Coversheet: Healthy Home Standards – Final: 7 December 2018

Advising agencies	*Ministry of Housing and Urban Development*
Decision sought	*Heating, insulation, ventilation, moisture ingress and drainage, and draught-stopping standards for residential rental properties*
Proposing Ministers	*Minister of Housing and Urban Development*

Summary: Problem and Proposed Approach

Problem Definition

What problem or opportunity does this proposal seek to address? Why is Government intervention required?

Nearly 600,000 households rent in New Zealand, representing nearly a third of New Zealand homes. Our rental homes are often cold and damp, which in turn can lead to negative health and social outcomes for tenants.

Research from the independent Building Research Association of New Zealand (BRANZ)[1], shows that many of New Zealand's rental homes are consistently in worse condition than owner-occupied houses.

New Zealand rental homes could be of poor quality for a number of reasons:[2]

- landlords might not invest in improvements or ongoing maintenance to the home because there is little incentive to do so, as some types of improvements benefit tenants only, particularly in a tight rental market
- landlords may not be clear or aware of their legal obligations and therefore do not comply
- tenants may not be clear or aware of landlords' obligations so do not raise issues
- tenants' short tenure and a tight rental market may mean tenants are reluctant to raise issues about the home in general, especially if they are on a low income or otherwise in a vulnerable position

Low-income, elderly, children, disabled persons, and Māori and Pacific Peoples are more likely than other groups to live in, or feel the effects of, cold and damp rental homes. As a result, these groups are at greater risk of negative social outcomes.

Proposed Approach

How will Government intervention work to bring about the desired change? How is this the best option?

The Healthy Homes Guarantee Act 2017 (HHG Act) was passed in December 2017 and enables standards to be set to create warmer, drier rental homes. The standards can be set for rental homes to be adequately heated, insulated and ventilated, protected from draughts and moisture ingress and well drained. Many New Zealand rental homes are cold, damp and mouldy because they lack some or all of these features. The standards are one of several Government initiatives addressing cold and damp homes.

Section B: Summary Impacts: Benefits and costs

Who are the main expected beneficiaries and what is the nature of the expected benefit?

People who rent are the primary beneficiaries of this proposal.

There is strong international evidence that effective heating, insulation and ventilation can directly reduce illness, by helping maintain a minimum indoor air temperature; and can indirectly reduce illness by controlling relative humidity, lowering dampness, and inhibiting the growth of mould and fungi.

Renters and owner-occupiers alike may suffer negative health effects from living in substandard properties. However, renters are more likely to live in such properties, and are also less likely to have the financial means to change their circumstances. They lack the authority to make many changes to the property that would improve their experience e.g installing a large fixed heating device.

As the lowest quality houses are concentrated in the rental market, there is a case for focussing on the quality of rental properties. For landlords, improvements may increase the value of a property and its potential attractiveness to renters. Preventing or addressing persistent dampness and mould will also maximise the lifetime of internal wall linings and other building components and chattels, and reduce maintenance costs.

The cost benefit analysis on the healthy homes standards (CBA) identifies the monetised and non-monetised costs and benefits of the proposed standards. Non-monetised benefits include school and work attendance, mental health, subjective well-being and comfort.

Taking steps to improve the healthiness of rental properties by requiring minimum standards for heating, insulation, draught stopping, ventilation, and for moisture ingress and drainage will result in net benefits for New Zealand overall.

Where do the costs fall?

Private landlords

The cost to private landlords will depend both on the current state of their properties and on the exact standards set in regulations.

The CBA estimates that it would cost in the region of $7,500 to $10,000 (excluding GST) to outfit a house to comply with all the standards assuming the house was deficient in all areas covered by the standards to begin with.

Public housing

Housing New Zealand Corporation (HNZC) and Community Housing Providers (CHPs), as providers of rental properties, will face increased costs to comply with the new standards.

HNZC estimates additional costs of $113 million to $144 million for known interventions, over and above existing planned programmes, plus a potential additional sum of $77 million to $99 million for interventions that may or may not be required to meet the proposed heating standard.

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As with other landlords, these agencies will incur operating costs including additional programme and tenancy management costs to implement changed processes.

The CBA identifies both capital and operating costs for all landlords. It also identifies any increase in operating costs for tenants.

These estimates are based on a number of assumptions for the public and private housing stock. In the case of public housing, property records in most cases do not have enough detail to confirm the exact number of affected properties for each standard.

Ensuring compliance
Compliance involves a number of activities including providing guidance on what compliance means, and enforcement of the standards. This involves the means to demonstrate that the standard has been complied with (e.g. through certificates of compliance) and, in some cases, requiring compliance through Tenancy Tribunal dispute processes.

The costs of publishing and enforcing the regulations will fall on the Tenancy Services Group in the Ministry of Business, Innovation and Employment (MBIE). This includes information campaigns, advice and support to landlords and tenants, compliance monitoring, investigation and enforcement, to support the effective implementation of the HHG Act. Funding was obtained in Budget 2018 to support the implementation of the HHG Act, MBIE has been funded an additional $15.1 million for operating (over 2018/19 to 2021/22) and $0.5 million for capital (in 2018/19). The operating costs included funding ($1.7 million) to support the development of a housing quality measure as a Tier 1 statistic.

What are the likely risks and unintended impacts, how significant are they and how will they be minimised or mitigated?

Enabling time for the standards to be met
While securing the supply of materials (insulation, heaters etc.) to undertake improvements required by the standards is unlikely to present issues, the availability of suitably qualified installers will have implications for when compliance may be realistically expected.

This risk has been addressed through when the standards must be complied with, between when they come into effect on 1 July 2019 and at the latest by 30 June 2024. We note that delays in meeting new standards can delay the expected benefits, although it is not clear that this will have any significant effect on the overall assessment of the regulatory impact.

Tenant heating and ventilation behaviour
To achieve estimated benefits some tenant heating behaviour changes are assumed. There is a risk that the assumption that 50 percent of tenants heat their homes more, either under or over estimates the benefits of installing fixed heating. Evidence indicates behaviour changes occur when households receive new heating devices suggesting it is likely that houses will use their heating more.[34]

A number of complementary initiatives including the winter energy payment, the electricity price review and any changes to the welfare system following the Welfare Expert Advisory Group will support behaviour changes so benefits are realised. Monitoring and evaluation will also assess behavioural changes through assessment of internal temperatures which reflect heating behaviour.

Landlord compliance
The majority of landlords (75 percent) are assumed to voluntarily comply with any required standards. To achieve compliance with the remaining 25 percent of landlords, additional

enforcement and compliance activity is required. The Government has allocated $15.1 million over four years to support the implementation of the healthy homes standards including enforcement and compliance activity (see section 6).

Planned compliance activity includes up to 2000 risk based compliance interventions with a mix of both proactive and reactive interventions. If a greater number of complaints is received, and accepted for action, then the number of proactive compliance and enforcement interventions would need to be reduced.

This may reduce the effectiveness of the proactive work in terms of incentivising landlords to change their behaviour through the fear of being caught. To mitigate this, screening methods are used by the enforcement team to ensure reactive compliance activity is focused on cases where harm is likely to occur. This reduces non-essential reactive compliance interventions maintaining capacity for proactive interventions.

Bringing multiple properties into compliance
For landlords with an extensive portfolio of rental properties, there will be costs associated with managing the process to become compliant (e.g. installation programmes and tenant management). Allowing time for the standards to be met will enable landlords with multiple properties to manage these costs over the 5 year period within which they are to comply with the new standards.

Shifting unimproved rental stock to new owners
Some private landlords may choose to sell their unimproved rental properties. If the new owner is a landlord, then the required standards will need to be met and there is no implication for achieving the objective of warm and dry rental properties. However, if the new owner chooses to occupy the property, then they may choose to improve the property to address healthy home issues, or opt to live in the property in an unimproved condition. We do not know the extent to which such shifts may occur in practice. However, we expect that most new owners would make some improvements to their properties over time.

The Building Act provides the means by which local authorities can address unsafe and insanitary homes, and requirements for properties that are renovated.

Removing unimproved houses from housing supply

Some current rental properties that need to be improved may be completely withdrawn from the housing supply (that is, they are neither available to renters nor to new owners). Where these properties are at the very low end of the quality spectrum and are unable to be improved, then the quality of the housing stock will have been improved and the supply of houses reduced. If these properties are in concentrated locations, then the effects on (rental) housing supply in those areas may be visible.

Local or central government may become involved to address emergency, temporary or longer term housing supply issues. We do not propose any additional mitigating measures.

Passing on costs to renters
The costs of upgrading properties will be borne by landlords, who may accrue limited direct benefits. Landlords may recover these costs from tenants through rents where supply and demand conditions allow them to do so. In some supply constrained markets, low income tenants may be paying close to as much as they can for housing and therefore limit potential rent increases. In these cases landlords will have to accept a reduced return on investment, or sell. Where a significant portion of landlords sell their properties this could create a short term supply shock as the market adjusts, potentially increasing short term demand on emergency or public housing.

The costs borne by landlords will vary by the type of property:

- Owners of high quality houses that already meet the standards will incur minimal costs.
- Owners of medium quality houses that will need moderate improvements are likely to stay in the rental market. With some additional one-off costs and small increases in maintenance requirements, these properties will be able to be upgraded.
- Owners of low quality houses may need more substantial repair to meet the minimum standards. These are more likely to be sold, either to another landlord with more capital available, or to an owner occupier.

A property is more likely to be sold where the costs of retrofitting are large, or if the standards apply earlier. Any practical exemptions, developed as part of the regulation design process, may mitigate these costs for some landlords. The regulation design process should clarify for landlords the nature, effects and costs of the required upgrades. Some upgrades that reduce damage to property can be mutually beneficial.

There have been recent increases in national median rent, this could be in part due to landlords anticipating the introduction of changes when considering how to set rents.

Distributional effects

Some rental properties will be sold to owner-occupiers including both first home buyers and other owner-occupiers moving into a new property. The net effect will be a decrease in the number of rental properties. Alternatively, some rental properties may be removed from use in long term accommodation altogether, and switched into short term accommodation (e.g. AirBnB).

Sales will be more likely to occur where:

- Low quality properties will require substantial upgrades in order to meet the forthcoming standards under the Healthy Homes Guarantee Act;
- Landlords are highly leveraged, with no owned rental properties that earn positive income to use to offset costs; and
- Landlords lack the skills or motivation to comply with the new law changes.

Each sale of a rental property to a new owner-occupier removes a property from the rental market. Transferring houses from rentals to owner-occupied housing may lead to a demand for more houses to accommodate the same number of people because the average, owner occupied housing has fewer people per property than rental housing.

A reduction in rental housing particularly low quality homes are likely to disproportionally effect low income households, potentially increasing demand for public and emergency housing. This pressure is also likely to increase household crowding at the margins until supply constraints can be reduced.

Effects mitigated by the context of the pressures in the broader housing market

The effects of strong demand from immigration and higher incomes for renters will be an increase in rents, especially in areas with unresponsive supply. This should encourage more landlords to stay in, or enter the housing market as rents increase. This effect is significant, because it could totally offset some of the negative effects of the healthy homes standards and other regulatory changes that affect landlords.

