QCOSS

Queensland Council of Social Service

Shifting Power

Improving choice and control through energy efficiency minimum standards for rental housing in Queensland

November 2018

About QCOSS

The Queensland Council of Social Service (QCOSS) is the state-wide peak body representing the interests of individuals experiencing or at risk of experiencing poverty and disadvantage, and organisations working in the social and community service sector.

For more than 50 years, QCOSS has been a leading force for social change to build social and economic wellbeing for all. With members across the state, QCOSS supports a strong community service sector.

QCOSS, together with our members continues to play a crucial lobbying and advocacy role in a broad number of areas including:

- place-based activities
- citizen-led policy development
- cost-of-living advocacy
- sector capacity and capability building.

QCOSS is part of the national network of Councils of Social Service lending support and gaining essential insight to national and other state issues.

QCOSS is supported by the vice-regal patronage of His Excellency the Honourable Paul de Jersey AC**,** Governor of Queensland**.**

Lend your voice and your organisation's voice to this vision by joining QCOSS. To join visit the QCOSS website (www.QCOSS.org.au).

QCOSS would like to acknowledge the work of Linda Parmenter (Elucid Consulting) and Luke Berry (Engineroom Infrastructure Consulting) in preparing this report.

Cover photo from Adobe Stock

Contents

Introduction

In November 2017 the Queensland Government passed the *Housing Legislation (Building Better Futures) Amendment Act 2017*. One of the amendments was to introduce a new clause 17A into the *Residential Tenancy and Rooming Accommodation Act 2008* (RTRAA) to allow minimum standards for rental properties to be specified by regulation. This amendment gave effect to a 2015 election commitment from the Labor Government. In introducing the bill into Parliament, Minister de Brenni committed to consulting with the community on what, if any, particular matters should be specified (Hansard 2017). This paper has been prepared in anticipation of, and to contribute to, this important public consultation and discussion.

This QCOSS (Queensland Council of Social Service) project has been funded by Energy Consumers Australia (ECA)[1], and as such focuses on energy efficiency and includes a technical review of energy efficiency options (Appendix A) and a consultation process to analyse the options (Appendix B). The final recommendations are based on QCOSS's analysis and do not necessarily represent the views of all stakeholders that participated in this process. The project is also a continuation of and reinforces previous research by QCOSS regarding how tenants experience and access energy related issues. For broader renters' rights and advocacy, QCOSS refers the reader to, *Choice and Control? The experiences of renters in the energy market* (QCOSS 2016), and the QCOSS *Position Statement on Renting* (2018a), *QCOSS Position Statement on Housing* (2018b) and the *QCOSS Housing Policy Review* (2018c).

This report presents the results of our targeted research and consultation project to identify, assess and prioritise several recommended measures that could be specified as a minimum standard to improve energy efficiency. It concludes by outlining a transition plan that could support the implementation of the changes.

QCOSS position

The energy performance of Australia's residential buildings is low by world standards. The poor energy performance of our homes, combined with significant increases in energy costs during the past decade, means that many are now living in homes that are damp, too cold in winter, and too hot in summer.

Living in these homes, dealing with high electricity bills, and going without the energy we need for the essentials, can lead to financial stress, poor health and make it harder to work, to get an education, or to be a part of the community.

People on low incomes and/or who rent, are most vulnerable and have little choice or control over the efficiency performance of their home and major energy-using fixed appliances.

Improving the energy performance of Australian homes is an important and necessary reform that will benefit people and the community through: lower energy bills; improved health and well-being; a more reliable and affordable electricity system; emissions reductions; and economic benefits.

QCOSS found through our targeted research and consultation project on energy efficiency minimum standards for rental homes that:

- the new clause provides an opportunity to replace the existing vague and arguably subjective requirement that rental properties be 'clean, fit, in good repair, and safe' with clear specifications about the sort of amenity that renters have a right to expect

[1] https://energyconsumersaustralia.com.au/

- utilities industry research tells us that at any point-in-time around 10 per cent of people are in serious financial hardship and are unable to pay their bills (*Thriving Communities Partnership*, 2016)
- there is evidence that people who are disconnected for non-payment are likely to live in rental homes that are hard to cool, hard to heat, or have other energy efficiency problems that impact on their bill. About 80 per cent of people who were disconnected reported at least one energy efficiency issue that impacted their bill (PIAC, 2018)
- there is broad support among tenant advocacy groups for the introduction of minimum standards to improve the energy efficiency of rental properties.
- improved energy efficiency of rental homes provides multiple benefits including reducing costs, reducing emissions, improving safety and security, and improving health and wellbeing.

QCOSS supports the introduction of regulated minimum standards for energy efficiency in rental homes to improve their liveability and to reduce energy bills. However, we found that one size does not fit all. Prescribed minimum standards are too blunt and do not strike the right balance between encouraging investment in energy efficiency improvements that really make a difference for the tenant and providing flexibility for the rental property owner to choose the right mix of improvements to maximise impact and control costs. For this reason, we have recommended the introduction of home energy rating scheme which will prescribe a minimum standard that rental properties must meet, and minimum standards for insulation and LED light fittings as these offer big benefits for renters at a reasonable cost.

Recommendations

Recommendation 1: Minimum standard for the energy efficiency of rental properties (Home energy rating scheme)

QCOSS recommends the Queensland Government introduce a minimum standard for the energy efficiency of rental homes through the introduction of a Household Energy Rating Scheme. This scheme would set a minimum home energy rating that rental property owners can achieve through any number of energy efficiency options.

Recommendation 2: Minimum standard for ceiling insulation

Implement prescribed minimum standards for ceiling insulation which target older rental properties or properties with a low home energy rating to bring them into line with contemporary building requirements. Insulation is widely accepted as one of the key factors in thermal performance of buildings. It is estimated that 25-35% of heat loss and gain in a house is through the ceiling[2], while a well-insulated roof offers a potential reduction in heating and cooling costs of up to 50%[3]. Although it may not be relevant to unit dwellers (other than those in top floor apartments), it is a measure that applies across all climate zones and lack of insulation commonly contributes to low energy efficiency.

[2] Australian Government, "Insulation". Your Home Website http://www.yourhome.gov.au/passive-design/insulation
[3] ibid.

Recommendation 3: Minimum standard for LED light fittings

Implement prescribed LED lightbulb ready fittings so that all light fittings can accommodate generally available LED lights. While replacing lights is typically the responsibility of the tenant, tenants are unable able to fit LED light bulbs where fittings need to be changed or where it is difficult to gain access to light fittings (for example, raised ceilings).

The case for immediate replacement of all fluorescent and incandescent lights is strong – these changes could save tenants up to $280 per year[4].

Recommendation 4: Compliance framework

QCOSS recommends the Queensland Government develop a compliance framework that requires mandatory disclosure based on a third-party assessment of the energy efficiency rating of the home. Home owners should be given a reasonable amount of time to comply with the new home energy rating scheme. This will strike the right balance between compliance costs on owners, industry can respond to the demand for energy efficiency improvements and the benefits to tenants.

Recommendation 5: Information to help people comply

Publish clear and independent information so all parties (renters, lessors, property agents and third-party exempt sellers) clearly understand the features of the regime, their rights and obligations and what to do if there is a dispute.

Rationale

There is a clear rationale for specifying minimum standards across a range of dimensions for rental homes. More than a one third of all households (34.2 per cent) in Queensland rent (ABS 2016). Often, tenants will not pursue repairs so as not to 'rock the boat', resulting in problems being inherited by consecutive tenants. The introduction of minimum standards would require properties to comply with these requirements before being listed for rent. This will make it easier for tenants and lessors to understand what is expected. With homeownership becoming increasingly unaffordable, policy makers now acknowledge that many people will rent for life and that most will rely on the private rental market to meet their fundamental housing needs. At the same time tenancy protections are significantly underdeveloped when compared to international standards.

Introducing the *Housing Legislation (Building Better Futures) Bill* into Parliament Minister de Brenni acknowledged:

> *… more Queenslanders are renting than ever before and our laws need to reflect that shift. People should not have to live in homes that provide little more than basic shelter. People should expect a decent base standard of amenity for both their safety and, of course, their peaceful enjoyment. (Hansard 2017)*

There are also specific arguments to support the case for specifying energy efficiency standards as a core component of a broader range of measures.

