### ACOSS response to Trajectory for Low Energy Existing Homes Discussion paper: March 2019

18 April 2019



### About ACOSS

The <u>Australian Council of Social Service (ACOSS)</u> is a national advocate for action to reduce poverty and inequality and the peak body for the community services sector in Australia. Our vision is for a fair, inclusive and sustainable Australia where all individuals and communities can participate in and benefit from social and economic life.

### Introduction

ACOSS welcomes the opportunity to submit to the NEPP secretariat on the *Trajectory for Low Energy Existing Homes Discussion paper: March 2019.* 

Energy efficient homes are critical to reducing energy bills and providing healthy homes, which is integral to supporting wellbeing and positive health outcomes for people and communities. However, the energy performance of Australia's residential buildings is low by world standards. Over 9.5 million homes were built before adequate minimum energy efficiency standards were introduced for residential buildings in 2005. The poor energy performance of our homes, combined with significant rises in energy costs over the past decade, and increasing extreme weather fuelled by global warming, mean that many people are now living in homes that are damp, too cold in winter and too hot in summer.

Living in these homes, dealing with high electricity bills, and going without the energy people need for the essentials, can lead to financial stress, poor health, make it harder to work, to get an education or to be a part of the community, and sadly can cost lives.

Respected medical journal *The Lancet* reported that each year more than 6% of deaths in Australia are due to the effects of cold living environments while a further 1% are heat related. Heat related deaths are predicted to increase as climate change related heatwaves increase in intensity and frequency.<sup>1</sup> Older people, infants, and people with common chronic physical and mental health conditions are among those most at risk.<sup>2</sup>

People on low incomes and/or who rent, have little choice or control over the efficiency performance of their home and major energy-using fixed appliances.

Research by ACOSS and Brotherhood of St Laurence,<sup>3</sup> shows people on low-incomes pay disproportionately more of income on energy (on average, 6.4%) compared to households on highest income quintile (who pay an average of 1.5% of income). One in four low income households (roughly 455,604 households) are now paying over 8.8% of their income on energy.

<sup>&</sup>lt;sup>1</sup> Monash University. "Heatwave deaths will rise steadily by 2080 as globe warms up." ScienceDaily. ScienceDaily, 1 August 2018. <u>www.sciencedaily.com/releases/2018/08/180801093636.htm</u>

 <sup>&</sup>lt;sup>2</sup> Li, M., Gu, S., Bi, P., Yang, J., Liu, Q., 2015. Heat Waves and Morbidity: Current Knowledge and Further Direction-A Comprehensive Literature Review. International Journal of Environmental Research and Public Health 12, 5256
 <sup>3</sup> ACOSS and BSL (2018) Energy Stressed in Australia. <u>https://www.acoss.org.au/wp-content/uploads/2018/10/Energy-Stressed-in-Australia.pdf</u>



Low-income households appear to use less energy and spend less in dollar terms per year, yet pay disproportionately more, even after energy concessions are taken into account.

Ours and other research shows that particular groups are more vulnerable to high energy bills and poor health outcomes including people on Newstart and Youth Allowance, sole parents and their children, lone pensioners, Aboriginal and Torres Strait Islander people, and low-income renters.

Evidence suggests that rental properties are less energy efficient and less likely to produce energy.<sup>4</sup> Low-income renters have no control over improving the thermal shell or efficiency of major appliances like hot water, even if they could afford it. We note in the 25 years since the 1991 Census, the rental population has increased from 26.9 per cent to 30.9 per cent,<sup>5</sup> and is set to continue to increase into the future.

In addition, low-income and low-wealth households are not accessing rooftop solar at the same rate as other households.

We welcome many of the initiatives currently underway in jurisdictions with respect to improving energy efficiency of homes, as outlined in the Discussion Paper. However with 3 million people living in poverty<sup>6</sup> and many more renting, there is an urgent affordability, health and economic challenge with respect to improving the energy efficiency of existing homes, which needs a systematic, coordinated, national and ongoing response.

