

## Sustainable social housing retrofit? What tenants really want may not align with what they get



Based on AHURI Final Report No. 397: Sustainable social housing retrofit? Circular economy and tenant trade-offs

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### What this research is about

**This research examines the preferences and trade-offs of tenants during social housing retrofit programs, particularly in regard to implementing circular economy (CE) practices. The study looks beyond the relatively narrow consideration of energy efficiency, to respond to the broader requirements of the social housing sector—to incorporate and balance tenant needs with provider mandates, budgetary limitations, and wider social policy.**

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### The context of this research

The social housing stock represents some of the poorest-quality and unhealthiest housing in Australia, which has a range of negative implications for social housing tenants, policy makers and the wider community. Retrofitting, or upgrading, existing social housing stock has been proposed as a cost-efficient solution to concerns around energy efficiency, thermal performance, and quality issues. Retrofitting may enable social housing providers to meet their responsibility to provide 'affordable, safe and sustainable' housing to tenants through the reduction of vulnerability to energy poverty. Retrofitting may also be able to address other tenant priorities such as increased physical security, as well as managing the costs and supporting (or improving) the health and economic productivity of tenants.

Social housing dwellings are often significant carbon emitters due to their inefficient heating and cooling systems, and inadequate insulation. Retrofitting projects, using a CE approach, reduce carbon emissions and improve energy efficiency, while improving building quality, occupant satisfaction and physical and mental health.

### The key findings

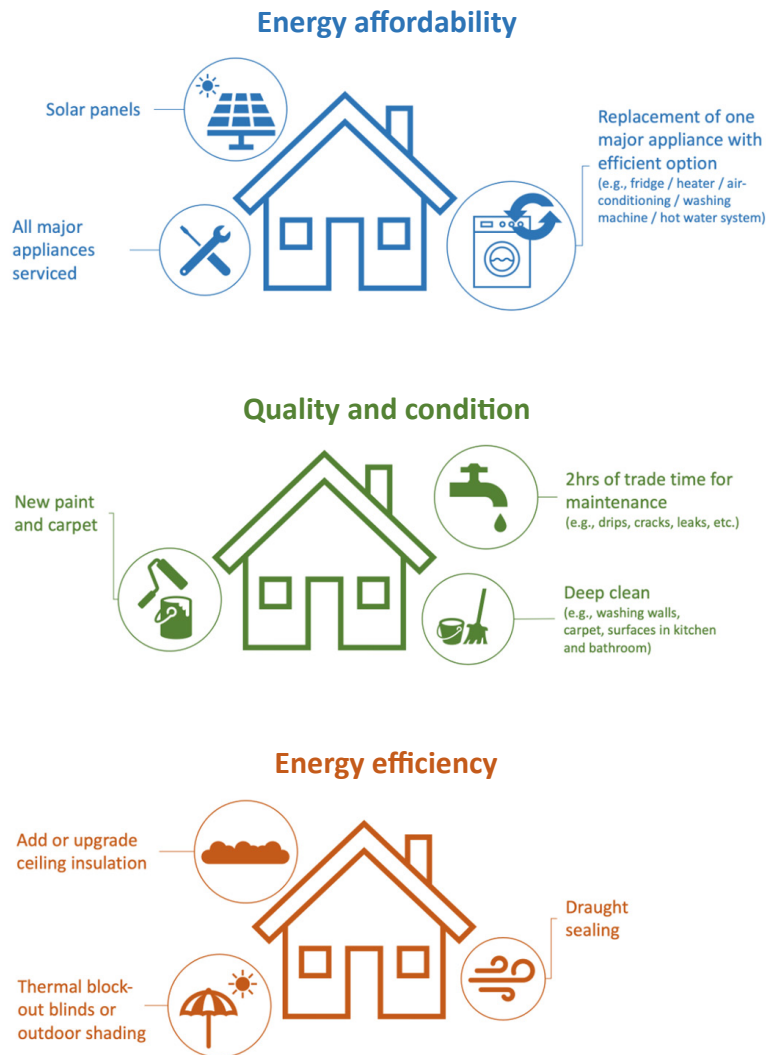
Recent CE programs in the social housing sector have primarily focused on optimising building longevity, maximising material reclamation, and developing adaptable technological assets to improve housing stock quality.

