

In Confidence

Office of the Associate Minister of Housing (Public Housing)

Chair, Cabinet Social Wellbeing Committee

**THE RESIDENTIAL TENANCIES (HEALTHY HOMES STANDARDS) REGULATIONS:  
AMENDMENTS TO THE HEATING STANDARD AND OTHER MINOR CHANGES**

**Proposal**

1 This paper seeks agreement on amendments to the healthy homes standards.

**Relation to government priorities**

2 One of this government's priorities for housing is to make sure every New Zealander has a warm, dry, and safe place to call home. These proposed amendments will ensure the policy intention of the healthy homes standards is achieved and address areas where there have been unintended consequences, in particular the required heating capacity for apartment style buildings and homes built since 2008.

**Executive Summary**

3 Approximately 600,000 households rent in New Zealand and research has shown that New Zealand's rental housing is of poorer quality than owner-occupied homes. On 1 July 2019, the Residential Tenancies (Healthy Homes Standards) Regulations 2019 (healthy homes standards) came into force to improve the quality of our rental stock and ensure that tenants have a warm dry rental home to improve the wellbeing of New Zealanders and their families.

4 The healthy homes standards aim to make a significant change to the quality of New Zealand rental homes by setting minimum requirements for heating, insulation, ventilation, draught stopping, and moisture ingress and drainage.

5 A number of issues relating to the healthy homes standards have arisen since they were introduced in 2019. These changes are needed now to ensure that the costs imposed by the formula that specifies the required heating capacity (heating formula) are proportionate for apartment style buildings and homes built since 2008. Other minor changes are needed to ensure that the burden on property owners who had installed a heat pump prior to 1 July 2019 is reasonable.

6 I am proposing that this committee approves the following amendments:

6.1 developing a revised heating formula specifically for dwellings built to current building code requirements for insulation and glazing and all apartments, which recognises the better thermal performance of these types of building

6.2 the establishment of a grace period for property owners whose properties meet the standards in 6.1 to comply with the new heating formula

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- 6.3 an alternative means of complying with the heating standard available to all rental homes,
  - 6.4 amending the allowable size for a heating “top up” for heaters installed before 1 July 2019,
  - 6.5 relaxing the tolerance for existing insufficient heaters, installed before 1 July 2019, from 90 percent to 80 percent of the kilowattage specified by the heating formula,
  - 6.6 amending the ventilation standards to allow continuous mechanical ventilation to satisfy the ventilation regulations,
  - 6.7 clarifying that geothermal heating systems, which directly provide heat to the living room, and for which the heating capacity cannot be measured satisfy the healthy homes heating standard.
- 7 Note that the amendments to the regulations will likely take effect in early 2022, which is after the first compliance date of 1 July 2021 when most landlords had to start complying with the healthy homes standards within 90 days of any new or renewed tenancy.

### Background

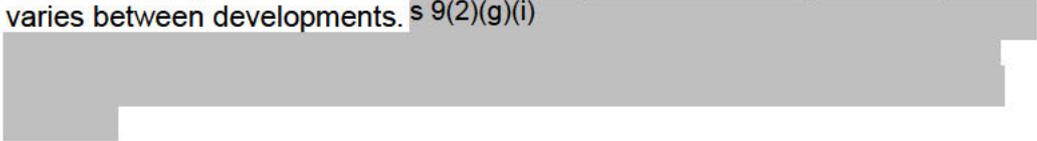
- 8 The previous Labour government introduced minimum standards for warmer and drier rental homes under the *Healthy Homes Guarantee Act 2017* in December 2017. The Act introduced standards for heating, insulation, ventilation, moisture ingress and drainage, and draught stopping.
- 9 Following the development of specific standards and public consultation, in May 2019 Cabinet agreed to the Residential Tenancies (Healthy Homes Standards) Regulations 2019 [LEG-19-MIN-0050 refers].
- 10 However, a number of issues relating to the healthy homes standards have arisen since they were introduced in 2019. I am seeking Cabinet’s approval to amend the healthy homes standards so the policy intention of the regulations is fulfilled.