[4] Based on 10 lights per house running at 6 hours/day. The cost of an LED light is about $4 compared to a saving per year of $28.50 compared to incandescent lights.

Renters without power to change

As energy prices have risen in the last decade renters have been doubly disadvantaged. Not only do they live in less efficient homes that are costlier to run, they often don't have permission to make upgrades, even if it's there is no cost to landlord. It is important to consider that if they did make changes, they may be wasting their money as the average tenancy is 13.9 months (RTA 2018). As benefits would generally accrue to the renter, there is little incentive for lessors to invest in energy-efficiency upgrades (the 'split incentive problem').

Tight competition in the rental market in many locations, or lack of choice for some renters (such as those on very low incomes or those living in social housing), further restricts renters from factoring energy features into their decision making when choosing a property to rent. The split incentive creates a growing divide in our communities – between those who can take advantage of opportunities to reduce their energy costs, and those who cannot, as demonstrated in *Choice and Control? The experiences of renters in the energy market* (QCOSS 2016). This was also acknowledged by the Queensland Productivity Commission in 2016. Renters are often locked out of energy efficiency programs run at a jurisdictional level, even where such programs target low-income households, as such schemes typically target owner-occupiers.

Renters often live in poorer quality housing

Although there is no reliable public information on the condition of private or social housing rental stock generally, particularly on its energy efficiency[5], there are indicators to suggest that compared to owner-occupiers, renters on average live in lower quality, older, and less energy-efficient properties. The value of investor owned properties is generally lower than owner occupied properties. In Brisbane for example, 65 per cent of investment properties in Brisbane (houses and units) are under the median value of the total housing stock (CoreLogic 2016). Surveys of energy consumption also consistently reveal that renters are more likely to live in homes that are uninsulated and are more likely to have inefficient hot water systems and if they have air conditioning, it is likely to be inefficient, for example box window air conditioners (ABS 2013).

Where rental stock is older, it is also a fair assumption that the energy efficiency will be lower. Minimum energy efficiency performance requirements for new residential buildings have only been included in the National Construction Code (NCC) and adopted by Queensland since 2003 (ABCB 2016). Prior to this, Nationwide House Energy Rating Scheme[6] (NatHERS) estimates houses in Australia averaged one star or less, with fewer than one percent of all houses achieving a six-star rating (NatHERS 2016). While the energy efficiency of freestanding dwellings has progressively and significantly improved since 2003, units have lagged as Queensland has not adopted the most recent NCC standards (DHPW 2014)[7]. More than half of all units in Brisbane are investment properties (CoreLogic 2016).

Renters face higher energy costs to run their homes

Setting minimum standards for energy efficiency in rental properties provides an opportunity to reduce energy costs for rental households. This is critical when considering that 47.6 per cent of rental households are also on low-incomes (ABS 2015). Although spending less per week on energy than most households, the cost of electricity is a higher proportion of total household income for both renters and low-income households (ACOSS 2018).

---

[5] Acknowledged by the RTA in its submission to the QPC inquiry into electricity pricing.

[6] http://www.nathers.gov.au/ All new houses and townhouses (class 1 buildings) and enclosed garages (class 10a buildings) attached to class 1 buildings must be 6-star. New or existing multi-unit residential buildings (class 2) must achieve a minimum 5-star energy rating.

[7] While the NCC rating for units was increased in 2010 to 6 stars, Queensland opted only to upgrade its existing requirement for 3.5 to 4-star ratings to 5-stars.

Low-income renters who are currently living in poorer quality, old and thermally inefficient housing do so because of affordability pressures, with the disproportionate costs of running these homes further exacerbating financial pressures (the high cost of being poor). A recent study using HILDA survey results found that 51.3 per cent of rental households were unable to pay their utility bills on time. Of these, 42.7per cent were in the private rental sector and 8.7 per cent were social housing tenants. Those households that were unable to pay their bills on time also correlated with the largest groups of renters in Queensland. These include single or dual parent families with dependent children that currently make up around 60 per cent of both the private and social housing rental sectors in Queensland (Azpitarte et al. 2015). 'Utility stress' means that many low-income households either go without cooling, heating, hot water, lighting and other amenities to manage the increasingly excessive cost of electricity and gas, or just pay more for it.

Renters and poorer housing amenity

Another rationale for including energy efficiency standards in any future regulation is the improvement in amenity for tenants. Housing with poor thermal efficiency and inefficient appliances can make it difficult for households to regulate temperature and can be uncomfortable to live in and lead to adverse health effects particularly amongst the elderly, children and people with chronic illnesses. For example, heat related deaths in Australia are predicted to progressively rise by 2050, from 1115 people in 2003 to 6300 people by 2050 with vulnerable populations most at risk (Maller 2011). Research in New Zealand has also linked increased rates of respiratory disease with under-insulated cold dwellings (Menclova and Webb 2014). Although it is cooling not heating needs that are most commonly associated with Queensland we should not forget that there are several parts of the state or times of the year where cold is a significant issue.

Renters and greenhouse gas emissions

A broader imperative for setting minimum energy efficiency standards is the low uptake of energy efficiency technologies in the private rental sector. This undermines Australia's attempts to reduce greenhouse gas emissions and mitigate the effects of climate change (Allcott and Greenstone, 2012 and de T'Serclaes and Jollands, 2007 cited in Wrigley and Crawford (2016)). The National Energy Productivity Plan (NEPP) aims to increase Australia's energy productivity by 40 per cent by 2030. To meet this target, it is estimated that Australia would need to almost double its rate of energy productivity improvement across all sectors, including in the residential sector. Despite this, specific strategies to address the barriers to energy efficiency in the private rental sector are lacking in the NEPP.

Vision

Shifting power back into the hands of tenants

Renters should have the power to:

- make informed choices about their energy supply and use
- control their energy costs
- have the ability to make appropriate modifications, and
- access energy consumer safeguards.

Renters must have the power to make informed choices regarding their energy supply and use, have timely access to information about the energy features of rental properties to include in their decision making, and have the right to make reasonable improvements without fear of penalty or eviction.

Energy Star Ratings

Rather than prescribe particular energy efficiency options, QCOSS advocates for the use of energy efficiency rating scheme and mandatory disclosure. Rental houses should achieve a minimum star or energy efficiency rating, below which housing should be unavailable for renting. Public and community housing should be maintained at best practice energy efficiency standards.

Renters should have the same access to quality and energy efficient housing as private owners

Low-income households and renters should have access to the same level of thermally efficient housing, especially considering the higher proportion of total household income spent on energy for both renter and low-income households. Vulnerable households should not have to decide between eating, being comfortable, or living in a healthy environment due to excessive energy costs.

Renters have the right to expect quality of housing, giving them affordable, safe, secure, healthy and energy-efficient homes in return for the rent they pay. This includes access to options such as insulation, secure doors and windows, efficient hot water and air conditioning systems where appropriate (especially when needed for health reasons). In addition, minimum standards should not lead to rental households being penalised with rent increases to attain a decent quality home that outweigh the energy efficiency measures.

Fair transition to a cleaner future

Low income households and socially vulnerable communities are expected to face greater impacts from climate change and a poorly managed transition to a cleaner economy. Low income households and renters should be able to reduce their own emissions through energy efficiency, contributing to Australia's emission reductions and being able to participate and get the full benefits of a fair transition to a cleaner future.

Assessing Energy Efficiency Measures

There are many factors that impact on a home's energy performance. The most important factor in a household's energy efficiency is the design or thermal performance of the 'building shell' - roof, walls, windows and floor - that can significantly influence the energy efficiency performance of the dwelling. Such building energy efficiency is expressed as a star rating out of 10 under the *Nationwide House Energy Rating Scheme* (NatHERS). Another key factor is the fixed appliances that are used in the home, particularly hot water systems, heating and cooling. Beyond this, the comfort of a home and its associated energy performance can be influenced by a variety of factors including whether there is shading from trees and awnings, whether the home has adequate cross-ventilation, or whether there are outdoor areas for drying clothes.

A 'long list' of energy efficiency measures considered for this project were assessed against a range of criteria, and from across a spectrum of approaches to energy efficiency:

1. The first key criterion was to understand the likely cost and benefit of the measure (acknowledging that these costs and benefits would be split between lessor and renter and that short payback periods may not hold the same weight in this context as in an owner occupier context). We were particularly looking for measures that had the potential to reduce electricity bills for renters, while adding value, or at the very least not imposing an undue burden on lessors.

