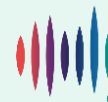


Understanding and measuring energy hardship in Australia

Consumer Energy Report Card
July 2025



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Summary

Energy hardship is a pressing and systemic issue that demands urgent policy attention. Without decisive action, many Australians will continue to face unaffordable energy costs, unsafe living conditions, poor health outcomes, and sustained financial stress.

The National Energy Equity Framework provides a definition of energy hardship and an initial guideline for measuring it. However, in Australia there is still no shared, practical approach to measure and track the scale of energy hardship over time.

In this report, we use our Consumer Energy Report Card survey to estimate the extent of energy hardship in Australia. **Our research reveals that nearly 1 in 5 Australian households are vulnerable to, or experiencing, some form of energy hardship.**

Energy hardship in Australia is therefore not a marginal issue. It is a challenge that demands urgent government action to protect vulnerable households and ensure a fair and equitable energy transition.

To ensure effective policy responses and accountability, federal and state governments must:

- develop a nationally consistent framework for measuring energy hardship;
- commit to tracking the number of households experiencing it; and
- invest in policies and support mechanisms that reduce its prevalence and severity.

Using data from our Consumer Energy Report Card survey we investigated the characteristics of the households we identified as vulnerable to, or experiencing, some form of energy hardship. Doing so identified several practical steps needed to reduce number of households vulnerable to, or experiencing, energy hardship:

1. **State and Territory governments need to introduce stronger minimum energy performance standards for rental properties.** Most households we identified as experiencing energy hardship rent their property and lived in inefficient homes.
2. **Governments need to improve their support programs by making them better targeted and streamlined.** Many households who said they received personal government allowance or benefits were identified as being vulnerable to, or experiencing, energy hardship.
3. **Retailers and governments need to be more proactive in identifying customers experiencing energy hardship.** Most of the households we identified as vulnerable to, or experiencing, energy hardship said they were not accessing available support options.

Governments have both the mandate and the means to act. This report offers initial insights and data to help inform more effective, equitable, and long-term energy policies—policies that protect households, improve housing, and ensure that no Australian is forced to choose between comfort, health, and affordability.



Motivation for this report

Energy costs continue to be a top concern for Australian households, ranking just behind macro issues such as the overall cost of living and the economy, according to our most recent Consumer Energy Report Card (CERC). With electricity prices set to rise again in 2025–26, these concerns are unlikely to ease in the near term.^{1,2}

To help ease this financial burden, the Federal Government has introduced temporary measures such as the \$300 energy bill relief rebate. While offsetting recent price increases, they are temporary and do not address the structural challenges driving energy affordability concerns for Australians. Despite this federal government financial assistance, around 70% of CERC respondents reported that their electricity and gas bills had increased over the past 12 months, with even more expecting further increases in the year ahead.

Given the essential nature of energy and the serious consequences of energy hardship – such as its impacts on physical and mental health^{3,4,5}— this report seeks to deepen our understanding of who is vulnerable to, or currently experiencing, energy hardship. By identifying the key characteristics of those most at risk, we aim to better inform the design and delivery of targeted and enduring support measures.



What is energy hardship

In Australia, the National Energy Equity Framework defines energy hardship as occurring when: “A household is ... unable to afford and/or use energy services in the home to live a comfortable and healthy life.”⁶ While terms like energy stress, energy burden, energy poverty, and fuel poverty are also used in Australia and internationally, this report adopts the terminology of the National Energy Equity Framework, referring to households as *vulnerable to, or experiencing, energy hardship*.

Energy hardship has been long recognised as a complex and multidimensional issue.^{7, 8} The National Energy Equity Framework categorises the drivers of energy hardship into three levels:⁹

- **Macro drivers:** influence energy hardship broadly across populations, including factors such as high energy prices, poor housing energy performance, and limited social benefits.
- **Meso drivers:** impact some households but not all, examples include poor retailer practices or landlords refusing to upgrade properties.
- **Micro drivers:** are specific to individual households and include factors such as consistently low income or sudden income loss, high energy needs for health reasons, bill shock, energy-inefficient housing, and financial abuse.

The more of these drivers that exist, the more likely a household will face energy hardship.



How is energy hardship identified and measured

While the National Energy Equity Framework recently introduced some drivers and indicators for energy hardship, there is still no consensus in Australia on how to consistently measure and identify those experiencing energy hardship. In contrast, European countries have established definitions and measurement approaches.¹⁰

Looking at the recommended and commonly used ways to measure energy hardship, three main types of indicators are typically employed:^{11,12}

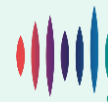
1. **Expenditure-based (objective) indicators:** These methods classify households as experiencing energy hardship if they spend more than an absolute or relative threshold on energy. A commonly used benchmark is the 10% threshold, first introduced in the UK^a by Boardman (1991), where a household is considered energy poor if it spends more than 10% of its income on energy.¹³ In Australia—where average energy expenditure is generally lower due to climate and other factors—a 6% threshold has been proposed as a more appropriate indicator of energy hardship.^{14,15,16} This 6% threshold also aligns with the U.S. Department of Energy's definition of a high energy burden.¹⁷
2. **Self-reported (subjective) indicators:** These are based on households' own experiences—and to some extent self-identification, such as reporting difficulty meeting their energy needs, struggling to pay bills, or avoiding heating or cooling to save money.
3. **Direct measure:** These assess whether households achieve a basic level of energy service (e.g., maintaining an indoor temperature of 21°C).¹⁸

Some of these indicators are aligned with recommended indicators in the National Energy Equity Framework, including action-based indicators (such as reducing energy use to cope), situation-based indicators (such as difficulty paying bills or thermal discomfort), and proxy-based indicators (such as indoor temperatures or mould presence).

Each approach to measuring energy hardship has its limitations. For instance, low energy expenditure may not reflect affordability but rather energy rationing—such as households choosing to live in uncomfortably cold or hot conditions to cut costs and avoid falling into arrears.¹⁹ Additionally, some households may not report difficulties in paying energy bills due to feelings of shame, or concerns about potential legal or social consequences, such as the risk of losing custody of children.²⁰

Given these limitations, researchers and policymakers increasingly advocate for combining multiple indicators to better reflect the diversity of households experiencing energy hardship. This approach enables more accurate identification of households in need and supports the design of targeted policy responses that address not just affordability, but also the lived realities of energy hardship in diverse household contexts.

^a The UK has recently moved towards a measure that combines energy efficiency and income considerations, known as the Low Income Low Energy Efficiency (LILEE) indicator, which defines fuel poverty as households with energy inefficient homes and income below the poverty line after housing and energy costs are accounted for. However, Northern Ireland and Wales continue to use the traditional 10% income threshold to identify fuel poverty, maintaining its original benchmark.



How we measure energy hardship in this study

Drawing on established approaches to measuring energy hardship—and incorporating selected indicators from the National Energy Equity Framework—we use the following indicators to assess energy hardship in our sample.

- **Spending more than 6% of income on energy bills:** Calculated by dividing respondents' reported electricity and gas bills^b by their reported household income.^c Households spending more than 6% of income on energy are flagged as potentially being vulnerable to, or experiencing, energy hardship.
- **Very difficult to pay energy bills:** Based on responses to the question: "In the last 6 months, how easy or difficult has it been to pay your electricity/gas bill?" Households selecting "very difficult" are considered at risk.
- **Financial stress and turning off heating and cooling to save money:** A composite indicator based on two questions: (a) Financial stress—respondents who describe their current financial situation as "Having a lot of difficulty covering basic living expenses and paying bills"; and (b) Self-reported behaviour of avoiding heating or cooling to save money.

