



**ACOSS submission to National Energy
Guarantee Draft Design Consultation Paper**

March 2018



Who we are

ACOSS is a national voice for the needs of people experiencing poverty, disadvantage and inequality and the peak body for the community services and welfare sector.

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.

What we do

ACOSS leads and supports initiatives within the community services and welfare sector and acts as an independent non-party political voice.

By drawing on the direct experiences of people affected by poverty and inequality and the expertise of its diverse member base, ACOSS develops and promotes socially and economically responsible public policy and action by government, community and business.

ACOSS would like to thank members of the ACOSS Climate and Energy Policy Network for input and guidance into this submission. ACOSS takes responsibility for final views and recommendations.

First published in 2018 by the
Australian Council of Social Service
Locked Bag 4777
Strawberry Hills, NSW, 2012 Australia
Email: info@acoss.org.au
Website: www.acoss.org.au

ISSN: 1326 7124

© Australian Council of Social Service 2018

This publication is copyright. Apart from fair dealing for the purpose of private study, research, criticism, or review, as permitted under the Copyright Act, no part may be reproduced by any process without written permission. Enquiries should be addressed to the Publications Officer, Australian Council of Social Service. Copies are available from the address above.

Contact for this submission: Kellie Caught, Senior Adviser – Climate and Energy, ACOSS. Email: kellie@acoss.org.au mobile: 0406 383 277

Contents

1	Introduction	4
	Summary of recommendations	6
2	Affordability	8
3	Emissions Requirement: Commonwealth Government design elements	13
3.1	Emissions reduction target for the NEM, including the level and form of the target	13
3.2	Interacting with State renewable energy targets and emissions reduction targets	15
3.3	Treatment of EITE activities	15
3.4	External offsets	15
4	Emissions Requirement: Energy Security Board design elements.....	17
4.1	Contracting and emissions	17
4.2	Flexible compliance options.....	17
4.3	Interactions with Voluntary ‘green’ programs.....	18
4.4	Enforcement tools for emissions requirement.....	18
5	Reliability Requirement: Energy Security Board design elements.....	19
6	Amending the NEO.....	22

1 Introduction

ACOSS welcomes the opportunity to make a submission to the Energy Security Board's consultation paper on the draft design of the National Energy Guarantee (NEG). ACOSS is participating in this inquiry representing the interests of people on low incomes and those experiencing the impacts of poverty and disadvantage in Australia, as well as in our role as the national peak body for the community services sector.

The primary purpose of the NEG is to reduce emissions in the electricity sector. It also seeks to support efforts to address system reliability and electricity affordability.

ACOSS supports the aims of the NEG. Climate change is a social justice and equity issue that urgently needs to be addressed. People on low incomes and experiencing disadvantage will suffer most from climate change impacts as they are least able to cope, adapt and recover. A mechanism is therefore needed to reduce Australia's emissions and transition to a clean economy in line with the goals of the Paris Agreement to limit global warming to well below 2 degrees and pursue a limit of 1.5 degrees. The transition should be achieved in an affordable, equitable and inclusive manner, to ensure that low-income and disadvantage households are not left behind or do not pay disproportionately more for the transition.

To date, Australia has failed on all fronts. Electricity prices have skyrocketed, energy inequity has increased and emissions continue to rise. Low-income and disadvantaged households are bearing the brunt.

Dr Alan Finkel in his independent review *into the Future Security of the National Electricity Market* argued that there is an urgent need to address *the* energy trilemma of affordability, reliability/security, and emissions reduction. Dr Finkel and chair of the Australian Consumer and Competition Commission (ACCC), Alan Fells, have both stressed that there is no silver bullet and a variety of measures will be needed. We agree.

ACOSS acknowledges and welcomes the range of activities underway to begin to address the energy trilemma, including the implementation of 49 of the 50 recommendations from the Finkel Review, abolition of limited merits review in network pricing, electricity retail reform, the ACCC electricity supply price inquiry, and now the NEG.

However, current action will not be adequate enough to alleviate the energy stress facing the more than 3 million people living in poverty and experiencing disadvantage. This is because **energy stress is more than just the price of electricity, it is also the size of the bill and capacity to pay.**

ACOSS is deeply concerned that alongside the very high profile energy market reform processes mentioned above that go some way to address the "price" element of affordability, that there is not a parallel process to address the other two elements of energy *affordability* – size of bill and capacity to pay.

The NEG itself *may* put downward pressure on wholesale electricity prices but it will not be done in an equitable way. There is a risk that the proposed NEG could concentrate the market and drive up costs. The proposed design of the NEG will have a higher administrative burden than other mechanisms which adds unnecessary costs, particularly if energy intensive trade exposed (EITE) industries are excluded.

The additional administrative costs will be passed on to other consumers, again disproportionately affecting low-income and disadvantage households.

Under the previous mechanism to reduce emission – the carbon price – revenue was raised that funded a package of measures for industry and households to address costs and inequities that may arise from the mechanism. The NEG will not raise revenue and there is nothing on the table for households.

Section 2 of this submission will look at the affordability issue in more detail and provide a series of recommendations.

Section 3, 4 and 5 respond directly to the design questions posed in the consultation paper with a focus on what is the best interest of people on low-incomes and experiencing disadvantage.

ACOSS notes the proposed NEG is an untested method to reduce emissions and address reliability. We lack any domestic or international examples to learn from, to use as benchmarks, or to demonstrate the effectiveness of this approach.