Discussion of social housing retrofit policy has focussed on two key areas in existing housing: the setting of minimum standards and retrofitting to improve sustainability and performance so as to deliver suitable housing for a low carbon future. Such policy assumes that different stakeholder groups have shared goals, but that is not the reality. Retrofit, at least in the social housing sector, is a relatively haphazard process, guided by good, but often conflicting, intentions.

There are concerns that retrofit programs in countries like Australia have largely been focused on technological solutions and higher socio-economic households, who could typically afford to undertake sustainable retrofit. Low-income renting households have been overlooked, especially those in the social housing sector.

## Retrofit preferences of householders are similar, regardless of tenure

The research surveyed 1,064 low to moderate income households across Australia irrespective of tenure to test whether preferences varied across the major tenures. Across the whole sample 14 per cent of respondents were social housing tenants, 40 per cent were renting from a private landlord, 27 per cent owned their home outright and 16 per cent were paying off a mortgage. Participants were provided with a series of choices between different retrofit and upgrade options.



- The survey found that, on average, solar panels, new paint and carpet and ceiling insulation are the most preferred intervention within their respective categories.
- For the energy affordability category, having solar panels was the most preferred option.
- Within the quality and condition category, there is no statistical difference between the new paint and carpet and deep clean options, while trade time is the least preferred option.
- In the energy efficiency category comparison, ceiling insulation is significantly more preferred, while draught sealing is least preferred.

When stratifying the preference data by income (those earning up to \$40,000 annually compared to those earning above \$40,000 annually), there are some differences in respondents' preferred options. For example, people earning over \$40,000 annually are less likely to prioritise having appliances serviced or trade time. The statistical difference between preference for solar panels or a new appliance observable in the overall results, however, is not present for the higher income cohort, meaning that those two options are equally prioritised. In contrast, the lower income cohort are less likely to value the deep clean option, which was equally valued as new paint and carpet by the sample overall.

Across the four main tenures—private rental, public rental, mortgage holders and outright owners—there was little meaningful difference in preferences. The only (weakly) significant difference was that of private renters' preferences for solar panels and replacement appliance.

## Tenant preferences may not align with sustainability priorities (and vice-versa)

The survey found that households' preferences for housing retrofit and upgrade options did not necessarily align with evidence of optimal retrofit priorities and do not align with the typical activities which receive funding (except for solar panels).

The activities that often have the highest cost-benefit outcomes, such as draft sealing and ensuring appliances are operating efficiently, were not highly desired. Often these options are less 'visible' and the benefits occurring may not be immediately evident or well communicated to householders.

Consumer households' preferences differ from typical activities associated with CE objectives, for instance, the low-cost, high impact activities aimed at improving the life-span and performance of the existing dwelling and appliances.

Bespoke choice modelling experiments during the development of future retrofit policies and programs offer a targeted and cost-effective way to understand the specific needs of intended recipient or 'consumer' cohorts. Tailored surveys, for example, could investigate the influence national and local events (e.g. COVID-19 pandemic, flood or fire), and different tenure conditions (e.g. length of residency, affordability, utility expenditure) on households' preference.

The expert panel discussions revealed that social housing retrofit was far from a simple consideration of housing improvement or increased energy efficiency. Overall, the discussions showed significant concern for the needs of tenants across the stakeholder groups, a keen awareness of the intrinsic constraints of the social housing sector, and uncertainty around the attribution of costs of any retrofit activity.

Many of the priorities and retrofit trade-offs selected by tenants in the survey were not expected by the panel members. For example, commonly provided retrofit measures (such as draft sealing) were not widely valued by the survey cohort, while less common interventions that were less focussed on energy efficiency (such as a deep clean) were highly regarded by consumer households.