In practice, it is impossible to isolate, after the fact, the different causes of rent increases. If rents do increase, as we expect, landlords may attribute these increases to the

Government's policies. However, in reality other factors will be strong demand from population growth, coupled with constrained supply that will enable landlords to increase rents.

We propose to monitor any changes in rent levels through the Bond database using the monitoring framework summarised in a later section of this RIS. We do not propose any further mitigating actions. Landlords will have their own expected pay-back periods and cost of borrowing to factor into their decisions, as well as their assessments of external market conditions.

Identify any significant incompatibility with the Government's 'Expectations for the design of regulatory systems'.

No significant incompatibility with the Government's expectations has been identified.

Section C: Evidence certainty and quality assurance

Agency rating of evidence certainty?

There is a well-established, reputable body of international evidence about the public health effects of indoor air quality and temperature, and the health benefits of providing effective heating, insulation and ventilation. There is also reputable evidence that many New Zealand homes have deficient heating, insulation and ventilation and that this deficiency cannot be addressed with portable heating devices. Much of this evidence, and deeper analysis of technical and economic information, is referenced in the CBA, which has been released publicly (accessible at https://www.hud.govt.nz/assets/Residential-Housing/Healthy-Rental-Homes/Healthy-Homes-Standards/Cost-benefit-analysis.pdf).

In addition to the references to the evidence used for the CBA (accessible at https://www.hud.govt.nz/assets/Healthy-Homes/Cost-benefit-analysis.pdf), also see

- Grimes A, et al. (2012). ***Cost benefit analysis of the Warm Up New Zealand: heat smart programme*** (accessible at http://www.motu.org.nz/assets/Documents/our-work/urban-and-regional/housing/Cost-Benefit-Analysis-of-the-Warm-Up-New-Zealand-Heat-Smart-Programme.pdf)
- Lucy Telfar Barnard, Nicholas Preval (May 2018) ***Healthy Homes Guarantee Standard Cost Benefit Input Warm Up New Zealand evaluation rental sector sub-analysis: differences in health events and costs by existing insulation status*** He Kainga Oranga/Housing and Health Research Programme, University of Otago, Wellington (accessible at https://www.hud.govt.nz/assets/Healthy-Homes/Otago-University-Cost-benefit-input.pdf)

To be completed by quality assurers:

Quality Assurance Reviewing Agency:

The Treasury Regulatory Quality Team

Quality Assurance Assessment:

The Treasury Regulatory Quality Team has reviewed the Regulatory Impact Assessment (RIA) "Healthy Home Standards" prepared by the Ministry of Housing and Urban Development and considers that that information and analysis meets the Quality Assurance criteria

Reviewer Comments and Recommendations:

The proposal has been well consulted with key stakeholders. The proposal is supported by Cost Benefit Analyses prepared by the NZIER and the Ministry of Housing and Urban Development, which is summarised in the RIA. The RIA identifies the key risks, such as the tenant and landlord behavioural assumptions underlying the analysis. The analysis is

constrained to the powers enabled under the Healthy Homes Guarantee Act, and is set out in the context of a wider number of related government initiatives

Impact Statement: Healthy Home Standards

Section 1: General information

Purpose

The Ministry of Housing and Urban Development is solely responsible for the analysis and advice set out in this Regulatory Impact Statement, except as otherwise explicitly indicated. This analysis and advice has been produced for the purpose of informing final decisions to proceed with a policy change to be taken by Cabinet.

Key Limitations or Constraints on Analysis

A number of initiatives are underway to address cold and damp homes (see related government initiatives). This analysis is constrained to the powers enabled by the Healthy Homes Guarantee Act which relate specifically to the fabric of rental homes i.e. heating devices and insulation.

Assumptions regarding landlord and tenant behaviour

Landlord compliance

An MBIE survey of landlords and tenants in early 2017, suggested that at least 75 percent of landlords will voluntarily comply with the 2016 insulation requirements by the time they become mandatory. This provides a basis for the assumed level of compliance with the healthy homes standards and informs enforcement and compliance requirements for the remaining non-compliant landlords.

Tenant behaviour and benefits

The benefits and costs provided in this analysis assume changes in tenant behaviour. The heating standard assumes 50 percent of tenants heat to the target temperature. This assumption does not predict that these temperatures will be reached but show that if these temperatures were reached, what would be the balance of the cost and benefits.

Limited data and information available on rental homes

We have not been able to set out full costs and benefits of all proposed options. We commissioned a cost benefit analysis of the proposed options (CBA) that helped to identify the scale of the effects of the proposed options for the healthy home standards.

The CBA contained some gaps (for example, in the assessment of the benefits of requiring higher standards than currently required for moisture ingress and drainage, and ventilation). These gaps formed part of the rationale to consult and seek information from stakeholders on known costs and benefits of our proposals.

In addition to some limits on quantifiable benefits and costs, there is limited housing quality data available on New Zealand rental homes. These limits affect the development of the healthy homes standards. In the medium term, initiatives from central government (MBIE and Statistics New Zealand) and the independent research body, BRANZ, are working together to inspect homes in 2018 and 2019 to gain better insight of New Zealand housing conditions. The data gathered from these inspections will enhance information from the 2018 census and 2018 General Social Survey.

Industry capacity

The standards may require a significant portion of the rental housing stock to undertake retrofit work to meet the standards. Given the current skills shortages in the construction sector, there is a risk that industry capacity could limit the ability for landlords to meet their obligations. Industry capacity has been considered when setting the compliance approach to mitigate this risk.

Impact on landlords and tenants

It is difficult to predict the exact market impacts from implementing the healthy homes standards. Many factors will influence whether a landlord chooses to increase the rent of their rental property, such as the current condition of their rental property and the scale of work required to lift the rental property's quality. It is likely that landlords will increase the rent they charge a tenant to offset to some extent the costs incurred from upgrading their properties, or choose to sell their properties.

It is anticipated that the standards would likely have a moderate effect on landlords overall. NZIER noted in the CBA that it is unlikely that landlords would pass on the costs of implementing the standards in full. Many private landlords hold property in hope of capital gain, as much as for rental income, and will likely be reluctant to incur the opportunity cost of vacancy and expense of recruiting new tenants by raising rents when other properties might not be doing so.

Related government initiatives

The healthy homes standards, and the potential impacts, need to be considered in the context of a number of other government initiatives underway in the rental housing sector:

- **Residential Tenancies Act (RTA) reform:** proposals that focus on such areas as improving a tenant's security and stability of tenure, modernising the law to appropriately balance the rights and responsibilities of tenants and landlords, and implementing a more efficient and proportionate enforcement regime

- **The Residential Tenancies Amendment Bill (No 2)** is currently before Parliament and makes three groups of amendments to the RTA related to contamination of rental properties, liability for damage to rental premises caused by a tenant, and tenancies over rental premises that are unlawful for residential use.

- **The Residential Tenancies (Prohibiting Letting Fees) Amendment Bill** was introduced on 22 March 2018 and passed into law on 6 November 2018. Letting agents, or any person, are prohibited from requiring a tenant to pay a letting fee, or any other fee, in relation to a tenancy. This amendment to the RTA will help to reduce the up-front costs faced by tenants and improve fairness for tenants.

- **Tier One Statistics:** Statistics New Zealand (Stats NZ), in partnership with MBIE are developing a Tier One statistic on housing quality. As part of this work Stats NZ recently consulted on a definition of housing quality.

- **Winter Energy Payment:** introduced on 1 July 2018 to help New Zealanders receiving New Zealand Superannuation, or a Veterans' Pension and beneficiaries to heat their homes by increasing the amount of money available to them over the winter months. From 2019, the Winter Energy Payment will be paid from May to September and will provide $450 a year for single people and $700 a year for couples or those with dependent children.

- **"Warmer Kiwi Homes":** a new four year government programme offering grants from 1 July 2018 to cover two-thirds of the cost of ceiling and underfloor insulation and ground moisture barriers to low income home owners. Heating grants will be added from 1 July 2019.

- **Healthy Homes Initiative (HHI):** the Ministry of Health's HHI was established in December 2013. It identifies at-risk families and undertakes housing assessments and facilitates access to interventions to create warmer, drier homes. Interventions include insulation, curtains, bed/bedding, floor coverings, heating sources and relocation. The Ministry of Housing and Urban Development and Housing New Zealand Corporation have agreed to a comprehensive evaluation of the programme, led by the Ministry of Health.

- **Te Puni Kōkiri community-led housing repair projects:** supports community-led housing repair projects aimed at whanau-owned homes in serious disrepair or without basic utilities.

Responsible Manager (signature and date):

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Claire Leadbetter

Manager, Tenancy and Housing Quality

Housing Branch, Policy Group

Ministry of Housing and Urban Development

Section 2: Problem definition and objectives

2.1 What is the context within which action is proposed?

Many New Zealand rental homes are cold and damp

A substantial amount of households (592,300) rent in New Zealand.[5] Many of the rental homes are cold and damp.[6,7] Insufficient insulation, inadequate heating, drainage and ventilation, moisture ingress and poor draught stopping all contribute to making rental homes cold and damp.[8] Research indicates that New Zealand's rental stock is consistently in worse condition on average than owner-occupied homes. Any new requirements for rental housing must be considered against other tenancy legislative changes and wider constraints in the housing market.

2.2 What regulatory system, or systems, are already in place?

The housing and tenancy regulatory system establishes the legislative settings for residential housing in New Zealand. It regulates the provision and use of social housing, retirement villages, rental housing and housing including developments where multiple owners hold a type of property ownership known as a unit title.

The system establishes:
(i) rights and obligations of residential tenants and landlords;
(ii) rules for ownership and management of unit title developments;
(iii) a framework for both public and private ownership of social housing;
(iv) rules to protect the interests of residents and intending residents of retirement villages and to enable the development of retirement villages.
Landlords, tenants and related parties may also need to meet requirements under other relevant legislation, including:

- the *Building Act 2004* and the Building Code for new rental homes
- the *Health and Safety at Work Act 2015*, the *Health Act 1956* and the *Housing Improvement Regulations 1947* (the HI Regulations).

During 2016/17, changes were made to the *Residential Tenancies Act 1986* (RTA) and its regulations to improve the quality of rental homes by making them safer, warmer, and healthier. This included requirements for there to be smoke alarms in all rental properties and insulation standards to be implemented by 1 July 2019. Stronger enforcement provisions were also provided for in the 2016/17 changes, enabling MBIE's Chief Executive to investigate and take direct actions against landlords who seriously or persistently breach the Act. The HHG Act and these standards provide a more comprehensive approach to achieving warm, dry rental homes.

Further changes to the RTA are being progressed alongside the healthy homes standards. They relate to tenant liability for damage to rental premises, methamphetamine testing and contamination in rental premises, and unlawful residential premises.

Current heating requirements for landlords in New Zealand

Currently, the *Housing Improvement Regulations 1947* requires every 'living room' shall be fitted with a fireplace and chimney or other approved form of heating.[9]

Current insulation requirements for landlords in New Zealand

Since 1 July 2016, social housing landlords have been required to meet ceiling and underfloor insulation requirements in their rental homes as set out in the 2016 Insulation and Smoke alarm regulations:[10] This requirement extends to private landlords on 1 July 2019.