Past energy policy based on poor assumptions or political expediency has led to inefficiencies and affordability issues. For example, stricter reliability settings imposed by New South Wales and Queensland governments in the mid-2000s led to excessive increases in spending to reinforce existing networks and construct new networks. Consumers are still paying the price. Any errors or oversights in developing the NEG will have similar adverse consequences.

While the draft design consultation paper has alleviated some concerns regarding the workability of the scheme, and has clarified the reliability obligation, it has raised new issues regarding complexity, market competition, costs and inequity. We are concerned that the NEG as it currently stands is an expensive and inefficient mechanism to deliver affordable clean energy. A scheme that applies to generators, for example, would be- less complex, less costly and more equitable.

However, we acknowledge the NEG is currently the only mechanism to reduce electricity sector emissions that the Australian Federal Government has put forward for consideration.

To help evaluate the effectiveness of any emissions reductions mechanisms ability to protect people on low income or experiencing disadvantage, we have developed a set of principles, outlined in box 1 below, which we will use to judge the effectiveness of the NEG and in responding to the consultation paper questions.

Box 1: ACOSS key principles in designing an emissions reduction mechanism for the electricity sector

An emissions reduction mechanism:

- Must be credible, scalable and durable, in line with the goals of the Paris Agreement to limiting warming to well below 2 degrees and pursue a limit of 1.5 degrees C (The adherence to Paris Agreement trajectory is important to reduce cost on future generations)
- It should contribute to low-income and disadvantaged households being better off with lower costs and safer climate.
- It should be effective and efficient including:
 - Least cost;
 - Facilitate well-functioning, open and low cost energy market (i.e. does not lead to market distortion, barriers to entry, market concentration and over investment);
 - Efficient and transparent pass through of costs.
- It should be fair and equitable.
- Governments should collectively carry the costs of the mechanism. Where this is not the case, scheme costs should be allocated equitably and measures put in place to offset disproportionate costs to people on low incomes and experiencing disadvantage (because low-income and disadvantage households pay disproportionately more when costs are smeared across bills).
- It should provide a degree of certainty to support a just and managed transition for workers and communities affected by the transition from fossil fuels to clean energy.
- The energy sector can and should transition faster. Emissions reductions should come from within the electricity sector, without use of offsets.
- Complementary measures should be introduced to further address other parts of the quadlemma with respect to affordability, reliability/security, and a just transition.
- Not all members of the community have the capacity or inclination to engage in the energy market, and should not be penalised for not doing so.
- Community interests, in particular those on low-income and experiencing disadvantage, should be actively engaged or represented in the design of the mechanism.

Summary of recommendations

Recommendation 1: COAG Energy Council establish an independent review to address energy affordability, with a focus on size of bill, capacity to pay as well as any remaining gaps to reduce the price of energy.

Recommendation 2: ESB undertake an analysis on the efficiency and equity of the NEG and its impact on low-income and disadvantaged households.

Recommendation 3: The following measures be implemented immediately to relieve energy stress and address NEG inequities:

- immediate increase to Newstart benchmarked to the essential costs of living;
- a review of concessions policy to ensure appropriate awareness, targeting and structure; and
- implementation of mandatory state and territory energy efficiency standards for rental properties supported by federal tax incentives for landlords.

Recommendation 4: Significantly increase the proposed 2030 emissions reduction target in line with the electricity sectors ability to decarbonise faster than other sectors and on what Australia should be doing to contribute to achieving the Paris Agreement [climate change] goals.

Recommendation 5: Set electricity emission reduction targets every 5 years, including setting 2025 and 2030 targets now.

Recommendation 6: Allow a rolling five year notice period for changes to emissions reduction target.

Recommendation 7: Mandate that no backsliding is allowed on emissions reduction targets.

Recommendation 8: Allow State renewable energy and emissions target to be additional to the national electricity emissions reduction target.

Recommendation 9: Do not allow EITE exemption from the emissions obligation.

Recommendation 10: Do not allow external offsets to be used to meet emissions requirement in the electricity sector.

Recommendation 11: For Emissions Obligation, simplify contracts options and utilise contracts that specify a MWh that could take the form for example of a 'stapled security', where a specified amount of emissions per MWh is 'stapled' to contracts currently in existence (such as OTC or Australian Securities Exchange-traded swaps).

Recommendation 12: Do not allow deferral of compliance. Consider partial carryover to provide flexibility for smaller retailers.

Recommendation 13: Allow voluntary emissions reductions programs such as GreenPower, to be additional to the NEG's emissions reduction target.

Recommendation 14: Support a longer-trigger to enable retailers to respond with long-term options such as new investments.

Recommendation 15: For Reliability Obligation support exchange-traded and over-the-counter (OTC) contracts (e.g. swaps, caps)

Recommendation 16: Consider further the Book-build option as a way to close the gap once the Reliability Obligation is triggered rather than allocate the gap to all retailers, which may be more beneficial to second and third tier retailers and encourage new entrants and innovation into the market.

Recommendation 17: Ensure there is market transparency as to the capability of generators/firming capacity to perform under the certain circumstances and conditions that would trigger the Reliability Obligation.

Recommendation 18: The NEO objectives are expanded to include a social equity objective and an objective to support decarbonisation.

2 Affordability

A smooth and expeditious transition to a modern clean energy system is desirable and achievable. However, Australia's energy system is in disarray, and low-income and disadvantaged households are bearing the brunt of it.

The latest ACOSS figures identify 3 million people, including over 731,000 children, already living in poverty in Australia. The number of people struggling with energy stress is likely to be much higher.