### Analysis

#### *Issues with the healthy homes standards heating formula*

- 11 Schedule 2 of the healthy homes standards provides a heating formula to calculate the required heating capacity for each rental property after specific information is inputted. When officials designed the heating formula there were trade-offs and compromises made to keep the formula relatively simple while recognising it will be applied to a wide variety of houses in New Zealand. We understand that the current heating formula is appropriate for most existing, pre-2008 rental homes, other than apartments.
- 12 However, Te Tūāpapa Kura Kāinga – the Ministry of Housing and Urban Development (HUD) has received a significant amount of feedback from stakeholders, including Kāinga Ora, landlord representatives, community housing providers, and heating professionals and engineers, that the heating formula uses conservative assumptions that lead to overstating the required heating capacity for homes built since 2008 and apartments.

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- 13 Experts have identified three discrete assumptions used in the heating formula that are not appropriate for post 2008 rental homes and apartments of any age, and are significant contributors to the oversizing issue. These assumptions are:
- 13.1 a ventilation rate of 1.0 air change per hour<sup>1</sup>
  - 13.2 a pick up load (the energy initially required to heat the living room to the required temperature of 18°C) of 40W/m<sup>2</sup>, and
  - 13.3 heat loss of 50 percent from the living room to adjacent internal rooms.
- 14 Kāinga Ora has a number of new developments underway. During construction they have worked closely with engineers who do not agree with the heating formula and the tool's assessment of the heating requirements. Subsequently, it has become clear that the heating solutions designed by professionals to meet the same or higher outcomes as the healthy homes regulations will not meet the requirements of the heating formula and the developments would have to be completely redesigned to allow for extra pipework to accommodate a heat pump, rather than the wall panel heaters the engineer recommended. The impact of the heating tool's requirements varies between developments. § 9(2)(g)(i)
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### *Proposed solutions to address the issues with the heating formula*

- 15 Officials have proposed the following solutions to ease the burden from the oversizing of the heating formula:
- 15.1 amending the heating formula for dwellings built to the current building code requirements for insulation and glazing and apartments to use assumptions that are more appropriate for higher performing dwellings built to current building code requirements for insulation and glazing and all apartments,
  - 15.2 the provision of a different pathway for all rental homes, to show compliance with the policy intention of the heating standard. A suitably qualified specialist would be able to certify that the heating solution meets the policy intention of the heating standards,
  - 15.3 the provision of a grace period to comply with the revised heating standards.

### *Amending the assumptions in the heating formula for dwellings built to the current building code requirements for insulation and glazing and apartments*

- 16 I recommend amending the identified three assumptions in the heating formula for dwellings built to current building code requirements for insulation and glazing and all apartments. Based on advice from industry specialists, I recommend amending the assumptions identified in paragraph 13 to:
- 16.1 a ventilation rate of 0.5 air changes per hour,
  - 16.2 a pick up load of 20 percent of the base heat requirement and

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<sup>1</sup> This assumption was based on older, somewhat draughty dwellings or windy conditions.