# Response to Discussion Paper Consultation Questions

#### General comments or suggestions?

#### Moral obligation to improve energy efficiency of existing homes

ACOSS believes there is a **moral obligation** on Governments to act to ensure the health and wellbeing of people and prevent avoidable loss of life. As noted above, homes with poor energy efficiency are contributing to loss of life during cold snaps and heat waves, with people experiencing poverty and disadvantage most at risk. For example, a study by Monash University researchers found under the extreme scenario, there will be a 471 per cent increase in deaths caused by heatwaves in three Australian cities (Brisbane, Sydney and Melbourne).<sup>7</sup>

In addition, there are **multiple other benefits** from improving the energy efficiency of existing homes, including:

• Lower energy bills for households

<sup>&</sup>lt;sup>4</sup> QCOSS (2016) Choice and Control? The experiences of renters in the energy market. <u>https://www.qcoss.org.au/choice-and-control-experiences-renters-energy-market</u>

<sup>&</sup>lt;sup>5</sup> ABS 2016 Census of Population and housing <u>http://www.abs.gov.au/ausstats/abs@.nsf/mf/2024.0</u>

<sup>&</sup>lt;sup>6</sup> ACOSS (Australian Council of Social Services) 2016, Poverty in Australia 2016, Canberra, <u>https://www.acoss.org.au/wp-content/uploads/2016/10/Poverty-in-Australia-2016.pdf</u>, page 11

<sup>&</sup>lt;sup>7</sup> Monash University. "Heatwave deaths will rise steadily by 2080 as globe warms up." ScienceDaily. ScienceDaily, 1 August 2018. <u>www.sciencedaily.com/releases/2018/08/180801093636.htm</u>



- Reduced emissions to contribute to meeting Australia's international commitments towards the Paris Agreement goal of limiting global warming to 1.5 degrees to avoid more dangerous climate change
- Reduced energy wastage and energy prices (reducing peak demand) for the wider economy.
- Lower spending on health care and services as a result of improving health and well-being.
- Improved resilience of the electricity systems to extreme weather and blackouts.
- Job creation through installing energy efficiency upgrades.
- Economic stimulus resulting from the above benefits.

ACOSS would like to see all eight benefits listed above in the "objectives" identified in the Discussion Paper for improving energy efficiency for existing homes.

#### **Employment and economic stimulation**

Employment opportunities and economic stimulation should be considered as major benefits resulting from policies to improve energy efficiency for existing houses. A recent Energy Efficiency Council (EEC) report found that further energy efficiency measures could result in an additional 120,000 full time jobs.<sup>8</sup>

ACOSS acknowledges there may be labour, product and capacity constraints to implementing some of these policy mechanisms and measures, which could impact on policy delivery timelines. However with appropriate signals and policy certainty, industry can prepare and ramp up to manage potential constraints.

The current downturn in the new build market can help smooth constraints, while the energy efficiency measures for existing homes can provide an important economic and employment boost.

#### Savings to Government budgets

If State and Territory Governments shifted to full or partial percentage based energy concessions, instead of the current flat rate, the government concession budget could reduce as energy bills decreased as a result of improved energy efficiency in the household.

These savings would be complemented by broader economy wide benefits, including through improved health and wellbeing and increased productivity.

## Consideration should be given to setting interim targets to incrementally improve energy efficiency across all existing homes

Consideration should be given to setting interim targets for improving the energy efficiency across all existing homes - that ratchet up over time - to drive policy development and implementation to achieve longer-term goals, such as:

- The trajectory towards zero energy (and carbon ready) homes as per COAG Energy Council agreement in February 2019.
- End energy poverty/stress ACOSS has been advocating for the development of official indicators of energy affordability and stress to measure and reduce energy stress over time.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> http://www.eec.org.au/energy-efficiency-employment-in-australia

<sup>&</sup>lt;sup>9</sup> See for example recommendations 7 of ACOSS 2019 Federal election asks <u>https://www.acoss.org.au/wp-</u> <u>content/uploads/2019/03/ACOSS-Pre-election-priorities-climate-energy.pdf</u> and ACOSS submission to Energy Security Board consultation on strategic energy plan draft metrics

http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/ACOSS%20Response%20SE P%20draft%20metrics%20-%20March19.pdf



Energy efficiency will play a critical role in reducing energy stress (see for example UK energy poverty policies).