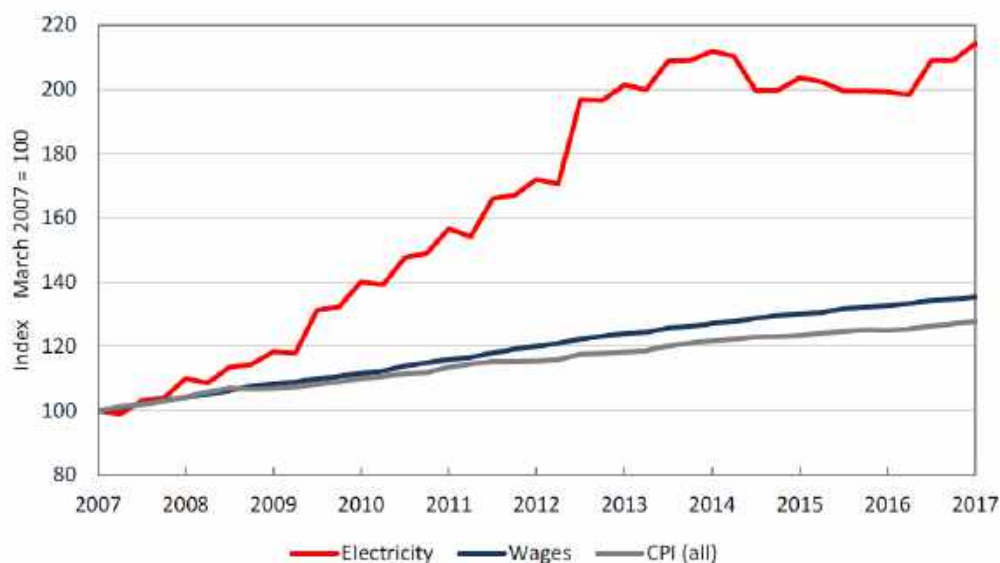
People more likely to be vulnerable to energy stress are those living on unemployment or student allowances, pensioners, renters, single-parent families, Aboriginal and Torres Strait Islander people, households where someone has a disability or medical condition, and people who are in low paid work.

Access to reliable and affordable electricity is a basic and essential human right - it is critical to our health, wellbeing, economic participation and social inclusion.

Despite being an essential service, electricity prices are skyrocketing, disconnections have increased, the number of households experiencing measurable hardship has risen, and more households are rationing energy to the detriment of their health and well-being. This is overlaid with a housing affordability crisis, low wage inflation, frozen social security, and long-term unemployment which has almost tripled since the global financial crisis – with now only one job for every eight people looking for work.

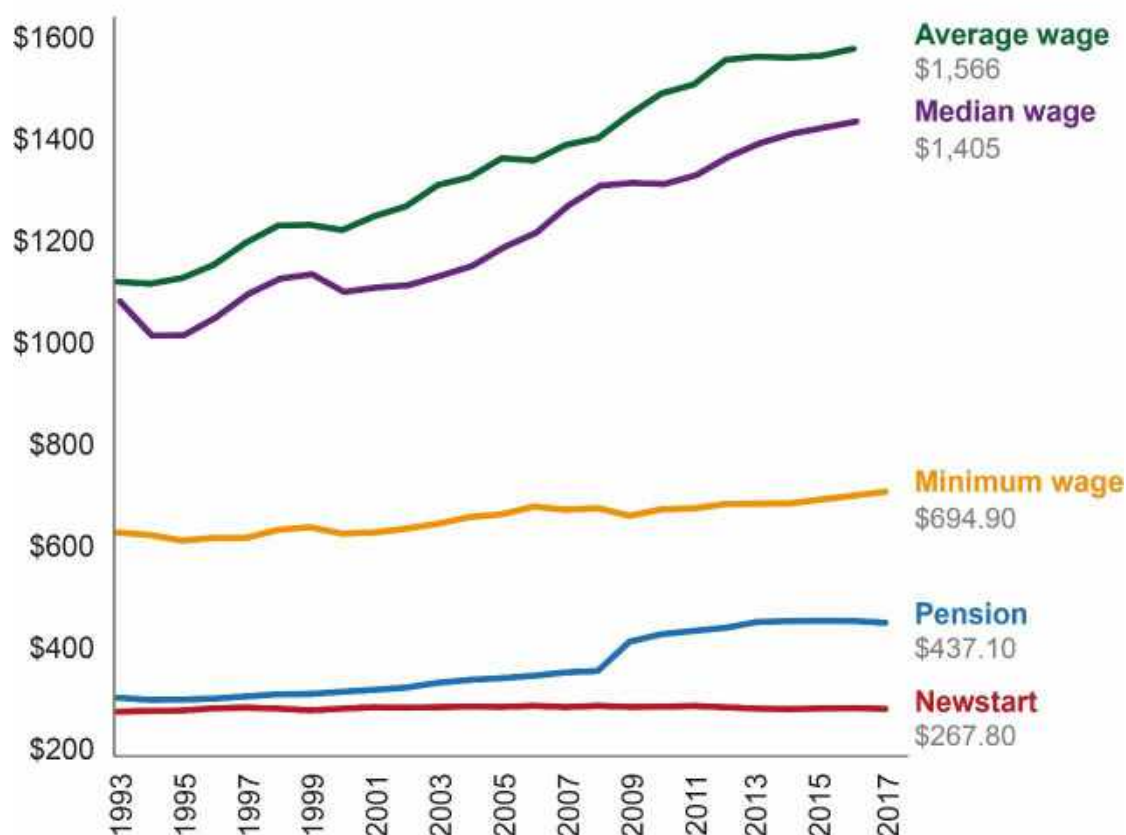
Figure 1 shows CPI for electricity has outstripped CPI for all sector and average wage growth. Figure 2 shows the differences is even worse for low-income and disadvantage household where minimum wage has remained fairly flat and Newstart payment flatter.

