

10 February 2020

To whom it may concern,

Thank you for the opportunity to provide feedback on the *Holistic review of NCC 2019 elemental provisions for Class 1 buildings* issues paper.

Renew (Alternative Technology Association Inc trading as Renew Australia) is a national, not-for-profit organisation that supports residents and consumers to live sustainably. We have been providing expert, independent advice on sustainable solutions for the home to households, government and industry since 1980.

We thank the project consultant team for their work in developing the issues paper.

Our comments on issues raised by the paper authors are as follows.

Ensuring alignment does not mean weakening

Renew broadly supports the principle of greater alignment between DTS elemental provisions and NatHERS outcomes. Greater alignment between compliance pathways has the potential to clarify the process for consumers and industry.

Greater alignment is furthermore beneficial in preparing the housing sector for the future introduction of mandatory energy performance disclosure, which is supported by Renew.

However, we are concerned that the practical outcome of seeking this alignment may be that in certain circumstances elemental performance may be lowered under the DTS Elemental provisions.

Where any elemental requirements are relaxed at current stringency levels, increased stringency must more than make up for this.

Giving more allowance for certain elemental performance such as fans, surface colours or glazing may be acceptable as long as the subsequent increase in stringency requirements under the 2022 NCC ensure that overall home energy performance is higher and reflects an overall step change.

We also note the difficulty of comparing outcomes across DTS Elemental and NatHERS and acknowledge the challenges in practice of ensuring close alignment. Even with greater alignment, the 'apples and oranges' nature of the assessment systems means that discrepancies in outcomes are likely to remain.

To meaningfully ensure greater alignment between DTS Elemental and NatHERS, we understand the consultant team proposes a process of 'reverse engineering' of 7-star outcomes to design the elemental provisions.

There appears to be a risk that while some homes will have improved overall outcomes, others will have worse outcomes. In our understanding, the key to ensuring improvements across the board will be in simulating outcomes across a range of homes and climate zones.

The issues paper notes (p14):

“The proposed approach to redeveloping the DTS elemental provisions is to reverse engineer these provisions from the specifications required to achieve 7 stars from a sample of houses using the 2022 version of AccuRate (updated weather and star bands).”

We would be interested to learn more about the number and range of homes to be sampled in making this assessment and look forward to engaging with this during the NCC process.

Finally, while we note that the authors have proposed reverse engineering a 7-star NatHERS equivalent, we believe that DTS Elemental provisions delivering a higher NatHERS equivalent rating (e.g. 7.5 stars) should also be modelled simultaneously. There is a possibility that greater performance can be achieved at low cost and this should be considered at this stage of the NCC process.

The role of DTS Elemental

It is our general view that in developing the new provisions the onus should be on ensuring energy performance via DTS Elemental and VURB is no lower than that achieved through NatHERS-based compliance.

As noted in the issues paper, a small and diminishing percentage of new homes meet compliance via the DTS elemental provisions. Since November 2018 the proportion of homes assessed using NatHERS has consistently been over 80%, with 96% of homes assessed using NatHERS in August 2019. The issue paper further notes that NatHERS assessors are likely to have capacity to assess all new dwellings.

As such, DTS elemental will increasingly be considered a pathway for exceptional cases.

The most significant role of the DTS Elemental provisions may be in their impact on VURB approvals. We are concerned by anecdotal evidence that higher rates of assessments using VURB and elemental pathways in some jurisdictions including Western Australia are a result of these provisions allowing low-cost compliance that does not deliver the same energy performance as NatHERS-based assessments.

It is appropriate to set high benchmarks for individual elemental performance to ensure there is no overall underperformance or gaming of the system.

One option that we believe worth considering is to offer DTS Elemental as a compliance pathway *only where it can be demonstrated* that NatHERS-based assessment cannot be undertaken at a reasonable cost.

Thermal Bridging

Renew supports the principle of including thermal glazing in the DTS Elemental provisions. We welcome the proposal of the consultant team to undertake an analysis of costs and benefits of frame materials and features. We furthermore support the proposal to develop a thermal bridging calculator.

Ceiling fans

We support measures to increase the number of fans in hotter climate zones and the size of area to be covered by them. It is not clear to us that under increased stringency this should result in a lowering of standards for other elements.

Orientation and subdivision planning

We note that the paper refers to minimum north-facing glass area in certain climate zones.

It is our understanding that questions of subdivision planning, orientation and siting are outside of the scope of the NCC but are significant to housing energy performance. Renew understands that a key reason the thermal benchmarks of NatHERS can't be achieved by some dwelling is due to poor orientation and siting – which for new estates, comes back to proper planning of sub-division layout to ensure maximisation of northerly aspects.

We seek your consideration of how orientation may affect the performance of homes complying with DTS Elemental provisions and whether this may be addressed via the provisions.

We are happy to provide further details of successful planning for optimum orientation at any stage in this process.

Concluding remarks

We look forward to engaging with you over the course of the development of the NCC 2022 regulations. Please do not hesitate to contact us at any time to discuss any issue.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'D. Moyse', with a long, sweeping horizontal flourish extending to the right.

Damien Moyse
Acting CEO
Renew