2. The assessment of benefit went beyond reductions in electricity bills to also include amenity benefits – for example whether a particular measure would assist with improving comfort for the tenant such as temperature regulation, reduced noise, assist with light control or provide privacy (for example, lockable screen doors that both enhance airflow, reducing cooling costs, and improve security).
3. Assessment also included the applicability of the measures across different climate zones including tropical, sub-tropical, arid, and humid zones, and different building types. Our aim was to find measures that target properties of the lowest quality and amenity, bringing those houses up to more contemporary building standards and therefore assisting renters that are likely to be experiencing the greatest housing stress.
4. We were also interested in the ease or difficulty of implementation of particular measures, for example whether expert advice would be required to implement a measure, whether there might be any adverse unintended consequences from implementing the measure, whether some properties could potential have worse energy efficiency or be less comfortable because of the measure. It was also useful to note the ease for tenants themselves to implement any of the measures at low cost.

The outcomes of the assessment are given in Appendix A.

Shifting Power – Transition plan

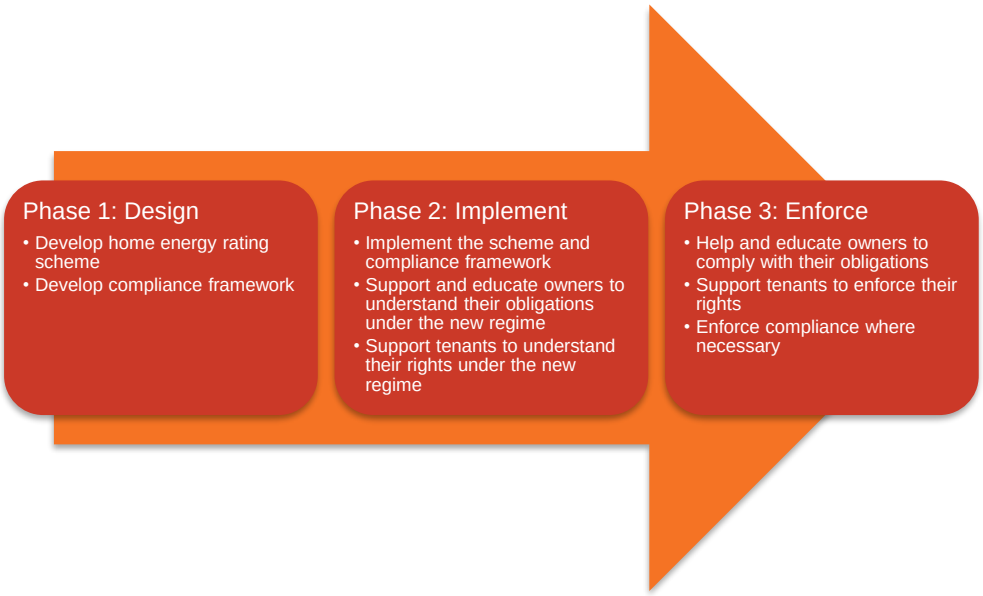
QCOSS recommends that the Queensland Government provide adequate time for people to transition to the new rules before they start enforcing compliance. We have set out a pathway to improving energy efficiency for rental properties below which aims to strike a balance between the benefits for tenants and compliance costs and other practical implementation issues for landlords.

Minimum standards are not a new concept in Australia, but it is only in the last two years that Tasmania has enacted basic minimum standards for rental properties in legislation[8], and now both Queensland and Victoria have enabled minimum standards for rental homes, including energy efficiency, to be specified in future regulation. Changes need to take account of the differences between various types of rental homes. The concerns raised by lessors and agents regarding costs is that a one size fits all approach to minimum standards will not work. The broader priorities for renters and their concerns about affordability demonstrate a need for a well-designed policy 'package' to improve the energy efficiency of rental properties that is carefully timed and phased. That is, a smooth transition will:

a) give rental property owners time to comply with the new rules
b) allow industry to respond to and manage increased demand
c) retain flexibility to maximise impact for tenants at a reasonable cost to rental property owners.

[8] Since August 2016, minimum standards have applied to new leases made in Tasmania under the *Residential Tenancies Act 1997* (TAS) and include specifications regarding the provision of a heating device in main living area and prescribing that curtains or blinds must be provided in each bedroom and living area.

Figure 1: A pathway to improving energy efficiency for rental homes



Phase 1: Design

The Queensland Government should consider the following principles in the design and development of a home energy rating scheme, minimum standards for LED lighting and insulation, and a compliance framework for Queensland:

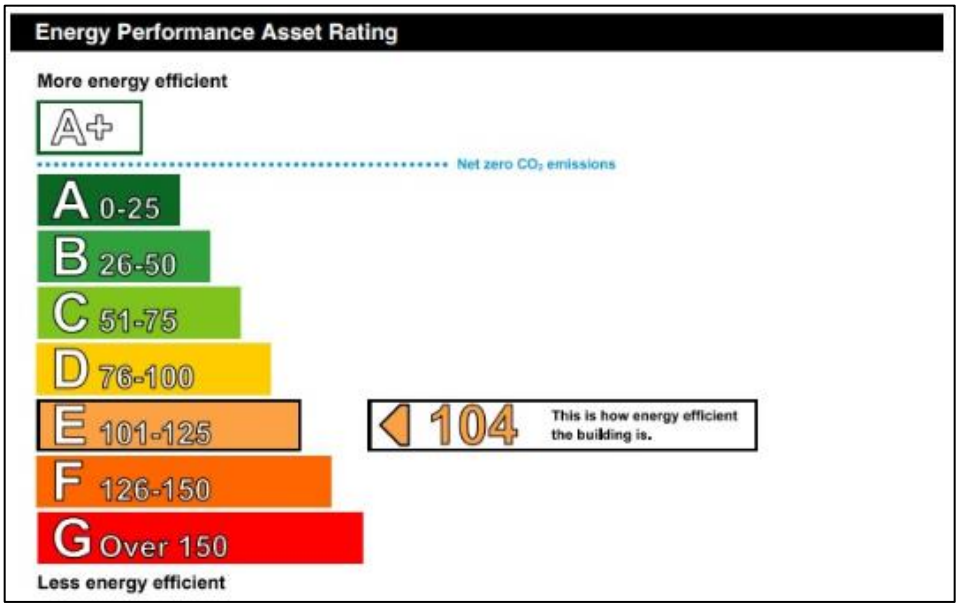
- The home energy rating scheme must be relatively simple to apply and must produce predictable and consistent energy efficiency ratings.
- The scheme must be capable of predicting energy efficiency outcomes to help inform investment decisions.
- The scheme must be capable of being enforced and should include mandatory reporting and disclosure rules (such as average annual energy costs of the property[9]) to ensure tenants can also make informed decisions.
- Property owners should be given a reasonable amount of time to comply with the new minimum standards.
- The need for any exceptions or special rules should be identified and tested with stakeholders.
- Look at existing schemes for features that would work well in the Queensland context.
- The need to support industry including training of accredited independent third-party assessors to apply the scheme[10], to advise stakeholders about the energy efficiency of a dwelling and to help property owners identify actions to improve their rating to the minimum standard.
- The inclusion of a feature that ensures lessors cannot unreasonably refuse tenants permission to make modifications to improve the energy efficiency of a property if there is no cost to the lessor.

[9] While actual costs depend on behaviours and portable appliances, this can be standardised as a comparison tool, with assumptions listed.
[10] As already occurs under the Tasmanian scheme - https://www.cbos.tas.gov.au/topics/technical-regulation/building-standards/building-practitioners/energy-efficiency

- The scheme should be designed in collaboration including the Queensland Government, property owners and managers, relevant industry groups, tenant advocacy groups and the community sector.

Example 1: The Minimum Energy Efficiency Standards (MEES) (UK)

Private rental properties in England and Wales were required from 1 April 2018 to reach a minimum energy performance standard of 'E' or above on the Energy Performance Certificate (i.e. it is illegal to grant a lease extension, renewal or new lease for homes with an F or G rating). The Energy Performance Certificate (renewed every 10 years) is based on a 5-point assessment and is calculated per square meter based on the fittings and construction type of the dwelling including heating systems, insulation and double-glazing of windows. A requirement to obtain this certificate and disclosure of the energy performance of rental properties has been in place for some time. When a certificate is issued, it includes recommendations for improvements and details costs for improvements. The energy performance standards apply to all new or renewed leases from April 2018 and will apply to any remaining private rentals from April 2020.



