lighting and adopt the Government Resource Efficiency Policy. implement government energy management and reporting systems to help agencies understand where and how to make energy savings develop clean energy standards for new government funded infrastructure projects and investigate the best way to implement them 	Do you have any comments on the actions we propose to fund through the Climate Change Fund to drive energy efficiency?	N/A
	Are there particular issues we need to consider to ensure these actions are effective?	N/A
	Are there particular communities or industry sectors we should be targeting to improve energy efficiency?	N/A
	Are there other opportunities for energy efficiency we should be encouraging?	N/A
	<i>Q27: What is the best approach to develop higher sustainability and energy efficiency standards that can apply across a range of infrastructure types?</i>	N/A
	<i>Q28: What are the best policy options to facilitate the installation of energy efficient public lighting?</i>	N/A
	<i>Q29: What is the best way to support councils to apply GREP?</i>	N/A
	<i>Q30: What is the best way to achieve energy and bill savings from hotels used by NSW Government?</i>	N/A
	<i>Q31: Are there other ways to save energy through government procurement?</i>	N/A

<p>3.2 Improve energy productivity for households and businesses</p> <ul style="list-style-type: none"> • accelerate energy efficient appliance standards under the national Greenhouse and Energy Minimum Standards program • consult on increasing the NSW Building and Sustainability Index (BASIX) targets for new homes to encourage industry innovation and best practice, and reduce energy bills • improve energy standards for new commercial buildings by advocating for new standards • investigate the introduction of energy standards for retail tenancies and common areas in apartment buildings. • partner with supply chains to improve the efficiency of the products available to end consumers. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to drive energy efficiency?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there particular communities or industry sectors we should be targeting to improve energy efficiency?</p> <p>Are there other opportunities for energy efficiency we should be encouraging?</p> <p>Q8: <i>What is the best way to keep BASIX standards up to date?</i></p> <p>Q9: <i>How can better information on BASIX performance help consumers and industry to understand the benefits of better designed and more energy efficient homes?</i></p> <p>Q11: <i>What is the best approach to achieve energy and bill savings from common areas and shared services in apartment buildings?</i></p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>
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	<p>Q12: Could the NSW Government achieve energy savings from precinct-scale developments, high-growth areas and by partnering with local government areas?</p> <p>Q13: What would be the benefits and impacts of encouraging precinct-scale or local government area energy savings for new homes and other buildings?</p> <p>Q20: Reports indicate a 70% improvement on 2010 energy consumption levels deliver significant and cost-effective energy savings for new commercial buildings. What level of stringency increase should the NSW Government advocate for to deliver significant and cost-effective energy savings?</p> <p>Q21: What role, if any, could the NSW Government play to help businesses access private finance to help them adjust to improved energy standards for new commercial buildings?</p> <p>Q22: What other approaches could be taken to achieve energy and bill savings from commercial buildings?</p> <p>Q23: What are the potential benefits and impacts of this option?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>
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	<p><i>Q24: What other approaches could be taken to achieve energy and bill savings from large retail buildings?</i></p>	<p>N/A</p>
	<p><i>Q25: What are the potential benefits and impacts of this option?</i></p>	<p>N/A</p>
	<p><i>Q34: What is the best approach for the NSW Government to support the acceleration and expansion of GEMS?</i></p>	<p>N/A</p>
	<p><i>Q36 Are there opportunities to enhance the national Energy Rating Label system that could deliver significant energy savings?</i></p>	<p>PIAC believes that clear, succinct information for consumers about the Energy Rating Label system can help deliver significant energy savings. Consumers may not purchase efficient appliances if there is an inefficient appliance that is cheaper. Many consumers do not weigh up the upfront costs against the long-term savings, particularly where upfront costs pose a heavy burden on a household's day-to-day living expenses. PIAC suggests that along with the energy rating label, clear information about how much a consumer can save would be helpful. This will assist consumers to understand the differences in cost savings over time.</p> <p>PIAC encourages the NSW Government to develop a flexible communication plan for the Energy Ratings Label system, including targeted strategies for CALD customers, the elderly, those living with a disability, and any other consumers who would benefit from targeted communication and engagement.</p>