For this study, we identified a household as vulnerable to, or experiencing, energy hardship if they reported at least one of these three indicators. We deem the existence of one such indicator as sufficient to consider a household to be vulnerable to, or experiencing, energy hardship. However, our findings also point to a significant group of households who, while not meeting those thresholds, could be at risk of experiencing energy hardship in the future. For example:

- 29% of households described paying their energy bills as "quite difficult" in the last 6 months.
- 28% of households reported "having some difficulty but just making ends meet" financially and said they avoid using heating or cooling to save money.

While this report focuses on the most acute cases of energy hardship to inform targeted insights and advice, we emphasise that households facing moderate difficulty also require attention. Energy hardship is not a fixed state—many households move in and out of vulnerability over time. Preventative support for at-risk groups will be essential to reduce long-term hardship and protect household health and resilience.

Based on data availability and recommended approaches, we used the indicators described above to assess energy hardship in this study. However, we note that many other indicators could have been included – for example, whether households cut back on other essentials to pay their energy bills. Under-consumption of energy could also be better captured by adopting a "required energy use" approach similar to that used in the UK. Instead of actual consumption, it estimates the energy needed for safe, healthy living based on dwelling type, climate, and household size. Although it requires detailed data and complex models like Building Research Establishment Domestic Energy Model,²¹ this method more accurately reveals hidden hardship among households limiting energy use due to cost.²²

^b Following common practice, we do not consider fuel cost in this study.

^c In addition to being a commonly used threshold, 6% is roughly twice the median energy burden across the lowest 40% of households by income in our survey. This is consistent with recommendations to base energy hardship thresholds on median energy expenditure (see, for example, Liddell, Christine, et al. "Measuring and monitoring fuel poverty in the UK: National and regional perspectives." *Energy policy* 49 (2012): 27-32.) and on low-income households (see, for example, Bryant, D., Porter, E., Rama, I., & Sullivan, D. (2022). *Power pain: An investigation of energy stress in Australia*. Brotherhood of St. Laurence.)



Around 1 in 5 households are vulnerable to, or experiencing, energy hardship

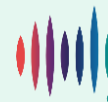
Table 1 shows the proportion of households surveyed in our Consumer Energy Report Card who we identified as being vulnerable to, or experiencing, energy hardship. Our results are consistent with recent research using the Household Income and Labour Dynamics in Australia (HILDA) survey, which has reported around 20% of households experiencing energy stress in 2020.²³

Table 1 shows that more than 1 in 10 households report spending more than 6% of their income on energy bills. In our December 2024 CERC, this was around 13%. Importantly, around 4% of households are spending more than 10% of their income on energy bills.

Table 1 also shows how energy hardship can become more severe and compounding for certain households. Around 5% of households met two or more of these indicators, and alarmingly, around 1% met all three. This 1% represents nearly 110,000 households – and all the other people living in that household.

Table 1: Indicators of energy hardship

Energy hardship indicators	Share (%)
Spending more than 6% of income on energy bills	11%
Very difficult to pay energy bills	8%
Financial stress and turning off heating and cooling to save money	7%
Vulnerable to, or experiencing, energy hardship	
At least one hardship indicator (1+)	19%
Two or more hardship indicators (2+)	5%
All three indicators	1%



Not all households experience energy hardship in the same way

Our survey data underlines the value of considering the multiple dimensions of vulnerability to energy hardship to ensure that government, industry and regulatory reporting is accurately capturing the scale of this problem in Australia.

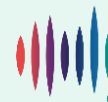
Table 2 shows that there is limited overlap between indicators of energy hardship, particularly between expenditure-based and subjective indicators. The majority of those identified as vulnerable to, or experiencing, energy hardship are identified by only one indicator (around 14%).

Moreover, the majority of those identified as spending more than 6% of their income on energy bills (the most common indicator) do not report under the subjective indicators. As discussed earlier, this may reflect factors such as stigma, or a lack of recognition that their coping behaviours—like reducing energy use or rationing other essentials so they can pay their energy bills—are signs of hardship.^{24,25}

Similarly, only 31% of those who report finding it very difficult to pay energy bills also spend more than 6% of their income on energy. This highlights the importance of a multidimensional approach, as it captures hidden or partial experiences of energy hardship that may be missed when relying on a single indicator.

Table 2: Overlap between different energy hardship indicators

Spending more than 6% of income on energy bills	Financial stress and turning off heating and cooling to save money	Very difficult to pay energy bills	Share (%)
x			8%
	x		3%
		x	3%
x	x		1%
x		x	1%
	x	x	2%
x	x	x	1%
None of these indicators were reported			81%



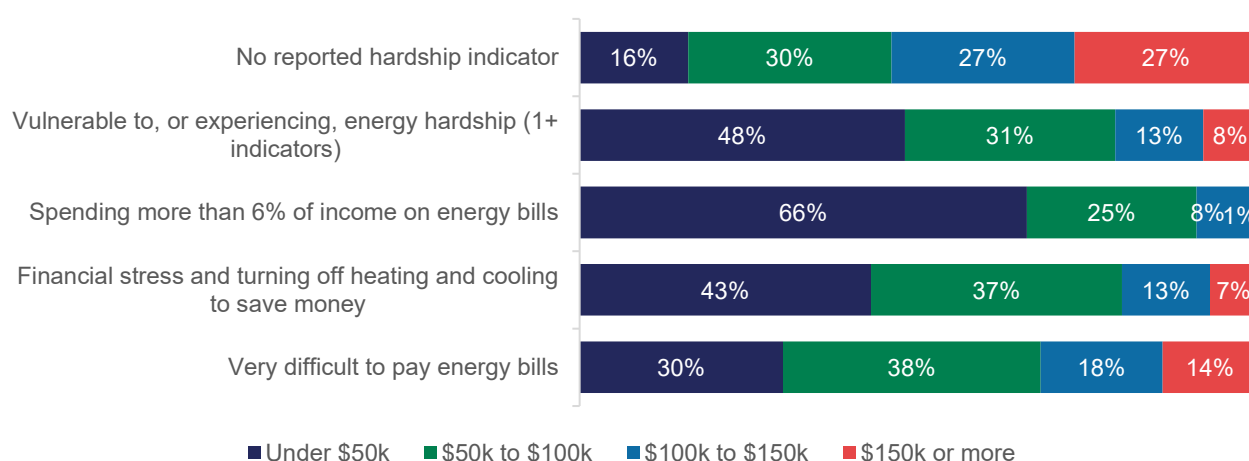
Some higher-income households also report indicators of experiencing energy hardship

Nationally, around 22% of households report an annual income below \$50,000, 30% between \$50,000 and \$100,000, 25% between \$100,000 and \$150,000, and 23% earn \$150,000 or more. Figure 1 shows that the sociodemographic profiles of households vulnerable to, or experiencing, energy hardship differ noticeably depending on which hardship indicator is used. In particular, income distribution varies significantly between households identified by the “spending more than 6% of income on energy bills” indicator and those identified by subjective measures.

