# Affordable, clean energy for people on low incomes

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# Content

- **Background**
- **Methodology**
- **Distributional Analysis of Emissions reduction mechanism**
- **Scenario 1: Home energy efficiency and rooftop solar measures**
- **Scenario 2: Fairer regulated retail price**
- **Scenario 3: Increasing Newstart and related allowances**
- **Scenario 4: Better targeted energy concessions**
- **Supporting a rapid transition to clean energy**

# Background

- This report is the final in our series on improving support for low-income households through the transition to clean energy.
- This project was funded by Energy Consumers Australia Limited (www.energyconsumersaustralia.com.au) as part of its grants process for consumer advocacy and research projects.
- Our previous reports found:
  - low-income households pay disproportionately more of income on energy 6.4% v 1.5%.
  - A well designed emissions reduction scheme could bring energy prices down for everyone and higher targets are achievable especially coupled with energy affordability measures.
- We wanted to confirm impact of price change from emissions reduction mechanism on low-income earners.

And

- Model a number of policy solutions – energy efficiency, regulated retail price, increase to Newstart and better targeted energy concessions - to reduce energy stress and support a faster transition to clean energy.
- ACOSS and BSL commissioned Ass. Prof Ben Phillips, ANU to analyse the cost of energy (electricity and gas) for a range of household types in Australia.

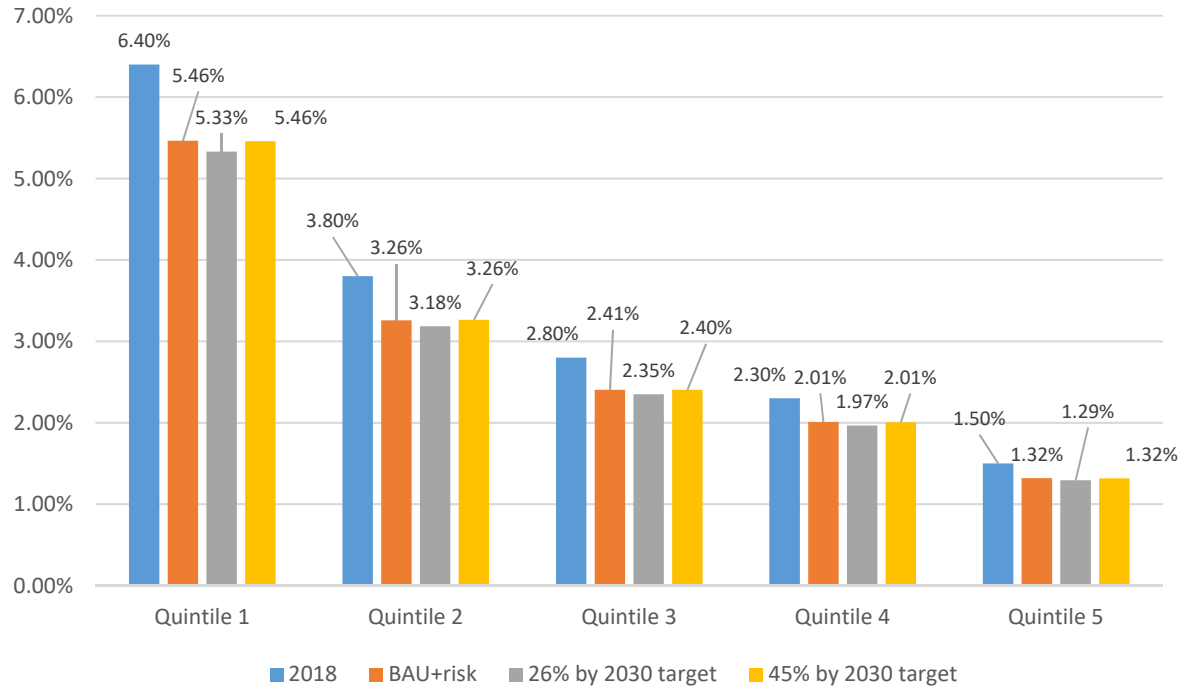
# Methodology

- The analysis underpinning this report was conducted using PolicyMod, a detailed microsimulation model of the Australian tax and transfer system.
- The model is based on the 2015–16 Australian Bureau of Statistics (ABS) Survey of Income and Housing. This survey has around 18,000 households, which we use for simulating the tax and transfer system.
- For this research we used both the standard PolicyMod and a version based only on the records contained in the Household Expenditure Survey (HES), which includes expenditure data on energy for a range of households including whether solar panels are used.
- We also used the ABS Household Energy Consumption (HECS) 2012 survey to develop statistical models (logistic and linear regressions) to impute the share of energy expenditure for the fixed supply charges and the variable supply charges.
- Broadly we modelled four separate types of scenarios with three variations for each – 12 scenarios in total. For all scenarios, with the exception the Newstart scenarios, we modelled all states and territories except for Western Australia and the Northern Territory, unless stated otherwise.