Landlords need to include an insulation statement to disclose the extent of insulation in a rental home in new tenancy agreements.

Where insulation is being repaired or installed in rental homes, landlords must meet the current New Zealand Standard for insulation installation: NZS 4246:2016.

Landlords are prohibited from installing or repairing electrically conductive insulation (e.g. foil) in any ceiling or suspended floor in their rental home.[11]

There are exemptions to meeting the requirements of the 2016 regulations if:[12]

- it is not reasonably practicable to install insulation
- the home complies with the requirements relating to thermal insulation at the time it was installed and the landlord has the relevant record showing compliance with those requirements
- the landlord intends to demolish or substantially rebuild the home within 12 months and applied for any necessary resource consent or building consent before the tenancy commenced
- for 12 months from the date the tenancy commences, if the tenant is the former owner of the home.

Current ventilation requirements

The Building Code deals with ventilation requirements for new buildings under Clause G4, and internal moisture is specifically covered in Clause E3.

Regulation 9(1) of the HI Regulations requires that every bathroom shall have at least one window that directly opens to the external air unless other adequate means of ventilation are provided to the satisfaction of the local authority. Regulation 11 of the HI Regulations requires that each habitable room shall be constructed such that windows with an area not less than one twentieth part of the area of the floor of the room can be opened for the admission of air. Every room that is not a habitable room shall be provided with such window(s) as the local authority may consider necessary for adequate ventilation.

Current moisture ingress and drainage requirements

The HI Regulations include provisions to protect rental homes against moisture ingress and inefficient drainage.

Regulation 15 of the HI Regulations states that every house shall be free from dampness.[13]

Regulation 14 of the HI Regulations states that every house shall, to the extent the local authority deems necessary, be provided with efficient drainage for the removal of storm water, surface water and ground water. Every house shall be provided with gutters, downpipes and drains for the removal of roof water *to the* satisfaction of the local authority. It also provides that timber floors shall have adequate space and vents to ensure proper ventilation to protect the floor from damp and decay.

Current draught stopping requirements

Regulation 17 of the HI Regulations requires that the materials of which each house is constructed shall be sound, durable and where subject to the effects of the weather, weatherproof, and shall be maintained in such a condition. The walls and ceilings of every habitable room, bathroom, kitchen, kitchenette, hall and stairway shall be sheathed, plastered, rendered or otherwise treated and shall be maintained to the satisfaction of the local authority. Every floor shall be kept in a good state of repair free from crevices, holes and depressions.

2.3 What is the policy problem or opportunity?

A significant number of households rent in New Zealand (approximately 592,300). Many of the rental homes in New Zealand are cold and damp because of insufficient insulation, inadequate heating, drainage and ventilation, excess moisture and poor draught stopping.

Research from the Building Research Association of New Zealand (BRANZ), an independent research organisation, shows that New Zealand's rental housing stock is consistently in worse condition on average than owner-occupied houses.[14]

New Zealand rental homes could be of poor quality for a number of reasons:

- landlords might not invest in improvements or ongoing maintenance to the home because there can be little incentive to do so, as some types of improvements benefit tenants only, particularly in a tight rental market
- landlords may not be clear, or aware of, their (legal) obligations and therefore do not comply
- tenants may not be clear, or aware of, landlords' obligations so do not raise issues. Also tenants' short tenure and a tight rental market may mean tenants are reluctant to raise issues about the home in general, especially if they are on a low-income or otherwise in a vulnerable position.[15]

Living in cold and damp homes can affect wider social outcomes

Cold and damp homes are strongly associated with people experiencing health issues, including respiratory and cardiovascular conditions.[16] Cold homes with insufficient insulation and heating systems, especially in winter, are linked to poor health outcomes.[17] Damp and mouldy homes are associated with toxic reactions, allergies, pneumonia and asthma, and other infections.[18,19,20,21] Low income, elderly, children, disabled persons and Māori and Pacific people are more likely to live in or suffer from the effects of cold and damp homes. Homes with insufficient insulation, draughts and inefficient heating systems can also create higher atmospheric carbon emissions.[22,23]

The counterfactual is the situation where healthy home standards are not introduced. This would mean renters continue to experience cold, damp and under-insulated homes. The analysis in this RIS considers the changes from the status quo through different options across heating, insulation, ventilation, moisture ingress and drainage, and draught-stopping. This involves comparing the additional costs involved in complying with each standard with the additional benefits obtained through health costs avoided, energy savings, emission reductions and other potential (often qualitative) benefits. As there is a net benefit gain to New Zealand from introducing the standards, not introducing the standards means New Zealand forgoes this opportunity to make a gain.

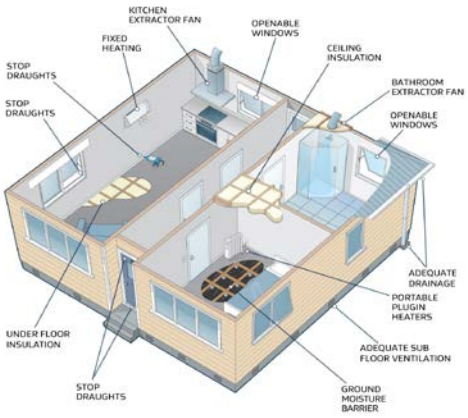
What would happen if healthy home standards are not developed

While there is a choice as to how extensive and comprehensive the healthy home standards are, the HHG Act requires that standards be introduced by 1 July 2019 to give effect to its objectives.

If no standards are developed or the standards reflect the status quo and do not require any improvement to the condition of the property, then some New Zealanders will continue to rent low quality houses that contribute to poor outcomes for themselves, their families and their communities. Overtime, the condition of existing low quality properties may continue to decline and very low quality rental homes would continue to exist unless (or until) they are declared uninhabitable or insanitary by a local government exercising its powers under the Building Act 2004.

Achieving a warm, dry home

Achieving a warm, dry home involves a house working as a system to manage ventilation, moisture and heat. This is shown in the following illustration:



To make a home is warm and dry, there needs to be the means to ensure there is adequate ventilation (to exchange moist or stale air with fresh air), drainage to take any moisture away from the home (as poor drainage creates conditions that make a home hard to keep warm and dry), stopping water getting into the house (e.g. though leaks), stopping draughts that can make it hard to keep the home warm, and for the home to have the means to be heated and insulation to prevent heat escaping.

Heating

Many New Zealand rental homes are cold in winter, leading to poor health outcomes

Many New Zealand rental homes are colder in winter than recommended indoor temperatures by World Health Organization guidance.[24] Data from a BRANZ study indicates that, during the winter months, mean living room temperatures in New Zealand fall below the recommended range.[25] Living room and bedroom mean temperatures are typically 15.8°C and 14.2°C respectively during the day and fall to 13.5°C and 12.6°C respectively overnight.

Cold homes are associated with poor health and other social outcomes.[26] A lack of adequate heating has been associated with higher rates of winter deaths, increased risk of cardiovascular disease and respiratory conditions. Heating can reduce illness by maintaining a healthy air temperature, lowering relative humidity and dampness, and reducing the risk of mould and fungi.[27]

22 percent of rental homes have no fixed heating, leading to inefficient or unhealthy heating being used

A large portion of New Zealand rental homes have no, inadequate, or inefficient heating available for tenants to use to reach a healthy indoor temperature.[28] The BRANZ 2015 House Condition Survey found that 22 percent of New Zealand rental homes have no fixed heating compared to 7 percent of owner occupied properties with no fixed heating.[29]

Tenants without fixed heating typically will rely on more costly to operate portable plug-in heaters and unflued gas heaters to warm a room.[30] The maximum heat output from portable electric heaters available in New Zealand is 2.4 kilowatts, which is typically not sufficient to achieve a healthy indoor temperature in larger living areas. Using multiple plug-in heaters in the same room is also not a practical solution because electrical circuits have limited capacity to power multiple plug in heaters.

Unflued gas heaters are a health and safety risk as they can produce toxic gases, such as nitrogen dioxide and carbon monoxide. Unflued gas heaters also produce water vapour that can make a room damp if it is not appropriately ventilated. The 2015 House Condition Survey found 21 percent of rental homes have unflued gas heaters and for 6 percent of rental homes this is their only source of heat.[31]

Insulation

In an average sized uninsulated home, about 30-35 percent of heat loss is through the ceiling and roof, and about 12-14 percent is lost through the floor

Many rental homes still do not have adequate insulation to retain heat and therefore are more likely to be cold, damp and mouldy.[32] Cold, damp and mouldy houses can create poor health and other negative social and environmental outcomes, such as increased carbon emissions, air pollution and higher energy costs associated with heating uninsulated homes.

Ceiling and underfloor insulation can be fairly easily retrofitted because many rental homes have accessible roof and/or subfloor spaces. In contrast, retrofitting wall insulation and double-glazing is more costly and usually involves substantial building work (such as removing internal wall linings) that, in addition to the costs associated with the work involved with compliance, could be quite disruptive to tenants living in a rental home. For this reason, current insulation regulations and the options proposed for the insulation standard are limited to requirements for ceiling and underfloor insulation retrofitting.

The 2016 regulations require landlords to install or retrofit ceiling and underfloor insulation in rental homes with no or minimal insulation by 1 July 2019 unless an exception applies. Landlords also need to ensure the insulation is in reasonable condition to help protect against cold and damp rental homes.[33] The 2016 regulations are in place until 1 July 2019 when they will be replaced by the new standards or continue to be in force.

To be effective, insulation must be well installed and maintained otherwise it will not perform well.[34] Sub-optimal insulation includes insulation that does not fully cover the required space, has settled in a way that inhibits its performance, covers downlights in an unsafe manner, is damaged or mouldy, has gaps or holes or is infested.

Ventilation

Poor ventilation is associated with the growth of mould and mildew

Many New Zealand rental homes are currently poorly ventilated, leading to dampness and mould.[35] Mould can lead to poor health outcomes for tenants.[36,37]

The presence of dampness and mould is a particular problem in areas where high moisture events are caused by everyday activities, such as showering, cooking, and drying clothes. These activities generate moisture that remains inside a rental home if it is not well ventilated.[38,39] Air needs to flow in and out of a home so it stays fresh, dry and healthy. BRANZ recommends to regularly open windows and doors wide for 10 – 15 minutes and to use extract fans to provide sufficient ventilation after a high moisture event, such as showering or cooking.[40,41] Tenants may be unwilling to leave windows open due to the entry of cold air or security concerns.

A study by BRANZ shows New Zealand rental homes had visible mould at greater levels than owner-occupied homes in all areas of the home. Bathrooms were the most common rooms with mould, followed by the laundry and the kitchen.

BRANZ data supplied to MBIE suggests around 37 percent of rental homes in New Zealand do not have mechanical ventilation (e.g. fans to extract moisture) in the kitchen and 44 percent do not have mechanical ventilation in the bathroom. A further 17 percent of kitchens and 12 percent of bathrooms have mechanical ventilation that is not venting outside (either

just recirculating the air within the home or venting it into the roof cavity).[42] Bathrooms without mechanical extract fans or heating were twice as likely to have moderate or worse patches of mould compared to those with extractors or heating.[43] Kitchens without any mechanical ventilation were three times as likely to have visible mould compared to those with mechanical ventilation.[44]

Insufficient sub-floor ventilation is also a problem in New Zealand homes. This is discussed in the "Moisture ingress and drainage" section below.