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- 16.3 heat loss of 25 percent to adjacent internal rooms.
- 17 These revised assumptions are more appropriate for dwellings built to current building code requirements for insulation and glazing and all apartments and would reduce the risk of overstating the required heating capacity for these types of dwellings. Revising these parts of the heating formula will reduce the cost of complying for property owners while still achieving the aim of allowing a rented home to reach 18°C on the coldest day of the year. Decreasing compliance costs for property owners means a reduced risk of these costs being passed on to tenants through increased rents.
- 18 The Building Research Association of New Zealand (BRANZ) has conducted modelling of these new assumptions for HUD using data for approximately 800 dwellings (including apartments) constructed after 2008 extracted from MBIE's heating assessment tool, and approximately 2,000 apartments provided by Wellington City Council (WCC). The heating tool data shows that the dwellings constructed after 2008 received significantly reduced required heating capacities under the revised heating formula with, for example, a building given a 5kW requirement under the current heating formula assumptions typically being reduced to a requirement of around 3.5kW when using the new assumptions. The WCC apartment data shows a similar trend with the required heat capacity under the current formula of 3kW typically reduced to around 2kW using the new assumptions. The modelling indicated the policy intention of the heating standard of heating to, and maintaining the living room of a rental home at, 18 °C on the coldest day of the year will still be achieved using the new assumptions in the heating formula.
- 19 My officials would need to define dwellings built to the current building code requirements for insulation and glazing and apartments in the regulations to clarify which buildings could use the revised assumptions. I propose that:
- 19.1 'Dwellings built to the current building code requirements for insulation and glazing' are defined as:
- 19.1.1 dwellings that have first received building consent on or after the following dates, according to their Zone, as set out in Annex B of NZS 4218:2009:
- 19.1.1.1 For Zone 1, 30 September 2008
- 19.1.1.2 For Zone 2, 30 June 2008
- 19.1.1.3 For Zone 3, 31 October 2007.
- 19.1.2 dwellings which first received building consent prior to the relevant date above but which have been renovated throughout to the building code requirements for insulation and glazing which applied from the dates above.
- 19.2 'Apartments' are defined as residential buildings that consists of three storeys or more, and contain 6 or more dwellings or individual units within the building. We consider this to be the minimum size of development where the high thermal mass of the building starts to have a significant impact on heat loss and airtightness for each of its dwellings.

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- 20 I recommend that the healthy homes standards compliance statement which accompanies new and renewed tenancy agreements be revised to require landlords to indicate whether the rental home uses the revised heating formula and, if so, the basis for this, or whether the alternative route to compliance detailed in the next section has been used, as well as to accommodate other changes proposed in this paper. The landlord would be required to retain the supporting evidence and the tenant would have a right to request that evidence from the landlord.

### *Provision of a different pathway to show compliance with the policy intention for all dwellings*

- 21 While amending the heating formula will allow heating solutions to be finetuned for dwellings built to the current requirements for insulation and glazing and apartments, there will still be situations where the tool cannot take specific aspects of a building into consideration.
- 22 In addition to amending the heating formula, I propose introducing an alternative compliance pathway in the regulations to meet the policy intention of the heating standard: heating to, and maintaining the living room of a rental home at, 18 °C on the coldest day of the year. This alternative pathway will be available to all rental homes and take into account any additional factors of the building that may not be taken into consideration by the heating formula. However this alternative pathway will principally be effective and economic for those using innovative and energy-efficient technologies in new property developments, where they would already have commissioned a specialist assessment.
- 23 Under this alternative compliance pathway I propose that a specialist certify that the heating device or system used will heat to, and maintain the home at 18 °C on the coldest day of the year. The details of this assessment would be included on the healthy homes standards compliance statement which accompanies new and renewed tenancy agreements. A suitably qualified specialist will need relevant skills and experience to be able to make an assessment on an appropriate heating system for a specific building or dwelling.
- 24 I propose that a suitably qualified specialist be defined as:
- 24.1 a registered chartered engineer under the Chartered Professional Engineers of New Zealand Act 2002,
  - 24.2 an International Professional Engineer (IntPE), or
  - 24.3 a person that has completed a tertiary engineering, physics or building science qualification (at New Zealand Qualification Framework Level 7 or above) , with an additional 5 years of experience in heating system design whether commercially or otherwise.
- 25 The specialist will have to assess the heating device against the below criteria, and supply documentation to demonstrate how the heater or heating system complies with this criteria. The documentation should show how the specialist has taken the following into consideration:
- 25.1 the heating device or system will need to be able to heat the living room of the dwelling to 18°C on the coldest day of the year by using the assumed external temperature assumptions for the location in Schedule 2 of the healthy homes standards,