# Distributional analysis of emissions reduction mechanism

## OVERVIEW

- The NEG modelling from our first report found that energy prices would decrease under all scenarios modelled - business-as-usual (BAU), 26%, 45%, and 65% emissions reductions targets.
- We modelled the changes in retail price data from the NEG report, and applied it to the unit records in PolicyMod based on updated HES data, to analyse any change in energy expenditure as a percentage of income for households against three of the emissions reduction scenarios – BAU, 26% target and 45% emissions reduction target.



# Scenario 1: Home energy efficiency and rooftop solar measures

## OVERVIEW

- The energy performance of Australia's residential buildings is low by world standards.
- Two of the most effective ways to reduce the size of energy bills are energy efficiency and the installation of rooftop solar.
- Low-income households lack choice and control.

**Scenario 1a.** Grant of $2,000 for houses and apartments, targeted at people on low incomes.

**Scenario 1b.** Grant of $5,000 for houses and $2,000 for apartments, targeted at people on low incomes.

**Scenario 1c.** Energy efficiency standard for rental properties, targeted at 75% of rental properties, equivalent to $5,000 for houses and $2,000 for apartments.

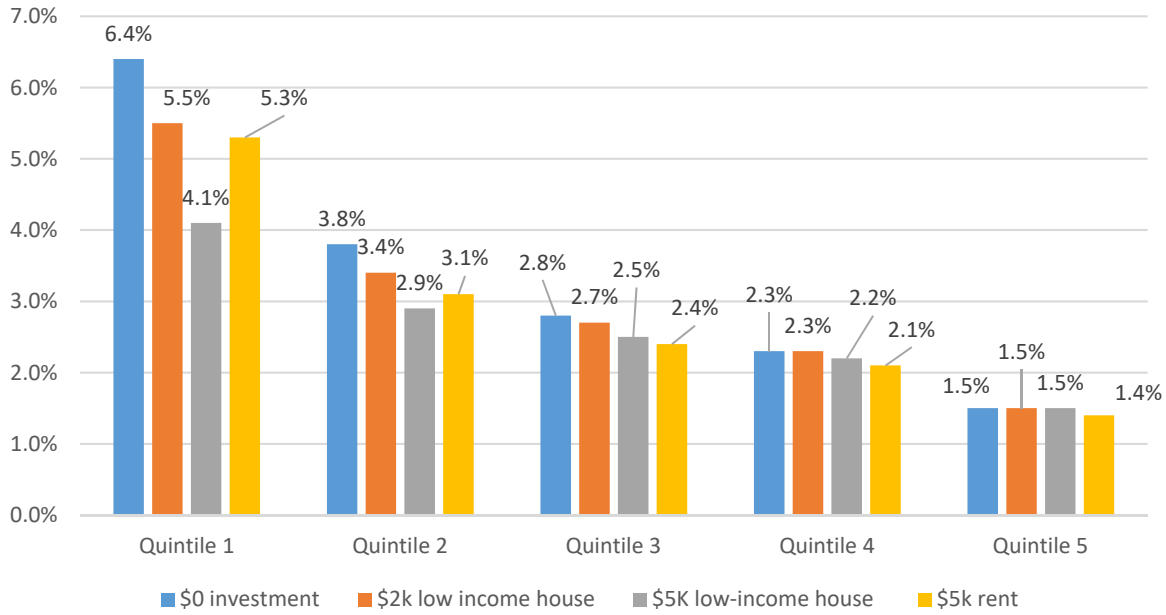
- Department of Environment and Energy provided costs and savings data for the three scenarios. The appliances included hot water, reverse cycle air-conditioning, LED lights and solar.
- Using PolicyMod model we imputed the assumed savings for the energy efficiency measures at the household level.