One option could be to develop *different policy mechanisms* to improve energy efficiency *across the different residential housing types* where each policy mechanism is introduced, and ratcheted up over different time scales, including:

- Low-income house and apartment owners
- Middle and high-income house and apartment owners
- Private rental properties
- Community housing and apartments
- Public housing and apartments
- Other residential homes like manufactured home parks, retirement villages,

In this case interim overarching energy efficiency targets across all existing homes, could help provide the impetus for targeted policies to be developed and implemented in a timely manner.

A second option would be to develop one policy mechanism i.e. a mandatory energy efficiency target for all residential housing, where *targeted support* is provided *for different residential housing types* to achieve interim targets i.e. landlords receive tax rebate, and low-income home owners receive a grant. In this case the interim targets serve to ratchet up energy efficiency requirements incrementally over time.

## Method to determine energy efficiency levels/target for existing homes should include thermal comfort, appliances and energy production (solar and batteries)

Further consideration will need to be given to how to rate the energy efficiency of existing houses. The NatHERS star rating system currently used for new houses is likely to be insufficient for measuring energy efficiency of existing houses as NatHERS focuses on the thermal performance of the building shell and does not include appliances and energy production (solar and batteries).

Improvements to the thermal shell of an existing building will be limited because of its existing design and construction. It will therefore be important to look at a rating system that can consider a mix of thermal performance, appliances and energy production. A mix would provide flexibility, but also ensure basic thermal comfort is being met as opposed to just using energy production which would not have the same benefits as a mixed approach.

The Victorian Government has developed the *Residential Efficiency Scorecard* which does include thermal shell performance, appliances and energy production, to provide a 10 star rating system. The score card is utilised to conduct an energy audit by professionals, a rating is provided and recommendations are made as to how to increase the star rating. The *Residential Efficiency Score* card could be used as a basis for a mandated energy efficiency standard, whereby properties would be required to meet a certain star rating in the first instance, and move up the rating scale at predetermined intervals.

Similarly the UK has an Energy Performance Certificate (EPC) rating ranging from A-G (where A is best and G is worst), which includes thermal shell measures and appliances. The UK has mandated that all rental properties have to meet a minimum EPC rating of E between 2018 and 2020. There doesn't seem to be any trajectory to increase the performance level. The UK scheme also has a range of allowable exemptions.



#### Improving energy efficiency and energy production of apartments is challenging

ACOSS acknowledges that improving energy efficiency for apartments and other multi-dwellings such as manufactured home parks, are likely to require different solutions and/or measurements than single dwelling houses. Further research and analysis is needed.

Consideration will also need to be given to how common areas are included.

#### **Financial incentives**

Policy options will be most effective where they target the specific barriers faced by groups with different socio-economic profiles. Financial incentives need to be targeted to those households for which unaffordability is the primary barrier, otherwise there is a risk of public funds not being spent effectively.

For many less vulnerable households, low awareness, lack of relevant information, trust and complexity are just as important barriers as finance.

#### Water efficiency measures

Consideration should be given as to how water efficiency measures could be incorporated, particularly where water efficiency measures directly correlate with energy savings, such as water efficient shower heads.

## *Is there anything missing from the summary of policy options for improving existing homes?*

ACOSS welcomes the inclusion in the Discussion Paper of many of the policy options identified in the joint consumer statement on improving energy efficiency for new and existing homes.<sup>10</sup>

Options from the joint statement, not included in the Discussion Paper, included:

- Obligations on energy companies to achieve annual energy efficiency reductions,
- Disclosure and information obligations on real estate companies and lending institutions.