While lower-income households are more likely to be vulnerable to, or experiencing, energy hardship across all indicators, the “spending more than 6% of income on energy bills” indicator disproportionately captures the lowest income group. Specifically, 66% of households classified as vulnerable to, or experiencing, energy hardship by this measure report an annual income below \$50,000. In contrast, subjective indicators capture a broader range of income levels, potentially reflecting vulnerabilities not shown by energy spending alone—such as high housing costs, debt, or sudden life changes like illness or job loss that strain household finances.

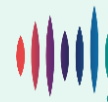
These differences highlight the value of a multidimensional approach to measuring energy hardship. Single metrics can miss key aspects such as financial stress or coping behaviours not captured by expenditure ratios. This complexity is now recognised overseas in places such as the UK and Scotland, where newer definitions of fuel poverty deduct essential costs—such as rent, council tax, and childcare—before assessing energy affordability.²⁶ While more comprehensive, such approaches also require detailed household-level data in order to be implemented effectively. Only 16% of households not reporting any of the hardship indicators have an income below \$50k. When at least one hardship indicator is considered, this rises sharply to 48%.

Figure 1: Income distribution across energy hardship indicators



Note: “No reported hardship indicator” refers to households that did not report any of the three main indicators used in this study. “Vulnerable to, or experiencing, energy hardship (1+ indicators)” refers to households that reported at least one indicator, while “2+ indicators” would refer to households who reported two or more.

Note: The first bar (“No reported hardship indicator”) and the second bar (“Vulnerable to, or experiencing, energy hardship”) together represent the total survey population. Approximately 81% reported no hardship indicator, and 19% were vulnerable to or experiencing hardship (1+ indicators).



Most households vulnerable to, or experiencing, energy hardship have very high energy bills

Table 3 shows that high energy bills appear to be a significant driver of energy hardship. Around 50% of households identified as vulnerable to, or experiencing, energy hardship reported energy bills in the highest 25% of all survey responses. This means they reported paying more on energy bills than at least 75% of all other households. In contrast, only 10% were in the bottom 25% of energy bills.

For comparison, only 19% of households not reporting any the three indicators were in the highest quartile, while nearly 30% were in the lowest quartile. This finding aligns with ACCC findings that consumers on payment plans or hardship programs tend to have significantly higher energy bills and consumption compared to other consumer groups.²⁷

Table 3 also highlights a limitation of relying solely on energy bill size or bill-to-income ratios to identify energy hardship. For example, 18% of households who reported as being under financial stress and turning off heating and cooling to save money reported low bills (in the bottom 25%). While this may partly reflect inherently low energy needs, it may also indicate that some households are deliberately under-consuming energy due to financial pressure.

This behaviour-driven restraint means that their experience of hardship is hidden by expenditure-based indicators, even though they would otherwise require and potentially use much more energy if affordability were not a barrier. This underscores the importance of using a broader set of indicators to identify energy hardship beyond just bill size or energy spend.

Table 3: Energy expenditure distribution across energy hardship indicators

	Energy bills			
	<25th percentile	25-50th percentile	50-75th percentile	>75th percentile
No reported hardship indicator	30%	25%	26%	19%
Vulnerable to, or experiencing, energy hardship (1+ indicators)	10%	20%	20%	50%
<i>Spending more than 6% of income on energy bills</i>	4%	14%	21%	61%
<i>Financial stress and turning off heating and cooling to save money</i>	18%	28%	18%	36%
<i>Very difficult to pay energy bills</i>	8%	22%	17%	52%



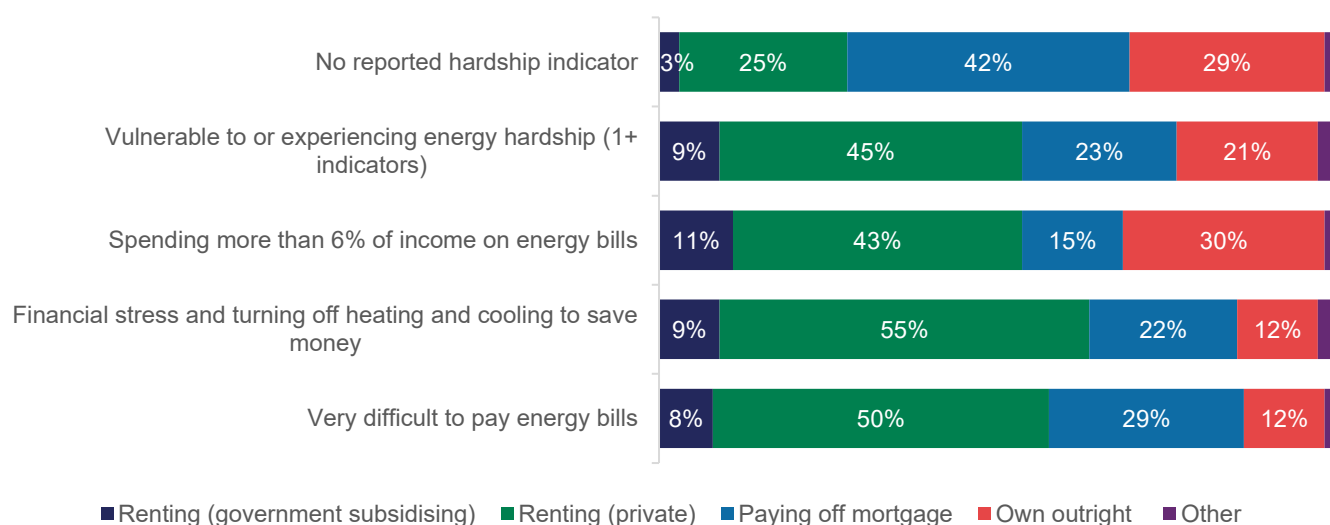
Renters are disproportionately more likely to be vulnerable to, or experiencing, energy hardship across all hardship indicators

While most households identified as vulnerable to, or experiencing, energy hardship are renters, there are notable differences in housing tenure across different indicators. The expenditure-based indicator—spending more than 6% of income on energy bills—includes a relatively high proportion of outright homeowners (30%), many of whom are likely retirees living on fixed income with low or no housing costs.

In contrast, the subjective indicators capture a higher proportion of renters and mortgage holders. These households may face greater day-to-day financial pressure, despite a lower energy cost-to-income ratio, as more of their income is committed to housing and other essential living expenses.

Renters make up 69% of those meeting two or more hardship indicators and 54% of those meeting at least one—compared to just 28% of households not reporting any indicators.

Figure 2: Distribution of homeownership in each energy hardship indicator



Age and family composition also vary significantly across different energy hardship indicators—particularly between those identified by the “spending more than 6% of income on energy bills” and those identified by “very difficult to pay energy bills” indicator. Among households considered vulnerable to, or experiencing, energy hardship based on the “very difficult to pay energy bills” indicator, 45% have a household decision maker aged between 30 and 50—an age group often associated with family formation.²⁸ In contrast, the largest age group identified by the “spending more than 6% of income on energy bills” indicator is 65 and over, comprising 30% of households.