# Scenario 1: Home energy efficiency and rooftop solar measures

## RESULTS

- The modelling finds that for a one-off capital investment of $2,000 for apartments and $5,000 for houses, average annual savings ranged from $289 for apartments to $1,139 for houses.
- Figure below shows positive impact on reducing proportion of income spent on energy.
- Rental standards good for single parents (many of whom rent), but not be as good for pensioners who own their own home.

**Figure 2. Electricity and gas expenditure as a percentage share of income by income quintiles and by different energy efficiency scenarios**



# Scenario 1: Home energy efficiency and rooftop solar measures

## SUMMARY OF RECOMMENDATIONS

1. States and territories should mandate minimum energy efficiency performance standards for rental properties, as part of a broader set of healthy and habitable rental housing standards. Include provision of incentives for landlords and safeguards to avoid significant rent increases.
2. Federal, state and local governments should work cooperatively with energy retailers to co-fund ongoing programs to provide access to energy efficiency and solar photovoltaic technology for low-income households.
3. Federal and state governments should develop and implement programs to improve the energy efficiency and solar access of all social housing, community and other “affordable” housing.
4. Federal and state governments should invest in energy efficiency and clean energy for remote Aboriginal and Torres Strait Islander communities.
5. COAG should agree to improve minimum performance standards for residential buildings to a 7-star National House Energy Rating Scheme (NatHERS) rating. Support for social and affordable housing to comply.

# Scenario 2: Fairer regulated retail price

## OVERVIEW

- Competitive retail energy markets are not currently delivering the expected benefits to customers. Many people are paying more than they should.
- ACCC found pricing structures confusing, standing offer excessive, and high retail margins in some jurisdictions.
- Many low-income households are paying high unit costs on not on best offers.

**Scenario 2a.** All households take up the regulated retail price unless they are on a cheaper price already.

**Scenario 2b.** 100% of low-income households (concession households and working families earning $53,728 for couples and $28,912 for singles) take up the regulated retail price, unless they are on a cheaper price already.

**Scenario 2c.** 30% of households take up the regulated retail price across all households.

- ACOSS & BSL worked with an energy industry expert to develop a retail tariff model to estimate a regulated retail price that included fair retail margin and CARC.
- Using PolicyMod model we compared the imputed unit price (imputed from HECS and HES data) on our base data set with that offered by a regulated price. Households with solar panels were excluded.

# Scenario 2: Fairer regulated retail price

## RESULTS

- There was roughly $53 difference between a regulated retail price (RRP) & Basic Service offer (BS0).
- Comparison of RRP against current standing and market offers found in most jurisdictions the RRP was below them, but still above market offers with conditional guarantees. Some networks in VIC, NSW and SA had most offers above the RRP.
- Those who take up the regulated retail price are better off on average by $200 to $381 per annum, depending on state and scenario.
- On average 30-40% of all households across all quintiles take up the regulated retail price under scenario 2a (similar no. for q 1 for scenario 2b).
- The number of households who take up the regulated retail price varies by jurisdiction, as follows: 45.4% for NSW, 60% for Vic, 37% for Brisbane, 37.9% for SA, and 41% for ACT.
- Implementing scenario 2a – everyone can opt-in and take up regulated retail price unless already on a better offer – would reduce energy expenditure as a percentage share of income for lowest-income households from the current 6.4% to 5.85%.
- Implementing scenario 2b – low-income only take up regulated retail price – would reduce energy expenditure as a percentage share of income for lowest-income households from the current 6.4% to 5.87%.

# Scenario 2: Fairer regulated retail price

## SUMMARY OF RECOMMENDATIONS

**6.** Governments agree to implement a regulated retail price, which guarantees a fair price for those consumers who want it. The regulated retail price should reflect fair retail margins and be available to all consumers. The fair regulated retail price should:

- be determined using a bottom-up approach to identify a fair and efficient price is in each network;
- apply to flat-rate, controlled-load tariffs, dual peak/off peak tariff. Innovation and further competition can occur around tariffs such as other time of use, demand tariffs, and solar energy tariffs;
- be a default offer and opt in for active market participants; and
- serve as a reference price for bill comparison.