Moisture ingress and drainage

Up to 40 litres of water can rise up from the ground below a 100 sqm home every day, even if the ground appears dry

Moisture entering a home from outside often contributes to damp and mould issues inside the home in addition to moisture created by everyday occupant activities like cooking and showering – see the Ventilation section 3.

A 2015 study by BRANZ found that mould was visible in over half of New Zealand rental homes.[45] Mould is a key indicator of overall indoor air quality and is potentially harmful to tenants' health.[46] A recent New Zealand study shows a strong association specifically between mould and childhood wheeze.[47]

BRANZ research also indicates that 76 percent of rental homes have a subfloor, 44 percent of rental homes with subfloors have insufficient ventilation, and 81 percent of rental homes with subfloors do not have a ground moisture barrier.

What causes moisture ingress and inadequate drainage in rental homes?

- **Subfloor[48] moisture entering the home:** this is a major issue in New Zealand rental homes, particularly if there is insufficient subfloor ventilation or no ground moisture barrier[49] under the home (about 76 percent of rental homes have a subfloor[50]). The moisture can cause damp and decay to the building (including roof spaces).[51,52,53] BRANZ research shows that the amount of moisture rising from the ground under a home can be substantial (40 litres of water per day under a 100 square metre home)[54] even if the soil appears dry.[55] Ground moisture barriers protect against moisture rising from the ground,[56] yet most rental homes with subfloors (81 percent) do not have a ground moisture barrier. An estimated 44 percent of rental homes with subfloors have insufficient subfloor ventilation.[57] Inadequate subfloor ventilation can be caused by blocked vents, plants and shrubs covering vents, clutter in the subfloor that reduces airflow and too few vents in the subfloor walls.

- **Leaks:** Rainwater can leak into the home through gaps or holes in a home's roof, walls or windows. Plumbing leaks[58] in or under a home can lead to dampness in the home, building damage and can also worsen subfloor moisture and drainage issues.

- **Inefficient drainage:** Moisture can enter into the home if there are broken, blocked, or inadequate gutters, downpipes and drains. Paths and gardens that direct water into subfloor spaces can be significant sources of subfloor moisture that can then evaporate into the home, causing dampness.

- **No or failed waterproofing or drainage of concrete floors and in-ground walls:** If a home lacks a moisture barrier under a concrete floor, has no or failed waterproofing of basement in-ground walls or has inadequate drainage around a concrete floor or basement in-ground walls then moisture can enter into the home causing dampness.[59]

Draught stopping

Uncontrolled draughts let heat escape and let cold air in

New Zealand rental homes can be draughty, particularly if they were built before 1960 when houses were constructed in a less airtight manner than contemporary homes.[60] Draughts or uncontrolled air flows increase the risk of a cold indoor temperature.

Research from the Department of Public Health at the University of Otago, Wellington on new builds indicates even minor improvements in draught stopping can improve the warmth of homes.[61] The University of Otago's research shows minor draught stopping interventions, such as additional sealing strips and fitting draught excluders to exterior doors, can increase the indoor temperature by 1-1.5ºC.

Homes need to be well ventilated to keep the air inside fresh and dry. However, gaps or holes in a home can cause draughts and a cold interior. Smaller gaps may not appear problematic but can cumulatively cause a draught issue. Draughts also make it harder and more expensive for tenants to heat their homes.[62] Homes that are draughty can offset some of the benefits of improved insulation, heating, and ventilation.

2.4 Are there any constraints on the scope for decision making?

The Government's overarching objective is to establish minimum standards to allow New Zealand tenants to live in warm and dry rental homes. It has announced its intention to introduce standards, effective from 1 July 2019, to give effect to the HHG Act. The HHG Act and healthy homes standards work towards this objective by making rental homes warmer and drier.

2.5 What do stakeholders think?

Who are the stakeholders? What is the nature of their interest?

Considering the growing size of New Zealand's rental market, the correlation between rental housing quality and social and health outcomes, and the potential costs to investors, there was significant interest from a wide variety of stakeholders. In addition to Ministers and media, the identified stakeholders included:

- Landlord representatives: individual landlords, social housing providers, landlord advocacy and representative bodies, individual property managers, property management companies and representative bodies
- Tenancy representatives: individual tenants and tenancy advocacy groups
- Industry: tradespeople, retailers, product suppliers and representative bodies
- Social and health: District Health Boards, Primary Health Organisations, Plunket New Zealand
- Māori: Iwi/Rūnanga, Iwi primary health organisations, Iwi social housing providers and organisations Iwi advocacy representatives (such as Māori Women's Welfare League)
- Research: Otago University, Massey University, Building Research Association of New Zealand (BRANZ)
- Other peak bodies and supporting institutions: Federated Farmers, Student associations, Grey Power, Citizens Advice Bureau, budgeting advisors
- Government: local and regional councils, government agencies with housing stock (eg, LINZ, Corrections, Ministry of Education, NZDF), Ministry of Health, Housing New Zealand Corporation, Ministry of Social Development and Te Puni Kōkiri

What consultation has already taken place and with whom?

Following the passing of the HHG Act 2017, we engaged with building experts, industry suppliers and tradespeople and their peak bodies through a technical workshop to fully understand the key elements that would make the biggest, most tangible difference to the warmth and dryness of the home. Health researchers were commissioned to undertake specific pieces of work, and we met regularly with the Building Research Association of NZ and relevant government agencies. In addition, we participated in a Q&A forum at an Eco Design Advisor Conference. The information gathered from these engagements enabled us to develop the options that were released in a Discussion Document for public consultation. The Discussion Document was released on 4 September 2018, with consultation concluding on 22 October 2018.

To ensure the Discussion Document, which is technical in nature, could be understood by a variety of people, we created a shorter, simpler summary document. The public were able to provide their feedback in written form and through an online survey (using Survey Monkey). One submission was also conducted by phone due to the submitter's circumstances. We received 1,777 submissions, and all the stakeholders initially identified were well represented among the respondents.

Alongside the public consultation process, we held workshops in five centres across New Zealand (Whangārei, Auckland Central, South Auckland, Wellington and Christchurch), where invited stakeholders participated in a conversation on the proposed standards to help inform their written submissions. All stakeholder groups were represented at the workshops.

Which stakeholders share the Agency's view of the problem and its causes?

There is broad agreement shown through the consultation process that the problems and causes of damp, cold and mouldy homes are accurately captured and articulated in the discussion document, CBA and through well documented research. The proposed standards seek to balance the objective of creating warmer, drier, healthier rental homes within a timeframe where tenants can quickly notice the tangible improvements, against the impact on landlords, and the ability of landlords to make the necessary changes in a timely manner. The proposed standards are broadly supported by tenants, tenancy advocacy groups, health groups, and industry and product suppliers.

Which stakeholders do not share the Agency's view in this regard, and why?

There were differences in opinion among submitters on whether the proposed minimum standards go too far or not far enough. Landlords and their representative bodies have commented that some of the proposed standards could increase rents or push some landlords out of the rental market due to the costs of installing new equipment and ongoing maintenance, for marginal improvement to the quality of the specific rental home. There is also a widely held view from landlords and some tenancy advocacy groups that there needs to be better education for tenants on how to maintain the home to a healthy standard (such as proper ventilation). Some tenancy advocacy groups and health groups believe the standards do not go far enough in terms of prescribing a higher minimum standard (additionally suggesting landlords supply portable heaters, or a higher minimum indoor temperature, or the standards extending to other areas such as the provision of curtains), particularly given the lower socio-economic status of many tenants, and that rental properties are often of a lower quality than owner occupied homes.

Key Themes from Public Consultation

The largest proportion of submissions received were from tenants (44 percent), followed by landlords (38 percent). Submissions were also received from a range of stakeholders, including social housing providers, equipment suppliers and installers, public health experts, researchers, engineers, building inspectors, and home performance advisors. Some of the submitters were affiliated with Māori interests.

Broadly, tenants and health advocates were more likely to support higher standards, while landlords and property managers were more likely to support the status quo.

A number of ideas were raised during consultation that fall outside the proposed healthy homes standards, including the need for more tenant education, dryer ventilation, improving enforcement provisions, taking a whole-of-house approach, fuel poverty and affordability, the inclusion of curtains and a shower dome, and further exemptions. We have given these ideas consideration in our analysis, where possible. Some of these ideas could not be incorporated into these standards, as they were not feasible or appeared costly to implement. The information and guidance that is prepared to support the standard, particularly around tenant education, will be strengthened to support the implementation and overall understanding of the healthy homes standards.

Does the issue affect Māori in particular? Have iwi/hapū been consulted, and if not, should they be?

Māori families are more likely than other ethnic groups to live in, and feel the effects of, cold and damp rental homes. Cold and damp homes are strongly associated with people experiencing health issues, including respiratory and cardiovascular conditions, toxic reactions, allergies, and other infections. This leads to wider negative social outcomes, such as absent days from school or work. We sought specific feedback through the workshops and the consultation process from iwi housing providers, Rūnanga, Māori advocacy groups (such as social and health providers), and from Te Puni Kōkiri at an agency level. We received a good level of feedback from these groups.

If consultation is planned, how will this take place, with whom and when? If is not intended, why is this?

Consultation has taken place on the proposed standards, as detailed above.

Section 3: Options identification

3.1 What options are available to address the problem?

Criteria for options identification

The assessment criteria to determine the options considered:

- suitability: able to achieve the objective (warm, dry rental home); enduring, flexible and enabling adoption of future innovation and building solutions
- fairness: costs and benefits to landlords (time and money)
- equity: costs and benefits to tenants (time and money)
- feasibility: costs and benefits to industry (time and money)
- accountability: costs and benefits to government (clear and enforceable standards, court administration)

Heating

The heating options address the objective to provide warmer and drier rental properties by requiring landlords to take action to enable the property to meet minimum heating standards.

1.1 Rooms required to be heated

Option one – heating in the living room only

A landlord must provide a form of heating device in the main 'living room'. A living room could include a lounge, dining room and kitchen if it is an open plan rental home.

Option two – heating in the living room and in bedrooms

A landlord must provide a heating device in the main 'living room' (lounge and dining room and kitchen if open plan) and an appropriate heating device, if a heating device is required to meet indoor temperatures required by the standards, in any room that is rented as a bedroom.

Option three – status quo

A landlord is required to provide some form of heating in the living room (which may be an outlet plug and not necessarily a heating device).

1.2 Indoor temperature that heating devices should be sized for in a rental home

Option one – heaters must be capable of achieving an indoor temperature of at least 18°C

Landlords need to provide heaters capable of achieving an indoor temperature of at least 18°C in the room(s) applicable to the heating standard.

Option two - heaters must be capable of achieving an indoor temperature of at least 20°C

Landlords need to provide heaters capable of achieving an indoor temperature of at least 20°C in the room(s) applicable to the heating standard.

We propose to use a formula to determine the capacity required for heating devices for a room to achieve the appropriate indoor temperature. An online tool would assist with

calculating the capacity of the device needed.

Option three – status quo

No specification of type of heating or the temperature to which the device can heat the room.