Example 2: Home Energy Rating Tools

The Cooperative Research Centre for Low Carbon Living research stream "Energy Fit"[11] has recently concluded a significant body of research to develop a business case and an implementation plan for a voluntary rating system to measure and communicate energy efficient home performance at the point of sale and lease. Energy Fit drew on the experience of the ACT's mandatory scheme and international schemes, and found that, at a cost of $6 to 7 million, a disclosure system would deliver a net public benefit of between $42 to $535 million and estimated that energy efficiency improvements would be made to between 7.5% and 30% of the homes.

Energy Fit reported that 92% of housing consumers surveyed thought it was important to have information on the energy efficiency of homes as part of a sale or lease and would be willing to pay a modest amount for it, and that 89% reported they would find a home more attractive to buy or rent if they were told that it was an energy efficient home.

Their research assessed 22 rating tools and concluded that for a system to be effective, the ratings need to be low-cost, easy to use, and communicated as a star or bar rating. They also found that the information needs to be: able to be reproduced; supported with information regarding the key features that underlie a performance result so that consumers can understand the rating; and complemented with tailored information on the benefits of energy efficiency delivered at point of sale or rent.

Phase 2: Implement

The Queensland Government should also take a collaborative approach in implementing the new minimum standards. The key issue will be to strike the right balance between the urgency of improving energy efficiency of rental properties for tenants and the compliance costs for property owners. QCOSS suggests that the Queensland Government should follow the ACT's and Victoria's lead and implement an energy rating scheme to improve the energy efficiency for rental homes in a way that allows time for the uptake of energy efficiency measures.

Certain aspects of the new regime could be given shorter timeframes to comply with such as the disclosure requirements, the LED fittings and ceiling insulation. While a rating scheme might be developed initially for voluntary uptake and disclosure, for renters to gain real benefit application of the rating tool and to disclose to renters would need to become mandatory over-time.

[11] References: Adams H, Clark M, and Potts J (2016) Enhancing the Market for Energy Efficient Homes: Implementing a national voluntary disclosure system for the energy performance of existing homes. http://www.lowcarbonlivingcrc.com.au/sites/all/files/publications_file_attachments/rp3016_enhancing_the_market_for_energy_efficient_homes_final_report.pdf
ACT Environment and Sustainable Development Directorate (ESDD) (2014) Reporting the energy efficiency of residential tenancies in the ACT. http://www.environment.act.gov.au/__data/assets/pdf_file/0005/701186/Attachment-A-Energy-Efficiency-Information-for-Tenants-Final-Consultation-Report.pdf
Georgia Warren-Myers, Evidence of consumer response to energy efficiency rating disclosure. Presentation at ECA Housing Summit, https://energyconsumersaustralia.com.au/wp-content/uploads/HS-S4-Georgia-Warren-Myers-Uni-of-Melbourne.pdf

Phase 3: Enforce

QCOSS suggests that the new minimum standards for rental homes should be fully implemented within four years and that compliance and enforcement action should commence from this time. We suggest that an independent regulator be established to help and educate, support people to comply, resolve disputes and enforce compliance where necessary.

The *One Million Homes Alliance* in Victoria has been advocating for a similar, phased minimum energy efficiency rating for rental properties for some time, and estimates it would cost most property owners less than $5500 to bring properties up to the required standard (Sustainability Victoria 2017). Based on these same figures and excluding heating upgrades (which is less relevant for much of Queensland) and water efficiency, improvements relating to insulation, draught sealing, and hot water would cost less than $4000. The *One Million Homes Alliance* also suggested audits and advice costs about $400. This would of course be spread out over the years that the rating would be current.

Review of the disclosure regime in the ACT found that one major weakness of the scheme was that not all properties had had assessments and an energy rating. As a result, disclosure is less useful to a renter when they only have it for some of the properties they are comparing. A more recent review found that under voluntary regimes, low efficiency properties remain un-disclosed, may then attract cheaper rent, but this poorer quality housing is therefore often left to low income households, and more expensive to run undermining the intent of these reforms.

The introduction of minimum standards must be supported by advice and information for both tenants and property owners, prescriptive standards for insulation type based on roof variables and R-values based on location and climate zone. Consideration of financial support for lessors, enforcement and compliance, and protections for tenants against rent price increases should also occur. In New Zealand for example, if tenants have concerns regarding their insulation that they cannot resolve with the lessor, they can go to the Tenancy Tribunal that has the authority to issue work orders and penalties of up to $4000 for non-compliance (Tenants Services 2018). New Zealand also provides grants for lessors with low-income tenants in private rental properties to improve their rental insulation. These measures have been in place as part of a broader program to encourage insulation in homes since 2009 (the Warm Up New Zealand Heat Smart Program). Fifty per-cent of the insulation cost is subsidised by local councils, and the remainder by the lessor. To be eligible, tenants must have a Community Services Card or have health conditions related to cold, damp housing. Either the lessor or tenant can apply (EECA 2016). A recent evaluation of the Warm Up program concluded that the program has a cost ratio of 3.9:1. (Healthy Housing 2018).

Enabling Policy

Community Education and Awareness

There are few energy efficiency resources directed specifically at renters. Those that do exist provide advice only on simple and low-cost measures, with renters often not having the power to do what the advice suggests. Renters need a quick visual reference tool, such as the colour coded bars used in the UK scheme (see example 1 above), as well as more in depth information regarding what features to look for when renting a home and how these features may impact on energy costs. This should be given prior to tenants signing a lease, such as at the point of advertising.

Renters also need information clarifying their rights to make modifications to a home to make it more energy efficient. Rising tenant awareness, and increased disclosure requirements for rental properties, is likely to drive increased demand for more energy efficient properties to rent. Renters can also face barriers to understanding their rights, accessing safeguards, and seeking redress in relation to energy disputes.

The Queensland Government should develop locally relevant resources for both renters and lessors, including foreign languages and interpreter services. These could be modelled on resources such as the ATA's *Renters Guide to Sustainable Living (ATA 2009)* which provides advice for renters to negotiate to make specific changes to improve energy efficiency, *The Victorian Green Renters' Guide* (EV 2012), which tells renters what to look for in a rental property and provides a checklist that allows comparison of energy efficiency features of up to three properties on one page, or the ACTs Rent Smart guide[12] and the ACT Actsmart Energy saving guide[13].

In the review of the ACT disclosure scheme, Pitt and Sherry (2013) suggested it would be useful to develop, or make available, existing checklists and tools that can be used by tenants to make their own assessment of the energy efficiency (and consumption characteristics) of rental properties and to engage with real estate agents and peak bodies to promote the use of the self-assessment tool among property seekers and lessors (ESDD 2014). The Energy Fit project also recommended a future rating scheme should enable consumers to conduct their own "self-assessments" (Adams et al. 2016).

Example 3: Warrant of Fitness (WOF) self-assessment tool, NZ.

In Wellington, New Zealand a voluntary "Warrant of Fitness (WOF)" self-assessment tool (using a free app) has been made available to lessors since late 2017. The WOF is an evidence-based housing quality checklist with 29 criteria, covering aspects such as ventilation, heating, safety and hygiene. An early trial of the WOF on 144 rental properties concluded that national implementation of the tool would be effective in improving health and safety for renters and identifying problems with dwellings that could be remedied at relatively low cost. Of the rental properties assessed in the study, 94% failed the WOF on one or more criteria. However, the average cost of upgrades to dwellings to then meet the standards was estimated at only $2474, while 35% of the dwellings tested would cost less than $1000 to remedy. Another interesting outcome of the study was that when surveyed following the assessment, only 12% of the property owners interviewed said they would consider increasing rents if mandatory minimum standards were introduced.