# Scenario 3: Increasing Newstart and related allowances

## OVERVIEW

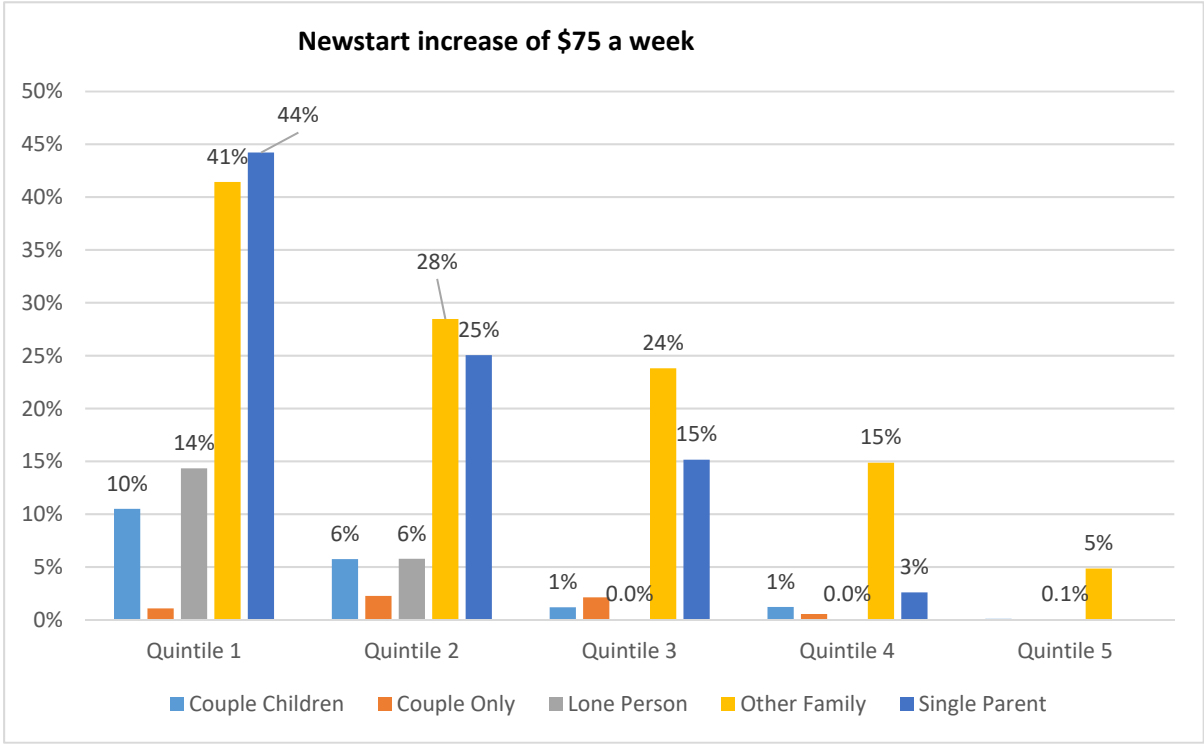
- Newstart has not increased in real terms in 24 years, leaving over 800,000 people struggling on $39 a day. Meanwhile, the cost of essentials such as energy has drastically increased.
- On average these households spend 6.3% of their income on energy, up from 5.2% ten years prior. A quarter of these households are spending more than 9.7% of their incomes on energy.

**Scenario 3a.** Increase in Newstart only by $25 a week.
**Scenario 3b**. Increase in Newstart only by $75 a week.
**Scenario 3c.** Increase in Newstart only by $110 a week.

# Scenario 3: Increasing Newstart and related allowances

## RESULTS

- $75 a week (just over $3,502 a year), would reduce energy expenditure as a percentage share of income for Newstart households from the current 6.3% to 5.6%.
- $110 a week (just over $5,185), would reduce energy expenditure as a percentage share of income for Newstart households from the current 6.3% to 5.3%.
- $25 a week (just over $1,169), would only reduce energy expenditure as a percentage share of income for Newstart households from the current 6.3% to 6.0%. As a $25 a week rise is not consistent with the bare minimum needed to cover basics & we would not support such a low increase.
- single parent households and “other” households, are the main beneficiary.