We would welcome further consideration of these options.

# What policy options do you think present the greatest opportunities to improve the energy performance of existing homes, and what do you think the order of priority, or suite of options, should be?

#### AND

## What are the key considerations that need to be taken into account with the policy options identified?

As indicated above, the NEPP team should further explore the possibility of developing one policy mechanism (i.e. mandatory energy efficiency target, for all residential housing), but provide targeted support for different residential housing types. Or, alternatively develop different policy mechanisms

<sup>&</sup>lt;sup>10</sup> <u>https://www.acoss.org.au/wp-content/uploads/2018/12/Final-Joint-Statement-Consumers-call-for-action-on-housing-energy-performance-standards.pdf</u>



to improve energy efficiency across the different residential housing types where each policy mechanism is introduced, and ratcheted up over different time scales,

The table below outlines a number of policy options identified in the joint consumer statement on improving energy efficiency for new and existing homes,<sup>11</sup> as well as the Discussion Paper. The options are rated by priority, with discussion of key considerations that need to be taken into account included.

| Policy options  | Rating 1-<br>5, where<br>1 is low<br>and 5 is<br>high. | Key considerations to be taken into account/comments   |
|---|--|--|
| Introduce mandatory<br>energy efficiency<br>standards for rental<br>homes | 5  | <ul> <li>This is a critical policy to overcome landlord split incentive.<br/>Voluntary schemes or financial incentives on their own are<br/>unlikely to result in improvements to cheaper, worse performing<br/>homes. More targeted schemes, like financial incentives to<br/>landlords of low-rent properties, could end up distorting the<br/>market as the improved house could move into a higher rent<br/>bracket.</li> <li>If necessary, provide incentives to landlords to upgrade rental<br/>properties, including investigating potential tax mechanisms.</li> <li>Implement safeguards to avoid adverse effects on housing<br/>affordability, including measures to avoid significant rent<br/>increases or unnecessary removal of properties from the low-cost<br/>rental market following upgrades. See for example proposals<br/>made by Environment Victoria in their 2017 report<sup>12</sup> which<br/>include:         <ul> <li>New legislative protections against excessive rent increases and<br/>establish a new, simple mechanism to allow tenants to<br/>challenge increases that are disproportionate to the cost of<br/>complying with the standards.</li> <li>Right for tenants to challenge non-compliance: Legislation<br/>would make compliance with standards a duty and specifically<br/>permit tenants to use the compensation and compliance<br/>mechanisms to deal with breaches.</li> <li>Repairs and maintenance bond: Landlords would be required<br/>of tenants) that could be accessed up to a defined amount if<br/>they did not carry out repairs within statutory periods or<br/>refused to comply with mandated standards. This would allow<br/>tenants to remedy straightforward breaches without having</li> </ul> </li> </ul> |

<sup>&</sup>lt;sup>11</sup> <u>https://www.acoss.org.au/wp-content/uploads/2018/12/Final-Joint-Statement-Consumers-call-for-action-on-housing-energy-performance-standards.pdf</u>

<sup>&</sup>lt;sup>12</sup> <u>http://environmentvictoria.org.au/wp-content/uploads/2017/09/Bringing-rental-homes-up-to-scratch-Sept-2017-online.pdf</u>