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- 25.2 the heating device or system must be a 'qualifying heater' under the healthy homes standards. The electric heater 'top up' allowance or the large heater tolerance may be used if any existing qualifying heaters or qualifying large heaters were installed before 1 July 2019
- 25.3 the heating device or system must have a sufficient pick up load to be able to heat the living room to 18°C within 2 hours after a period of 8 hours disuse
- 25.4 the heating device or system must be sufficiently sized for the expected transmission, infiltration and ventilation heat losses of the living room during very cold and windy external conditions, based on assumed external temperature assumptions for the location in Schedule 2 of the healthy homes standards. This includes heat losses to:
- 25.4.1 external air
  - 25.4.2 ground and
  - 25.4.3 adjoining spaces within the same dwelling or other building entities within the same building or to another adjoining building.

### *Provision of a grace period*

- 26 If Cabinet agree to proceed with the changes outlined in this document, they will not come into effect until early 2022. As a result, I am proposing a grace period to comply with the revised heating standard which recognises the regulatory change and that landlords will need extra time to adjust for the new rules. This grace period will not apply retrospectively to rental homes where a tenancy agreement was entered into or renewed between 1 July 2021 and the date the proposed changes come into effect.
- 27 Where a tenancy agreement is entered into or renewed after the new changes come into effect, I recommend that a grace period be introduced, solely for dwellings built to the current building code requirements for insulation and glazing and apartments, to comply with the revised heating standard that lasts 6 months from when the changes come into force. If there is a new or renewed tenancy during this period, the 90 day compliance period will only start once the 6 month grace period ends, meaning landlords in this position will have up to 9 months rather than 90 days to comply.
- 28 This option provides additional time for industry and regulated parties to comply with changes to the heating standard compared. This is the case regardless of whether a full nine months elapses between a new or renewed tenancy and the expiry of the 90 day compliance period, as planning may commence as soon as the new heating standard comes into force.
- 29 This proposal takes into consideration the impact on both tenants and landlords and any delays which may occur in updating the online heating tool once the changes come into force. Because the grace period applies to dwellings built to the current building code requirements for insulation and glazing and apartments, it means there will not be a delay in installing heating devices in older and poorer quality homes. While this means that tenants in dwellings subject to the changes in the heating formula may face a delay in the installation of a heating device, these types of building are known to be warmer than most homes due to generally having better thermal characteristics.

*Increasing the transitional 'top up' heating allowance*

- 30 Currently, the healthy homes standards allow a rental home with a required heating capacity of more than 2.4kW but with undersized qualifying heaters installed before 1 July 2019 to use electric heaters to 'top up' to the required heating capacity where the qualifying heaters are short of the required heating capacity by 1.5kW or less.
- 31 The rationale for allowing small 'top ups' was to avoid penalising landlords who had installed heat pumps or other suitable heating prior to the healthy homes standards being introduced, and that existing heating was reasonably close to the heating required by the healthy homes standards.
- 32 However, the Energy Efficiency and Conservation Authority has found, through their Warmer Kiwi Homes programme, that there are many heat pumps installed before 1 July 2019 that are undersized relative to the heating formula by more than 1.5kW, often significantly more. This is due to the lack of consistency in the methods used by engineers to calculate heating requirements prior to the introduction of the heating standard.
- 33 On this basis I propose that the transitional 'top up' threshold be reduced so that a rental home with a required heating capacity of more than 2.4kW but with undersized qualifying heaters installed before 1 July 2019 be allowed to use electric heaters to 'top up' to the required heating capacity where the qualifying heaters are short of the required heating capacity by 2.4kW or less, rather than the current 1.5kW or less.
- 34 HUD considers 2.4kW to be a suitable cut-off point because electric heaters with a greater capacity than 2.4kW are inefficient and expensive to run. 2.4kW is also the highest heating capacity of fixed plug-in electric heaters available in New Zealand.