# Scenario 3: Increasing Newstart and related allowances

## SUMMARY OF RECOMMENDATIONS

**7.** Increase the single rates of Newstart, Youth Allowance and related payments by at least $75 per week.
**8.** Index Newstart, Youth Allowance and related payments to wages, a representative basket of goods, or the CPI (whichever is higher) to ensure they maintain pace with community living standards.
**9.** Increase Commonwealth Rent Assistance by 30% or $20 per week for a single person on Newstart.

These measures should be complemented by increases to family payments for households with children on low incomes, as outlined in ACOSS, Budget Priorities Statement 2018–19

# Scenario 4: Better targeted energy concessions

## OVERVIEW

- Concessions play a critical role in making energy bills more affordable for low-income households, with more than 2 million people currently accessing energy concessions.
- Some major flaws with existing concessions schemes including: lack of awareness of eligibility, too much variation between states adding to admin costs, and lack of equity between energy users.
- One way to make concessions more equitable to moving away from the current flat dollar-based mechanism to percentage-based concession.

**Scenario 4a.** Shift to percentage-based for whole bill.
**Scenario 4b.** Hybrid – portion dollar-based and portion percentage-based.
**Scenario 4c.** Current dollar-based or percentage-based used in scenario 4a (see below), whichever provides more savings.

- The base model calculates energy concessions for each household based on the given rules for each state as they apply to concessions. An alternate concession model was developed by ACOSS and BSL and applied to Policy Mod.

# Scenario 4: Better targeted energy concessions

## RESULTS

- The shift away from flat dollar-based concessions to either a percentage-based concession or hybrid concession (portion flat and percentage) creates winners and losers. Low-consumption households are slightly worse off under percentage and hybrid concessions compared to a flat dollar-base, whereas higher-consuming households, such as families, would be better off.
- The clear winners of the shift to either a percentage-based or hybrid concession are couple and single parents. A majority of household types see no change in savings.
- For couples with no children, lone persons and other household types, there were slightly more winners than losers.

**Table 6. Average dollar impact of shift from flat dollar-based concession to percentage-based concession by state**

| | NSW | Vic | QLD | SA | Tas |
|---|---|---|---|---|---|
| Winners | $167 | $115 | $162 | $163 | $211 |
| Losers | -$121 | $0 | -$131 | $88 | $-141 |

**Table 8. Average dollar impact of shift from flat dollar-based concession to hybrid concession by household type**

| | NSW | Vic | QLD | SA | Tas |
|---|---|---|---|---|---|
| Winners | $106 | $129 | $103 | $136 | $152 |
| Losers | -$72 | $43 | -$83 | $44 | $-71 |

# Scenario 4: Better targeted energy concessions

## SUMMARY OF RECOMMENDATIONS

**10.** State and territory governments should replace the current flat dollar-based concession scheme with full or partial percentage-based concession schemes.

**11.** Energy concessions should be means tested.

**12.** Governments and retailers should implement strategies to improve awareness and uptake of energy concession eligibility:

- When applying for and/or on confirmation of receipt of a pension concession card, healthcare card or DVA gold card, the Commonwealth Governments (who administer these cards) should inform recipients that they are eligible for energy rebates and provide instructions on where to find out more.
- When retailers sign up a customer to a new or renewed plan they should ask whether the customer is a recipient of a pension card, healthcare card, or DVA card and apply the concessions.

**13.** COAG Energy Ministers agree to review concessions to provide harmonisation across states and territories. Harmonisation should aim to reduce costs and improve choice, ensure energy concessions are targeted towards those most in need of assistance, and improve the value of concessions in lagging states. The framework should set best practice benchmarks across jurisdictions, and allow flexibility for jurisdictions with distinct needs

# Supporting a rapid transition to clean energy

## SUMMARY OF RECOMMENDATIONS

**19.** The Australian Government should urgently implement policies to reduce emissions across our economy, in particular the emissions-intensive electricity sector. Whether the policies are economy-wide or sector-specific is less important, so long as the policies are credible, stable, low cost, and equitable with protections for vulnerable groups.

**20.** The Australian Government should set emissions reductions targets in line with our fair share of achieving the Paris Agreement goal to limit global warming to well below 2 degrees and pursue 1.5 degrees. We note the electricity's sector can and should reduce its emissions faster than other sectors. A 2030 emissions reduction target of 45% reduction below 2005 levels should be seen as an absolute minimum and should preferably be higher. Implementing energy affordability measures outlined here for example would make a 65% emission reduction target more achievable.

# Thank you

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