Involvement of property managers

Gabriel and Watson (2012) identified potential for property managers to play a greater role in supporting energy efficiency property upgrades. The study reported opportunity for property managers to disseminate information about energy efficiency and raise awareness about the energy and water performance of properties (Gabriel and Watson 2012). However, the survey of real estate agents and property managers for the ***Energy Fit*** project found many of those surveyed were reluctant to give information about energy efficiency for a range of reasons including limited demand from clients (which would increase under mandatory disclosure and a household energy rating scheme), but also the existence of conflicting information that was confusing. ***Energy Fit*** recommends specialist training, such as that provided by the CSIRO's Livability project[14], and information resources with tailored, consistent messaging. The Livability project covers 17 livability features[15] and would need to be updated to provide effective training for real estate agents on the Queensland energy efficiency minimum

[12] https://www.liveability.com.au/wp-content/uploads/2012/09/Renters-Guide_Final3.pdf
[13] https://www.actsmart.act.gov.au/__data/assets/pdf_file/0012/697287/Actsmart-Household-Energy-Savings-Guide-June-2018-updates-FINAL.pdf
[14] https://liveability.com.au/about/
[15] https://liveability.com.au/

standards. To assist property managers, the UK provides detailed guidance[16] of what is expected, funding options, implementation, exemptions and enforcement.

Permission for Energy Efficiency modifications

In the short term the RTRAA should be amended so that lessors cannot unreasonably refuse tenants permission to make modifications to improve the energy efficiency of a property if there is no cost to the lessor. Similar measures have been introduced in the UK where tenants may change shower heads (for example to low flow devices), install external or internal shading over windows, and sealing drafts. The legislation also provides that lessors cannot unreasonably deny a tenant the right to make an energy-efficient change to a property, if it was at no cost to the lessor (noting tenants in the UK may be more likely to make changes to a property as they are generally on longer term tenancies).

Wrigley and Crawford's interviews and surveys with lessors, renters and agents found contrasting views between the parties about the ease with which tenants can currently make modifications. While agents and landlords said renters could make any changes they wanted with permission, renters said landlords had discouraged them from making improvements. They found 82% of renters that made improvements did so without permission from the landlord.

General tenancy improvements

Minimum standards for rental properties, whether involving energy efficiency or other measures, must be accompanied by improvements in tenancy protections. This would include finding ways to improve security of tenure, protect tenants from unfair rent increases, and providing independent inspectors and mechanisms to ensure compliance by lessors and an ability to enforce rights by tenants.

References

Adams H, Clark M, and Potts J (2016) Enhancing the Market for Energy Efficient Homes: Implementing a national voluntary disclosure system for the energy performance of existing homes. http://www.lowcarbonlivingcrc.com.au/sites/all/files/publications_file_attachments/rp3016_enhancing_the_market_for_energy_efficient_homes_final_report.pdf

Alternative Technology Association (ATA), 2009, https://shop.ata.org.au/shop/renters-guide-to-sustainable-living

Australian Bureau of Statistics (ABS) 2013, 4670 – Household Energy Consumption Survey, Australia: Summary of Results, 2012, http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4670.0Main+Features12012?OpenDocument

Australian Bureau of Statistics 2014. 4601.0.55.001 – Environmental Issues: Energy Use and Conservation. http://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/4602.0.55.001?OpenDocument

Australian Bureau of Statistics (ABS), 2015, Housing Occupancy and Costs, 2013-14. Retrieved from http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4130.02013-14?OpenDocument

Australian Building Codes Board (ABCB) 2016, National Construction Code, History of Adoption. http://www.abcb.gov.au/User/Login?returnUrl=/ncc-online/NCC/2016/NCC-2016-Volume-One/History-Of-Adoption/History-Of-Adoption

Australian Bureau of Statistics (ABS), 2016, Census Quick Stats, http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/3?opendocument

[16] https://www.gov.uk/government/publications/the-private-rented-property-minimum-standard-landlord-guidance-documents

Australian Council of Social Service (ACOSS) 2018, Energy stressed in Australia: a joint report with Brotherhood of St Laurence, https://www.acoss.org.au/wp-content/uploads/2018/10/Energy-Stressed-in-Australia.pdf

Azpitarte, F., Johnson, V., & Sullivan, D. (2015). Fuel poverty, household income and energy spending: An empirical analysis for Australia using HILDA data. Fitzroy: Brotherhood of St Laurence, https://www.cuac.org.au/research/external-research/430-fuel-poverty-household-income-energy-spending-an-empirical-analysis-for-australia-using-hilda-data/file

Budden C. and Weldon C. (2016) Energy Efficiency Information for Tenants Pilot Final Report. https://www.environment.act.gov.au/__data/assets/pdf_file/0004/1099264/Energy-Efficiency-Information-for-Tenants-Pilot-Report-2016-web.pdf

CoreLogic (2016) Profile of the Australian Residential Property Investor. https://www.corelogic.com.au/resources/pdf/reports/CoreLogic%20Investor%20Report_June%202016.pdf

Department of Housing and Public Works (DHPW) 2014, Annual Report 2013 - 2014. Brisbane: Queensland Government. http://www.hpw.qld.gov.au/SiteCollectionDocuments/HPWAnnualReport2013-2014.pdf. Energy Efficiency and Conservation Authority (EECA), 2016, Energywise, https://www.energywise.govt.nz/at-home/buying-and-renting/landlords

Environment and Sustainable Development Directorate (ESDD), 2014, Reporting the energy efficiency of residential tenancies in the ACT, http://www.environment.act.gov.au/__data/assets/pdf_file/0005/701186/Attachment-A-Energy-Efficiency-Information-for-Tenants-Final-Consultation-Report.pdf

Environment Victoria, (2012) Third edition, http://environmentvictoria.org.au/wp-content/uploads/2010/06/renters-guide.pdf

Gabriel, M., Watson, P. (2012), 'Supporting Sustainable Home Improvement in the Private Rental Sector: The View of Investors', Urban Policy and Research 30, 309-325.

Hansard Record of Proceedings, 24th October 2017, http://www.parliament.qld.gov.au/documents/hansard/2017/2017_10_24_WEEKLY.pdf

Healthy Housing website, 2018. http://www.healthyhousing.org.nz/research/past-research/evaluation-of-warm-up-new-zealand-heat-smart

Maller, C. J. and Y. Strengers. (2011) "Housing, Heat Stress and Health in a Changing Climate: Promoting the Adaptive Capacity of Vulnerable Households, A Suggested Way Forward". Health Promotion International 26.4: 492-498.

Andrea Kutinova Menclova, AK and Webb RS, (2014) The Effects Of Home Heating On Asthma: Evidence From New Zealand, https://ir.canterbury.ac.nz/bitstream/handle/10092/12440/12654190_HomeHeating_Asthma-Menclova%26Webb-Nov2014-WEAI.pdf?sequence=1

Nationwide House Energy Rating Scheme (NatHERS) website, (2016). http://www.nathers.gov.au/owners-and-builders/star-rating-scale-overview

Exploring issues and options for an energy efficiency disclosure program for residential tenancies in the ACT: Consultation Paper. https://www.environment.act.gov.au/__data/assets/pdf_file/0005/708485/ACT-Tenant-Info-Consultation-Paper-2-Sept-2013-FINAL.PDF

PRD Nationwide. Your Green Guide: Residential Real Estate 2018. https://www.prd.com.au/research-hub/your-green-guide-residential-real-estate-2018

Residential Tenancy and Rooming Accommodation Act (RTRAA) 2008, https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2008-073

Residential Tenancy Authority (RTA), 2018 Annual Report 2017-18, https://www.rta.qld.gov.au/About-the-RTA/Corporate-information/Annual-report/Annual-report-2017-18

QCOSS, 2016, Choice and Control? The experiences of renters in the energy market, https://www.qcoss.org.au/choice-and-control-experiences-renters-energy-market

QCOSS Position Statement on Renting, 2018a

QCOSS Position Statement on Housing, 2018b, https://www.qcoss.org.au/sites/default/files/QCOSS%20Position%20Statement%20on%20Housing%20%28August%202018%29.pdf

QCOSS' Housing Policy Review, 2018c, https://www.qcoss.org.au/sites/default/files/QCOSS%20Housing%20Policy%20Review.pdf

Queensland Productivity Commission (QPC) Final Report, Electricity Pricing Inquiry, 2016, https://www.qpc.qld.gov.au/inquiries/electricity-pricing

Sustainability Victoria (2014) Household Energy Report, Tables 3 and 4, cited in Environment Victoria (2017) Bringing Rental Homes Up to Scratch. http://environmentvictoria.org.au/wp-content/uploads/2017/09/Bringing-rental-homes-up-to-scratch-Sept-2017-online.pdf

Tenancy Services website (2018). Insulation. https://www.tenancy.govt.nz/maintenance-and-inspections/insulation/

Wrigley, K. and Crawford, W.H. 2015, Bridging the gap: energy efficiency improvements for rental properties, http://anzasca.net/wp-content/uploads/2015/12/031_Wrigley_Crawford_ASA2015.pdf

Appendix A – Potential Energy Efficiency Measures

Ceiling Insulation

Insulation is widely accepted as one of the key factors in thermal performance of buildings. It is estimated that 25-35 per cent of heat loss and gain in a house is through the ceiling[17], while a well-insulated roof offers a potential reduction in heating and cooling costs of up to 50 per cent[18]. Minimum R values (the measure of thermal resistance or how much a material inhibits temperature transfer) for ceilings and walls are required under the National Construction Code[19], which is currently being upgraded[20]. The requirements vary across climate zones. Homes built prior to these building standards which have not had insulation retrofitted will be significantly less efficient.