*Increasing the tolerance for existing insufficient heaters*

- 35 The healthy homes standards currently state that the heating standard is deemed to be met where large living room heaters each with a heating capacity of more than 2.4W, such as wood burners, flued gas heaters and heat pumps:
- 35.1 were installed prior to 1 July 2019, and
- 35.2 do not meet the required heating capacity under the healthy homes standards, but are within 90 percent of it (e.g. they provide at least 2.7 kW of heating capacity when the requirement is 3.0 kW).
- 36 I propose relaxing this tolerance so that large living room heaters within 80 percent of the required heating capacity (e.g. they provide at least 2.4 kW of heating capacity when the requirement is 3.0 kW) will be deemed to meet the heating standard. This will avoid penalising landlords that have acted in good faith prior to the healthy homes standards being introduced to install a heating device in their rental property. This will also allow homes with living room heaters below the current 90 percent threshold but at or above the 80 percent threshold to avoid the need to 'top up' using electric heaters.
- 37 This is a transitional provision and when the heating device needs to be replaced in the future, this provision will no longer apply and a heating device of appropriate size will need to be installed.

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### *Alternative ventilation systems for dwellings built to the current building code to satisfy the standards*

- 38 Under the current ventilation standard, continuous mechanical ventilation would typically not meet the requirements. Continuous mechanical ventilation is considered an alternative approach to intermittent ventilation (e.g. extractor fans which are required by the standard) for well insulated, more modern homes but is typically at odds with the minimum exhaust capacities (flow rates) of at least 50 litres per second for a kitchen and at least 25 litres per second rates for a bathroom prescribed in the healthy homes standards. Continuous ventilation typically delivers constant ventilation at a lower flow rate than more typical “intermittent” ventilation provided by just bathroom and kitchen extraction (around 10 litres per second).
- 39 While continuous ventilation systems can comply with the ventilation standard where they meet minimum ducting diameters (at least 150mm for kitchens or at least 120mm for bathrooms), continuous mechanical ventilation often uses smaller ducting which does not comply with the standards. Therefore, I propose an amendment to allow under the ventilation standard, mechanical ventilation systems that continuously extract from kitchens and bathrooms at lower flow rates than permitted in the healthy homes standards, where they are installed in dwellings that have first received building consent on or after 1 November 2019, provided the mechanical ventilation system was part of the original building consent and continues to meet the requirements of that building consent.

### *Amendment to allow geothermal energy to satisfy the heating standard*

- 40 Stakeholders have expressed concern that direct geothermal heating systems which do not use a heat pump and typically deliver heating to the living room through hot water pumped through either pipes in the floor or radiators may not satisfy the healthy homes heating standard due to a lack of stated capacity. This makes it difficult to provide evidence that the heating system meets the heating capacity required by the heating formula.
- 41 I understand that direct geothermal heating is a low-cost heating system used by a small number of households, primarily in Rotorua, of about 1,500 to 2,000. Only some of these homes would be rental homes and subject to the healthy homes standards.
- 42 I propose an amendment to the heating standard so that geothermal heating systems, which directly provide heat to the living room, and for which the heating capacity is not stated, are deemed to satisfy the requirements of the healthy homes heating standard. Although there is a small risk that individual homes falling within this exemption will not meet the required heating capacity, a very small portion of rental homes would be using this niche heating system. This approach recognises that these tenants have access to a very low cost heating systems and additional heating is unlikely to be needed to meet the policy objectives of the heating standard.

### *Risks*

- 43 Amendments to the regulations are likely to come into effect in early 2022, which is after the date some private landlords and all boarding house tenancies have to comply with the healthy homes standards. For example, if a tenancy is entered into, or renewed on 1 July 2021, the rental property must comply with the healthy homes standards by 28 September 2021.