| 1  |
|--|
| to navigate complex administrative processes. It would also<br>give landlords an incentive to minimise claims by bringing<br>homes up to standard before tenancies begin.  |
| • We note that a mandatory scheme for rental properties will<br>benefit all income levels, not just low-income households.<br>However, more than 40% of people on lowest income are renters,<br>including a high proportion of single parents (mainly women),<br>who would significantly benefit from this policy. Further a<br>mandatory scheme for rental properties will contribute to<br>achieving other benefits such as reducing emissions, reducing<br>demand on the grid, job creation, and economic stimulus.   |
| • ACOSS would support a <b>staged implementation</b> with increased stringency over-time, to (a) give property owners ample time to comply and spread investment over several years so as to minimise pressure on rent increases and risk of evictions and (b) give industry time to plan.   |
| <ul> <li>Further consultation would need to occur on how staging could occur, options include: <ul> <li>Start with a basic list and target worse performing houses first (see for example report by Environment Victoria on Victorian Government proposed scheme<sup>13</sup>)</li> <li>Phase in cheaper or easier measures first, like lighting and insulation, and follow-up with other measures over time (see for example QCOSS report on energy efficiency standards for rental properties<sup>14</sup>)</li> <li>Apply first to properties where new agreements are being entered into and then all remaining properties by a set date (see for example the UK Private Property minimum standard<sup>15</sup> where the standard applies from 2018 where a new tenancy is made, and then by 2020 in private properties where no changes to tenancy arrangements have been made, noting the required standard of Energy performance Certificate E is reasonably easy to achieve)</li> </ul> </li> </ul> |
| <ul> <li>Timing of staging will also depend on the methodology to measure levels of energy efficiency (see discussion earlier).         <ul> <li>Commitment to policy by 2020</li> <li>Design and legislation of policy by 2022</li> <li>Implementation begins before 2024</li> </ul> </li> <li>Noting some jurisdictions can and should move faster given they have already begun actively engaging on mandatory energy efficiency standards for renters.</li> </ul>  |

 <sup>&</sup>lt;sup>13</sup> <u>https://environmentvictoria.org.au/2017/09/27/bringing-rental-homes-scratch/</u>
 <sup>14</sup> QCOSS (2018) Shifting Power: Improving choice and control through energy efficiency minimum standards for rental housing in Queensland

https://www.qcoss.org.au/sites/default/files/20181128 RPT Energy Efficient Min Standards 0.pdf 15 https://www.gov.uk/government/publications/the-private-rented-property-minimum-standard-landlord-guidancedocuments



| Develop and<br>implement programs to<br>improve the energy<br>efficiency of all social<br>housing | 5 | • This is a critical policy that <b>targets those who are most vulnerable</b><br><b>to energy stress</b> and adverse health and wellbeing impacts.  |
|---|---|---|
|   |   | • <b>Community Housing</b> – the Clean Energy Finance Corporation<br>(CEFC) has develop a specific finance package to support<br>community housing invest in energy efficiency and energy<br>productivity for new builds and use the money saved to upgrade<br>existing housing. Despite strong interest from many community<br>sector housing providers, the uptake has been low. Barriers to<br>engaging in the program, capacity and funding constraints in the<br>community housing sector still need to be addressed, with more<br>support needed. |
|   |   | • <b>Public housing</b> - We note some jurisdiction have invested in improving energy efficiency and energy productivity for some public housing stock, but would like to see more systematic commitment. The South Australian Government's virtual power station program that includes all public housing stock, has a lot of potential and takes an equitable approach of providing benefits to all tenants even if their house is unable to host solar and battery. Inclusion of energy efficiency upgrades would make this an excellent scheme.     |
|   |   | <b>State and Territory Governments</b> with the support of the federal Government <b>should be taking a principled approach</b> and committing to improve the energy efficiency and energy productivity of all public housing.  |
|   |   | • Along the lines of the South Australian virtual power station, there is opportunity for public and community housing providers to package energy efficiency and energy productivity together to provide grid stabilisation and demand management services and generate revenue to pay back the investment to upgrade.   |
|   |   | • We would like to see governments commit to increasing the energy efficiency of all existing social housing (public and community) in line with a trajectory, and work with the community sector to support the them meet the trajectory.  |
|   |   | <ul> <li>Timing of staging will also depend on the methodology to measure levels of energy efficiency (see discussion earlier). A potential timeline could be:         <ul> <li>Commitment to policy by 2020</li> <li>Design and legislation of policy by 2022</li> <li>Implementation begins before 2024</li> </ul> </li> </ul>  |
|   |   | Noting some jurisdiction and community sector housing providers can and should move faster.   |