<p>3.3 Support industry to realise cost-effective energy productivity opportunities</p> <ul style="list-style-type: none"> • support large energy users to investigate energy savings opportunities. • support industry sectors to adopt best practice energy management practices 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to drive energy efficiency?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there particular communities or industry sectors we should be targeting to improve energy efficiency?</p> <p>Are there other opportunities for energy efficiency we should be encouraging?</p> <p>Q14: What is the best approach to providing funding support to large energy users to prepare plans?</p> <p>Q15: The NSW Government could determine program participation by targeting a set a number of large energy users, or by setting an energy consumption threshold. What is the best approach to determine which large energy users could be included in a program?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>
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	<p>Q16: Payback periods or internal rates of return could be suitable ways to determine what makes a 'cost-effective' energy efficiency opportunity. What is the best approach to define 'cost-effectiveness'?</p>	N/A
	<p>Q17: Are there instances where large energy users should be exempt from preparing a plan? If so, under what circumstances?</p>	N/A
	<p>Q18: Is requiring energy management systems similar to those applied in Germany or the United States appropriate for large energy users in NSW?</p>	N/A
	<p>Q19: Are there other initiatives or approaches that NSW should consider that could be effective in enabling large energy users in NSW to implement cost effective energy efficiency opportunities</p>	N/A
	<p>Q26: What opportunities may be available to the NSW Government to further promote waste heat recovery?</p>	N/A
	<p>Q34: Are there opportunities for the NSW Government to work with the hot water industry to explore innovations that can save energy and money?</p>	N/A

<p>3.4 Drive clean energy upgrades for rental households</p> <ul style="list-style-type: none"> • provide ratings for homes at the point of sale or lease to help renters and buyers know which properties would be cheaper to run and more comfortable to live in • improve energy performance of tenanted homes to make them more affordable and liveable for renters. • provide financial incentives and/or access to affordable finance for landlords to improve their properties to make them more energy efficient • investigate opportunities to work with other jurisdictions on common approaches to energy efficiency in rental properties. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to drive energy efficiency?</p>	<p>N/A</p>
		<p>Are there particular issues we need to consider to ensure these actions are effective?</p>
		<p>Are there other opportunities for energy efficiency we should be encouraging?</p>
		<p>Are there particular communities or industry sectors we should be targeting to improve energy efficiency?</p>
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	<p><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></p>	<p>PIAC understands that energy efficiency ratings for rental households will enable tenants to make informed choices about their living situation and how the property will affect their energy consumption and bills.</p> <p>PIAC is concerned that efficiency ratings may affect the rental market for vulnerable, low-income tenants if a minimum standard is not mandated. If the rental market aligns property value with efficiency ratings, there is a chance that a ratings system could contribute to inequitable access to energy efficient properties between low and high income tenants. There is likely to be an adverse impact on low income households who may only be able to afford cheaper inefficient properties and hence receive higher energy bills. PIAC believes setting a minimum energy efficiency ratings standard could avoid this issue and we encourage the NSW Government to investigate further (see Q3).</p>
<p><i>Q2: What are the key attributes for a voluntary ratings program to be considered successful and justify transition to a required scheme?</i></p>	<p>PIAC has concerns about a voluntary ratings system. See Q1 above.</p>	