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- 44 There will be a portion of landlords that will be aware that the government is considering changes for apartments and building code compliant rental properties. However, if a landlord's compliance deadline has been triggered before the regulations come into effect, they must comply with the standard they were required to comply with when their compliance date was triggered.
- 45 Making changes to the healthy homes standards, and in particular the heating standard, poses some risks. Landlords of the types of dwelling affected by the changes that have already undertaken work to ensure their properties comply with the standards might feel unfairly treated or disadvantaged because they complied early in line with the Government's messages. For example, if they have already installed an oversized heat pump in a dwelling built to the current building code requirements for insulation and glazing and the new changes would have allowed them to install a smaller, cheaper and more effective heat pump.
- 46 While this situation is not ideal, delaying the change will only lead to a larger number of rental properties being fitted with oversized heat pumps with undesirable outcomes. It is preferable to amend the regulations as soon as possible to reduce this risk and to not cause unnecessary delays to new developments being built for rental purposes by requiring oversized heat pumps to be installed.
- 47 s 9(2)(g)(i) [REDACTED] This would not capture any tenancies that are renewed in those months or tenancies where a bond was not lodged. A relatively small proportion of these properties will be compliant with the current building code requirements and/or be apartment-style buildings.
- 48 HUD officials have asked the Tenancy Compliance and Investigation team (TCIT) at Tenancy Services how they would approach complaints about non-compliance during this period. TCIT has advised that if they are aware changes to the healthy homes standards are being made, they are unlikely to take enforcement or punitive action related to the upcoming changes. However, if a tenant would still like to pursue the complaint, TCIT would explain they could take the complaint to the Tenancy Tribunal.

### Legislative Implications

- 49 I expect the timeline to finalise these proposed changes to the healthy homes standards to be as set out below:

Deliverable	Date
Cabinet Social Wellbeing Committee Consideration	10 November 2021
Cabinet Legislation Committee Considers Draft Regulations	February 2022 <i>(if time permits, approval will be sought from a policy)</i>

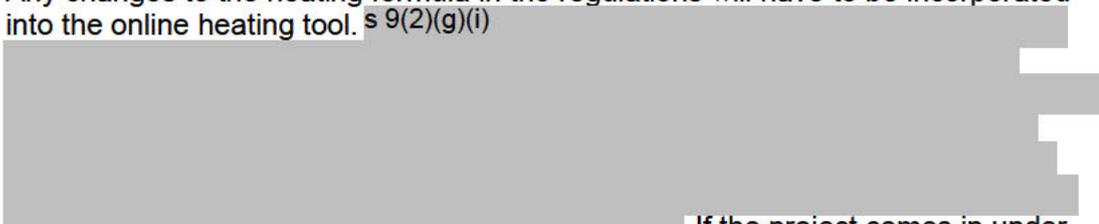
<sup>2</sup> This data reflects the period from commencement of the healthy homes standards on 1 July 2021 to the date we expect Ministers to announce our proposed changes to the heating formula in October 2021.

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	<i>committee in January 2022)</i>
Regulations come into force	March 2022  <i>(February 2022 if approval can be obtained from a policy committee in January 2022)</i>

- 50 I seek Cabinet's authorisation to issue drafting instructions to the Parliamentary Counsel Office to give effect to the recommendations in this paper that will create the new regulations and amend existing regulations.
- 51 I also seek Cabinet's authorisation to make any further minor policy, transitional and technical decisions (including records required for compliance) necessary to bring the new regulations into effect, and amend the existing regulations, by early 2022.

### Financial Implications

- 52 Any changes to the heating formula in the regulations will have to be incorporated into the online heating tool. s 9(2)(g)(i)
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- If the project comes in under budget, the additional funding could be used for information and education activities to inform stakeholders of changes to the healthy homes standards.

### Impact Analysis

#### *Regulatory Impact Assessment*

- 53 A regulatory impact statement has been prepared and is attached to this cabinet paper as Annex A.
- 54 The Panel's assessment and comment is as follows:
- 54.1 *The Panel considers that the RIA meets the quality assurance criteria. It concludes that the assessment is complete, concise, clear and convincing. The analysis of costs, benefits and other impacts is framed by assessment criteria based on the intended policy objectives. On balance, based on the analysis presented, the preferred options and the approach to their delivery appear to be appropriate. Although consultation on these proposals was targeted, we consider this to be appropriate and sufficient in the circumstances.*

#### *Climate Implications of Policy Assessment*

- 55 The Climate Implications of Policy Assessment (CIPA) team has been consulted and confirms that the CIPA requirements do not apply to this proposal as the threshold for significance is not met.