1.3 Heating devices landlords should provide in rental homes

Option one – landlords provide fixed heating devices only

A landlord must only provide fixed heating devices where portable electric heaters are insufficient to achieve the appropriate indoor room temperature in the rooms covered by the heating standard. Where rooms covered by the heating standard can be sufficiently heated by portable electric heating devices, a landlord would not be required to provide any heating devices.

Option two – landlords provide both fixed and portable heating devices

A landlord must provide fixed and portable heating devices where necessary to achieve the appropriate indoor room temperature in the rooms covered by the heating standard.

Option three – status quo

No specification of heater type (may include an outlet plug, open fire or unflued gas heater).

Modified Option two

Landlords must provide fixed heating devices of a minimum capacity of no less than 1.5 kilowatts with a thermostat for electric heaters. This option ensures all living rooms have some form of fixed heating. It requires landlords to provide fixed heating in homes that tenants could heat with portable plug in electric heaters.

Insulation

The options set standards for properties to be insulated to a minimum standard to address the objective for rental homes to be warmer and drier.

2.1 Minimum levels of insulation required in rental homes

The proposed options for a minimum level of ceiling and underfloor insulation in rental homes for the insulation standard are covered in the following table.

Table 1: The proposed options for a minimum level of ceiling and underfloor insulation in rental homes for the insulation standard

Options	Ceiling requirements	Underfloor requirements
Option one (status quo continued)	**Insulation installed before 1 July 2016 must be replaced or 'topped up' if below**: • minimum R-value of 1.9, or 1.5 if in a building of high thermal mass construction	**Insulation installed before 1 July 2016 must be replaced or 'topped up' if below:** • 0.9
	Installed from 1 July 2016 + continue from 1 July 2019: • 2.9 if the home is located in zones 1 or 2 • 3.3 if located in zone 3	**Installed from 1 July 2016 + continue from 1 July 2019**: • 1.3

Option two (akin to "2001 Building Code")	**Existing insulation must be replaced or 'topped up' if below:** • 1.9 if the home is located in zones 1 or 2 • 2.5 if located in zone 3	**Existing insulation must be replaced or 'topped up' if below:** • 1.3
	All new insulation installed must be at least: • 2.9 if the home is located in zones 1 or 2 • 3.3 if located in zone 3	**All new insulation installed must be at least**: • 1.3
Option three (akin to "2008 Building Code")	**All existing and new insulation must be at least:**: • 2.9 if the home is located in zones 1 or 2 • 3.3 if located in zone 3	**All existing and new insulation must be at least**: • 1.3

Option one (continue the status quo)

The requirements under the 2016 regulations (in Table 1) would continue to apply after 1 July 2019 so landlords must replace or retrofit insulation to meet (or exceed) the requirements for ceiling and underfloor insulation in their rental homes.

Option two

A landlord must replace or retrofit ceiling and underfloor insulation in their rental home if it is not in a reasonable condition (or better), and, when originally installed, did not have the R-value of (at least):

- ceiling: 1.9 if located in zones 1 or 2 and 2.5 if located in zone 3
- underfloor: 1.3.[63]

These R-values are the minimum level of ceiling and underfloor insulation for new homes built between the years 2001 and 2008. This option would require retrofitting or replacing ceiling and underfloor insulation if it did not meet the 2001 insulation standard when it was installed or if it is not in reasonable condition.

The 2001 Building Code insulation standard increased the R-value of floor insulation for all climate zones from 0.9 to 1.3 but, in practice, the methods and products for underfloor insulation did not change. Increasing the level to 1.3 would not require additional properties upgrade their underfloor insulation presuming the underfloor insulation is not damaged, complete and secure.

Where the insulation does not meet the requirements of this option, landlords must install or top-up insulation in accordance with the relevant New Zealand Standard to meet the following minimum R-values:

- ceiling: 2.9 if the premises are located in zones 1 or 2, or 3.3 if the premises are located in zone 3
- underfloor: 1.3.

Option three

Landlords must replace, retrofit or 'top up' ceiling and underfloor insulation if it is not in reasonable condition (or better), is not in accordance with the relevant New Zealand Standard[64] and, when originally installed, did not have the R-value (at least) of:

- ceiling: 2.9 if the premises are located in zones 1 or 2 or 3.3 if the premises are located in zone 3
- underfloor: 1.3.

These R-values are currently the minimum level of ceiling and underfloor insulation for new homes built since 2008 under the 2008 Building Code.

2.2 Assessing reasonable condition of insulation

Under the proposed options for insulating rental homes, existing ceiling and underfloor insulation must be in 'reasonable condition' and, when originally installed, have met certain minimum R-values.

Current Tenancy Service Guidance assesses existing ceiling insulation as meeting the 'reasonable condition' requirement if, for instance, ceiling insulation has not settled below 70 millimetres thick and has no mould, dampness or gaps.

Option one (status quo)

The following must be taken into account to determine whether any insulation is in a reasonable condition:

- the extent to which the performance of the insulation is compromised by any aspect of the insulation's condition
- the extent of any dampness, damage, degradation or displacement: ceiling insulation must not have excessively settled or compressed. Notably, for existing ceiling insulation, settlement or compression of up to 30% compared to the insulation's original thickness is deemed acceptable in guidance[65]
- the condition of any materials or other items that are ancillary to the installation of the insulation (e.g. strapping or staples)[66]

Option two

Insulation must meet the "reasonable condition" criteria described in option one above. However, for ceiling insulation, only a very minimal reduction in insulation thickness as a result of settlement or compression will be deemed acceptable in the assessment of reasonable condition.

2.3 Proposed Modified Option for Insulation

A modified option was identified following consultation on the options. The modified option combines the minimum level of insulation installed (Option three) and the reasonable condition (Option one and two), so that the standard for ceiling and underfloor insulation would be based on the 2008 Building Code OR, for ceiling insulation, a minimum thickness of insulation of 120mm.

Ventilation

The options identified for minimum standards for ventilation in rental homes address the objective for drier rental properties.

3.1 Ventilation requirements in rental homes

Option one (status quo)

Option one is the status quo. Under this option, a landlord must ensure:

- every bathroom has at least one window that directly opens to the outside air unless other adequate means of ventilation are provided *to the satisfaction of the local authority.*
- each habitable room must be constructed such that windows with an area amounting to not less than one twentieth part of the area of the floor of the room can be opened for the admission of air.

- every room which is not a habitable room shall be provided with such window or windows *as the local authority may consider necessary* for adequate ventilation.

Option two: openable windows and extract fans in rooms with a bath or shower

A landlord is required to install mechanical extract fans (or other similar device that extracts moisture) in indoor rooms that have a shower or bath, in addition to living rooms, dining rooms, kitchens and bedrooms having a window that can be opened for the entry of air. The extract fan must be properly sized for the room it is installed in, properly installed, located in close proximity to the moisture source, well ducted and vented to the outside of the house.

An exemption for certain rental homes could be provided in certain cases where it is not practicable to have an openable window in a room, including:

- if, at the time the home was built, it received building consent even though it did not have an openable window(s) in the relevant location
- if it is not reasonably practicable to create an openable window in the relevant location. Guidance will provide the detail of what is "not reasonably practicable".

Option three: openable windows and extract fans in rooms with a bath, shower or indoor cooktop

A landlord is required to install mechanical extract fans (or other similar device that extracts moisture) in indoor rooms that have a shower, bath or indoor cooktop to remove moisture vapour and cooking fumes, in addition to living rooms, dining rooms, kitchens and bedrooms having a window that can be opened for the entry of air. The extract fan must be properly sized for the room it is installed in, properly installed, located in close proximity to the moisture source, well ducted and vented to the outside of the house. The same exemption as for option two would apply.

Moisture ingress and drainage

4.1 Protecting rental homes against moisture entering the home and inadequate drainage

Option one (status quo)

A landlord is required to meet their existing legal obligations, including the Residential Tenancies Act and HI Regulations. That is, a landlord must maintain the premises in a reasonable state of repair including providing efficient drainage and storm-water removal from the property.

Option two: landlords install a ground moisture barrier if possible and drainage must be efficient

A landlord would be required to:

- provide efficient pipework or drainage without leaks to remove storm water, surface water, plumbing water and ground water to avoid water pooling around or under the home, and from water entering the home
- provide gutters, downpipes, and drains that are open and not blocked and can efficiently remove storm water, surface water, ground water and plumbing water and avoid pooling water around and under the house
- ensure a suspended floor has a ground moisture barrier that covers the soil under the home[67] to protect against moisture ingress and dampness.

This option targets the identified issue that many New Zealand rental homes have substantial subfloor moisture, insufficient subfloor ventilation, inefficient drainage and leaks and inadequate drainage.

To be exempt from the these requirements, a landlord would not need to provide a ground moisture barrier under option two if:

- the rental home is a pole house[68] with an open air space between the floor and the ground under the home; or
- a landlord obtains a certificate from a qualified building surveyor to show that their rental home complies with the standard.

Where a rental home has insufficient access to install a ground moisture barrier, the landlord will need to ensure that, wherever practicable, one of the exemptions above are met.

Modified Option two: landlords, wherever practicable ensure the subfloor, if enclosed, has a ground moisture barrier

A modified option was identified following consultation on the options. The modified option is a version of Option Two, updated to reflect the feedback received and further analysis, being that **landlords must ensure efficient drainage and guttering, downpipes and drains at their rental home, and wherever practicable ensure the subfloor, if enclosed, has a ground moisture barrier**, regardless of the presence of air vents. The rationale for this is provided below.

Overall, submitters were in favour of Option Two, and considered this option would better support drier, healthier homes. Those that preferred Option One (the majority of landlords and property managers) considered that current legislation was sufficient, and that the focus should be on enforcing current requirements rather than creating new ones. Some also noted that retrofitting older homes can be difficult and expensive.

Concern was raised during the public consultation period regarding the requirement for adequate subfloor ventilation in the form of vents where the instalment of these vents could compromise the structural walls. Concerns were also raised around the difficulty of establishing whether existing subfloor vents were adequately sized, which is difficult for a landlord or tenant to measure. Further discussion with BRANZ identified that ground moisture barriers were the most effective means of preventing moisture from entering the home, and vents made little material difference, as long as there was a ground moisture barrier installed.

Draught Stopping

The draught stopping options address the objective of achieving warmer and drier rental homes.

5.1 Draught stopping levels in rental homes

Option one (status quo)

Currently, regulation 17 of the HI Regulations requires that the materials of which each house is constructed shall be sound, durable and where subject to the effects of the weather, weatherproof, and shall be maintained in such a condition. The walls and ceilings of every habitable room, bathroom, kitchen, kitchenette, hall and stairway shall be sheathed, plastered, rendered or otherwise treated and shall be maintained to the satisfaction of the local authority. Every floor shall be kept in a good state of repair free from crevices, holes and depressions.[69]

Option two: stop unnecessary gaps or holes that cause noticeable draughts

A landlord is required to stop any unnecessary gaps or holes that cause noticeable draughts and a colder rental home, and block any decommissioned chimneys and fireplaces.

Date of Compliance with Standards

The date for compliance with the new standards was a substantial issue considered through the Discussion document.