Figure 1. CPI for electricity compared with other sectors and wage growth



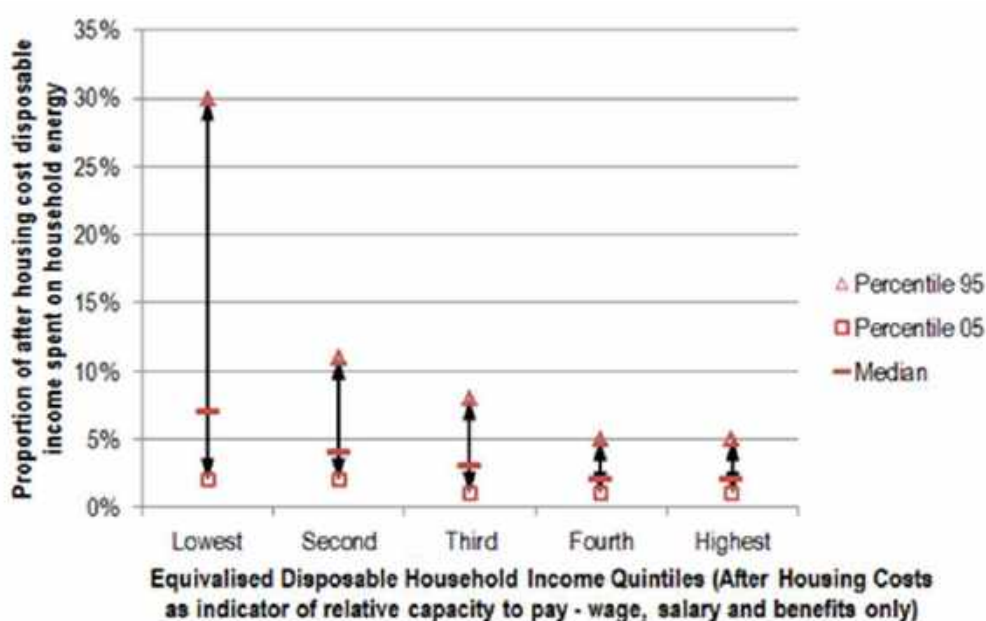
Source: ABS, Consumer Price Index 6401.0 and ABS, Wages Price Index 6345.0, Australia.

Figure 2. Wages, benefits and pensions for a single adult (\$ per week, adjusted for inflation)



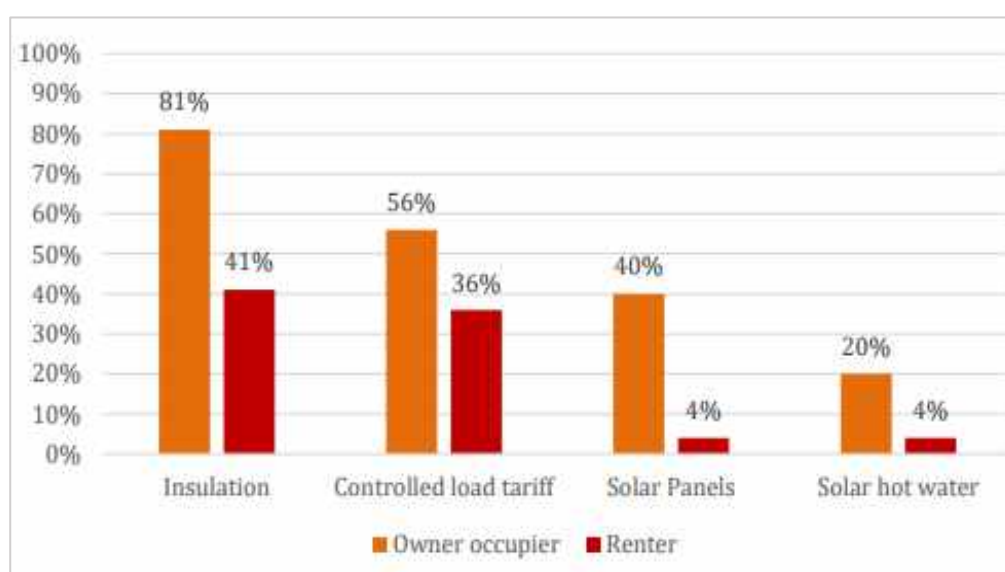
Low-income households receive less income, with little to no growth, but spend more of that income on energy bills. As seen in figure 3, low-income households spend on average 7% of their income on energy, compared to high income households who pay around 3% on average. However many low-income households spend more, as high as 30%, of their income on energy.

Figure 3. Income spent on energy by income quintiles



Around half of people on low incomes are living in rental properties, and will be spending a significant amount of their income on rent. Rental properties have significantly less energy efficient features and distributive energy (see figure 4 for example of Queensland households), which will affect the size of their electricity bill. Renters are in a particularly difficult position because they have limited ability to make changes to the properties they live in and landlords have little incentive to invest in upgrades which do not benefit themselves.