For the purposes of this project we have only considered the option of requiring ceiling insulation as a minimum standard. Wall insulation can be expensive and difficult to install as a retrofit measure, while under floor insulation has variable benefits across housing types. By contrast there are a range of solutions for retrofitting ceiling insulation across housing styles.

The cost of insulation will depend on the roof design and type of insulation required, the R-value chosen, and the size of the roof area. For 120m^2 of roof space the cost is estimated to range from $1200 to $3000. This is therefore a relatively high cost measure for lessors. In an owner-occupier home the investment might be paid back in reduced heating and cooling costs as little as 4 years, making a compelling case for the investment. The financial benefits will not be as high as many rental properties lack air-conditioning and heating however the benefit of more comfortable temperatures in terms of improved amenity cannot be underestimated. Where a home has cooling or heating, the financial benefit from insulation will also vary depending on whether households use these appliances less often or for shorter periods because of the improvement in the internal temperature.

There are several benefits of considering ceiling insulation as a minimum standard. The measure and the associated benefits would be generally applicable across all geographic zones and there is ample existing guidance to assist policy makers to specify minimum and appropriate R-values for different locations. Information about the most appropriate insulation type (i.e. foil, batts etc.) for particular roof types is readily available from both independent sources and installers.

Although the idea of a mandatory insulation in rental properties may give some rise to concern about safety given the experience of the Commonwealth insulation subsidy, there are surely lessons from that experience that can inform risk management. For example, giving lessors adequate time to meet the standard could avoid creating additional demand too quickly. Lessons on implementation can be drawn from the experience in New Zealand, which has recently passed changes to their Residential Tenancies Act to require ceiling and underfloor insulation to specified level to be installed by July 2016 for social housing and by July 2019 for all other rental properties. Additionally, in NZ the lessor/property owner must now provide a statement of the extent of insulation in a rental property on commencement of a new tenancy agreement.[21]

---

[17] Australian Government, "Insulation". Your Home Website http://www.yourhome.gov.au/passive-design/insulation

[18] ibid.

[19] Australian Building Code Board. National Construction Code. (2016) http://www.abcb.gov.au/ncc-online/NCC/2016-A1/NCC-2016-Volume-Two/Part-312-Energy-Efficiency/Part-3121-Building-Fabric

[20] The new code will be adopted by States and Territories in May 2019. https://www.abcb.gov.au/Resources/Publications/Education-Training/The-Key-Dates-for-NCC-2019

[21] EECA Energy Wise Website. (2018) https://www.energywise.govt.nz/at-home/buying-and-renting/landlords/

Window Treatments

A range of window treatment options were examined for their suitability as a minimum standard. These included:

- low E glass and double glazing
- external window shading
- internal window coverings

Up to 40 per cent of a home's heating energy can be lost and up to 87 per cent of its heat gained through windows.22 Reducing this loss or gain is therefore an extremely effective strategy for households to create a more comfortable living space and to reduce heating and cooling costs. Advanced glazing solutions can exclude up to 60 per cent of heat compared to plain single glazing.23 Double glazing (DG) can make buildings warmer in winter (retaining heating) and cooler in summer (retaining cool air or air-conditioning). Low-E (low emission) glass prevents radiant energy travelling through a windowpane. It is best where direct sunlight shines on windows (emissivity rating of 0.02 compared to typical glass 0.84). However, these glazing solutions cost around three times that of normal glazing and are not mandatory in new builds.24 For these reasons alone Low E glass and double-glazing options would not be considered suitable as a minimum standard for rental properties. In addition, the assessment revealed problems in successfully applying it across all geographies and implementation problems. In particular, double-glazing is less appropriate in coastal regions where airflow provides cooling, and low E glass may not be justified where there are few west-facing windows receiving hot afternoon sun.

An alternative option to expensive glazing is to stop the sun hitting the glass in the first place with appropriate external shading. There are several options for keeping the sun at bay – from simple shade cloth to awnings, shutters, and pergolas. Similarly, the cost of these measures varies from very expensive to relatively cheap. Planting evergreen or deciduous trees can also be effective, though trees can take a long time to be sufficiently established.

Effective external shading can block 90 per cent of radiant heat through windows[25]. However, depending on the orientation of the home and the climate, this might not be desirable when warmth is required. For this reason, it is important to understand the orientation issues and to choose fixed or adjustable solutions accordingly. External shading can also have additional benefits for tenants such as privacy and protection from wind and rain. However, external shading can reduce light if not designed well.

It would be difficult to construct an easy to understand one size fits all standard around external shading and to define when and where it is required. Different solutions (styles, angles etc.) are needed for different sides of the house, the overall home orientation, seasons and locations as the angel of the sun hitting the windows is different in each case. Some window orientations will not benefit from shading, or existing eaves will be sufficient, while in other cases the angle of the sun will mean eaves are not sufficient and vertical adjustable solutions are required. In some cases, shading from trees and other buildings will already be sufficient. It is likely that a lessor would need advice on options tailored to the individual features of their property adding to the already potentially high costs of the measure. For these reasons we did not consider external window shading to be an effective measure capable of being prescribed as a minimum standard.

---

22 Australian Government, Your Energy Savings Website. http://yourenergysavings.gov.au/energy/heating-cooling/windows-doors-skylights

23 Renew website. http://renew.org.au/articles/keep-your-cool-external-shading-buyers-guide/

24 Home Improvement Website, https://www.homeimprovementpages.com.au Cost estimate: float glass $38/m2 compared to $200/m2 for DG and $220 for low-E glass.
U-values measure the heat transfer of windows/frames. This depends on the window but also the frame. Although double glazed windows can have very low (better) U-values, there is a wide range of performance.

25 Australian Government, Your Home website. http://www.yourhome.gov.au/passive-design/shading

Internal shading of windows through curtains and blinds can also be effective in preventing heat gain and reducing heat loss; however, they are generally more effective in preventing heat loss in winter than they are to keep radiant heat out. This measure would be less effective for Queensland than in colder states. The effectiveness of this measure is also extremely variable depending on type of window shading purchased and how they are installed and can even have an adverse impact if using dark curtain materials that trap the heat. Generally, coverings need to sit within window frames or be sealed at the top (for example by a pelmet) and fall to the floor to be effective. The more effective the product (i.e. made to measure, heat absorbing or block-out materials) the more expensive they will be. Nonetheless, there are other reasons that support window coverings as a minimum standard. Tenants would not have to buy window coverings and improved privacy having windows covered. Light control is another benefit. However, as with external shading, the wide range of options and varying effectiveness make it difficult to specify as a minimum standard. For this reason, internal shading has not been recommended as a minimum standard to achieve energy efficiency.

Draught proofing

Blocking draughts is one of the easiest and cheapest ways to keep heat in during winter and out during summer. The measure would involve sealing any gaps and cracks around the home. The most common places to seal include around doors and windows, but also sealing around ventilation ducts, exhaust fans and chimneys (rare in most of Queensland), and in some cases floor boards in older Queenslander houses. Door seals are generally stuck or screwed onto the bottom of doors (both external and internal). They are preferable to door snakes as they do not create a trip hazard. Weather seals can be stuck to door or window frames to fill in the cracks or gaps. Both are easily obtainable from hardware stores.

In Victoria, 'Positive Charge', a social enterprise set up by Social Traders and Moreland Energy Foundation, offers a service to assess and quote on, and then (if required) to deliver draught proofing services for residential homes. The assessment and quote services for a house range between $165 and $225[26]. The cost of draught proofing materials is generally low, although the final cost would depend on the extent of the gap sealing and whether a professional installer is required. Most basic draught sealing could also be done by either the lessor or the tenant. The benefits of draught proofing include both lower heating and cooling bills by 20-25 per cent[27], making the case for draught proofing compelling.