	<p>Q3: The NSW Government has identified performance standards, technology standards, and an incentive program as potential approaches to improve energy efficiency standards for tenanted homes.</p> <p><i>What is the best approach or combination of approaches and why?</i></p>	<p>PLAC considers that a combination of all three approaches will help tenants access energy efficient homes and will assist with upgrade costs. PLAC believes there are a number of issues to be considered. These include what standards should apply, whether standards should be voluntary or mandatory, compliance measures to ensure performance standards are met, and which party bears the cost of property upgrades (the split incentive issue).</p> <p>Performance Standards</p> <p>The Draft Plan proposes that residential tenancy properties meet minimum energy efficiency ratings.² Owners can choose from a range of options to meet these targets before leasing their property.³</p> <p>PLAC agrees that there needs to be flexibility for owners in meeting the performance standards as dwelling type can influence how energy efficiency can be achieved. Furthermore, standards may differ between metropolitan and regional areas, as homes in differing climate zones will require appropriate heating and cooling. This means that costs to upgrade each home will vary under a performance standard. PLAC believes financial incentives would assist in the transition (see more below under 'Incentive Programs').</p> <p>Research suggests that legislated minimum performance standards will ensure that <i>all</i> tenants are living in an energy efficient home and benefit from reduced energy consumption. This could involve a phased-in approach, combined with financial incentives.⁴ The NSW Government may also need to consider how owners can comply with the standards.</p> <p>Currently, the NSW Residential Tenancies Act 2010 (the Act) does not set out minimum energy efficiency standards unlike section 39 of the same Act, which mandates minimum water efficiency standards for properties. Where these standards are not met, the</p>
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		<p>owner bears the cost of the water bill.⁵ The difference between energy and water in a tenanted home is that tenants contract directly with energy retailers for their electricity or gas supply and landlords are not involved in the transaction. Additionally, appliances and household structures can alter a property's energy efficiency. This makes setting a standard difficult, and PIAC considers there would be challenges in ensuring compliance with standards. PIAC believes the setting of energy efficiency standards would need to be treated differently to water efficiency standards.</p> <p>PIAC encourages the NSW Government to review the Act as part of its plan to implement minimum energy efficiency ratings standards, taking into account how the compliance issue would impact on homeowners and tenants.⁶</p> <p>Technology Standards</p> <p>An effective way to meet standards is by upgrading infrastructure and appliances that play a role in the energy efficiency of a household, to which home owners can contribute.⁷ This includes upgrading specific poor-performing technologies or insulation before properties are leased.⁸</p> <p>In its submission to the review of the <i>NSW Residential Tenancies Act 2010</i>, PIAC suggested that there is an opportunity to amend section 63 in relation to repairs to provide any replacement of appliances or structural repairs to meet energy efficiency minimum standards.⁹ For example, when replacing an air conditioner, the replacement should meet a minimum star rating. PIAC believes this is one potential option and we encourage the NSW Government to consider it in addition to compliance concerns above.</p> <p>Incentive Programs</p> <p>PIAC believes incentive programs will assist owners and tenants to invest in upgrades in tenancy properties.</p>
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		<p>As the NSW BASIX requirements apply to homes built from 2004¹⁰, PIAC is concerned that older homes will miss out. The problem is compounded for vulnerable groups because it is often these homes that low-income or disadvantaged homeowners purchase or tenants reside.</p> <p>PIAC is concerned about who finances the upgrades or retrofits to meet energy efficiency standards, known as the split incentive issue.¹¹ PIAC believes setting minimum energy efficiency ratings and technology standards may assist the split incentive issue <i>if</i> homeowners and tenants are given appropriate financial support and flexibility in its implementation. For example, the University of Melbourne has suggested providing tax incentives to homeowners to upgrade.¹² PIAC recommends consultation between government departments to identify schemes and subsidies to assist people who are unable to invest in improvements.¹³</p> <p>In addition, PIAC considers amendments to sections 84 and 85 of the NSW Residential Tenancies Act 2010 could assist with the split incentive issue.¹⁴ This will involve the removal of the right to end tenancies without grounds to guarantee the tenant a consistent lease if investing in energy efficiency upgrades.</p>
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	<p><i>Q4: Housing stress includes rent and energy bill pressures. What are the best approaches to reduce energy bill pressures for tenants without increasing housing costs and why?</i></p>	<p>PIAC believes an effective way to reduce energy bill pressures for tenants without increasing housing costs is to provide effective information and engagement on energy efficient practices, and financial incentives to make structural changes to rectify energy inefficiency. See Q3 and Q10 (under the heading 'Energy Efficiency education and information) for further information.</p>
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	<p><i>Q5: On-bill financing and other innovative financing mechanisms could allow owners to share upgrade costs with tenants. What is needed to help landlords to improve the energy performance of tenanted homes?</i></p>	<p>PIAC sees on-bill financing and other innovative financing mechanisms as a positive step towards supporting vulnerable households' access to energy efficiency benefits. As mentioned in section 3.2 Q36, a household may not be able to afford the upfront costs of energy efficiency technology, which can prevent the long-term benefits of bill savings. Likewise, a landlord may be unable to afford these costs.</p> <p>Good Shepherd Microfinance and many other community welfare organisations across NSW are already delivering the No Interest Loans Scheme (NILS), which allows participants to purchase energy efficient white good products without the pressure of interest charges or additional payments that may otherwise contribute to debt.¹⁵</p> <p>The American Council for an Energy Efficient Economy (ACEEE) point out the benefits of on-bill financing systems through utility companies. These include eliminating initial costs and aligning energy savings with energy bill payment charges. On the other hand, the ACEEE has concerns with on-bill financing such as whether utility companies have the 'expertise, the means, or the desire to become lending institutions'.¹⁶</p> <p>PIAC urges the NSW Government to consider the support needed for either retailers or community organisations to deliver financial support to owners and tenants.</p>
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¹⁵ Good Shepherd Microfinance (2016) Available at: <http://goodshepherdmicrofinance.org.au/services/no-interest-loan-scheme-nils/>, accessed on 5 December 2016.

