

## Energy hardship in Australia's rental housing market

Based on AHURI Final Report No. 338: Warm, cool and energy-affordable housing policy solutions for low-income renters



### What this research is about

This research examined the incidence of energy hardship within Australia's rental housing market and considered strategies and policy actions to reduce its impact on the lives of Australian households. Energy hardship broadly includes absolute measures of financial hardship; consensual or subjective reflections on households' lived experiences; and circumstances where residents limit their energy use for normal daily activities.

### The context of this research

Household expenditure on domestic fuel and power, as a proportion of total expenditure, rose in the period 2009–10 to 2015–16 by up to 37 per cent. Previous research also found that up to 40 per cent of Australian households who rent their housing experience energy hardship. Many of these households are forced by market pressures to live in homes that are expensive to heat and cool due to a lack of minimum energy performance standards.

Tenants, and especially private tenants, are often the poorest and most vulnerable within Australian society—and do not have the legal right or authority to modify their dwellings in order to improve thermal performance and energy efficiency.

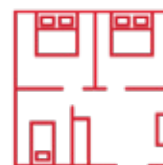
### The key findings

Formulating effective solutions to problems of unaffordable energy and thermally inefficient housing in the low-cost rental sector is particularly challenging because of 'split incentives'—where the landlord pays for improvements that provide them with no immediate or direct financial benefit—and other tenancy and financial barriers.

**37%**  
Household expenditure  
on domestic fuel and power,  
as a proportion of total  
expenditure households



**40%**  
Australian rental  
households experience  
energy hardship



## Defining and measuring energy hardship

There is no single definition of 'energy hardship' in Australia. The United Nations' sustainability goals define energy hardship as the lack of affordable, renewable and reliable energy services. It can be temporary or persistent; is experienced across a spectrum; and can be measured using a quantitative (objective) or a qualitative (subjective) approach.

Quantitative approaches generally measure energy affordability as the ratio of energy costs to income, which is then compared to either an absolute benchmark (e.g. 10%), or a relative benchmark, such as a national average or median.

In Australia, energy hardship based on the ratio of energy costs to household income is called 'energy stress'. Households in energy stress spend a higher proportion of their income on energy compared to the average population.

Measuring household required energy expenditure, rather than an actual energy expenditure, may provide a more accurate measurement of energy poverty for those households who have had to severely restrict their energy use.

Qualitative approaches to measuring energy hardship are based on the understanding that there is a societal consensus that everyone should be able to heat—and in Australia also to cool—their home to adequate temperatures. In general, surveys are used to identify whether or not the householder is able to heat or cool the home when needed, whether they have had difficulty in making payments, and whether they have resorted to curtailment behaviours or coping strategies.

## Who is affected?

Both private and social renters are frequently found to experience a higher likelihood of being exposed to energy hardship than people in other tenures. The population groups that are particularly vulnerable to energy hardship are varied, and include rental households that comprise: single people (regardless of age); older people (particularly those on a pension); single-parent families; younger families (particularly those with young children); people with a medical condition and/or a disability; people on a low-income; the working poor and people living in poverty; people with lower educational attainment or poor access to the internet or information; culturally and linguistically diverse groups (including newly arrived immigrants and refugees); and Aboriginal and Torres Strait Islander peoples.

## Challenges reducing energy hardship in the rental sector

Dominant issues that present energy challenges to private renters relate to market failures such as: principal-agent problems, information asymmetry and split incentives; a lack of agency for renters; landlords' priorities; imbalance of power in tenant-landlord relationships; informal lease arrangements; and the practices of the property management sector.

Some renters are fearful of negative repercussions (e.g. rent increases or evictions), so do not make requests of their landlords—such issues are compounded in circumstances where there is no formal lease arrangement. Other challenges for renters include financial constraints, lack of information or awareness of 'energy-efficient features', non-standard electricity supply arrangements, and short-term lease periods.

## Impact of dwelling on energy consumption

The thermal quality of the building envelope is an important factor in predicting energy consumption for heating and cooling, and is dependent on the climate-specific physical thermal performance of the external walls, windows, roof and floor.

A Victorian-based study found a higher prevalence of perceived difficulty in heating their home among renters (50%) compared to owner-occupiers (30%), with tenants citing draughtiness and lack of insulation as significant challenges. Research indicates that, independent of the type of housing, undertaking even small retrofitting works—such as draught-sealing, installing ceiling fans, and making internal changes to prevent heating and cooling of service spaces—can significantly reduce energy costs for tenants while retaining a comparable level of comfort.

Electricity generation by solar PV panels has been shown to reduce household electricity costs. A recent study of energy stress in Australia found that access to solar panels reduced household electricity costs by about \$400 a year. The research also found that access to solar panels is unevenly distributed across the five income quintiles. However, renters are disadvantaged in their access to this technology.

In one survey, while not necessarily fully representative, private and public renters were shown to be under-represented among households with solar panels, with only 2 per cent of renters having access to solar PV, compared with 20 per cent of all households.