If draught proofing were to be implemented as a minimum standard one challenge would be to be to decide the extent to which the measure should be implemented. For full implementation it is necessary to have home assessment and for appropriate recommended actions to be implemented. A more basic standard might require external doors and window frames to be sealed and/or the bottom of external doors, floors and doors that close off heated or cooled spaces.

Security Screens on windows and external doors (for ventilation)

While the installation of security screens on windows and external doors is not usually thought of as an energy efficiency measure, installation would increase ventilation in a home. To the extent that this reduces reliance on air conditioning in the property this will save money on electricity bills. Where rental properties do not have air conditioning, the main benefit is cooling and increased airflow. Security screens would at the same time improve the security of a rental property. Heat related illness and even death can be due to homes being locked up when ventilation is required. It is understood some older people and others at risk of domestic violence may be afraid to open doors and windows for safety reasons. A further amenity benefit might be control of insects and other pests.

[26] Positive Charge Website. https://www.positivecharge.com.au/household/draught-proofing/
[27] Ibid

The measure could be relatively low cost depending on the extent of the requirement. Bunnings offer a range of security doors ranging in price from $139-720. An average cost might be $350 plus installation. Requiring one or two external security doors could therefore be affordable, while a requirement for screens on lower floor windows might become very expensive, especially if custom size screens were not available.

LED lights

LEDs have significant advantages over incandescent or fluorescent lights. They are more efficient, last much longer, and come on more quickly than fluorescent lights. LED lights do not contain the mercury that is found in compact fluorescent lights.

Historically LED lights have been more expensive than alternatives but are quickly becoming cheaper and more available than fluorescent or incandescent lights. Incandescent lights are now classed as specialty items. A comparison of the three types of lights shows that for a house with 20 lights, LED lights could save residents significantly compared to incandescent or fluorescent lights.

	Incandescent	Fluorescent	LED
Approximate cost (source: Bunnings)	$4	$5.50	$4*
Wattage for equivalent lighting	60W	14W	8W
Bulbs for 25,000 hours of use – about 12 years of use at 6 hours/night	21	3	1
Total purchase cost	84	16.50	4
Electricity cost at 25 c/kWh	375	87.50	50
Total cost to operate per light	459	104	54
Expected additional costs over 25,000 hours of use in a house with 20 lights (compared to LED)	$7,850	750	--
Expected annual additional running costs per light at 6 hours/night use (compared to LED)	$28.50	$3.30	--

*this price is achievable when purchasing LED light bulbs in bulk packs. Individual bulbs may be more expensive.

Potentially offsetting the above savings, there may be upfront costs in changing some light fittings to accommodate LED lights in place of existing fluorescent or incandescent lights (other fittings may accommodate screw-in or bayonet fitting LED lights). Changes to light fittings would likely require the services of an electrician, in particular fluorescent light fittings.

While replacing lights is typically the responsibility of the tenant, tenants would not be able to fit LED light bulbs where fittings need to be changed or where it is difficult to gain access to light fittings (for example, raised ceilings). Therefore, a proposed minimum standard could be that landlords must ensure all light fittings can accommodate generally available LED lights.

Solar Panels

Installing Solar PV panels on suitable roof space is a clear and proven way to save energy costs. The typical payback period could be around 6 years on an estimated installation cost of $6,000 for a 5-kW system, based on reasonable assumptions. In 2015-16, around 25% of Queensland households (or 17% of Australian households) had solar panels, compared to only around three per cent of Australian rental households[28]. The figure may be slightly higher for renters in Queensland with the latest Queensland Household Energy Survey indicating 3.9 per cent of SEQ rental households and 3.1 per cent of regional rental households, had a solar PV system[29]. While requiring solar panels on rental properties was considered in the long list, the upfront cost of installing solar are high and therefore the extent of the split incentive (where landlords would foot the bill, while the tenants get the benefit, leaving the landlords without an incentive) is also high. In addition, some roofs are not suitable for solar panels as solar panels require north-facing, unshaded, and reasonably accessible roof space. These considerations mean solar panel installation has not been recommended as a suitable measure.

More efficient appliances

Requiring more efficient fixed appliances including hot water systems and stoves was considered in the analysis. While there is little difference in the energy consumption of various cook top and stove options, the key benefit that could be achieved for renters would be where changing from a gas cooktop to an electric option allowed for disconnection from reticulated gas. This would generally only be an option if gas were used only for cooking in the property. Removing the high service charge applicable to reticulated gas would be the main source of the saving. While this measure was not considered appropriate as a minimum standard as it would only benefit a small number of renters, there is a case for other measures to increase awareness of the high cost of gas particularly where there is only one gas appliance in the home, and to promote alternative electric options which are now more efficient than in the past[30], and allow GHG reduction through renewable energy (if sourced through solar or Green Power).

Hot water was of particular interest as it typically contributes the most to household energy bills. Replacing electric storage hot water with gas or electric instantaneous systems hot water would stack up financially for an owner-occupier particularly where an existing unit was at or near replacement. However, in a rental property a lessor would be inclined to install the cheaper electric storage option. The high cost would make it unreasonable to requirement replacement of a system until the existing system failed, and so the benefits of this measure would be delayed for many renters. There are also a range of issues in determining what an appropriate replacement option might be as the best choice depends on the location, position, and fuel sources available. For example, while electric instantaneous hot water uses less energy and would save money, most systems require 3-phase power that is not generally available in regional areas. A further implementation issue may be that consideration of a replacement is often not made until the current system breaks down and then the replacement decision is made in a hurry.

[28] ABS (2015). Case Study: Slow Growth in Solar in Australian Homes. http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/6523.0~2015-16~Main%20Features~Case%20Study%20-%20Slow%20Growth%20in%20Solar%20Power%20in%20Australian%20Homes~14

[29] Energy Queensland (2017). Queensland Household Energy Survey (QHES) Insights Report. https://www.energex.com.au/__data/assets/pdf_file/0003/362685/QHES-2017-Full-Report.pdf

[30] Alternative Technology Association (2014) Are we still cooking with Gas?, ATA Melbourne

Conclusions from the assessment

Installation of solar panels and efficient hot water systems would bring the most benefit, but the high upfront cost of these items and the fact they are not mandatory in new buildings under current building codes mean they may be unreasonable measures to include in a minimum standard. The same can be said for other high cost items such as double glazing or low E glass and external awnings, although it is noted that an overall thermal rating for walls must be achieved in new builds from a combination of solutions[31].

A minimum standard that required light fittings to be suitable for LED lights was perhaps the most straightforward and low-cost option, with small but nonetheless clear financial benefits for renters.

Internal window covers and security screens for ventilation could assist with lowering cooling costs and improved temperature regulation; however, there were too many variables to conclude that this measure was generally appropriate across all housing types and locations. Nonetheless, a requirement for curtains or blinds and/or security screens would provide other important amenity for tenants including privacy, light control, safety and security. These standards are likely to be suggested by renters and renter advocates in the context of minimum standards for reasons other than energy efficiency.

Ceiling insulation, though relatively costly, has a short payback time due to the significant savings that can be made in heating and cooling costs. Noting that many rental properties do not have heating and cooling appliances, there is also significantly improved amenity through insulating properties. Ceiling insulation is mandatory for new properties, and has been for some time, and is usually easy to retrofit. The existence of R-value and other specifications for different housing styles and climate conditions makes it relatively easy to accommodate variability if it were specified as a minimum standard.

By contrast, other solutions to improve the thermal efficiency of properties, such as the various window treatments and draught proofing, would not be easy to specify as a minimum standard. The reason for this is that the various options available would need to be tailored to each rental property to realise the full benefits. A lessor would need advice on the best approach considering a range of factors including the housing style, location, orientation etc.

Ideally a combination of measures, tailored to individual dwellings, is the best way to achieve an overall standard of thermal efficiency as is required by contemporary building standards. To avoid a ‘one size fits all’ approach, an agreed energy efficiency rating system for pre-building code stock would be required, with standards for rental properties set around this rating system.

Such a solution could not be adopted in full immediately but would need to be developed and phased in over time. It would require the adoption of a particular rating tool or system for measuring the energy efficiency of a property, and the development of an assessment process and a workforce of assessors to rate and advise property owners on options to improve the ratings. It would also require consideration of and the development of standards around how information should be presented to prospective tenants at the point of advertising a lease, entry condition report and lease agreements. A minimum standard regulation would then specify the rating required before a property could be considered fit to rent.