## Population Implications

- 56 Waitangi Tribunal claim 2750 (Wai2750) has increasingly highlighted how poor rental outcomes disproportionately affect Māori. People with disabilities, Māori and Pacific peoples, and older people have a critical need for housing which is safe and healthy, and are also more likely to live in rental housing, due to low incomes. The healthy homes standards amendments proposed in this paper will help to ensure that the needs of these people are better met through healthy housing.

## Human Rights

- 57 There are no human rights implications in this proposal and there are no inconsistencies between the proposal and the Human Rights Act 1993.

## Consultation

- 58 This paper has been prepared by the Te Tūāpapa Kura Kāinga – Ministry of Housing and Urban Development.
- 59 The following agencies have been consulted: The Ministry of Business, Innovation and Employment, Kāinga Ora, the Energy Efficiency and Conservation Authority, Land Information New Zealand, The Treasury, the Ministry of Education, The New Zealand Defence Force, the Department of Prime Minister and Cabinet, the Ministry of Health, the Ministry of Social Development, Department of Corrections, and Te Puni Kōkiri.

## Communications

- 60 Public statements have been made noting that work is being done to look into heating sizing for apartment-style properties. The Office of the Associate Minister for Housing (Public Housing) will make a public announcement outlining the amendments following Cabinet agreement on these proposals. It is also proposed to release the modelling conducted by BRANZ alongside this announcement. A communications approach to support the announcement and updating general information to the sector will be developed by the Ministry in collaboration with Tenancy Services (MBIE) and in discussion with the Minister's office.

## Proactive Release

- 61 I intend to proactively release this paper within the 30 business days provided for in Cabinet Office Circular CO (18)4.

## Recommendations

The Associate Minister of Housing (Public Housing) recommends that the Committee:

1. **Note** that HUD has received a significant amount of feedback from stakeholders, including Kāinga Ora, heating professionals and engineers, that the healthy homes standards required heating capacity heating formula (heating formula) uses conservative assumptions that lead to overstating the required heating capacity for homes built since 2008 and apartments.
2. **Note** that experts have identified three assumptions used in the heating formula that are not appropriate for homes built since 2008 and apartments, and are significant contributors to the oversizing issue.

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3. **Agree** that changes be made to the assumptions used in the heating formula for the following types of building (but remain unchanged for other types of building):
  - 3.1. 'Dwellings built to the current building code requirements for insulation and glazing' defined as
    - 3.1.1. dwellings that have first received building consent on or after the following dates, according to their Zone, as set out in Annex B of NZS 4218:2009:
      - 3.1.1.1. For Zone 1, 30 September 2008
      - 3.1.1.2. For Zone 2, 30 June 2008
      - 3.1.1.3. For Zone 3, 31 October 2007.
    - 3.1.2. dwellings which first received building consent prior to the relevant date above but which have been renovated throughout to the building code requirements for insulation and glazing which applied from the dates above.
  - 3.2. 'Apartments', defined as residential buildings that consist of three storeys or more, and contain 6 or more dwellings or individual units within the building.
4. **Agree** to revise the three assumptions in the heating formula to better reflect the building characteristics of dwellings built to the current building code requirements for insulation and glazing and apartments, as follows:
  - 4.1. The ventilation rate to be changed from 1.0 to 0.5 air changes per hour
  - 4.2. The pick-up load to be changed from 40W/m<sup>2</sup> to 20% of the base heat requirement
  - 4.3. The heat loss to adjacent rooms to be changed from 50 percent to 25 percent.
5. **Note** that modelling has been conducted on HUD's behalf by the Building Research Association of New Zealand (BRANZ) which generally indicates that the above new assumptions will significantly reduce the required heating capacity for dwellings subject to the new assumptions whilst ensuring that the living rooms of these rental homes may be heated to, and maintained at 18 °C on the coldest day of the year, in accordance with the policy intention of the heating standard.
6. **Agree** that the healthy homes standards compliance statement which accompanies new and renewed tenancy agreements be revised to require landlords to indicate whether the rental home uses the revised heating formula and, if so, the basis for this, or whether the alternative route to compliance detailed below has been used, as well as to accommodate other changes proposed in this paper..
7. **Agree** that the landlord would be required to retain the supporting evidence for their compliance statement with the tenant given a right to request that evidence from the landlord.
8. **Agree** to provide an alternative pathway for all rental properties to comply with the healthy homes heating standard, which allows suitably qualified specialists to certify that heating solutions meet the policy intention of the heating standard – to heat to, and maintain the living room of a rental home at, 18 °C on the coldest day of the year – without relying on the heating formula.