This pattern is also reflected in family composition: around 44% of households identified by the “very difficult to pay energy bills” indicator are couples with children, while the largest group identified by the “spending more than 6% of income on energy bills” indicator (32%) are people living alone. This pattern—characterised by family formation age and larger household size—is also seen among households enrolled in retailer hardship programs.²⁹

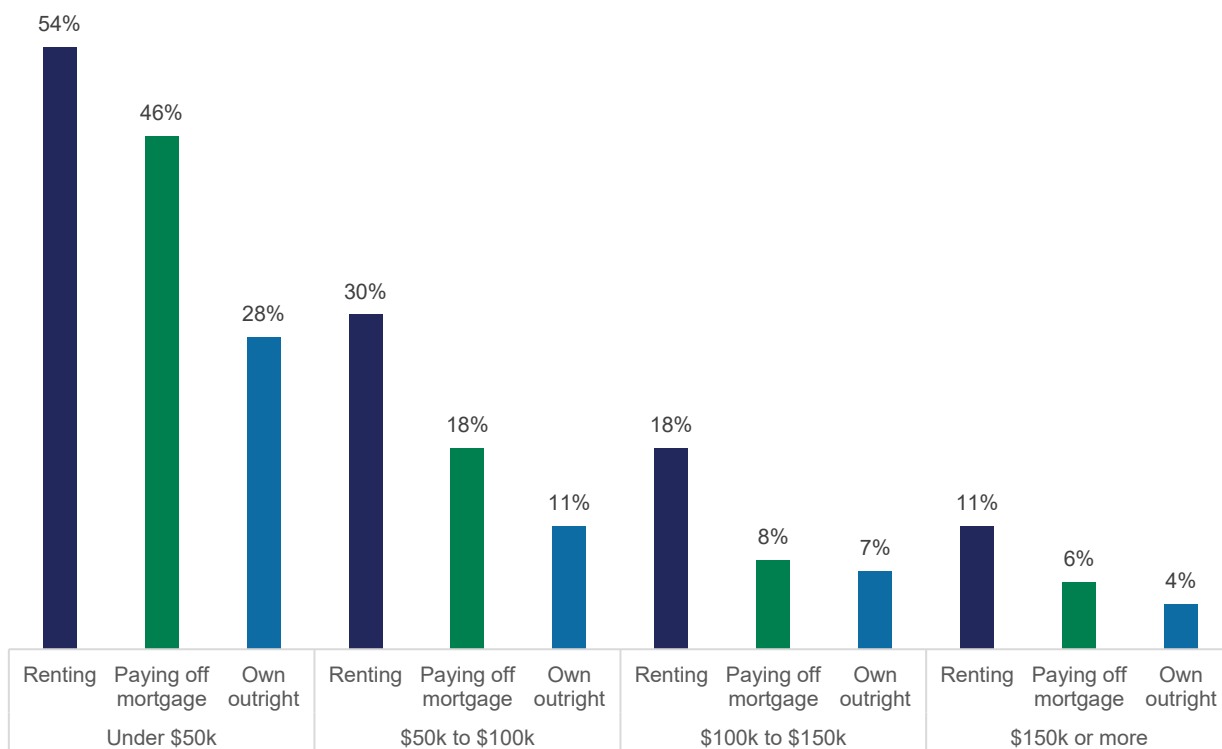


Energy hardship persists for renters, even at higher incomes

Renting, regardless of income level, remains a key factor associated with elevated risk of being vulnerable to, or experiencing, energy hardship.

Figure 5 shows the proportion of households that are vulnerable to, or are experiencing, energy hardship, by household income and homeownership status. It shows that over half of households who have an income under \$50k and rent are vulnerable to, or experience, energy hardship. In contrast, around 28% of those who have an income under \$50k and own their home are vulnerable to, or experience, energy hardship. Figure 5 shows an increased likelihood of energy hardship for renters throughout all income groups.

Figure 5: Proportion of households vulnerable to, or experiencing, energy hardship (1+ indicators) by household income and homeownership





Renters face structural disadvantages in energy access and comfort

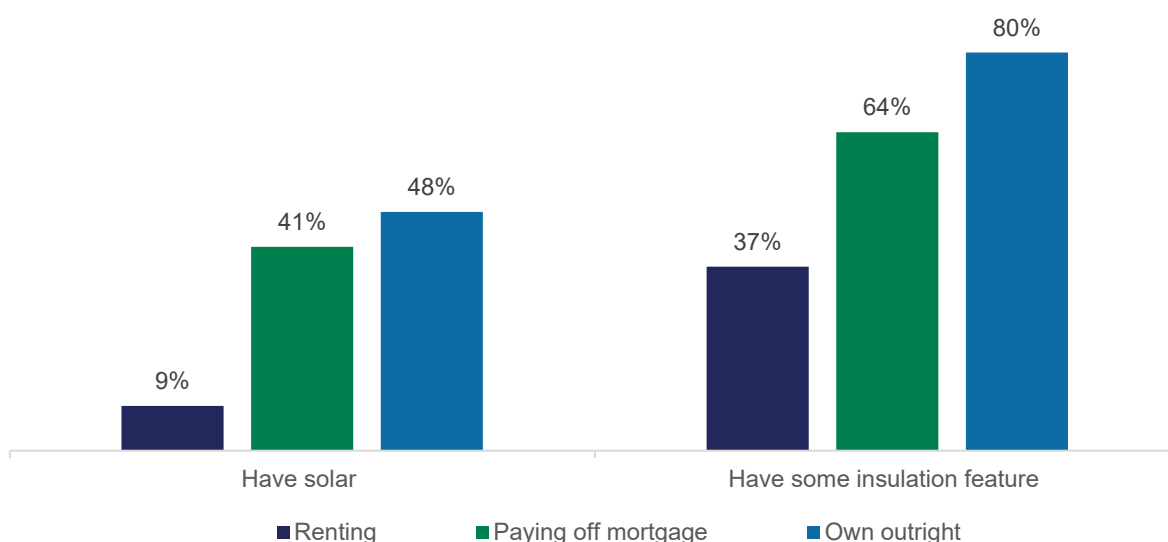
It should be no surprise that renters are more likely to face energy hardship given that rental homes consistently underperform when it comes to energy performance and appliance quality.³⁰ Research shows that, after accounting for factors such as net wealth, renters in Australia spend around 8% more on electricity than similar homeowners—likely due to higher energy use driven by poorly insulated, less efficient appliances and housing.³¹

Due to the “split incentive” problem, landlords have little economic motivation to invest in energy upgrades that primarily benefit tenants.³² Renters, in turn, often lack the ability to retrofit their homes and typically do not have the security of tenure needed to make such investments worthwhile.³³

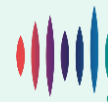
Our Consumer Energy Report Card survey reinforces the scale of disparity for renters: while 80% of owner-occupied homes report having at least one form of insulation^d, only 37% of rental properties do. Similarly, CHOICE found that fewer than 50% of rental homes had insulation, compared to over 80% of owner-occupied dwellings.³⁴

Renting also poses a significant barrier to solar adoption.³⁵ In our survey, renters overwhelmingly cited their tenancy as the main reason for not owning rooftop solar. Only 9% of rental homes reported access to solar, compared to 48% of dwellings owned outright. Our data, consistent with other studies, shows that households with rooftop solar are less likely to experience energy hardship. Research indicates that access to solar for low-to-moderate income households reduces the likelihood of bill payment difficulties, disconnections, and consumption reduction as a cost-saving measure.³⁶

Figure 6: Access to solar and insulation by home ownership type



^d By “at least one form of insulation,” we mean having at least one of the following: ceiling insulation, floor insulation, double or triple glazed windows, or draft proofing (sealing gaps around windows, doors, and other areas).



Many recipients of government support programs still experience energy hardship

Governments provide several support mechanisms to help those in the community who are vulnerable to hardship. These include income support mechanisms like JobSeeker, Youth Allowance, Carer Payment, Widow Allowance, Aged Pension, or Disability Pension. Governments also provide subsidised housing, specific concession schemes for energy bills, and emergency assistance programs like the Energy Accounts Payment Assistance, which helps people having difficulty paying their energy bills due to short-term financial hardship, crisis, or emergency.