¹⁶ ACEEE (2016) On-Bill Financing for Energy Efficiency Improvements, Available at: <http://aceee.org/sector/state-policy/bookkit/on-bill-financing>, accessed on 5 December 2016.

	<p><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></p> <p><i>Q7: What are the key attributes for a voluntary ratings program for tenanted homes to be considered successful and justify transition to a required scheme?</i></p>	<p>See Q1 above.</p> <p>See Q2 above.</p>
<p>3.5 Support vulnerable households to reduce their energy bills</p> <ul style="list-style-type: none"> upgrade 15% more social housing by reviewing and expanding the Home Energy Action program, strengthening partnerships and developing innovative financing mechanisms. as part of a review of energy concessions, the government will investigate the use of energy rebates and other innovative mechanisms to fund energy efficiency upgrades, taking account of community views 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to drive energy efficiency?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there particular communities or industry sectors we should be targeting to improve energy efficiency?</p> <p>Are there other opportunities for energy efficiency we should be encouraging?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>

<ul style="list-style-type: none"> provide bill reduction advice that is tailored to the needs of vulnerable customers identified through better information. 	<p><i>Q10. What is the best approach to help vulnerable households save energy and money?</i></p>	<p>Home Energy Action Program</p> <p>The NSW Government proposes to continue and expand the Home Energy Action (HEA) Program that aims to help vulnerable, low-income households save energy and money through appliance swaps and solar upgrades. PIAC is pleased the program will extend to public and Aboriginal Housing.</p> <p>PIAC is concerned with the long-term effectiveness of the program on eligible households. Low-income households often purchase cheaper inefficient appliances to replace broken ones, as they do not have the finances available to purchase new efficient products. This can increase a household's energy bill, therefore creating more financial stress. If a low-income household undertakes an appliance upgrade as part of the HEA program to avoid this issue, PIAC is concerned there will be no financial support available once the product warranty expires and the HEA program runs its course, placing households in the same undesirable position as previously. PIAC considers that the HEA program plays an important role in providing medium term assistance to vulnerable households and recommends that long term solutions be considered alongside the program to deliver meaningful support. This could include providing structural changes to homes, including thermal efficient measures such as insulation. Roughly a quarter of a household's energy bill is due to heating and cooling, and the installation of insulation would benefit consumers in the long run.¹⁷</p> <p>Furthermore, PIAC considers the maintenance responsibilities and ownership of energy efficient upgrades under the HEA program are unclear. If a household is to receive solar panels as part of the program, PIAC is concerned that the long-term maintenance costs involved could create financial burden on some low-income households.</p>
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¹⁷ Department of Industry, Resources and Energy (2015) Available at: www.resourcesandenergy.nsw.gov.au/energy-consumers/save-energy-and-reduce-your-bills/reducing-energy-costs, accessed on 5 December 2016.

		<p>PIAC is also concerned with gap payments for appliances obtained under the HEA program and how vulnerable households can afford this. A majority of program participants apply to be a part of the program via the Office of Environment and Heritage's website.¹⁸ As community welfare organisations are not involved in this process, there is little oversight of whether program participants are using payday lenders to bridge the gap payment, potentially placing participants in unaffordable debt and interest fees. PIAC suggests that the NSW Government ensure HEA program participants are adequately supported in their gap payments.</p> <p>PIAC believes eligibility for the HEA program should be expanded to include other households which are experiencing hardship. This would go beyond Centrelink and health care card holders to including vulnerable households who are on energy retailer hardship programs and payment plans.</p> <p>Rebates and concessions</p> <p>PIAC is concerned with the additional household costs associated with accessing energy efficiency benefits. This includes structural upgrades to a home such as insulation, appliance upgrades, solar panels, batteries and smart meters. A one size fits all approach to energy efficiency will not work for all low-income or disadvantaged households as households differ in their needs for financial support and information.</p> <p>There is scope for the NSW Government to comprehensively review the concession regime in light of recently announced changes to the energy concession regime in Queensland. More than 150,000 additional Queensland families will benefit from access to rebates.¹⁹ Furthermore, almost 700,000 Queensland</p>
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¹⁸ Office of Environment and Heritage (2016) Home Energy Action Appliance Replacement Offer Quarterly Update Event, Tuesday 8 November 2016.