Figure 4. Proportion of Queensland households with energy efficiency features¹



¹ QCOSS (2017): [Choice and Control? The experiences of renters in the energy market](#)

ACOSS acknowledges and welcomes the range of activities underway to begin to make energy more affordable and address the energy stress, including the implementation the Finkel recommendations, abolition of limited merits review in network pricing, electricity retail reform, the ACCC electricity supply price inquiry, and now the NEG.

However, while many of these measures underway aim to put downward pressure on electricity prices they will not be adequate enough to alleviate the energy stress facing the more than 3 million people living on low incomes and experiencing disadvantage. This is because, as outlined above and depicted in figure 5, it's not **only the price of electricity that causes energy poverty, it's also the size of the bill and a household's capacity to pay**. Factors such as energy efficiency of your home, whether you rent, your capacity to generate your own energy, level of income, access to concessions, medical needs, size of household, and other financial stressors such as housing costs, all contribute to create energy stress.

Figure 5: Factors influencing electricity price and total costs of securing energy



Delivering affordable clean energy will require non-energy market solutions as well as solutions across the whole supply chain, and federal and state government leadership recognising that people cannot be left behind.

ACOSS is deeply concerned that alongside the very high profile energy market reform processes mentioned above that go some way to address the “price” element of affordability, that there is not a parallel process to address the other two elements of energy *affordability* – size of bill and capacity to pay. An independent review to address ALL aspects of energy affordability is urgently needed.

Recommendation 1: COAG Energy Council establish an independent review to address energy affordability, with a focus on size of bill, capacity to pay as well as any remaining gaps to reduce the price of energy.

While much of the discourse for the need for the NEG has been around affordability, there has been little discussion or analysis of:

- The additional costs to retailers of the NEG as a result of the complexity and compliance requirements; overall scheme administration; and the exclusion of EITEs;
- How the costs will be passed on; or
- Whether there is a mechanism to offset the costs for low-income and disadvantage households already struggling under record high electricity prices.

While the NEG itself *may* put downward pressure on wholesale electricity prices it will not be done in an equitable way, especially compared to other mechanisms available. People experiencing poverty and disadvantage who contribute least to Australia's emissions, are less able to adapt and cope with climate change impacts, and are least able to afford to pay for the transition, will end up paying disproportionately more.

It is essential that the ESB conduct a distributional analysis of the NEG, to assess its impact on energy affordability for low-income and disadvantaged households.

Recommendation 2: ESB undertake an analysis on the efficiency and equity of the NEG and its impact on low-income and disadvantaged households.

Under the previous mechanism to reduce emission – the carbon price – revenue was raised that funded a package of measures for industry and households to address costs and inequities that may arise from the mechanism. The NEG will not raise revenue and there is nothing on the table for households.

At a minimum, the ESB and COAG should be developing targeted measures for low-income and disadvantage households to address the inequities and additional costs imposed by the NEG and smeared across bills.

Recommendation 3: The following measures be implemented immediately to relieve energy stress and address NEG inequities:

- immediate increase to Newstart benchmarked to the essential costs of living;²
- a review of concessions policy to ensure appropriate awareness, targeting and structure; and
- implementation of mandatory state and territory energy efficiency standards for rental properties supported by federal tax incentives for landlords.

² See ACOSS Budget Statement 2018 for details http://www.acoss.org.au/wp-content/uploads/2018/02/ACOSS-Budget-Priorities-Statement-2018-19_FINAL.pdf

3 Emissions Requirement: Commonwealth Government design elements

3.1 Emissions reduction target for the NEM, including the level and form of the target

3.1.1 Setting the sectoral emissions reduction target

Australia should do all it can to protect its citizens from more dangerous climate change, and reduce cost burden on future generations. ACOSS is concerned the slated emissions reduction target is not adequate, and will not deliver the electricity sector's fair contribution to the emissions reductions needed to achieve goals of Paris Agreement.

A target set too low will

- impose avoidable costs if investors do not see the package as credible and consistent with the Paris Agreement; and
- fail to provide an investment signal to meet scheduled and unscheduled coal retirement, leading to further cost and reliability issues.

The electricity sector has more capacity to reduce emissions than other sectors because it has affordable, clean deployable technology available now. New wind and solar with firming technology are cheaper to build than new coal and gas power.³ Other sectors, such as agriculture and some industrial process, are further behind in the transition. A 26% by 2030 target for the electricity sector will place a greater burden and cost on other sectors which will have flow through effect to people and communities.

Finkel modelling found business as usual would result in 35% renewable energy by 2030. The Finkel review recommended that, to meet the government's 2030 economy wide emissions reduction targets of 26-28%, the electricity sector should aim for at least 42% renewable energy by 2030. Other independent modelling has found that penetration of renewable energy can be much higher, for example the Institute of Sustainable Futures found the NEM could achieve 100% renewable energy by 2035.⁴ Under a more ambitious economy wide emissions reduction goal consistent with limiting warming to well-below 2 degrees and pursue a 1.5 degree limit, the electricity sector would need to do significantly more.⁵

³ Recent analysis from Bloomberg (<http://bit.ly/2FXIPK6>) Reputex (<http://bit.ly/2mCNitT>) the Centre for International Economics (CIE) (<http://bit.ly/2oQu3fY>) and the gentailer AGL (<http://bit.ly/2oQu3fY>) found that for a new energy generation build, renewable energy (wind and large scale solar pv) is now cheaper than gas and coal. Reputex and AGL found this is still the case with storage and/or firming capacity added.

⁴ ISF (2016): [*100% Renewable Energy for Australia: Decarbonising Australia's Energy Sector Within One Generation*](#).