## Different objectives across social housing stakeholders can limit outcomes

The objectives underlying retrofit programs are rarely explicit and vary greatly between stakeholders: social housing providers may be largely motivated to assist their tenants to avoid energy poverty; industry groups seem principally focussed on sustainability outcomes; and many tenants' main motivation is wanting homes that are more liveable, efficient, clean and warm. These different, and often competing, objectives obviously limit successful outcomes.

There was substantial discussion of the importance of minimum standards as a means to drive and guide retrofit responses. Minimum standards were seen as important in framing an ambition, they 'set a benchmark that we want to achieve, and then we just have to work out how to get there'. Currently, minimum standards are piecemeal across states, but increasingly becoming a means to improve quality in the social rental sector. It was also noted that any change to minimum standards would need both 'carrots' of assistance and 'sticks' of regulation. If minimum standards were applied and upgraded, many social housing providers would likely be unable, without additional assistance (subsidies) to meet them.

There was also a slight caution raised, that any retrofit activity that occurred should benefit, rather than financially disadvantage, tenants. The example given was the installation of reverse cycle air-conditioning, which in some cases enabled tenant households to make their homes warm, but in many cases the poor construction quality of the home meant that the power costs of running the air-conditioner forced these households directly into energy poverty.

## The impact of tied funding on improving liveability for tenants

Social housing providers often have poor quality stock and an ambition to improve it for tenants, but no dedicated funding source to do more than meet basic requirements for housing and safety. As such, they may subsidise their limited rental income with 'bundles of money' in the form of tied grants for housing improvements and retrofit. This is an important point of disconnect, tied funding opportunities were often politically initiated, highly targeted to specific outcomes, and importantly, rarely coordinated. Tied grants are rarely focussed on improving liveability for tenants, instead they are much more likely to reflect sustainability goals of the environmental sectors of government and peak bodies.

A longer term funding pathway for social housing retrofit and quality upgrades would give social housing providers a clearer direction and allow for more considered and nuanced responses.

## Limited tenant voice has meant tenants' preferences were largely unknown

For the majority of panel participants (policy makers, social housing providers and industry), tenant preferences were both surprising and largely unknown. This indicates that a systematic tenant voice (and tenant preferences) has, to date, rarely been included in existing retrofit activities. The inclusion of at least some acknowledgement of tenant preferences in the development of any social housing retrofit interventions would shift the focus of assistance (and the desired outcomes) towards basic liveability.

One of the main insights provided by the panel discussions was the (largely invisible) mismatch of retrofit ambitions between different stakeholders—social housing providers, industry, government agencies, and tenants. Acknowledgement of this mismatch and a more explicit statement of aims by all stakeholders is a valuable outcome of this research. While the policy implications of an alignment of retrofit ambitions are unclear, it would provide coordinated guidance to outcomes.

## What this research means for policy makers

The research finds that international best practice includes the setting of minimum standards for all housing, including social housing stock. These minimum standards include a range of different housing elements such as window coverings, heating and cooling systems and other basic functions. In some jurisdictions, for example New Zealand, these minimum standards are linked, not only to improving the quality of a dwelling, but the wider social benefits (e.g. improved health) delivered.

The research findings suggest that social housing providers in Australia require greater overall funding; more certainty around specific sustainability-focussed funding programs; and a clearer mandate to address sustainability within their housing stock to meet CE objectives. Retrofit and quality improvements are undertaken with short term focus, based on whatever funding or opportunities are available at that point in time. This funding model constrains all stakeholders from longer term planning or strategic coordination, but also reduces the opportunity to use CE principles in retrofit activities.

## Methodology

This research reviewed current policies and literature, interviewed policy stakeholders; surveyed low to moderate income households about retrofit preferences; and undertook an expert industry panel.

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### To cite the AHURI research, please refer to:

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