¹⁹ Queensland Government media statement (2016) Available at: <http://statements.qld.gov.au/Statement/2016/11/30/power-price-stability-key-focus-of-response-to-qpc-report>, accessed on 5 December 2016.

		<p>households will continue to benefit from the solar panel feed-in tariff which was meant to cease.²⁰</p> <p>PIAC recommends that the NSW Government review its concession regime, taking into account the current impact of high energy costs on low-income households to access the benefits of renewable energy technology and energy efficiency by lowering the cost of energy. PIAC also recommends that the NSW Government introduce rebates to support the take-up of energy efficient technology by low income and vulnerable households. In addition, PIAC strongly supports a percentage-based concession for low-income earners.</p> <p>Energy Efficiency education and information</p> <p>PIAC encourages the NSW Government to develop a flexible communication strategy for the policies and programs to result from the Draft Plan. Energy efficiency education needs to be communicated in an effective way that acknowledges differences in how communities and individuals engage and receive information. For example, residential park communities do not have direct contact with an energy retailer as they are under an exempt selling arrangement. If the NSW Government is relying on retailers to provide energy efficiency information to their customers, customers in these communities could miss out on potential bill savings as there is risk that park managers may not pass on the information. The NSW Government should also give due consideration to those who do not have internet access or who engage better by face-to-face interaction.</p> <p>Low Carbon Living (CRL) recently conducted research across Australia to understand lower income barriers to low carbon living. CRL found that most focus group participants only had a vague understanding of what 'low carbon living' meant.²¹ PIAC therefore recommends the NSW Government consider the</p>
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		<p>characteristics of various customer segments, engagement methods and use of language in its communication strategy for energy efficiency education and information.</p>
<p>3.6 Support small businesses to increase their energy productivity</p> <ul style="list-style-type: none"> invest in market capacity to deliver innovative energy efficiency products and services to small businesses and collect data to inform the Energy Savings Scheme continue to provide energy efficiency training to general business advisers. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to drive energy efficiency?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there particular communities or industry sectors we should be targeting to improve energy efficiency?</p> <p>Are there other opportunities for energy efficiency we should be encouraging?</p> <p><i>Q32: Are targeted incentives an effective way to deliver energy savings and kick-start new activities in the Energy Savings Scheme?</i></p> <p><i>Q33: Are there more effective ways to grow and transform the market for energy efficiency products and services?</i></p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>
<p>3.7 Ensure that 40% of participants in the NSW Government clean energy program are in regional NSW</p> <ul style="list-style-type: none"> provide information on the business proposition for energy efficiency service providers in regional New 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to drive energy efficiency?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p>	<p>N/A</p> <p>N/A</p>

²⁰ Queensland Government broadens power rebate eligibility (2016) Available at: <http://www.9news.com.au/national/2016/11/30/11/9/qld-govt-must-make-power-bill-promise-opp>, accessed on 5 December 2016.

²¹ CRC, RP3038: Lower income barriers to carbon living, Summary of focus group and survey findings, 2016, pg 11.

<p>South Wales such as a map of known energy efficiency opportunities.</p>	<p>Are there particular communities or industry sectors we should be targeting to improve energy efficiency?</p>	<p>N/A</p>
	<p>Are there other opportunities for energy efficiency we should be encouraging?</p>	<p>N/A</p>
<p>3.8 Reduce peak demand through battery storage and other demand management measures</p> <ul style="list-style-type: none"> engage with the COAG Energy Council to reform the National Electricity Rules to reduce barriers to broad based demand management advocate to the Australian Energy Regulator for greater implementation of demand management by network businesses jump start the demand management market during the current regulatory cycle with reverse auctions to reduce peak demand using technologies such as appliance demand response and battery storage work with network businesses and energy efficiency service providers to coordinate 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to drive energy efficiency?</p>	<p>The NSW Government proposes to manage peak demand for electricity by using measures such as battery storage and energy efficiency. This would result in less network expenditure, reducing the cost of electricity bills.²²</p> <p>PLAC considers that demand management initiatives need to be integrated into regulatory decision making and network planning. There is significant potential for batteries to be used for energy efficiencies on both small and large scales, therefore reducing costs to networks and end users. In this context, PLAC suggests that the NSW Government consider the overall impact on residential households when implementing demand management measures such as battery storage into the network grid.</p>

²² NSW Government, Draft Climate Change Fund Strategic Plan, 2016, pg.26.