⁵ The Climate Institute (http://climateinstitute.org.au/verve/resources/National_Agenda_FINAL23082016.pdf) and WWF-Australia (<http://www.climatechangeauthority.gov.au/sites/prod.climatechangeauthority.gov.au/files/submissions/2015/WWF%20Austr>

If the electricity sector target is too low it could lock in technologies that make it harder and more costly to achieve more ambitious emission reduction targets in the future. As future federal and state governments seek to achieve higher emissions reduction, the system will be faced with stranded assets and a more costly transition. The cost impact of setting high emission standards now on future emission reduction trajectory should be considered in the future modelling of the NEG.

Further, AEMO has argued that, to avoid electricity shortfalls and reliability issues for example when Liddell coal-fired power station is scheduled to close in 2023, investment signals are needed now to invest in new generation.⁶ The ESBs modelling of the NEG shows that beyond 2022 the retirement of Liddell power station reduces supply under both the BAU and the 26-28% NEG scenario, suggesting the proposed NEG target is not enough to avoid generation shortfalls when Liddell or other coal-generators come offline.

Recommendation 4: Significantly increase the proposed 2030 emissions reduction target in line with the electricity sectors ability to decarbonise faster than other sectors and on what Australia should be doing to contribute to achieving the Paris Agreement [climate change] goals.

3.1.2 Timing, process and adjustments for setting electricity emissions targets

ACOSS supports setting electricity targets every five years to build ambition over time (as per the Paris Agreement). ACOSS would support setting a 2025 target now as well as a 2030 target. ACOSS also supports a five year notice period for setting and changing emissions reduction targets, however it should be a rolling five year notice period. For example, changes to 2026 target could be made in 2021, and changes to 2027 could be made in 2022 etc. This allows for more a more timely response to changes in technology, science and community sentiment. Consistent with the Paris Agreement, ACOSS advocates for an agreement that targets could only stay the same or be revised up, and cannot go backwards.

Recommendation 5: Set electricity emission reduction targets every 5 years, including setting 2025 and 2030 targets now.

Recommendation 6: Allow a rolling five year notice period for changes to emissions reduction target.

Recommendation 7: Mandate that no backsliding is allowed on emissions reduction targets.

[alia.pdf](#)) estimate that to contribute its fair share to limit warming to 1.5°C, Australia would need to reduce emissions by 45 per cent on 2005 levels by 2025, 65 per cent by 2030 and net zero emissions soon after 2040.

⁶ AEMO (2017) Electricity Statement of Opportunities for the National Electricity Market.

https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/NEM_ESOO/2017/2017-Electricity-Statement-of-Opportunities.pdf

3.2 Interacting with State renewable energy targets and emissions reduction targets

The consultation paper proposes that NEG is geographically neutral, which means that any additional renewable energy generation made as part of a state-based policy measure to meet a state based renewable energy or emissions reduction target will not be ‘additional’ to the national emissions reduction target.

We note a number of the states’ renewable energy and emissions reduction targets are more consistent with achieving the Paris Agreement goals to limit global warming to well below 2 degrees and pursue a 1.5 limit. ACOSS’s preference would be for states to negotiate for the national target to be more ambitious. In the absence of the ability to negotiate stronger national targets, ACOSS would support state-based emissions reduction policy measures (which should be implemented in a way that minimises costs for low-income and disadvantage households and in line with ACOSS principles outlined in box 1) to be additional to the national emissions reduction target.

Additionality would allow more ambitious emissions reduction and discourages any ‘free-riding’ by other jurisdictions.

Recommendation 8: Allow State renewable energy and emissions target to be additional to the national electricity emissions reduction target.

3.3 Treatment of EITE activities

ACOSS is concerned by the proposal to exempt EITEs from the emissions reduction obligation. EITEs were originally exempted from the Renewable Energy Target (RET) because of the increased costs the RET obligation had on electricity prices. This EITE exemption has led to other consumers and households paying more for their electricity, including low-income and disadvantage households, who are least able to pay.

The NEG would purportedly put downward pressure on wholesale price and purportedly have minimal transaction cost, so it is unclear why EITEs need to be exempted. Setting up the exemption would add some costs into the system.

ACOSS would not support EITE exemption if it led to increased costs to low-income and disadvantaged households. Without further analysis or modelling to provide evidence for the need for the exemption and the impacts of the exemption, ACOSS does not support EITE exemption from the emissions obligation.

Recommendation 9: Do not allow EITE exemption from the emissions obligation.

3.4 External offsets

Without further analysis and modelling, the impact of offsets on affordability is unclear. In early years offsets *may* result in slightly cheaper electricity, especially under more ambitious target, but as demand

for offsets increases, they will become more costly. Meanwhile, as renewables become cheaper over time, offsets will be less appealing. Further any use of offsets would result in less renewable energy in the system, which could impact negatively on wholesale prices.

ACOSS is concerned that the ability to purchase offsets would further undermine the contribution of the electricity sector in the economy-wide transition to achieve global goals and avoid more dangerous climate change. While a case can be made for the use of quality offsets in some other sectors where low/zero emissions technology is still costly or unavailable, the electricity sector has affordable (wind and solar with firming capacity is now cheaper than new build coal or gas) and deployable technology and will play a critical role in Australia's transition to a clean economy.

If short-term emissions targets for the electricity sector were significantly increased there may be a case for offsets. ACOSS does not support the use of offsets in as currently proposed for the electricity sector.