| Government Funding<br>ongoing programs for<br>low-income and<br>disadvantaged<br>households to provide<br>access to energy-<br>efficient knowledge,<br>products and<br>renewable energy | 5 | <ul> <li>Consideration should be given to a implementing a staged mandatory energy efficiency standard for home owners of existing houses, if the objectives outlined in the discussion paper and this submission are to be achieved.</li> <li>However, with more than 60% of the lowest-income households either owning or purchasing their own home.<sup>16</sup> but are income poor, there needs to be systematic and ongoing program to support energy efficiency upgrades.</li> <li>Effective programs need to be delivered at no upfront cost, integrate behaviour change with basic retrofit measures, and be delivered through existing trusted relationships (local government, community, financial counselling, health or other services).</li> <li>Good design and delivery of government-funded programs can leverage complementary finance in the form of efficiency obligation schemes, but vulnerable households are unlikely to access these schemes while the onus is on them to access rather than be proactively provided.</li> <li>Consideration should be given to creating an Affordable Energy Partnership with local government, energy businesses and community agencies to drive national rollout Local Home Energy Hubs (with financial support from federal and state Governments) that:         <ul> <li>Assist with knowledge and education</li> <li>Provide energy audits and recommendations</li> <li>Provide energy efficiency and energy productivity incentives schemes, with special no cost provisions for low-income households.</li> </ul> </li> <li>Timing depends on whether a staged mandatory energy efficiency standard is pursued and would follow similar timelines to the above policy mechanisms.               <ul> <li>Commitment to policy by 2020</li> <li>Design and legislation of policy by 2022</li></ul></li></ul> |
|---|---|---|
| Introducing mandatory disclosure of energy  | 3 | <ul> <li>Mandatory disclosure is most helpful to track the energy<br/>efficiency status of housing, noting significant knowledge gaps</li> </ul>  |

<sup>&</sup>lt;sup>16</sup> ACOSS and BSL (2018) Energy Stressed in Australia. <u>https://www.acoss.org.au/wp-content/uploads/2018/10/Energy-</u> <u>Stressed-in-Australia.pdf</u>



| performance of a home<br>at point of sale or rent   |   | <ul> <li>nationally. This objective could also be achieved through mandating a trajectory for improving energy efficiency standards for all existing homes.</li> <li>Improved information via disclosure could be effective for homes for sale, but may be less effective in the rental market where tenants may not have sufficient market power to act on information</li> <li>Unless paired with some other policy mechanism like meeting a mandated standard, mandatory disclosure is unlikely to result in the improvements needed, especially for people on low-incomes.</li> </ul>  |
|---|---|--|
| Obligations on energy<br>companies to achieve<br>annual energy<br>efficiency reductions.  | 3 | <ul> <li>Energy companies can play an important role in identifying customers that are struggling with energy bills and where energy efficiency measures could be part of the solution. A number of energy retailers provide support to vulnerable customers to audit the energy performance of their home and provide support to make improvements.</li> <li>In addition, there are a number of state and territory based retailer obligations schemes that require retailers to help households and businesses save on energy use and costs, and lower their greenhouse gas emissions.</li> <li>However, the measures are often limited to smaller ticket items like fridges and lighting, and either exclude large appliances like hot water and air-conditioning, and where they are included it is only at a discounted rate which creates a barrier for low-income households.</li> <li>Further consideration should be given to how energy retailers can be incorporated into a number of the policy mechanisms being considered, for example as a partner in Affordable Energy Partnership discussed above.</li> <li>ACOSS would encourage the NEPP team to investigate the role of energy retailers in improving residential energy efficiency in other countries.</li> </ul> |
| Review mechanisms<br>that facilitate landlord<br>support for tenants to<br>initiate upgrades to<br>their homes or fixed<br>appliances to improve<br>their homes | 3 | <ul> <li>Consideration could be given to provide rights for tenants to make reasonable changes to the property to improve the energy efficiency of the property, on the basis that it does not damage and instead adds value to the property. Consultation would need to occur with the landlord, but the landlord should be required to provide reasonable grounds for rejecting the proposal. Tenants are likely to still be concerned about repercussions or rent increases. Mandatory standards are fairer and systematic.</li> <li>The current tax requirement that covers the replacement of damaged or broken building structures or appliances with "like for like replacement" should be reviewed and amended to encourage an upgrade to more efficient items.</li> </ul>   |