<p>Information required to target energy savings at grid constrained areas.</p>	<p>Are there particular issues we need to consider to ensure these actions are effective?</p>	<p>The report PIAC commissioned by Bruce Mountain examines different models for ownership of energy storage technologies, including innovative approaches used in California and New York.²³ The research shows risk for Australian consumers if electricity networks are allowed to include batteries in their Regulated Asset Bases on which they earn a guaranteed return. If this occurs, PIAC is concerned that the costs incurred will be passed on in households' electricity bills,²⁴ defeating the purpose of cost savings through energy efficiency measures.</p> <p>PIAC urges the NSW Government to consider this research when engaging with COAG Energy Council and the Australian Energy Regulator (AER) and to look at the broader implications of demand management measures on households.</p> <p>Furthermore, PIAC encourages the NSW Government to explore network tariff reform that will best assist households to reap the benefits of energy efficient technology and ensure that lower energy usage will result in lower bills. It would be counterproductive if lower energy usage resulted in higher bills as a result of high fixed network costs.</p>
<p>Are there particular communities or industry sectors we should be targeting to improve energy efficiency?</p>	<p>N/A</p>	
<p>Are there other opportunities for energy efficiency we should be encouraging?</p>	<p>N/A</p>	

²³ Bruce Mountain, *Batteries and electricity network service providers in Australia: regulatory implications*, 2015, available at: <http://www.piac.asn.au/publication/2015/10/batteries-and-electricity-network-service-providers-australia-regulatory-implica>

²⁴ Ibid.

<p>3.9 Identify energy efficiency measures that could double New South Wales' energy productivity</p> <ul style="list-style-type: none"> • establish an Energy and Resource Efficiency Research Hub in collaboration with the research sector to build expertise in energy efficiency and support innovators to assess the performance of new products • monitor and publish New South Wales energy use, energy savings and energy-efficiency sales data in collaboration with the energy services sector and the COAG Energy Council • research the design of programs that are more effective in influencing consumers and suppliers to save energy • provide funding to measure and verify energy savings in targeted industry sectors and technologies • investigate the introduction of an energy productivity target for New South Wales and the form that it could take 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to drive energy efficiency?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there particular communities or industry sectors we should be targeting to improve energy efficiency?</p> <p>Are there other opportunities for energy efficiency we should be encouraging?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>
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3. Preparing for a changing climate

Please provide any comments on specific potential actions below:

Sections and potential actions	Questions	Responses
<p>4.1 Ensure 100% of NSW Government agencies are taking action to manage their climate change risks</p> <ul style="list-style-type: none"> prepare best-practice guides, tools and targeted training to help government agencies identify and manage climate change risks support government agencies to meet their requirement to undertake initial climate risk assessments and develop appropriate responses develop a framework for reporting government agencies' adaptation initiatives to foster best practice build the capacity of land management agencies to enhance bushfire management and prevention. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to prepare New South Wales for the impacts of climate change?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there positive opportunities from climate change we should be targeting?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>
<p>4.2 Increase awareness of climate change risks in industry sectors and local governments</p> <ul style="list-style-type: none"> provide tailored information resources and updated climate change projections, including expanding the AdaptNSW website, on practical cost-effective ways to reduce risks for local councils and communities help the primary industries, energy and infrastructure sectors understand how they can respond to climate change risks and capture opportunities build capacity in coastal councils to respond to climate change risks build capacity in local councils and joint organisations to understand and coordinate local responses to climate change impacts. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to prepare New South Wales for the impacts of climate change?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there positive opportunities from climate change we should be targeting?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>