## Survey of low-income renters

The Australian Housing Conditions Dataset (AHCD) and Housing Energy Efficiency Transitions (HEET) analyses found that there are numerous housing quality issues in the low-income rental space, for both private and social rental housing, which impact on energy hardship and quality of living, and which are distinct from issues faced by owner-occupiers or higher-income renters.

Eighteen per cent of public renters, and 14 per cent of private renters, were unable to keep sufficiently warm in winter. Residents living in the rental sector also faced problems with keeping cool in summer, though to a lesser degree.

Three of the five social housing tenants interviewed (as part of HEET) had requested more significant changes from their housing providers around the improvement, replacement or addition of space-conditioning systems for heating and cooling. For all three, their request was declined, even though at least one had suggested the current system was impacting on their child's health.

Three of the private rental tenants (interviewed in HEET) had consistently had requests for improvements refused by landlords, except when the request was interpreted by the landlord as addressing minimum housing standards (e.g. fixing a broken hot-water system). The understanding of 'minimum standard' appeared to vary between landlords (i.e. was not based on formal guidelines).

With regards to energy-efficiency improvements, tenants were constrained with what they could do in their homes. Their perception was that landlords care about maximising the investment yields of their properties and that sustainability-focussed upgrades were not seen as smart investment decisions by the landlords. However, landlords were reported to be amenable to tenants spending their own money on these projects. Tenants, however, were not enthusiastic about investing in their rented properties given the insecurity of their tenure.

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## Investigative panel findings

The Investigative panels found that minimum standards for the energy-performance of rental homes is a critical starting point and must underpin all other strategies. Similarly, mandatory disclosure of dwelling performance was seen as a potentially powerful tool to aid residents in their selection of properties, and as a way of monitoring compliance with minimum standards (e.g. following the approach of the European Energy Performance Certificate).

In the current era of large-scale stock transfer from the public sector to community housing providers, the participants cautioned that there was evidence that, in some cases, transferred social housing stock presented a particular future risk, as it was often poor quality and had low energy efficiency. Relatedly, the Panel noted that newer social housing stock was often much more energy efficient and presented significantly less energy hardship risk, but that newer homes represented only a very small proportion of social housing stock.

There was general consensus that landlords should be encouraged (whether via regulation or softer measures) to assume a greater duty of care to their tenants in terms of providing safe living environments. Avenues for change in this area include: motivating landlords to improve conditions in order to keep 'good' tenants; temperature monitoring to provide an objective measure of the thermal fitness of the dwelling; or requiring appliances (e.g. hot-water services) to be upgraded instead of replaced 'like-for-like'.

Panellists acknowledged that property management is a high-turnover profession and requires no formal training or qualification. Panel members therefore suggested that in order to push for change in this area, property agents would need to be bound by regulations. For example, in the UK, property managers are penalised if they let a dwelling that is not up to standard, or if they fail to disclose dwelling performance information.

Several limitations regarding material or technological upgrade were discussed. Panellists noted that: there is a functional limit to what can be done to mitigate heat risk without resorting to air conditioning; even when heating or cooling appliances are installed, tenants may not be able to afford to use them; and tenants may not even desire (and therefore are unlikely to use) the technology offered.

Health was identified as one of the most powerful discourses available; in the UK, statistics on the association between excess winter deaths and fuel poverty are released annually, creating a regular political imperative for action.

The panellists also noted the importance in the UK of narratives around protecting children's and elders' health. The Panel thought the most appropriate term is that landlords ought to have an obligation to provide 'safe' living environments.

## What this research means for policy makers

Policy makers might consider moving towards:

- an agreed definition of energy hardship to ensure support programs reach those households most in need. Furthermore, while some households are not in energy hardship based on traditional understandings, they are only able to meet their energy needs by reducing consumption in other areas, such as food or housing
- consensus of policy objectives that support tenants' health and wellbeing as the primary guiding objective (noting there is currently no clear definition of what constitutes a 'decent' or 'safe' home)
- catching people before they experience energy hardship as it is easier to keep people from entering energy hardship than to get them out of it once they are experiencing it
- strengthening tenants' rights and also ensuring that residents are aware of those rights. There needs to be a clear understanding of what constitutes basic housing quality. This could be partially addressed by creating and enforcing minimum energy-efficiency standards
- incentivising landlords, such as enabling landlords to claim tax rebates or other financial assistance so that appliances (e.g. hot-water services) be upgraded instead of replaced 'like-for-like'. This would help improve energy efficiency and performance over time
- educating key intermediaries, such as property managers and tradespeople, who play an important role in improving property and household outcomes, but that they may not yet have a sufficient level of understanding or training. Basic training for these associated professions around the technological, material and behaviour changes that can improve energy efficiency could provide a useful short-term intervention point.

## Methodology

This research reviewed academic and grey literature on energy hardship and housing conditions in the Australian social and private rental sectors; analysed data on tenant experiences; and led focus groups and Investigative Panels to provide a roadmap for the better design and targeting of energy hardship intervention measures for low-income renters.

“Catching people before they experience energy hardship as it is easier to keep people from entering energy hardship than to get them out of it once they are experiencing it.”

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