Recommendation 10: Do not allow external offsets to be used to meet emissions requirement in the electricity sector.

4 Emissions Requirement: Energy Security Board design elements

The emissions guarantee mechanism appears complex, onerous and potentially imprecise with respect to tracking emissions reductions. While it could be scalable with a more ambitious target, its complexity is likely to result in higher administration costs than other schemes previously considered, and more burdens for second and third tier retailers. The complexity and compliance burden are likely to increase costs directly when the compliance costs are passed through to consumers, and indirectly, by stifling market competition.

ACOSS urges the ESB to simplify the process to reduce the burden for second and third tier retailers and reduce the overall costs of the scheme to retailers so as to minimise what is passed on to consumers, in particular low-income and disadvantaged households who pay disproportionately more.

4.1 Contracting and emissions

A significant number of stakeholders, including the ASX and electricity retailers, have expressed concerns that some of the contracting options outlined in the consultation paper could negatively impact on market liquidity and disadvantage second and third tier retailers creating barriers to entry or increase market concentration.

ACOSS has previously indicated we would support the use of existing markets or structures where they are efficient, or other mechanisms and structures that the electricity market is familiar with that are efficient and low cost. ACOSS would therefore support the option outlined in the consultation paper that uses contracts that specify a MWh and could take the form for example of a 'stapled security', where a specified amount of emissions per MWh is 'stapled' to contracts currently in existence (such as OTC or Australian Securities Exchange-traded swaps). This form of contracting should also simplify reporting and compliance obligations and associated costs of an onerous system.

Recommendation 11: Simplify contracts options and utilise contracts that specify a MWh that could take the form for example of a 'stapled security', where a specified amount of emissions per MWh is 'stapled' to contracts currently in existence (such as OTC or Australian Securities Exchange-traded swaps).

4.2 Flexible compliance options

ACOSS would not support deferral of compliance as this could undermine the integrity of the mechanism and delay investment in the NEM. There could potentially be a role for partial carryover for the retailer to either use in the following year or offer to other retailers, especially those at risk of not meeting their compliance. Providing flexibility for small retailers should be encouraged.

Recommendation 12: Do not allow deferral of compliance. Consider partial carryover to provide flexibility for smaller retailers.

4.3 Interactions with Voluntary 'green' programs

As the consultation paper notes some business and households undertake voluntary action to reduce emissions associated with their electricity use, which provides additional demand for renewable energy above mandatory government requirements. ACOSS supports voluntary action being additional to the NEGs emissions reduction target.

Recommendation 13: Allow voluntary emissions reductions programs such as GreenPower, to be additional to the NEGs emissions reduction target.

4.4 Enforcement tools for emissions requirement

While ACOSS supports efforts to build a culture of compliance, it is important to the integrity of the scheme that strong signals are provided to avoid non-compliance. ACOSS believes that retailers will be well aware of their obligations and that a penalty process followed by suspending or revoking authorisation to operate in the retail market is all that is needed.

5 Reliability Requirement: Energy Security Board design elements

The requirement for a Reliability Obligation, along with an emissions obligation, has not been considered previously and there is considerable anxiety as to the potential for negative consequences.

We understand the proposed Reliability Obligation is a different way of implementing the Finkel Generator Reliability Obligation; that it would be broader as it is not limited to new builds; and that it impacts retailers not generators.

We note also there are and will be additional reliability mechanisms, some currently available in the NEM, some recently introduced, and others which are commitments only at this stage. These mechanisms include:

- regional reliability assessment, taking into account emerging system needs, to inform market participants and governments;
- three year notice of plant closure;
- the Reliability Emergency Reserve Trader (RERT) provisions;
- day ahead market; and
- demand response.

These will, importantly, send financial signals for investment in the services that are valued in the system, and are expected to address the same reliability issues that the Reliability Obligation in the NEG is intended to address.

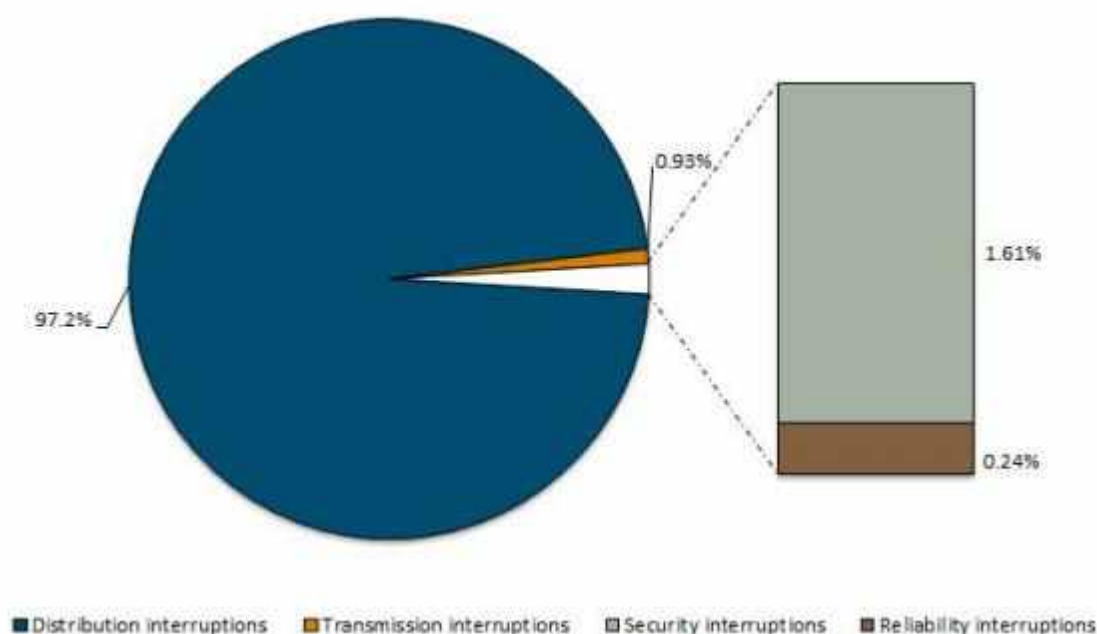
While reliability is important, we are concerned that an excessive emphasis on, or poor application of measures to deal with reliability, could lead to over investment in or over-payment for reliability and drive up costs.