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9. **Agree** that a suitably qualified specialist can supply documentation to demonstrate how the heater or heating system complies with the following criteria:
  - 9.1. the heating device or system is able to heat the living room of the dwelling to 18°C on the coldest day of the year
  - 9.2. the heating device or system must be a 'qualifying heater' under the healthy homes standards. The electric heater 'top up' allowance or the large heater tolerance may be used if any existing qualifying heaters or qualifying large heaters were installed before 1 July 2019
  - 9.3. the heating device or system has a sufficient pick up load to be able heat the living room to reach 18°C within 2 hours after 8 hours disuse
  - 9.4. the heating device or system is sufficiently sized for the expected transmission, infiltration and ventilation heat losses of the living room during very cold and windy external conditions, as appropriate for the location of the dwelling.
10. **Agree** that a suitably qualified specialist to conduct the alternative route to compliance assessment be defined as:
  - 10.1. a registered chartered engineer under the Chartered Professional Engineers of New Zealand Act 2002,
  - 10.2. an International Professional Engineer (IntPE), or
  - 10.3. a person that has completed a tertiary engineering, physics or building science qualification (at New Zealand Qualification Framework Level 7 or above) , with an additional 5 years of experience in heating system design whether commercially or otherwise.
11. **Agree** to introduce a grace period of up to 9 months for dwellings built to the current building code and apartments to comply with the revised heating standard.
12. **Agree** to reduce the transitional 'top up' threshold so that a rental home with a required heating capacity of more than 2.4kW but with undersized qualifying heaters installed before 1 July 2019 be allowed to use electric heaters to 'top up' to the required heating capacity where the qualifying heaters are short of the required heating capacity by 2.4kW or less (currently 1.5kW or less).
13. **Agree** to relax the transitional tolerance threshold for existing insufficient large living room heaters (qualifying heaters of 2.4kW or higher) so that, until they need to be replaced, they are deemed to meet the required heating capacity where they were installed prior to 1 July 2019 and are within 80 percent of the required heating capacity (currently 90 percent).
14. **Agree** to allow under the healthy homes ventilation standard, mechanical ventilation systems that continuously extract from kitchens and bathrooms at lower flow rates than permitted in the healthy homes standards, where they are installed in dwellings that have first received building consent on or after 1 November 2019, provided the mechanical ventilation system was part of the original building consent and continues to meet the requirements of that building consent.

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15. **Agree** that geothermal heating systems, which directly provide heat to the living room and do not have a stated heating capacity, be deemed to satisfy the healthy homes heating standard.
16. **Note** that it is expected that the regulations will be submitted to Cabinet Legislation Committee for approval in February 2022 and will commence in March 2022, or February 2022 if approval can be obtained from a policy committee in January 2022.
17. **Invite** the Associate Minister of Housing (Public Housing) to issue drafting instructions to the Parliamentary Counsel Office to give effect to the recommendations in this paper that will create the new regulations and amend existing regulations.
18. **Authorise** the Associate Minister of Housing (Public Housing) to make any further minor policy, transitional and technical decisions (including records required for compliance) necessary to bring regulations into effect by early 2022.

Authorised for lodgement

Hon Poto Williams

Associate Minister of Housing (Public Housing)