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25 February 2020

To whom it may concern,

Thank you for the opportunity to provide feedback on the *Verification methods* 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.

In our view, the priority when developing compliance pathways should be to ensure that a genuine step-change in energy performance can be delivered by an increase in stringency in the 2022 NCC.

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

Infiltration

Renew supports the principle of ensuring that infiltration is included as a factor in energy efficiency compliance. We agree that air tightness is an important parameter in energy performance and heating energy use.

We note that different infiltration levels may be appropriate under different circumstances; for example, a home using air conditioning requires higher levels of air tightness than a home using only natural ventilation in hotter climates.

For the former, the existing requirement of 10 ACH @ 50 Pa appears extremely lax. In our understanding, the work of CSIRO, ClimateWorks/ASBEC and individual developers suggests that greater stringency can be achieved in this area for negligible upfront cost and meaningful energy reductions/costs over time.

While it may be appropriate to allow trade-offs for air tightness to a certain point, it is important to ensure that improved air tightness is a strategy towards greater overall performance and stringency (improving over time), and that any trade-offs do not result in weakening the overall impact of stringency increases.

In order to prevent gaming or suboptimal performance, we believe it is important that air tightness should be measured on an objective and shared standard. Requiring blower door tests is appropriate to provide a clear indicator of performance. Trade offs should not be allowed without demonstrated blower door outcomes.

Thermal bridging

We support the principle of including thermal bridging as a factor in the provisions. We furthermore support the proposal to develop a thermal bridging calculator for use by consumers and practitioners.

Alignment with NatHERS whole of house

Greater alignment between VURB and Whole of House provisions is an important goal that will improve consistency of ratings. We believe that, where possible, a common methodology is required to measure minimum levels of thermal performance. Common methods for measurement of thermal performance is required to minimise gaming by developers choosing between pathways.

We support in principle the recommendation that whole-of-house parameters being post processed for NatHERS should be made transparent and available for the VM (VURB) methods for both Class 1 and Class 2. As recommended, this provides a method to ensure net zero regulated energy budget.

We have made recommendations to the related issues paper regarding whole-of-house parameters and PV issues. Essentially, in our view, the overall aim of introducing whole-of-house parameters should be to ensure that cost effective fixed appliance measures (hot water, lighting, etc) are included with maximum energy thresholds – and that these should be assessed on their own (cost/benefit) merits. Solar PV generation should not be able to be used to offset efficiency gains in this regard.

Ceiling fans

We support the settings for ceiling fans being reviewed. Overall is that the inclusion of ceiling fans, like any other fixed appliance, should not allow/be used as a substitution for a reduction in thermal performance.

Application to Class 2 buildings

A focus of the current process involves developing a compliance pathway for Class 2 buildings through Verification Using a Reference Building (VURB), currently available only for Class 1 buildings.

In our view, the overall strategy in applying a VURB pathway for Class 2 buildings should be to set a high performance benchmark for VURB compliance in order to ensure that the process does not become a low-cost, low performance pathway for developers. While we acknowledge that VURB would likely be an easier pathway than existing options, there may be a risk of gaming (that has anecdotally been observed with VURB class 1 approvals) and

enforcement may be a key issue. A standard results proforma should be developed with clear metrics in order to ensure that the process is not gamed.

We agree that it is appropriate to align Class 2 compliance with existing provisions in Volume 1 given that many buildings are mixed-class.

Concluding remarks

We look forward to continuing our engagement in this process. Please do not hesitate to contact us at any time to discuss any issue.

Yours faithfully,

Damien Moyse
Acting CEO
Renew