Table 4 shows that many recipients of government support programs still experience energy hardship. Among households receiving personal government allowances or benefits, 36% report at least one energy hardship indicator, compared to only 12% of households not receiving such support.

The disparity is even more pronounced among unemployed individuals, nearly half (47%) of whom are vulnerable to, or experiencing energy hardship, compared to just 12% of full-time workers. Within government support recipients, unemployed individuals (e.g. those on JobSeeker) appear significantly more vulnerable than retirees (e.g. those receiving the Aged Pension).

Table 4 also shows that those living with health conditions and living in social housing require more support. Households with at least one member who has a health condition or disability are significantly more likely to be vulnerable to, or experiencing, energy hardship—36% report one or more indicators, compared to just 18% of households without any health conditions. When comparing social housing to private rentals, 46% of those in social housing are highly vulnerable to, or experiencing, energy hardship, compared to 30% of those in private rentals.

Table 4: Share of households vulnerable to, or experiencing, energy hardship (1+ indicators) by key sociodemographic characteristics

	Share (%)
Receive personal government allowance or benefits (e.g. JobSeeker, Newstart, Youth Allowance, carer payments, widow allowance, aged pension, disability pension)	36%
Currently unemployed	47%
Household has a member with a health/disability condition that impacts their energy needs	36%
Government subsidised renting	46%

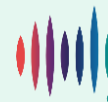


Many of the households we identified as vulnerable to, or experiencing, energy hardship said they were not accessing available support options

Table 5 shows that a significant proportion of households identified as vulnerable to, or experiencing, energy hardship say they are not accessing available support options. Among households reporting two or more indicators of hardship, 65% were not enrolled in a hardship program with their energy retailer, 30% had not contacted their retailer about difficulty paying bills, and 49% had not applied for any government support. 22% had done none of these things. This points to major limitations in the reach and effectiveness of current support measures.

Table 5: Share of vulnerable households not accessing support

	Vulnerable to, or experiencing, energy hardship (1+ indicators)	Vulnerable to, or experiencing, energy hardship (2+ indicators)
Not enrolled in a hardship program with their retailer	79%	65%
Haven't contacted their energy provider about difficulty paying bills	57%	30%
Haven't applied for government assistance to help pay their bill in the last 12 months	67%	49%
Haven't done either of these	47%	22%



Many households experiencing hardship don't switch plans – even when they could save

Recent ACCC analysis found that 79% of households could save money by switching to better electricity offers.³⁷ Yet our survey shows that few households – particularly those identified as vulnerable to, or experiencing, energy hardship – are not switching retailers at higher rates than others, despite being more likely to benefit.

Table 6 shows that only 64% of households identified as vulnerable to, or experiencing, energy hardship say they review their energy plan at least once a year. This is less than those who did not report any hardship indicator.

Table 6: Energy provider switching by vulnerability status^e

	Vulnerable to, or experiencing, energy hardship (1+ indicators)	Vulnerable to, or experiencing, energy hardship (2+ indicators)	No reported hardship indicator
I review my energy plan at least once a year	64%	63%	70%
Switched energy provider over the past year	26%	27%	21%

While the share of households reviewing or switching is broadly similar, their reasons for not reviewing their energy plan differ. Table 7 shows that among those who had not reviewed their plan in the past year, the most common reason for those vulnerable to, or experiencing, energy hardship was "I wouldn't know where to start". In contrast, the most common reason for those not reporting hardship indicators was "I'm happy with my current plan."

Table 7: Main reasons for not reviewing energy plan regularly

	Vulnerable to, or experiencing, energy hardship (1+ indicators)	Vulnerable to, or experiencing, energy hardship (2+ indicators)	No reported hardship indicator
Satisfied with your current energy plan	24%	18%	36%
Wouldn't know where to start	38%	51%	22%

^e The numbers reported in Tables 6 and 7 exclude households living in Western Australia, the Northern Territory, and parts of Queensland, as these areas do not have full retailer choice. Additionally, households living in embedded networks are also removed.



Recommendation 1: State and territory governments need to introduce stronger minimum energy performance standards for rental properties

In Australia, minimum energy efficiency standards for homes were introduced much later than in many comparable countries, and to a lower benchmark. As a result, homes built before 2010 generally demonstrate significantly lower energy efficiency. Even today, Australian standards lag—homes constructed after 2010 are still estimated to be around 40% less efficient than homes built in similarly developed countries with comparable climates.³⁸ While current regulations in most jurisdictions require new homes to achieve a 7-star rating under the Nationwide House Energy Rating Scheme (NatHERS), older homes are still estimated to have an average energy efficiency rating of just 1.8 stars.³⁹ A substantial portion of the rental stock consists of these older, lower-performing homes.⁴⁰

Improving the efficiency of rental homes can cut energy bills and improve wellbeing. For instance, roof and ceiling insulation can reduce heating and cooling costs by up to 45%,⁴¹ and modern 7-star homes use about a third of the energy of older 1.5-star homes.⁴² Installing rooftop solar offers further savings—households can cut their electricity bills by 39–57%, resulting in annual savings of approximately \$822–1,350, depending on where they are on the grid.⁴³

But the issue is about more than bills—poor efficiency has serious health consequences. Monitoring by Better Renting, funded through an Energy Consumers Australia grant, found many rental homes regularly fall below safe indoor temperatures, increasing risks of respiratory illness, cardiovascular disease, and mental health issues. To save money, many renters reduce heating, worsening these health impacts.⁴⁴

Despite the risks, only a few jurisdictions have minimum energy efficiency standards for rental homes. The ACT now requires ceiling insulation in rentals.⁴⁵ Victoria mandates efficient heaters in living areas and from March 2027, new reforms will begin phasing in to improve rental home efficiency. These include requirements for efficient electric heating and hot water systems when existing systems reach end of life, mandatory ceiling insulation where none exists at the start of a new lease, and the installation of draught proofing and efficient cooling over subsequent years.⁴⁶ South Australia is also consulting on standards for efficient heating and cooling systems and ceiling insulation.⁴⁷ NSW has flagged future plans, but most states still have no enforceable requirements. Stronger national standards are needed to protect renters' health, reduce energy-related hardship, and improve energy equity.



Recommendation 2: Governments need to improve their support programs by making them better targeted and streamlined

To help alleviate energy bill concerns in the past year, the federal government provided electricity bill rebates to households. While we support the intention behind these measures, the uniform distribution of support risked inefficient use of limited resources. For example SEC Newgate's Mood of the Nation survey found that while 80% of households were aware of the \$300 electricity rebate, 44% of them said they could have easily paid their bills without it.

Our analysis suggests that despite receiving the \$300 rebate, around one in five households are still vulnerable to, or experienced, energy hardship. This highlights a clear opportunity to better target future financial support to the households most in need.

An example of the positive impact of adjusted financial support was seen during the early stages of the COVID-19 pandemic. In 2020, the temporary Coronavirus Supplement nearly doubled JobSeeker payments, and as a result, energy stress among households receiving JobSeeker fell by 15%.⁴⁸

In addition to bill relief measures, governments should prioritise long-term measures that address the underlying causes of energy hardship. We found that housing quality appears to be a key driver of energy hardship and renters, especially those in social housing, are disproportionately affected.

