
Consultation RIS: Heating and Cooling Load Limits – NatHERS Compliance Pathway

Response sheet



This response sheet has been provided to assist with preparing responses to the questions contained in the Consultation Regulation Impact Statement (RIS) that assesses the costs and benefits of including heating and cooling load limits in the NatHERS compliance pathway for NCC 2019.

How to complete this response sheet

1. Provide your details, including your name, organisation and contact details.
2. For each response—
 - Clearly articulate your answer to each question;
 - Avoid including information that is not relevant to the question;
 - Provide data and sources of information where appropriate.
3. Submit your comment at abcbris@abcb.gov.au with the subject title “Heating and Cooling Load Limits RIS”.
4. Comments close COB Friday, 13 April 2018.

Response sheet

Your details

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Comments

Question 1: The analysis assumes that building designers conduct energy efficiency assessments in the early stages of design and as a result no redesign costs are expected.

- At what stage in the building process are energy efficiency assessments undertaken?
- Is this assumption regarding early stage analysis reasonable given your experience?

Response:

ASBEC Member, the Australian Building Sustainability Association (ABSA), advises the following:

- Energy efficiency assessors are often the last to review building designs, with the exception of high-end, bespoke homes. Many major decisions have already been made by this point, including completion of the design and approval by the client, leaving the energy efficiency assessor with very few options to ensure the design is compliant with the Code's energy efficiency requirements.
 - With the exception of NSW, there is no requirement for assessors to be accredited, resulting in variation in application of the energy efficiency requirements.
 - The BASIX system in NSW precludes the inclusion of ceiling fans in the calculation of cooling loads, which impacts the cost-effective options for providing thermal comfort. ClimateWorks and ASBEC's report, *The Bottom Line: household impacts of delaying improved energy standards in the Building Code* identified ceiling fans in warm and hot climates as one of the most cost-effective energy efficiency opportunities for households. The exclusion of ceiling fans in the calculation of cooling loads misses out on this opportunity to cost-effectively improve energy efficiency, leaving builders with fewer options to improve the thermal comfort for building occupants.
 - The performance of the NatHERS Scheme is dependent on the consistent application of the software and technical notes. Therefore, auditing and enforcement measures to ensure consistency is required.
 - It is important to ensure that the NCC and any guidance materials reference all of the key components of the scheme not just the software. The advice provided to stakeholders in the use and implementation of the NCC will need to highlight the importance of assessors following the technical notes to ensure the assessment is in accordance with the requirements of the scheme.
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Question 2: To demonstrate clear net benefits, the ABCB needs to confirm that least cost options will be adopted in the majority of circumstances.

- Do you accept the least cost options outlined in the RIS as being viable solutions in meeting the proposed changes?
- Are practitioners likely to adopt these solutions in the majority of circumstances?
- When designing a new residential building currently is the demand for both heating and cooling considered?

Response:

N/A

Question 3: The analysis indicates that there are benefits associated with an effective information and education program.

- Do you find the current information available useful in describing how to meet the current energy efficiency requirements?
- Is there enough information being provided to practitioners currently?
- What type of information would be useful to practitioners? (E.g. case studies, advisory notes, handbooks, seminars etc.)

Response:

An information and education program is most effective when coupled with a regulatory driver that prompts practitioners to seek out and use that information. Information and education alone, without voluntary incentives or mandatory regulatory requirements, is unlikely to be fully effective.

ASBEC's *Low Carbon, High Performance* report, authored by ClimateWorks Australia, sets out recommendations for a suite of policies across five themes:

- A national plan with supporting policy frameworks and governance arrangements
- Mandatory minimum standards
- Targeted incentives and programs
- Energy market reforms
- A range of supporting data, information, training and education measures

The roadmap recommends that the policies are coordinated across the five themes, such that no single policy is pursued in isolation, to be fully effective. For example, energy efficiency requirements should be complemented with measures such as energy efficiency schemes and mandatory disclosure in order to address the information asymmetry market failures associated with purchasing and renting homes.

Question 4: The Consultation RIS considers two options:

- Option A: Regulatory Adjustment (i.e. incorporating the heating and cooling load limits into the NatHERS compliance option, complemented with an information/education program).
 - Option B: Implementation of an information and education campaign as a non-regulatory option.
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- Which is your preferred option, and why?

Response:

Option A: Regulatory Adjustment.

Low motivation to prioritise energy performance of buildings is a pervasive issue across many building owners and tenants and many service providers across the supply chain. Minimum energy performance standards can be a highly effective measure to overcome this issue by mandating improvements in energy performance in line with improvements in

technology and processes. This is justifiable on the premise that consumers would choose higher performing buildings and appliances where doing so would place them in a better financial position, but are prevented from doing so by market failures such as information asymmetry and split incentives.

Regulated mandatory minimum standards are generally designed to deliver a 'minimum' level of performance, and as such are not suitable to deliver the full potential in buildings, and need to be complemented by mechanisms to incentivise performance beyond the minimum standard. However, if designed to incorporate a stable and predictable future trajectory, mandatory minimum standards can in themselves support these other mechanisms by sending a signal that regulation will be tightened in the future. This incentivises consumers and suppliers to prepare and innovate to develop solutions ahead of the tightened standards.

Also see response to Question 3.

Question 5: Are there any other comments you would like to make in relation to the analysis?

Response:

Mandatory energy performance requirements in building codes are widely recognised as a key driver of improved building energy performance. Codes apply at the point of design and construction; often the easiest and cheapest time to deliver energy performance outcomes.

The last upgrade of the National Construction Code's minimum energy performance requirements dates back to 2010. The stringency of energy requirements in the NCC must be increased because over time, the energy and emissions impacts of new construction quickly add up; *The Bottom Line*, a report by ASBEC and ClimateWorks, estimates that 58 per cent of the buildings expected to be standing in 2050 will be built after the next update of the Code in 2019. Therefore, improvements to the NCC can have a large impact on the energy performance of the buildings sector.

Question 6: For each of the years between 2020 and 2029, the analysis has estimated that on average an additional 49 million square metres of floor area will be added to the existing dwelling stock. This is comprised of 33 million square metres for Class 1 buildings and 16 million square metres for Class 2 buildings.

- Do you agree with this annual estimate?

Response:

N/A