This was the experience in the mid-2000s when the New South Wales and Queensland governments imposed stricter reliability settings due to concerns about blackouts, which ACCC head Rod Simms described as an ‘overreaction’.

As shown in figure 6, outages due to generation reliability has been minimal 0.24% around 10 seconds per year per household, with the remaining 97.2% of blackouts due to local poles and wires.

Figure 6. Sources of supply interruptions in the NEM: 2007-08 to 2015-16⁷

⁷ AEMC (2017): [Interim report: Reliability Frameworks Review](#)



While ACOSS understands there are some concerns with respect to generation reliability as we build more intermittent renewable energy sources into the NEM, analysis shows with the right investment it can be managed. For example, research undertaken by UNSW found that an Australia powered by 100% renewable electricity could need as little as 12% of annual energy from synchronous renewable technologies to meet the current reliability standard.⁸ Storage solutions (batteries and pumped hydro), inverter technology and synchronous condensers can do the rest.

We would caution against strengthening the current reliability standard, as this would have significant cost implications for consumers.

We urge the ESB to give further consideration to the number of measures being considered to deal with generation reliability to minimise the costs to consumers, including whether we need the Reliability Obligation.

While the eight-steps that are proposed to form part of the Reliability Obligation alleviate some concerns expressed previously by ACOSS in a letter to the chair of the ESB in January 2018, issues remain about costs of the mechanism and potential for market concentration.

To mitigate some of the risks identified above, ACOSS recommends the following:

Recommendation 14: Support a longer-trigger to enable retailers to respond with long-term options such as new investments.

⁸ J. Riesz, B. Elliston (2016) "Research and Deployment Priorities for Renewable Technologies: Quantifying the importance of various renewable technologies for low cost, high renewable electricity systems in an Australian case study", Energy Policy, 98, p. 298-308.

Recommendation 15: Support exchange-traded and over-the-counter (OTC) contracts (e.g. swaps, caps)

Recommendation 16: Consider further the Book-build option as a way to close the gap once the reliability obligation is triggered rather than allocate the gap to all retailers, which may be more beneficial to second and third tier retailers and encourage new entrants and innovation into the market.

Recommendation 17: Ensure there is market transparency as to the capability of generators/firming capacity to perform under the certain circumstances and conditions that would trigger the Reliability Obligation.

6 Amending the NEO

With the proposal to embed emissions reduction measures in the National Electricity Law (NEL) and the National Electricity Rules (NER), and the acknowledgment of the dramatic changes underway in the energy market that have the potential for wide ranging social equity impacts, ACOSS believes the objectives that govern the NEM - the National Energy Objectives (NEO) - outlined below, are no longer fit for purpose.

The NEO's current objectives are:

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to – price, quality, safety, reliability, and security of supply of electricity; and the reliability, safety and security of the national electricity system.

One of the key arguments put forward for embedding the NEG into the NEM has been to better integrate emissions reduction policy and energy policy. For example the Finkel Preliminary Report argued:

“For both system security and affordability reasons, it is important that governments ensure energy and emissions reduction policies are integrated. The energy system needs to be able to adapt to changes in technology and in supply and demand that are stimulated by emissions reduction policies. Emissions reduction policies that are aligned with the operation of the electricity system will better support efficient investment decisions by consumers and in generation and network assets.”⁹

ACOSS notes that the NEO makes no references to emissions reduction and therefore should be amended to include a decarbonisation objective. Including a decarbonisation objective would also align the goals of other aspects of the electricity market, so that the rules and regulations that govern the electricity market embrace, facilitate and not hinder these policies or the market.

Alongside the inclusion of a decarbonisation objective, should be the inclusion of a social equity objective.

The electricity market is undergoing a dramatic transition creating both opportunities and risks, benefits and losses. Now more than ever, the distribution of energy market costs has the potential for wide ranging and serious social equity impacts. Yet the current framing of the objective does not provide guidance on how to consider social or distributional impacts of energy policy or regulatory decisions, especially for low income and disadvantaged households - this clearly goes beyond just 'price'. Given the essential nature of energy supply, it is important that outcomes for vulnerable customers are explicitly considered by decision-makers.

⁹ <https://www.environment.gov.au/system/files/resources/97a4f50c-24ac-4fe5-b3e5-5f93066543a4/files/independent-review-national-elec-market-prelim.pdf>, pg 23.

Including an equity objective alongside a decarbonisation objective would also help ensure that any future investments to move us closer to a much needed clean energy future, are carefully considered for their impacts on low income and disadvantaged households, and constitute the investment options that demonstrate the least cost to consumer to reach this shared goal.

Recommendation 18: The NEO objectives are expanded to include a social equity objective and an objective to support decarbonisation.