The Objectives relevant to considering options for compliance dates

Our objectives for the timing to implement the standard need to take into consideration needs of tenants, landlords, industry, and government, so that:

- tenants see the benefits of a warmer, drier home as soon as possible
- landlords and property managers have sufficient time and support to understand and comply with the changes, and procure and install necessary requirements
- industry capacity is able to respond to the changes, particularly if impacted by other government initiatives such as KiwiBuild
- government has sufficient time to provide advice through information campaigns, develop necessary guidance, and expand enforcement capacity where necessary
- the timeframe does not restrict flexibility and innovation to meet a higher quality of rental home

Feedback was sought on three options:

- Option one: comply within 90 days at the start of a new or renewed tenancy with an end compliance date of 1 July 2024
- Option two: a single compliance date
- Option three: staggered compliance dates over five years, either by the standard or by the location of the rental home

Under all options a set compliance date was proposed for Housing New Zealand Corporation rental homes and Community Housing Providers.

The majority of individual tenant and landlord submissions supported Option three for implementation. Submissions by landlord and industry peak bodies supported Option one.

Based on consultation feedback on industry capacity, a start date of 2022 for option one was recommended by officials (Option one A). An alternative start compliance date for option one of 2021 has also been included in this analysis reflecting ministerial preferences (Option one B).

Officials note Option one A is more realistic to ensure a higher level of compliance with the standards. Industry providers would have more time to meet the increased demand, landlords would have more time to plan and finance compliance with their obligations, and Government would have more time to operationalise the regulations. Officials advise it would be difficult to ensure landlords are adequately informed and ready to comply with their new obligations earlier than 1 July 2022, in particular because the online tool to help implement the heating standard is unlikely to go live until October 2019.

Though officials are making best efforts to bring this date forward, it is important to make

sure the tool is enduring and fit for purpose in the long term. Officials also note landlords are a disparate hard to reach market with a significant portion of the market made up of small scale landlords, and adequate time is necessary to thoroughly inform landlords of their new obligations. Officials have also raised concerns an earlier date could disengage landlords who would otherwise comply with the standards.

Officials also prefer Option one A, because it recognises Government capacity and the many other housing initiatives which call on trades and industry capacity currently underway. These include: KiwiBuild, the Housing New Zealand retrofit programme, improvements to public housing supply, and s 9(2)(f)(iv)

Option one B will result in tenants benefiting from a warmer drier home at an earlier date and may mitigate industry bottlenecks by spreading compliance over a longer timeframe. An earlier compliance date may reduce behaviour where landlords leave compliance until the last minute. However, landlords with new tenancies shortly after 1 July 2022 may struggle to achieve compliance because of insufficient time to understand their new obligations. They will also have limited time to plan, finance and complete any required work.

3.2 What criteria, in addition to monetary costs and benefits, have been used to assess the likely impacts of the options under consideration?

Our overarching objective is to achieve warm and dry rental homes.

The Government has a responsibility to ensure people in New Zealand have access to adequate housing. New Zealand signed and ratified the International Covenant on Economic, Social and Cultural Rights that recognises the right of everyone to an adequate standard of living including, but not limited to, the right to adequate housing and 'the continuous improvement of living conditions'.[70] The HHG Act and healthy homes standards work towards this objective by ensuring rental homes are warm and dry.

We aim to close the gap in quality between rental homes and owner-occupier homes. Our goal is to develop specific standards for appropriate levels of heating, insulation, ventilation, moisture ingress, draught stopping and drainage to improve the quality of rental homes recognising the integrated nature of a home system.[71]

We anticipate raising the quality of rental homes will help to address the needs of identified at-risk groups: low-income, elderly, disabled persons, children and Māori and Pacific Peoples.

If rental housing quality is improved, other secondary benefits related to health, education and the environment may also result (e.g. reduced sick days off school and work, fewer hospital admissions for illnesses and reduced carbon emissions).

Criteria used to assess options for each of the healthy homes standards

Our proposed options for each standard have been assessed against the following criteria:

- able to achieve the objective (warm, dry rental homes)
- net costs and benefits (in present value terms in aggregate and per home)
- costs and benefits to government (developing guidance, clear and enforceable standards, dispute processes and court administration)
- enduring, flexible and enable adoption of future innovation and building solutions.

3.3 What other options have been ruled out of scope, or not considered, and why?

Safety is not included within the scope of the proposed insulation regulations. However, it must be noted that certain materials, such as foil insulation, can cause an electrical safety risk and should not be used. As it is metal-based, foil conducts electricity and will become live if the foil or fixing staples make contact with live wires. In the constricted space and low light of a typical subfloor, the risk of electrocution is high.

Section 4: Impact Analysis

There are five tables below. Each table assesses the options for each area where standards are being proposed. All PVs are discounted over 15 years at four percent.

Analysis undertaken by NZIER used a discount rate of four percent rather than Treasury's current standard for public sector analysis of six percent. The approach taken by NZIER aligns with previous analysis undertaken by Motu which evaluated ECCA's Warm Up New Zealand insulation programme (WUNZ)[72]. Applying Treasury's six percent default discount rate tends to accentuate the front-end costs and discount the future benefits more strongly, lowering the present value of the net benefit. However, results were more sensitive to changes in the values attached to individual inputs in the analysis than to variations in discount rate. For moisture related standards, variations in discount rate and specific input assumptions do not significantly change the pattern of results in the absence of firmer information about how the measures would change the amount of moisture in and under houses and its action in creating quantifiable costs for occupants and building owners.

The tables on the following pages contain the same information contained within the CBA unless where a revised option has been developed.

Notes for Heating Standard Table

- Fixed heaters have higher capital costs and lower operating costs; portable heaters have lower capital costs and higher operating costs. The CBA assumes fixed heaters (heat pumps) in living rooms and 20 percent of heating in bedrooms is provided by heat pumps and 80 percent is provided by portable heaters with heating output less than 2.4 kilowatts. A change in this ratio for bedrooms will result in a change (increase) in the capital costs incurred by landlords and a change (decrease) in operating costs incurred by tenants.
- Revised option includes an additional 120,000 fixed electric heaters sized above 1.5 kilowatt and below 2.4 kilowatt at an installed cost of $110 GST inclusive ($67 purchase price and one hour for a tradesperson to mount device at $43). NZIER assumed effective life span for such heaters at 5 years and that it is cheaper to replace than repair. 120,000 homes is an estimate of homes that would require heating below 2.4 kilowatt and does not account for any existing fixed electric heating below 2.4 kilowatt currently in the rental stock

Heating standards		Rooms to be heated			Temperature to be achieved		Some heating devices, not others	
	No action / status quo	**Living room only** – fixed heating device where portable heater will not be sufficient	**Revised option – Living room only** - fixed heating device in all living rooms of a minimum capacity of no less than 1.5 kilowatts	**Living room fixed heat device and bedrooms** – 20% fixed and 80% portable heating devices	**At least 18°C**	**At least 20°C**	**Any heater**	**No unhealthy, inefficient and unaffordable heaters**
Able to achieve the objective (warm, dry rental homes) building solutions	0	++	++	++	+	++	0	++
Net costs and benefits (in PV$'000 terms),	0	**To 18°C:** 168,507 **To 20°C:** 169,513	**To 18°C:**143,557	**To 18°C:** 156,849 **To 20°C:** 163,333	**In living rooms only:** 168,507 **In living rooms and bedrooms:** 156,849	**In living rooms only:** 169,513 **In living rooms and bedrooms:** 163,333	0	**Not quantified**
Net costs and benefits per house (PV$)	0	**To 18°C:** 941 **To 20°C:** 594	**Not quantified**	**To 18°C:** 876 **To 20°C:** 573	**In living rooms only:** 941 **In living rooms and bedrooms:** 876	**In living rooms only:** 594 **In living rooms and bedrooms:** 573	0	**Not quantified**
Costs and benefits to government (specific to option)	0	**Not assessed separately. See administration costs in Section 5**						
Enduring, flexible and enable adoption of future innovation and building solutions	0	+	+	+	+	+	0	+
Overall assessment	0	++	++	+	+	++	0	++

Key:

++	much better than doing nothing/the status quo
+	better than doing nothing/the status quo
0	about the same as doing nothing/the status quo
-	worse than doing nothing/the status quo
- -	much worse than doing nothing/the status quo

Insulation standards		Minimum level of insulation		Assessing reasonable condition		Revised option
	No action (Current requirements are extended to apply after 1 July 2019)	**Properties under 2001 level are required to go to 2008 levels**	**All properties must meet 2008 levels**	**Status quo** (minimum ceiling insulation thickness from 70mm; 70-90mm; 100-120mm)	**Enhanced status quo** (minimum ceiling insulation thickness from 90mm; 90-120mm; 140-160mm)	**All properties must meet 2008 levels OR a minimum thickness of 120mm**
Able to achieve the objective (warm, dry rental homes)	**0**	**+**	**++**	**0**	**+**	**++**
Net costs and benefits (in PV$'000 terms)	**0**	7,240 – 50,677 depending on how reasonable condition is assessed (i.e. number of homes affected)	54,064 – 130,029 depending on how reasonable condition is assessed (i.e. number of homes affected)	Assessed as minimum and maximum homes in minimum level of insulation (see relevant column to the left)	Assessed as minimum and maximum homes in minimum level of insulation (see relevant column to the left)	94,611[1]
Net costs and benefits per house (PV$)	**0**	724	677 - 684	Not assessed separately	Not assessed separately	676[1]
Costs and benefits to government	**0**	**Not assessed separately. See administration costs in Section 5**				
Enduring, flexible and enable adoption of future innovation and building solutions	**0**	**+**	**+**	**+**	**+**	**+**
Overall assessment	**0**	**+**	**++**	**0**	**+**	**++**

Key:

++	much better than doing nothing/the status quo
+	better than doing nothing/the status quo
0	about the same as doing nothing/the status quo
-	worse than doing nothing/the status quo
- -	much worse than doing nothing/the status quo

[1] Calculated from NZIER Cost Benefit Analysis Table 6

Moisture ingress and drainage standards		Preventing moisture from entering the home and inadequate drainage		
	No action	**Install vents and moisture barriers**	**Revised option - ground moisture barrier for all homes with enclosed subfloor space (where accessible)**	
Able to achieve the objective (warm, dry rental homes)	**0**	**+**	**+**	With all moisture ingress options, while the PVs are negative, benefits for property maintenance, health, mental health, school attendance, subjective well-being and comfort were not quantified. The options would require relatively little additional benefit to be found to break even. (See page 38 of the Creating Healthy Rental Homes – Discussion document Preventing moisture entering the home reduces internal moisture levels decreasing the likely hood of mould and mildew. Mould and mildew pose a health risk but this has not been quantified financially to date.
Net costs and benefits (in PV$'000 terms)	**0**	-111,820	-153,507[2]	
Net costs and benefits per house (PV$)	**0**	-583	-533[2]	
Costs and benefits to government (specific to option)	**0**	**Not assessed separately. See administration costs in Section 5**		
Enduring, flexible and enable adoption of future innovation and building solutions	**0**	**0**	**0**	
Overall assessment	**0**	**0**	**0**	

Key:

++	much better than doing nothing/the status quo
+	better than doing nothing/the status quo
0	about the same as doing nothing/the status quo
-	worse than doing nothing/the status quo
- -	much worse than doing nothing/the status quo

[2] Calculated from NZIER Cost Benefit Analysis Table 15

Ventilation standards		Allowing moisture to ventilate out of the home		
	No action	Openable windows and extract fans in bathrooms	Openable windows and extract fans in bathrooms and kitchens	
Able to achieve the objective (warm, dry rental homes)	0	+	+	With all ventilation options, while the PVs are negative, benefits for property maintenance, health, mental health, school attendance, subjective well-being and comfort were not quantified. The options would require relatively little additional benefit to be found to break even.. (See page 22 of the Creating Healthy Rental Homes – Discussion document). Effective ventilation reduces internal moisture levels decreasing the likely hood of mould and mildew. Mould and mildew pose a health risk but this has not been quantified financially to date.
Net costs and benefits (in PV$'000 terms)	0	-54,550	-122,863[3]	
Net costs and benefits per house (PV$)	0	-216	-264[3]	
Costs and benefits to government (specific to option)	0	Not assessed separately. See administration costs in Section 5		
Enduring, flexible and enable adoption of future innovation and building solutions	0	0	0	
Overall assessment	0	0	0	

Key:

++	much better than doing nothing/the status quo
+	better than doing nothing/the status quo
0	about the same as doing nothing/the status quo
-	worse than doing nothing/the status quo
- -	much worse than doing nothing/the status quo

[3] Combined values from Table 11 in NZIER CBA

Draught-stopping standards		Preventing moisture from entering the home and inadequate drainage
	No action	**Stop unnecessary gaps or holes that cause noticeable draughts**
Able to achieve the objective (warm, dry rental homes)	**0**	**+**
Net costs and benefits (in PV$'000 terms)	**0**	94,787
Net costs and benefits per house (PV$)	**0**	578
Costs and benefits to government (specific to option)	**0**	**Not assessed separately. See administration costs in Section 5**
Enduring, flexible and enable adoption of future innovation and building solutions	**0**	**+**
Overall assessment	**0**	**+**

Key:

++	much better than doing nothing/the status quo
+	better than doing nothing/the status quo
0	about the same as doing nothing/the status quo
-	worse than doing nothing/the status quo
- -	much worse than doing nothing/the status quo

Compliance timeframes				
	Option one A - Comply with the standards within 90 days of a new or renewed tenancy from 1 July 2022, with all rental homes compliant by 30 June 2024	Option one B - Comply with the standards within 90 days of a new or renewed tenancy from 1 July 2021, with all rental homes compliant by 30 June 2024	Option two – A single compliance date of 1 July 2022	Option three - Staggered compliance dates over five years, either by the standard or by the location of the rental home
Tenants see the benefits of a warmer, drier home as soon as possible	-	+	+	+
Landlords and property managers have sufficient time and support to understand and comply with the changes, and procure and install necessary requirements	+	0	0	-
Industry capacity is able to respond to the changes, particularly if impacted by other government initiatives such as KiwiBuild	+	0	-	-
Government has sufficient time to provide advice through information campaigns, develop necessary guidance, and expand enforcement capacity where necessary	+	0	+	0
The timeframe does not restrict flexibility and innovation to meet a higher quality of rental home	+	+	-	0
Overall assessment	+	0	0	-

Key:

++	very good performance against criteria
+	good performance against criteria
0	no performance against criteria
-	poor performance against criteria
- -	very poor performance against criteria

Section 5: Conclusions

5.1 What option, or combination of options, is likely best to address the problem, meet the policy objectives and deliver the highest net benefits?

From the above assessment, new standards should be introduced for heating, insulation, ventilation, moisture ingress and drainage, and draught-stopping as all the options result in greater benefits than costs compared to doing nothing (or the status quo).

The standards that are likely best to address the problems identified, meet the policy objectives and deliver the highest net benefits are:

Heating

Location	Option two: landlords should be required to provide a heating device in the living room only
Indoor temperature	Option two: heaters that landlords provide must be capable of achieving an indoor temperature of at least 18°C in the rooms applicable to the heating standard
Heating devices	Option one: landlords should only be required to provide fixed heating devices

Insulation

Minimum level Degradation	Revised Option three that combines the options and simplifies the requirement: minimum level of ceiling insulation required that is akin to the 2008 standard OR a minimum thickness of 120mm

Ventilation

Method of ventilation	Option three: openable windows, plus extract fans in bathrooms and kitchens

Moisture ingress and drainage

Method of protection	Revised Option two that removes the need for additional air vents: ground moisture barrier for all homes with enclosed subfloor space (where accessible) and retains the need for efficient drainage, guttering, downpipes and drains

Draught stopping

Appropriate level	Revised Option two that simplifies the requirement: stop any unnecessary gaps or holes that cause noticeable draughts

Compliance timeframes

Appropriate timeframe	Comply with the standards within 90 days of a new or renewed tenancy from 1 July 2022, with all rental homes compliant by 30 June 2024

5.2 Summary table of costs and benefits of the preferred approach- Note: All PVs are discounted over 15 years at 4 percent.					
Summary of preferred standards: Benefits		**Affected parties (identify)**	**Comment**	**Impact PV$'000 High, medium or low for non-monetised impacts**	**Evidence certainty**
Heating	Living room only to 18°C, no unhealthy, inefficient unaffordable heaters, fixed heating devices	Tenants Mortality benefits Environment (reduced CO_2) Suppliers	Benefits to suppliers will be concentrated over the period landlords are given to comply	**669,950** Tenants 605,993 Mortality 100,245 Environment 9,136 Suppliers -45,424	Medium-high
Insulation	All houses required to meet 2008 standards for insulation or be 120mm thick	Tenants Suppliers Environment (reduced CO_2)		**282,324**[4] Tenants 279,454 Environment 2,052 Suppliers 817	Medium-high
Draught-stopping	Stop unnecessary holes and gaps	Tenants Suppliers		**134,730** Tenants 131,649 Suppliers 3,081	Medium
Ventilation	Opening windows, extract fans in bathrooms and kitchens	Tenants Suppliers	Unquantified benefits could result in a break even or positive net PV for this option	**5,584** Tenants ***Unquantified*** Suppliers 5,584	Low-medium
Moisture ingress and drainage	Subfloor moisture barriers where feasible	Tenants Suppliers	Unquantified benefits could result in a break even or positive net PV for this option	**12,833**[4] Tenants ***Unquantified*** Suppliers 12,833	Low-medium
Total monetarised benefits				**1,105,421**	
Total non-monetarised benefits		School attendance, mental health, subjective well-being and comfort: **Low-medium**			

[4] Revised options were not assessed in NZIER CBA. Impacts calculated using values extrapolated from NZIER CBA

Summary of preferred standards: Costs		Affected parties (identify)	Comment	Impact PV$'000 impacts	Evidence certainty
Heating	Living room only to 18°C, no unhealthy, inefficient unaffordable heaters, fixed devices	Landlords (capital and operating)	Costs to landlords will be concentrated over the period landlords are given to comply.	**501,433**	Medium-high
Insulation	All houses required to meet 2008 standards for insulation or be 120mm thick	Landlords (capital)		**187,713**[4]	Medium-high
Draught-stopping	Stop unnecessary holes and gaps	Landlords (capital)		**39,943**	Medium
Ventilation	Opening windows, extract fans in bathrooms and kitchens	Landlords (capital) Tenants (operating)		**128,446** Landlords 72,446 Tenants 56,049	Low-medium
Moisture ingress and drainage	Subfloor moisture barriers where feasible	Landlords	-	**166,340**[4]	Low-medium
Administration costs (already budgeted)	Budgeted MBIE administration costs (e.g. promoting, advising, monitoring, and enforcing standards)	Government (capital and operating)		**42,689**[5]	
Total monetarised costs				**1,023,875** Including budgeted administration costs **1,066,564**	
Non-monetised costs		MBIE regulatory administration (e.g. changes in dispute complexity, and mediation frequency)			

[4] Revised options were not assessed in NZIER CBA. Impacts calculated using values extrapolated from NZIER CBA

[5] Based on monitoring and enforcement of an additional 2000 new disputes arising over the standards each year: 500 being disputes arising from complaints; 1,500 being pro-active interventions

5.3 What other impacts is this approach likely to have?

In addition to the non-monetised benefits, we have identified that adjustments may be made in rental markets as landlords may seek to recover their business costs associated with complying with the regulations through increased rents. Any rental increases will need to meet the requirements of the Residential Tenancies Act.

There may also be changes in property ownership that occurs between landlords, or from current landlords to owner-occupiers. We would not be concerned with these changes where housing supply is unaffected. We also expect any shifts to owner-occupiers that result in properties remaining unimproved would be minor.

5.4 Is the preferred option compatible with the Government's 'Expectations for the design of regulatory systems'?

The preferred options are compatible with the Government's 'Expectations for the design of regulatory systems'.

Section 6: Implementation and operation

6.1 How will the new arrangements work in practice?

MBIE will be responsible for the effective implementation of the healthy home standards. In Budget 2018 the Government allocated $15.1 million over four years to support the effective implementation of the standards. This funding will support:

- enforcement and compliance activity
- development of an online heating tool
- collecting baseline housing data to support future monitoring and evaluation
- information and education activity

Compliance timeframes

The HHG Act allows for a phased implementation of the healthy homes standards between 1 July 2019 and 30 June 2024. This timeframe balances the needs and risks of tenants, landlords, industry, and government so that:

- tenants see the benefits of a warmer, drier home as soon as possible
- landlords and property managers have sufficient time and support to understand and comply with the changes and procure and install necessary requirements
- industry capacity is able to respond to the changes, particularly if impacted by other government initiatives such as KiwiBuild
- government has sufficient time to provide advice through information campaigns, develop necessary guidance, and expand enforcement capacity where necessary
- the timeframe does not restrict flexibility and innovation to meet a higher quality of rental home.

The public consultation sought feedback on a suitable compliance timeframe for the healthy homes standards. The clearest compliance timeframe, that best balances the impacts on tenants, landlords, industry and government is: landlords must comply with the standards within 90 days of a new or renewed tenancy, from 1 July 2022, with all rental homes compliant by 30 June 2024. A lead-in time of three years will provide for a higher level of compliance than an earlier start date, as it ensures landlords and industry are able to meet the demand, and tenants can expect to see a tangible improvement in the quality of their rental home in reasonable timeframe.

Enforcement and compliance activity

MBIE will undertake approximately 2000 enforcement interventions per year to support compliance with the healthy homes standards. This will include approximately 1500 light-touch cases (for example, seeking evidence about a property and providing a proportionate response based on the seriousness of the non-compliance), 300 investigations and 200 proactive property inspections.

The proposed proactive interventions would reach approximately 0.35 percent of New Zealand's rental housing stock. While this number is small, MBIE considers that it will provide some geographical coverage and have the intended effect on landlord's behaviour. The impact of the programme would be magnified by regional and national media coverage of resulting Tenancy Tribunal decisions to issue work orders and award up to $4000 for exemplary damages. MBIE will use a risk-based methodology to target proactive interventions where there is the greatest risk of non-compliance.