Targeted government investment in retrofitting poor-performing homes, especially those living in social housing and those occupied by people with health conditions, can deliver significant health and economic benefits. A Sustainability Victoria study found that every dollar saved on energy bills after retrofits delivered ten dollars in health cost savings for households with health conditions.⁴⁹

Furthermore, our analysis shows that households with rooftop solar are less likely to experience energy hardship (after accounting for other factors). This suggests that targeted solar installations—particularly in public and community housing—could be an effective way to reduce hardship in the long term.

Governments can also enhance targeting by improving program design. Many programs still require households to “opt-in”, which result in many eligible households missing out on the support they are entitled to. Research by the Consumer Policy Research Centre shows that many households eligible for energy concessions are not receiving them—up to 38% in South Australia, and between 19% and 35% in other National Energy Consumer framework states—often because concessions are not automatically applied.⁵⁰

Instead, the onus is on eligible concession holders to ensure their entitlement is correctly added and kept up to date on each bill.⁵¹ This gap is often due to a lack of awareness about available schemes, difficulty accessing or understanding information, and low awareness that concession details must be updated regularly—among other administrative and communication barriers.⁵²

Together, these challenges highlight the need for a review of government rebate programs to determine whether there is justification for the creation of a far more targeted, streamlined, and accessible system that delivers meaningful support to those who need it most.



Recommendation 3: Retailers and governments need to be more proactive in identifying and supporting customers experiencing energy hardship

According to the Australian Energy Regulator (AER), the most common method of identifying consumers experiencing hardship is through self-identification. This is by customers requesting assistance and apply to join their retailer's hardship program.⁵³ However, this approach is inherently limited.

Many people, particularly older and low-income households, may not recognise their situation as energy hardship.^{54,55} Instead, they see coping behaviours—such as limiting heating or cooling—as normal, and therefore may not seek help they are entitled to.

Even when customers do ask for assistance, there is no guarantee they will receive effective support. Findings from the recent *Rank the Energy Retailer* project show that even financial counsellors—who are trained professionals with established relationships and experience navigating energy retailer processes—rate some retailers' hardship practices poorly.⁵⁶ This suggests that consumers who must manage these processes alone face even greater barriers to accessing assistance.

These challenges point to the urgent need for retailers to take a more proactive approach in identifying those experiencing hardship. The importance of improving these processes has been also highlighted in recommendations from the AER Review of Payment Difficulty Protections,⁵⁷ as well as in rule change consultations with the Essential Services Commission of Victoria and the Australian Energy Market Commission (AEMC).^{58,59}

The difficulties consumers face in accessing support also highlight a broader limitation of relying on retail competition alone to deliver fair outcomes. The retail electricity market remains too complex for many consumers⁶⁰ disproportionately impacting low-income households, those with limited internet access, and people with lower English proficiency.⁶¹ These households often pay above-average energy prices, not just due to high usage, but because they are not on competitive plans.⁶²

Recent regulatory reforms are beginning to address this problem. For example:

- The Essential Services Commission (ESC) recently proposed rule changes to require retailers to automatically switch customers experiencing payment difficulty to their best offer.⁶³
- The ESC has introduced further proposed changes to require retailers to move legacy customers—regardless of whether they are experiencing financial hardship—onto a reasonable price plan, which could be the Victorian Default Offer.⁶⁴
- The AEMC has finalised a rule to protect hardship customers by ensuring they are not financially worse off than the retailer's deemed better offer.⁶⁵

We support these types of safeguards to ensure fairer outcomes for vulnerable consumers and would like to see similar policies introduced to all jurisdictions. Retailers and governments must ensure that the energy market works for everyone—not just those who are able to navigate it.



Conclusion

We estimate that nearly 1 in 5 households are currently vulnerable to, or experiencing, some level of energy hardship. This is a significant problem that requires immediate and sustained government action to support at-risk households and deliver a more equitable energy transition.

To address this, federal and state governments must:

- Develop a nationally consistent framework for measuring energy hardship;
- Commit to tracking the number of households experiencing it; and
- Invest in policies and support mechanisms that reduce its prevalence and severity.

This report outlines the practical steps needed to achieve that goal:

1. State and territory governments need to introduce stronger minimum energy performance standards for rental properties.
2. Governments need to improve their support programs by making them better targeted and streamlined.
3. Retailers and governments need to be more proactive and innovative in identifying and supporting customers experiencing energy hardship.

Governments must act now to establish robust measurement systems and deliver targeted, practical reforms that lift households out of hardship and prevent others from falling into it.



Appendix 1: Additional findings, limitations, and direction for future work

Several other factors were also significant in our model. For example, household composition and dwelling size. Single-parent households, larger households, and those living in larger homes (such as houses with three or more bedrooms) are more likely to be vulnerable to, or experiencing, energy hardship compared to those living in smaller dwellings such as apartments or townhouses. In contrast, households with solar panels are less likely to report indicators of energy hardship.

Future frameworks for measuring energy hardship should adopt a broader perspective that accounts for recent changes in household energy use, such as increased electricity consumption due to the electrification of homes and transport. For example, while electrifying transport can lead to higher electricity bills, it may also reduce overall household costs by lowering spending on petrol. A more comprehensive approach—one that considers total household energy burdens, including both housing and transport costs—would better reflect emerging vulnerabilities and ensure that hardship thresholds remain relevant.

It is also important to consider that survey data may miss people with limited internet access or those living in remote areas (such as non-metropolitan NT), which might lead to an underestimation of the true extent of energy hardship in Australia. Additionally, people supplied through irregular arrangements, such as prepayment meters or embedded networks, often face more complicated processes and may not receive the same level of support as other customers. Future data collection and policy design should ensure these groups are specifically identified and included to avoid underestimating hardship and to improve support targeting.

This study has several limitations. All data, including household income and energy bills, are self-reported. We used respondents' most recent energy bill to estimate annual expenditure, which may over- or under-estimate true yearly costs due to seasonal fluctuations. Income was collected as gross income because it is easier and more accurate for respondents to report; however, this does not account for housing costs, taxes, or other essential expenses. Where possible, using broader household expenditure data (e.g., rent, mortgage payments, loans, tax) could provide a more accurate picture of household financial stress.



Appendix 2 – Overview of sample and method

This analysis is based on data from **Consumer Energy Report Card** June 2025 Survey. The Consumer Energy Report Card survey was conducted by SEC Newgate. The raw data, and information on the methodology can be found [here](#).

Due to missing values in key variables such as bill amounts and income, approximately 1,000 observations were excluded. However, the remaining sample remains broadly representative in terms of key characteristics, with no significant differences compared to the full dataset.

Overview of sample income and homeownership distribution for June 2025 Consumer Energy Report Card (cleaned dataset for this analysis)

Share (%)	Own home outright	Paying off mortgage	Rent	Other	Total
Under \$50,000	9%	2%	10%	1%	22%
\$50,000 to \$100,000	10%	8%	11%	1%	30%
\$100,000 to \$150,000	6%	12%	7%	0%	25%
Over \$150,000	3%	15%	5%	0%	23%
Total	28%	37%	33%	2%	100%

The dataset used in this report is publicly available. Our analysis included regression modelling and significance testing (e.g. p-values) to identify key predictors of energy hardship and assess differences in hardship experiences across household groups. For further details, please contact us at elham.h@energyconsumersaustralia.com.au or ashley.bradshaw@energyconsumersaustralia.com.au.



