



Standing Committee on Planning, Transport and City Services

Inquiry into Annual and Financial Reports 2021-2022 **ANSWER TO QUESTION TAKEN ON NOTICE**

Asked by Suzanne Orr MLA on 2 November 2022: Rebecca Vassarotti MLA took on notice the following question(s):

Reference: Hansard uncorrected proof transcript 2 November 2022 PAGE 76

In relation to: NCC Energy Efficiency

MS ORR: Yes. There we are. I win the pub quiz for today. So, yes. So then can you please take on notice in considering that my understanding and happy to be wrong, is that that climate zone in particular is focussed around containing heat, what are we doing in the ACT to solve the problem that we have that Tassie does not have around letting go of heat in the high summer temperatures?

Ms Vassarotti: Yes. Look, I think we can certainly take the detail of that on notice. Certainly the energy efficiency standards, particularly looking at issues such as ventilation, air tightness, are, you know, like issues that will actually deliver, you know, benefits for both winter and summer. I think also in terms of some of the energy efficiency appliances, it absolutely takes you down the root of appliances such as reverse cycle air conditioning, then again provides benefits in both, you know, like at both ends of the scheme, but we can take some additional—we will provide some additional information regarding particularly the summer, you know the extreme heat issues and how the NCC seven stars responds to that issue.

Dr Brady: Minister, I can clarify, it is seven and eight for ACT and it is seven and eight for Tasmania as well.

Rebecca Vassarotti MLA: The answer to the Member's question is as follows:

Changes to the National Construction Code (NCC 2022) were agreed to by Building Ministers in August 2022. Building Ministers agreed that NCC 2022 will be adopted on 1 May 2023 subject to transition periods for energy efficiency, condensation mitigation, and liveable housing provisions, which come into effect on 1 October 2023.

NCC 2022 includes more stringent energy efficiency requirements which apply to houses and other low rise multiple dwelling projects (Class 1 buildings) and apartment buildings (Class 2 sole-occupancy units and Class 4 parts of buildings).

There are two key elements to the changes, as outlined below:

1. The minimum level of thermal performance of new homes is raised to the equivalent of 7 stars under the [Nationwide House Energy Rating Scheme](#) (known as NatHERS). This will deliver a significant improvement in thermal comfort for occupants through its focus on balancing the heating and cooling of homes.

Some of the improvements we are likely to see include:

- a. more options for roof, wall and floor insulation;
- b. reduced heat loss and gain through roofs, walls and floors due to thermal bridging;
- c. lighter colour roofs & walls in warmer climates to reduce heat gain;
- d. new ceiling fan requirements for warmer climates (efficient and effective cooling);
- e. window requirements more appropriate for climate; and
- f. lower heating and cooling demand.

New split heating and cooling load limits were introduced in the NCC in 2019 and have been updated for NCC 2022 to provide balanced performance all year round. In context, this introduction prevents dwellings from achieving a high star rating by performing very well in winter but poorly in summer.

2. A new whole-of-home, annual energy use budget now needs to be met by new homes. This budget applies to the energy use of a home's heating and cooling equipment, hot water systems, lighting and swimming pool and spa pumps.

The new annual energy use budget is applicable to the home's major appliances such as space conditioning, hot water, lighting, pool and spa pumps, and any on-site renewable energy generation. The whole of home annual energy use budget is larger for apartments than it is for houses. The new annual energy use budget provides a flexible approach to encouraging the selection of more efficient equipment, the major contributor to household energy use.

NCC 2022 provides a mix of practical solutions for homes that can be customised to the climate and location of each build.

Under the NCC, there are eight climate zones, all of which have different building code requirements. The ACT and Tasmania are both under climate zone 7, which is classified as a cool temperate zone. The NCC climate zones reflect current climate conditions.

The NatHERS energy rating software is the most common pathway in the ACT for demonstrating compliance with the NCC. NatHERS includes 69 climate zone files with a specific ACT climate file that is distinct to the climate files used for Tasmania. The climate file for the ACT in NatHERS has been updated for NCC 2022 and represents current climate conditions in the ACT.

The Australian Building Codes Board (ABCB) is currently looking at the mix of cooling and heating provisions within the NCC. To help inform this, the ABCB has a climate resilience project that is looking at extreme events and reviewing whether the NCC still achieves its objectives. There is also a national discussion around the use of contemporary or future climate files in energy rating software such as NatHERS. This discussion will enable the consideration of the future climate of the ACT including extreme heat.

Approved for circulation to the Standing Committee on Planning, Transport and City Services

Signature: 

Date: 10/11/2022

By the Minister for Sustainable Building and Construction, Rebecca Vassarotti MLA