This approach would ensure the end results of retrofit activities to improve energy efficiency deliver benefits for renters, while providing lessors with assistance identifying a range of suitable options and allowing them flexibility in deciding on their priority investment, and to ensure that those measure are appropriate on a case-by-case basis. Further arguments and details about how such an approach could be implemented in the Queensland context is provided later in this report.

[31] Australian Building Codes Board. National Construction Code (NCC). Op Cit.

Appendix B - Focus Groups

Focus groups with renters and landlords or agents were also held for the purposes of this project. There are some significant and consistent insights from both these consultation activities.

Renters

Renters may be less aware of energy efficiency features and products and less likely to attempt to take energy efficiency action than owner households. Despite this, many renters have an interest in energy efficiency, and do act to be more energy efficient when they have the power to do so. Most tenant respondents to the renters' survey for QCOSS's Choice and Control report, took some action to improve the energy efficiency or energy costs. More than half of these related to behavioural changes ranging from taking shorter showers and turning off appliances not in use, to not using some appliances at all, such as stoves or heaters.

Respondents frequently reported changing to energy efficient lighting and/or behavioural changes around using lights. In several cases people reported removing some lights altogether. Just over a third of respondents reported buying items including appliances and other fixtures to improve the energy efficiency of their home. Some people reported buying items for their properties that one could reasonably expect to find in a rental property, such as curtains and blinds. Some people reported installing insulation and ceiling fans. Several people also reported installing shade cloths and other measures such as installing fly screens at their own expense to take advantage of natural airflow.

The focus groups were supportive of minimum standards in some form, with several key themes emerging:

- The basic condition and functionality of tenants' property including security may be more important at this stage than focussing on energy efficiency
- Tenants were concerned about how to enforce any minimum standards relating to energy efficiency
- They were concerned about increased rents and being unable to utilise improved energy efficiency information because of lack of available affordable housing.

While most of our focus group participants believed energy efficiency is important, they had higher priorities relating to dwelling condition, such as being happy if windows could be closed properly. Another showed pictures of a roof 'repaired' with a tarp as the lessor had not responded to requests to fix their leaking ceiling. Another reported not having cold water due to exposed pipes heating their regular water supply during the summer months. In the current context of the existing weak regulatory framework of protections for renters, the age and poor quality of many rental properties and the difficulty that many renters report in securing repairs and maintenance, it is possible that other aspects of dwelling amenity will be seen as a higher priority over energy efficiency in the first instance.

Given difficulties in even securing repairs and maintenance, focus groups were concerned whether lessors would comply with mandatory energy efficiency standards, and what tenants would be able to do about it if lessors didn't. Renters suggested an independent third-party inspection scheme is needed, and that secure rental leases would result in greater uptake of energy efficiency improvements. Tenants would have both more confidence of enforcement and be more prepared to invest in low cost energy efficiency measures themselves. There was also some concern the costs of energy efficiency standards will be passed onto tenants in the form of increased rent, thereby negating the benefits of greater energy efficiency.

At least two of the focus group participants were very familiar with energy efficiency. While some had sought to change all their lighting to LED bulbs, they had some incompatible fittings. Even though they asked their lessor to share the costs of modifying the fittings (the tenant was willing to pay 50 per cent of the cost which was approximately $50 per fitting), the lessor would not do so. The tenant has removed the light bulbs and does not use those lights.

The focus group agreed that more information about the energy efficiency features of the property would be useful. However, the majority of participants did not believe it would make a difference to them as they had little choice of affordable properties for lower income tenants. Disclosure regarding the types of fixed appliances and the energy efficiency rating, as well as an overall property rating expressed as a simple number out of 10 or a number of stars, were both considered helpful. Disclosure at the point of advertisement was seen as the most effective time to reveal the energy efficiency rating of a dwelling.

Lessors and Property Managers

We interviewed key stakeholders representing the views of rental property investors/lessors or property managers/agents[32] to understand the level of support or opposition to minimum energy efficiency standards and any specific barriers or implementation issues that might arise so we could adjust our proposals accordingly. We have not sought to directly reflect the points made by stakeholders in those discussions but rely on the public comments made by the same parities in submissions following consultation on the Housing Amendment Bill.

In their submissions the Real Estate Institute of Queensland (REIQ) and the Property Owners Association (POA) did not support the implementation of minimum standards[33]. The Property Council of Australia (PCA) advised they were not opposed to the introduction of a minimum housing standard but believed it imperative that any prescription does not conflict or override other legislation such as the Building Act 1975, the Planning Act 2016, and local government planning schemes. They recommend consultation on any minimum standard prior to a regulation being made[34]. Lessor/agent representatives made a number of key points that we might expect to see in further consultation on minimum standards.

The first is that minimum standards would be an unfair cost imposition on property investors who should not be required retrospectively meet standards not in place at the time of their purchase (or build)[35]. The Property Owners Association (POA) argued minimum standards represented an “upgrade” of properties, which is unreasonable given that tenants select properties based on price and that all properties are built to local government and other building standard.[36] The REIQ supported independent inspections of properties, but against current standards and having regard to the age of the property[37].

---

[32] The property Owners Association preferred to provide us with some written comments rather than be interviewed.

[33] Property Owners Association of Queensland (POA). (2017) Submission on the Housing Amendment (Building Better Futures) Bill. https://www.parliament.qld.gov.au/documents/committees/TUC/2017/I48HsngBetterFutures/submissions/038.pdf

[34] Property Council of Australia (2017) Submission on the Housing Amendment (Building Better Futures) Bill. https://www.propertycouncil.com.au/Web/Content/News/QLD/2017/Industry_responds_to_Government_s_housing

[35] REIQ, Response to the Housing Amendment Bill (2017). https://www.parliament.qld.gov.au/documents/committees/TUC/2017/I48HsngBetterFutures/submissions/072.pdf and Property Owners Association of Queensland. Submission on the Housing Amendment (Building Better Futures) Bill. https://www.parliament.qld.gov.au/documents/committees/TUC/2017/I48HsngBetterFutures/submissions/038.pdf

[36] POA (2017) Op Cit.

[37] REIQ (2017) Op Cit.

A second argument by the POA was that the imposition of minimum standards would reduce the amount of affordable properties in the market as investors instead sold properties or left the rental market. The REIQ, for example, expressed concern about measures that may "erode landlord rights and undermine investment in the Queensland residential property market".[38]

The alternative and related argument is that lessors will be forced to pass on compliance costs through increase rents. The REIQ expressed concern about a 'one size fits all' standard that will leave vulnerable members of the community exposed to increased rents, and a decrease in the supply of affordable housing. Given the concern about rent increases is likely to be raised by all stakeholders, it will be important to address these concerns in any advocacy submissions on minimum standards.

Other arguments by the POA against minimum standards were that property managers would not have the skills to ensure compliance or that energy costs were more a function of the behaviour of tenants than the property they live in.[39]

The current opposition from these parties may be more pronounced because there are not yet any specific proposals to respond to. We note that when discussing possible options with the parties they were concerned measures that do not make sense for particular housing types or dwellings or were in contradiction with other regulatory standards. Timing and costs were also a key concern. They also did not necessarily oppose a rating system for properties.

Lessors and agents may be more amenable to minimum standards when the details are clear and presented in the right way. Wrigley and Crawford tested five different solutions to improving the energy efficiency of rental properties including minimum standards through a survey of renters and lessors and structured interviews with agents.[40] They found that mandatory energy minimum standards were one of two measures that enjoyed support by both renters and lessors (90% of renters and 70% of landlords). While 10% of lessors did not support minimum standards and 19% were unsure, the number of landlords who strongly disagreed reduced if minimum standards were combined with other solutions such as tax offsets for energy efficiency improvements[41]. The qualitative survey responses suggest that providing a reasonable lead time (of less than 5 years), phasing in the minimum standard, and putting in place protective mechanisms against unfair rent increases would strengthen support for the measure.

[38] ibid
[39] POA, Op. Cit.
[40] Wrigley and Crawford (2015), Op. Cit. The authors do acknowledge limitations in the survey including a small (but statistically significant) survey size and a potential bias towards respondents interested in reduction of Greenhouse Gas Emissions.
[41] Ibid.