<p>4.3 Grow the adaptation services market</p> <ul style="list-style-type: none"> establish an adaptation innovation fund to support innovation and entrepreneurialism that could protect our local communities and provide export opportunities investigate the need for accreditation schemes and information hubs for professional services involved in climate change adaptation such as agriculture, emergency preparedness and health improve building standards and planning requirements to take into account the impacts of climate change investigate and develop rating systems to assess the climate resilience of residential and commercial properties and infrastructure. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to prepare New South Wales for the impacts of climate change?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there positive opportunities from climate change we should be targeting?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>
<p>4.4 Assist local communities to reduce their exposure to natural hazards</p> <ul style="list-style-type: none"> minimise the impacts of climate change on socially and economically disadvantaged urban, regional and remote communities through social impact investment for actions such as upgrading homes, community facilities and infrastructure assist in making private finance, such as resilience bonds, available for households and businesses to adapt to climate change through partnerships with the finance and insurance sectors support innovative pilot projects that demonstrate best practice adaptation and can be replicated in other regional communities or local government areas. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to prepare New South Wales for the impacts of climate change?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there positive opportunities from climate change we should be targeting?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>
<p>4.5 Increase canopy coverage in heat exposed suburbs and regional towns</p> <ul style="list-style-type: none"> implement a program of information, tools and funds for demonstration projects to improve green cover in our cities and regional towns investigate how to encourage the use of natural ecosystems to reduce the effects of climate change 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to prepare New South Wales for the impacts of climate change?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p>	<p>N/A</p> <p>N/A</p>

<p>on people, communities and infrastructure, for example through flood mitigation and preventing coastal erosion.</p>	<p>Are there positive opportunities from climate change we should be targeting?</p>	<p>N/A</p>
<p>4.6 Improve understanding of climate change impacts in priority sectors</p> <ul style="list-style-type: none"> • update and enhance the state-wide climate projections developed with NARCClim, including projections for longer time periods and under different emissions scenarios • produce hazard maps and reports for key hazards, such as flood, bushfire, drought and heat, to help decision makers understand risks • co-fund new research on extreme climatic events, such as extreme rainfall or wind, to understand future risks as part of the NSW Adaptation Research Hub • co-fund new research into climate change risks and adaptation options for priority sectors, such as primary industries, health, water security and vulnerable communities, as part of the Adaptation Research Hub • identify risks to critical public infrastructure, such as energy, water, transport and health infrastructure and options to manage these future risks. 	<p>Do you have any comments on the actions we propose to fund through the Climate Change Fund to prepare New South Wales for the impacts of climate change?</p> <p>Are there particular issues we need to consider to ensure these actions are effective?</p> <p>Are there positive opportunities from climate change we should be targeting?</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>

4. General comments

This section provides an opportunity for any general comments on the overall strategic approach of the *Draft Climate Change Fund Strategic Plan AND A Draft Plan to Save NSW Energy and Money*.

Questions	Responses
<p>The government is interested in your feedback on whether and how we should refine and deliver the potential actions identified.</p>	<p>N/A</p> <p>PIAC recommends the NSW Government consider the impact of advanced technology on residential park communities. Residential park communities consist of non-permanent and permanent tenancies and owners; hence energy supply arrangements can differ between residents. Permanent residents in residential communities receive electricity via the park operator in an embedded network, receive their supply directly from an electricity retailer or receive their supply from both the park operator and an electricity retailer. PIAC notes the complexities that some park residents have in accessing retail competition, particularly as the NSW retail energy market presents new advanced technology offers.</p> <p>PIAC suggests the NSW Government consider how residents in older residential park communities can equitably access energy efficiency technology and schemes given the limitations of embedded networks, and the flexibility required to deliver the benefits of energy efficient technology. For example, older networks will likely require substantive upgrades to infrastructure in order to accommodate smart meters and solar panels. Under the current regulatory frameworks, it is unclear which party will bear the cost of these upgrades. This issue takes on an extra layer of complexity when access to competition is considered. Brownfield operators may prefer to open up their embedded networks to competition so that the cost of infrastructure upgrades can be shared across various parties. On the other hand, greenfield operators may prefer to limit competition to maximise profitability. PIAC is concerned about the impact on site fees and residents' ability to access energy efficient technology. PIAC recommends the NSW Government consult with residential park communities on best practice to access energy efficiency technology and measures that aims to avoid significant costs being passed onto residents.</p>