| Disclosure and<br>information obligations<br>on real estate<br>companies and lending<br>institutions | 2   | <ul> <li>These measures can be helpful in the short-term, to make people aware of the energy efficiency of the property they are considering renting or buying. To support change it would probably need to be coupled with mandatory disclosure and tools for behavioural change.</li> <li>It won't help those who cannot afford to and are unable to improve energy efficiency of appliances and thermal performance of building.</li> </ul>  |
|--|-----|---|
| Behavioural change   | 2-3 | <ul> <li>Behaviour change can be a very effective way to reduce energy use and improve energy efficiency. Low community awareness of the benefits of efficiency has long been recognised as a barrier to individual action, as well as to the effectiveness of increasing market incentives for property owners, builders etc. to deliver higher performance.</li> <li>But to be effective, consideration is needed as to the different ways different group's access information, the way that information can best be delivered and how to ensure easy access to cost-effective retrofit measures.</li> <li>Few people actively seek out efficiency information, so taking opportunities to 'piggyback' on complementary information or services (such as solar installation, financial counselling, HACC services etc.) will improve effectiveness and reach.</li> <li>However, behavioural change programs can be expensive and time consuming and where regulation is available like mandatory energy efficiency standards, much larger gains can be made.</li> <li>Further, while behavioural change can achieve many of the objectives, it won't help those already depriving themselves of energy because they cannot afford to and are unable to improve energy efficiency of appliances and thermal performance of building.</li> </ul> |

#### What research might assist in progressing this work?

- International examples Research and evaluate overseas examples to consider how policy mechanisms and measures could apply in Australia, including the UK, New Zealand, Germany and California.
- Analysis of benefits to health and health budgets Compile some of the domestic and international research looking at health benefits of improved energy efficiency to homes, and model potential savings to health budgets.
- Update impact of energy efficiency measures on reducing emissions to contribute to our international emission reduction commitments Commission research to update the impact



improving energy efficiency for existing buildings would have on reducing emissions by 2030 and 2050.

- Analysis of benefits to costs and reliability of electricity grid –Model the potential benefits of improving energy efficiency for existing homes on reducing peak demand and grid resilience, and potential flow on effects to Electricity prices.
- Analysis of how our current taxation system is dis-incentivising and incentivising energy efficiency upgrades.

# Would you be interested in attending a workshop in person at some point during June/July/August? If so, what jurisdiction/s would be your preferences?

ACOSS would welcome an opportunity to bring members of the community sector together to meet with the NEPP team for further consultation.

## List any research or data sources that is relevant to informing these questions or the project.

We have referenced a number of relevant reports throughout this submission.

In addition we would recommend:

- ACOSS and BSL (2019) Affordable, Clean Energy for people on low income. <u>https://www.acoss.org.au/wp-content/uploads/2019/02/FINAL-Report-Affordable-clean-energy-for-people-on-low-incomes\_web.pdf</u>
- Residential Building Electrification in California: Consumer economics, greenhouse gases and grid impacts, April 2019 <u>https://www.ethree.com/wp-</u> <u>content/uploads/2019/04/E3 Residential Building Electrification in California April 2019.pdf</u>

## Contact

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