References

- ¹ Australian Energy Regulator. (2025, May 23). *Final determination – Default Market Offer prices 2025–26*. <https://www.aer.gov.au/retail-markets/prices/default-market-offer-prices-2025-26>
- ² Essential Services Commission. (2025, May). *Victorian Default Offer 2025–26: Final Decision*. <https://www.esc.vic.gov.au/sites/default/files/documents/Victorian%20Default%20Offer%202025%E2%80%9326%20Final%20Decision%20Paper.pdf>
- ³ Brown, H., & Vera-Toscano, E. (2021). *Energy poverty and its relationship with health: Empirical evidence on the dynamics of energy poverty and poor health in Australia*. *SN Business & Economics*, 1(10), 1–34. <https://doi.org/10.1007/s43546-021-00100-6>
- ⁴ Liddell, C., & Morris, C. (2010). Fuel poverty and human health: A review of recent evidence. *Energy Policy*, 38(6), 2987–2997. <https://doi.org/10.1016/j.enpol.2010.01.037>
- ⁵ Porto Valente, Caroline, Alan Morris, and Sara J. Wilkinson. "Energy poverty, housing and health: the lived experience of older low-income Australians." *Building Research & Information* 50.1-2 (2022): 6-18.
- ⁶ DCCEEW 2024, Draft National Energy Equity Framework, Department of Climate Change, Energy, the Environment and Water, Canberra, May, 2025. CC BY 4.0.
- ⁷ Boardman, B. (2010). *Fixing Fuel Poverty: Challenges and Solutions* (1st ed.). Routledge. <https://doi.org/10.4324/9781849774482>
- ⁸ Liddell, Christine, and Chris Morris. "Fuel poverty and human health: a review of recent evidence." *Energy policy* 38.6 (2010): 2987-2997.
- ⁹ DCCEEW 2024, Draft National Energy Equity Framework, Department of Climate Change, Energy, the Environment and Water, Canberra, May, 2025. CC BY 4.0.
- ¹⁰ Chandrashekeran, Sangeetha, Viktoria Noka, and Stefan Bouzarovski. "Energy poverty: Measurement and governance in Europe and lessons for Australia." *Australian Economic Review* 55.4 (2022): 491-502.
- ¹¹ Vera-Toscano, Esperanza, and Heather Brown. "Empirical evidence on the incidence and persistence of energy poverty in Australia." *Australian Economic Review* 55.4 (2022): 515-529.
- ¹² Chandrashekeran, Sangeetha, Viktoria Noka, and Stefan Bouzarovski. "Energy poverty: Measurement and governance in Europe and lessons for Australia." *Australian Economic Review* 55.4 (2022): 491-502.
- ¹³ Boardman, B. (1991). *Fuel poverty: From cold homes to affordable warmth*. London: Belhaven Press.
- ¹⁴ UNSW City Futures Research Centre and Astrolabe Group. *Australia's Household Infrastructure Bill: Analysis Report*. Sydney: City Futures Research Centre UNSW & Astrolabe Group, 2019. Accessed July 21, 2022.
- ¹⁵ South Australian Council of Social Service (SACOSS). (2020). *Utilities stress indicators pilot project: Proof of concept*.
- ¹⁶ Bryant, D., Porter, E., Rama, I., & Sullivan, D. (2022). *Power pain: An investigation of energy stress in Australia*. Brotherhood of St. Laurence.
- ¹⁷ Sustainability Directory. (n.d.). *What is energy burden, and how is it measured?* Retrieved June 26, 2025, from <https://energy.sustainability-directory.com/question/what-is-energy-burden-and-how-is-it-measured/>
- ¹⁸ Cong, S., et al. "Unveiling hidden energy poverty using the energy equity gap. *Nat. Commun.* 13, 2456." 2022,
- ¹⁹ Cong, S., Nock, D., Qiu, Y.L. and Xing, B., 2022. Unveiling hidden energy poverty using the energy equity gap. *Nature communications*, 13(1), p.2456.
- ²⁰ Willand, Nicola, Nooshin Torabi, and Ralph Horne. "Recognition justice in Australia: hidden energy vulnerability through the experiences of intermediaries." *Energy Research & Social Science* 98 (2023): 103013.
- ²¹ Building Research Establishment (BRE). (2012). BREDEM-2012: Domestic Energy Model Specification. BRE. Available at: <https://files.bregroup.com/bre-co-uk-file-library-copy/filelibrary/bredem/BREDEM-2012-specification.pdf>
- ²² Sovacool, B. K., Cabeza, L. F., Pisello, A. L., Colladon, A. F., Larijani, H. M., Dawoud, B., & Martiskainen, M. (2021). Decarbonizing household heating: Reviewing demographics, geography and low-carbon practices and preferences in five European countries. *Renewable and Sustainable Energy Reviews*, 139, 110703. <https://doi.org/10.1016/j.rser.2020.110703>
- ²³ Bryant, D., Porter, E., Rama, I., & Sullivan, D. (2022). *Power pain: An investigation of energy stress in Australia*. Social Policy and Research Centre.
- ²⁴ Willand, Nicola, Nooshin Torabi, and Ralph Horne. "Recognition justice in Australia: hidden energy vulnerability through the experiences of intermediaries." *Energy Research & Social Science* 98 (2023): 103013.
- ²⁵ Chard, R., & Walker, G. (2016). Living with fuel poverty in older age: Coping strategies and their problematic implications. *Energy Research & Social Science*, 18, 62-70.
- ²⁶ Office for National Statistics. (2023, March 28). *How fuel poverty is measured in the UK*. Retrieved from <https://www.ons.gov.uk/peoplepopulationandcommunity/housing/articles/howfuelpovertyismeasuredintheuk/march2023>
- ²⁷ Australian Competition and Consumer Commission. (2024, June 28). *Inquiry into the National Electricity Market – June 2024*. <https://www.accc.gov.au/system/files/accc-inquiry-national-electricity-market-report-june-2024.pdf>
- ²⁸ Simshauser, Paul, and Tim Nelson. "The consequences of retail electricity price rises: rethinking customer hardship." *Australian Economic Review* 47.1 (2014): 13-43.