Development of an online heating tool

It is essential that it is easy for landlords, tenants, suppliers, and enforcement officers to determine the heating requirements for individual properties in a consistent way. MBIE will develop an online tool that users can enter the details of their home into to determine the exact heating requirements required to comply with the heating standard.

Monitoring and evaluation

MBIE is working alongside Statistics New Zealand and BRANZ to undertake up to 800 physical house inspections on a subset of homes from Statistics New Zealand's General Social Survey (GSS). This data will be used to evaluate progress against the objectives of the Healthy Homes Guarantee Act and provide data for the development of a tier one statistic on housing quality.

Information and education activity

An information and education (I&E) programme is required to help landlords, tenants and other stakeholders understand the new requirements and make compliance as easy as possible. This programme will be highly targeted and designed to achieve maximum impact with a comparatively small implementation budget. MBIE will build on relationships with creative and media agencies to determine the most effective channels to reach landlord and tenant audiences. MBIE would also work with third parties such as tenant support groups and the Citizens' Advice Bureau, or take road shows around community events This would enable MBIE to reach tenants who do not have access to digital media or are less likely to engage with the tenancy system through official services (e.g. immigrants may not use the website or contact centre due to language barriers).

The level of information and education activity will remain stable until 2024/25 to ensure new landlords and those renewing tenancies for the first time over the next four to five years receive the same information. Experience has shown that people often wait until the last minute to make required changes, so the need for information is expected to remain high as the need for compliance with the regulations becomes more compelling.

Guidance has been identified to be developed in the following areas (for installation and exceptions):

- acceptable/recommended heating devices to meet the heating standard
- assessing the condition of insulation
- ventilation
- moisture ingress and drainage
- draught stopping

6.2 What are the implementation risks?

The consultation process that was conducted over September to October 2018 has mitigated issues associated with complexity, awareness and issues that may arise in achieving compliance. It has also assisted in identifying benefits and costs that would otherwise have been difficult to assess.

Ongoing issues related to understanding what standards are required and ensuring compliance will be managed by MBIE (Housing and Tenancy Services). For example, through providing guidance material and through its operation of compliance, enforcement and dispute resolution processes.

Section 7: Monitoring, evaluation and review

7.1 How will the impact of the new arrangements be monitored?

MBIE has developed a draft monitoring and evaluation plan which will be finalised once the detail of the regulations is known. Which of the monitoring reports will be made public has not been determined yet.

The key outcome is an increase in the warmth and dryness of rental housing arising from the HHG Act amendments. Success on this front is not sufficient to result in improved health and employment outcomes for tenants. Those outcomes will not be covered in the plan, and will need its own multi-agency research agenda.

Timing

Baseline measures of existing compliance, and awareness and understanding by tenants and landlords of the new requirements will be established during the first year after the regulations are gazetted.

Implementation effectiveness will be evaluated during 2020/21 and will assess whether:

- regulations are fit for purpose,
- level of administrative burden on government and NGOs,
- industry capacity and capability,
- effectiveness of information campaigns
- emerging negative outcomes.

Monitoring of tenant and landlord awareness and compliance with the standards will be repeated in 2021/22 and in 2022/23, along with an overall assessment of implementation effectiveness.

Annual progress reports between 2019 and 2023 will highlight potential areas where the regime can be improved.

The outcomes evaluation will take place in 2024 with a final report in December 2025.

Data requirements: Existing

System-level monitoring of perception of housing warmth and dryness already exists through the General Social Survey and the Census.

There is only one objective measure of actual warmth and dryness, the House Condition Survey, which is conducted every five years by BRANZ. While the first survey was conducted in 1994, only since 2010 has it been conducted country-wide and with rental houses included in the sample. The last survey was in 2015 and included 149 rental houses.

Administrative load will be assessed through MBIE call centre logs, while the TIKA database (case management database that logs tenancy enforcement activity) and disputes database will provide information about compliance.

Data requirements: New

The 2018/19 pilot Housing Assessment Survey, commissioned to develop a housing quality measure, will also be available for the HHG Act evaluation. This survey is a fusion of the GSS and the House Condition Survey, where 800 houses (half of these being rentals) from the GSS sample are inspected as for the House Condition Survey. Depending on funding, this survey will be repeated in 2024 to inform the outcomes evaluation. This iteration of the GSS also included a Housing and Physical Environment

module, which include questions about heating and ventilation practices.

Landlord and tenant awareness and compliance with the 2016 amendments to the RTA was tracked during 2017 and 2018 by an online survey of 1000 landlords and 1000 tenants. The survey will be modified to suit the HHG Act and conducted in 2019, 2021 and 2023. It will be also conducted in 2025 if it is not possible to repeat the Housing Assessment Survey.

Qualitative research will be conducted with MBIE and Tenancy Tribunal staff, landlord representative bodies, industry stakeholders and NGOs involved in dispute resolution.

7.2 When and how will the new arrangements be reviewed?

The early phase of the evaluation exercise will identify aspects of the regime that require adaptation. Progress reports will be produced each year between 2019 and 2023.

Possible outcomes that might flag the need for earlier review are

- decreases in rental stock particularly at the lower quality end of the market, resulting in increased rents which will have a greater impact on the most vulnerable tenants
- poor landlord compliance
- lack of industry capacity and capability leading to workplace accidents, shoddy work, and unacceptable delays
- the emergence of unintended consequences

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[1] White V, Jones M (2017) Warm, dry, healthy? Insights from the 2015 House Condition Survey on insulation, ventilation, heating and mould in New Zealand houses. SR373, BRANZ

[2] Witten K, Wall M, Carroll P, Telfar-Barnard L, Asiasiga L, Graydon-Guy T, Huckle T, and Scott K (2017) The New Zealand Rental Sector. Study Report ER22. BRANZ Ltd and Massey University SHORE and Whariki Research Centre

[3] Boulic,M, et al (2007). "Cold homes in New Zealand – Low Heater Capacity or Low Heater Use?

[4] Howden-Chapman, Philippa, et al. "Effects of improved home heating on asthma in community dwelling children: randomised controlled trial." Bmj 337 (2008): a1411.

[5] Statistics New Zealand estimate 592,300 households in private occupied dwellings, as at quarter ended September 2018.

[6] White, V., Jones, M., Cowan, V., & Chun, S. B. (2015). House Condition Survey: Comparison of House Condition by Tenure. Study Report SR370. BRANZ Ltd, p. ii, p15-16, 24, 26.

[7] Witten, K.,Wall , M.,Carroll, P., Telfar-Barnard, L., Asiasiga, L., Graydon-Guy, T., Huckle, T. & Scott, K.(2017).The New Zealand Rental Sector. Study Report ER22.BRANZ Ltd & Massey University SHORE and Whariki Research Centre, p7.

[8] White, V. Jones, M., (2017) Warm, dry, healthy? Insights from the 2015 House Condition Survey on insulation, ventilation, heating and mould in New Zealand houses. SR372,. BRANZ Ltd. piii.

[9] Regulation 6 of the Housing Improvement Regulations.

[10] Regulation 11 and 14 of the *Residential Tenancies (Smoke Alarms and Insulation) Regulations 2016*.

[11] Regulation 24 of the *Residential Tenancies (Smoke Alarms and Insulation) Regulations 2016;* 2016/001: ban on installation and/or repair of foil insulation in residential buildings with an existing electrical installation at https://www.building.govt.nz/assets/Uploads/building-code-compliance/warnings-bans/201601-Foil-insulation-ban.pdf.

[12] Regulations 18 to 21 of the *Residential Tenancies (Smoke Alarms and Insulation) Regulations 2016*.

[13] Regulation 15 of the Housing Improvement Regulations 1947.

[14] White, V., Jones, M., Cowan, V., & Chun, S. B. (2015). House Condition Survey: Comparison of House Condition by Tenure. Study Report SR370. BRANZ Ltd, p ii.

Of 560 houses assessed 32% of rental properties as being 'poorly maintained' compared with 14% of owner-occupied housing; BRANZ, 2010 House Condition Survey – Condition Comparison by Tenure, 2012.

[15] Witten, K.,Wall , M.,Carroll, P., Telfar-Barnard, L., Asiasiga, L., Graydon-Guy, T., Huckle, T. & Scott, K.(2017).The New Zealand Rental Sector. Study Report ER22.BRANZ Ltd and Massey University SHORE and Whariki Research Centre, p8

The median income of tenants was in the $60-70,000 band, below the New Zealand median of $76,000

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[17] Telfar Barnard, L. F. (2010). Home truths and cool admissions: New Zealand housing attributes and excess winter hospitalization (University of Otago).

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[27] WHO Regional Office for Europe. 2009. Guidelines for Indoor Air Quality; Dampness and Mould. Copenhagen: WHO.

[28] White, V. Jones, M., (2017) Warm, dry, healthy? Insights from the 2015 House Condition Survey on insulation, ventilation, heating and mould in New Zealand houses. SR372. BRANZ Ltd. p26.

Two percent had no form of heating at all.

[29] White V, Jones M. (2017). Warm, dry, healthy? Insights from the 2015 House Condition Survey on insulation, ventilation, heating and mould in New Zealand houses. SR372, p. 25-39.

[30] Energywise, https://www.energywise.govt.nz/at-home/heating-and-cooling/types-of-heater/#runningcosts: portable unflued gas heaters are the most expensive form of heating and release toxic gases and large amounts of water vapour. They are also a fire risk. Portable electric heaters are more expensive to run than most other heating options and their heat output is lower compared to most other heater types.

[31] White, V. Jones, M., (2017) Warm, dry, healthy? Insights from the 2015 House Condition Survey on insulation, ventilation, heating and mould in New Zealand houses. SR372,. BRANZ Ltd.

[32] White, V. Jones, M., (2017) Warm, dry, healthy? Insights from the 2015 House Condition Survey on insulation, ventilation, heating and mould in New Zealand houses. SR372,BRANZ Ltd

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[58] Plumbing water can include tap and sewerage water.
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Draught stopping in this context is the installation of back draught shutters to extraction fans and draught excluders to doors.
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[63] The 2001 Building Code insulation standard increased the R-value of floor insulation for all climate zones from 0.9 to 1.3 but in practice the methods and products for underfloor insulation did not change. Increasing to R1.3 would not require additional properties to upgrade their underfloor insulation presuming the underfloor insulation is not damaged, complete and secure.
[64] NZ4246: 2016.
[65] Guidance for assessing "reasonable condition" of insulation under the current 2016 regulations can be found on the Tenancy Services website: https://www.tenancy.govt.nz/assets/Uploads/Insulation-requirements.pdf
[66] Residential Tenancies (Smoke Alarms and Insulation) Regulations 2016, regulation 17.
[67] The ground cover (also called on-ground vapour barrier) would need to be installed to New Zealand Standard NZS 4246, available at: www.tenancy.govt.nz
[68] A pole house has a suspended floor that is supported by long piles.
[69] Regulation 17 of the Housing Improvement Regulations.
[70] See Article 11 of the International Covenant on Civil and Political Rights; Article 25 of the Universal Declaration of Human Rights recognises the right to housing as part of the right to an adequate standard of living.
[71] Section 6 of the Healthy Homes Guarantee Act 2017 which will insert a new section 138B of the Healthy Homes Guarantee Act.
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