- ²⁹ Nelson, Tim, et al. "The drivers of energy-related financial hardship in Australia—understanding the role of income, consumption and housing." *Energy policy* 124 (2019): 262-271.
- ³⁰ Renew. (2024). *Efficiency standards for rental homes*. Retrieved June 18, 2025, from <https://renew.org.au/advocacy/efficiency-standards-for-rental-homes/>
- ³¹ Best, R., & Burke, P. J. (2022, May). *Effects of renting on household energy expenditure: Evidence from Australia* (CCEP Working Paper No. 2202). Crawford School of Public Policy, Australian National University. https://crawford.anu.edu.au/sites/default/files/2025-03/ccep2202_best_burke.pdf
- ³² Liu, E & Judd, B 2018, *Tenure as barrier to low carbon living*, Paper presented to 8th State of Australian Cities National Conference, Adelaide, 28–30 November. Viewed 21 July 2022.
- ³³ Barrett, B., Clarke, S., & Dignam, J. (2023). *Power struggles: Renting in winter*. Canberra: Better Renting. Retrieved from https://www.betterrenting.org.au/renter_researchers_winter_23
- ³⁴ Choice (2023.). *Renters left to freeze in poorly insulated homes*. CHOICE. Retrieved June 18, 2025, from <https://www.choice.com.au/money/property/renting/articles/renters-left-to-freeze-in-poorly-insulated-homes>
- ³⁵ Hajhashemi, E., Sauri Lavieri, P. & Nassir, N. Modelling interest in co-adoption of electric vehicles and solar photovoltaics in Australia to identify tailored policy needs. *Sci Rep* 14, 9422 (2024). <https://doi.org/10.1038/s41598-024-59318-7>
- ³⁶ Yozwiak, Madeline, et al. "The effect of residential solar on energy insecurity among low-to moderate-income households." *Nature Energy* (2025): 1-12.
- ³⁷ Australian Competition and Consumer Commission. (2024). *Inquiry into the National Electricity Market* (Report, 3 June 2024). <https://www.accc.gov.au/system/files/accc-inquiry-national-electricity-market-report-june-2024.pdf>
- ³⁸ Moore, T., Berry, S., & Ambrose, M. (2019). Aiming for mediocrity: The case of Australian housing thermal performance. *Energy policy*, 132, 602-610.
- ³⁹ CSIRO. (2021, September 23). *It's in the stars: How scientists figure out your home's energy rating*. <https://www.csiro.au/en/news/all/articles/2021/september/its-in-the-stars-how-scientists-figure-out-your-homes-energy-rating>
- ⁴⁰ Baker, Emma; Daniel, Lyrian; Beer, Andrew; Bentley, Rebecca; Stone, Wendy; Rowley, Steven; Nygaard, Andi; London, Kerry, 2023, "The Australian Housing Conditions Dataset 2022", <https://doi.org/10.26193/SLCU9J>, ADA Dataverse, V1
- ⁴¹ Australian Government, 2020. Insulation. [Online] Available at: <https://www.yourhome.gov.au/passive-design/insulation>
- ⁴² Climate Council. (2022, April). *Tents to castles: Building climate resilience in Australia's rental homes* [PDF]. Retrieved June 18, 2025, from <https://www.climatecouncil.org.au/wp-content/uploads/2022/04/Tents-to-castles-2022-final.pdf>
- ⁴³ Vorrath, S. (2023, October 27). Rooftop solar saves money, and batteries can wipe out bills: Labor pushes household savings. *RenewEconomy*. <https://reneweconomy.com.au/rooftop-solar-saves-money-and-batteries-can-wipe-out-bills-labor-pushes-household-savings/>
- ⁴⁴ Barrett, B., Clarke, S., & Dignam, J. (September 2023). *Power Struggles: Renting in Winter*. Canberra: Better Renting
- ⁴⁵ ACT Government. (2023). *Minimum housing standard for ceiling insulation in rental properties*. Retrieved from <https://www.act.gov.au/housing-planning-and-property/renting/minimum-housing-standard-for-ceiling-insulation-in-rental-properties>
- ⁴⁶ Victoria Department of Energy, Environment and Climate Action. (2024, December 13). *Energy efficiency for rental properties in Victoria*. Retrieved June 18, 2025, from <https://www.energy.vic.gov.au/renewable-energy/victorias-gas-substitution-roadmap/energy-efficiency-for-rental-properties-in-victoria>
- ⁴⁷ South Australian Parliament. *Residential Tenancies (Minimum Standards) Amendment Bill 2024*. Available at: [https://www.legislation.sa.gov.au/lz?path=/b/current/residential%20tenancies%20\(minimum%20standards\)%20amendment%20bill%202024_hon%20robert%20simms%20mlc](https://www.legislation.sa.gov.au/lz?path=/b/current/residential%20tenancies%20(minimum%20standards)%20amendment%20bill%202024_hon%20robert%20simms%20mlc)
- ⁴⁸ Department of Social Services [DSS] 2021, *Guide: government response to Coronavirus*, DSS, Canberra.
- ⁴⁹ Sustainability Victoria. (2024). The Victorian Healthy Homes Program: Research findings. Retrieved July 4, 2025, from <https://www.sustainability.vic.gov.au/research-data-and-insights/research/research-reports/the-victorian-healthy-homes-program-research-findings>
- ⁵⁰ Consumer Policy Research Centre. (2022). *Mind the gap: Consumer experiences of energy concessions in Australia* (Updated ed.). https://cprc.org.au/wp-content/uploads/2022/11/Mind-the-Gap_Report_Update-1011.pdf
- ⁵¹ Ibid
- ⁵² Dr Larissa Nicholls and Dr Kari Dahlgren, Consumer experiences following energy market reforms in Victoria: Qualitative research with community support workers, Consumer Policy Research Centre, June 2021, p 7.
- ⁵³ Australian Energy Regulator. (2024, December 2). *Annual retail markets report 2023–24*. Australian Energy Regulator. <https://www.aer.gov.au/publications/reports/performance/annual-retail-markets-report-2023-24>
- ⁵⁴ Chard, R., & Walker, G. (2016). Living with fuel poverty in older age: Coping strategies and their problematic implications. *Energy Research & Social Science*, 18, 62-70.
- ⁵⁵ Willand, N., & Horne, R. (2018). "They are grinding us into the ground"—The lived experience of (in) energy justice amongst low-income older households. *Applied Energy*, 226, 61-70.
- ⁵⁶ Financial Counselling Victoria. (2025). *Rank the Energy Retailer 2025: Financial counsellors rank Australia's energy retailers on hardship practices*. Retrieved from <https://fcvic.org.au/rank-the-energy-retailer-2025/#full-report>



-
- ⁵⁷ Australian Energy Regulator (AER). (2023). *Review of payment difficulty protections in the National Energy Customer Framework*. Australian Energy Regulator. Retrieved from <https://www.aer.gov.au/system/files/AER%20Review%20of%20Payment%20Difficulty%20Protections%20Final%20Report%202023.pdf>
- ⁵⁸ Essential Services Commission of Victoria (ESCV). (2024, October 24). *Energy Retail Code of Practice (ERCOP): Energy Consumer Reforms discussion paper*. Essential Services Commission. Retrieved from <https://www.esc.vic.gov.au/electricity-and-gas/codes-guidelines-and-policies/energy-retail-code-practice>
- ⁵⁹ Australian Energy Market Commission (AEMC). (2025, July 3). *Improving the application of concessions to bills: Draft rule determination (RRC0063)*. Retrieved from <https://www.aemc.gov.au/sites/default/files/2025-07/Draft%20determination%20-%20Concessions%20-%20RRC0063.pdf>
- ⁶⁰ Bedggood, R., Gardner, J., Gordon, R., Adams, H., Reade, L., Miller, W., Poruschi, L., Russell-Bennett, R., McAndrews, R., Letheren, K., Clarke, M. and O'Mahony, C. (2021) "Assessing Energy Inequity and the Distributional Effects of Energy Policies," Final Report, GEER Australia, Swinburne University of Technology, Melbourne
- ⁶¹ Colmar Brunton 2018, *Consumer outcomes in the national retail electricity market*, ACCC, Manuka, ACT.
- ⁶² Ibid.
- ⁶³ Essential Services Commission, *Energy Consumer Reforms Discussion Paper*, October 2024
- ⁶⁴ Essential Services Commission, *Energy Consumer Reforms – Regulatory Impact Statement*, May 2025
- ⁶⁵ Australian Energy Market Commission. (2025). *Final determination: Assisting hardship customers*. Retrieved from <https://www.aemc.gov.au/sites/default/files/2025-06/Final%20determination%20-%20Assisting%20hardship%20customers%20%281%29.pdf>