

1 July 2024



Mr Gary Rake

Chief Executive Officer & Head of Division
Australian Building Codes Board
GPO Box 2013
Canberra ACT 2601

Re: Consultation Regulation Impact Statement - Increasing the stringency of the commercial building energy efficiency provisions in the 2025 National Construction Code

The Energy Efficiency Council (EEC) welcomes the opportunity to comment on the proposed changes to the energy efficiency provisions in the 2025 National Construction Code.

Our comments are limited to the Consultation Regulation Impact Statement (CRIS), rather than the technical details of the draft energy efficiency provisions.

The EEC is Australia's peak body for energy management, electrification, and decarbonisation with a membership of businesses, universities and governments working to guide Australia on the path to an efficient, prosperous net zero economy. Our comments on the CRIS reflect our members' established policy position that the electrification of Australia's building stock is the most cost-effective and technically viable pathway to decarbonising commercial buildings.

The EEC supports the ABCB's decision to adopt the highest level of stringency (Stringency Level 3) in the draft NCC and applauds the inclusions of provisions that encourage buildings to be all-electric ready, at minimum. Nonetheless, the fact that the draft Code still allows for buildings consuming fossil gas to be constructed is disappointing and irresponsible given Australia's commitments under the Paris Agreement.

The Australian Sustainable Built Environment Council's *Unlocking the Pathway* report¹, and several other reports, confirm that electrification is the lowest cost, fastest emissions reduction pathway for Australia's built environment. Therefore, the decision to allow dual fuel buildings to continue to be constructed after 2025 puts an unnecessary burden on the rest of the economy – such as heavy industry and agriculture – to decarbonise faster, and increases the cost of abatement for the entire economy.

The draft provisions propose that gas-consuming buildings can 'offset' the emissions from their gas use by building additional solar PV beyond levels required under Stringency Level 2, including via ground-mounted solar arrays. This idea is problematic for several reasons:

- 1) It is highly unlikely that ground-mounted solar will be possible in many cases as space around buildings will not permit their construction. In addition, encouraging extra grid-connected solar PV installations to offset a building's gas consumption (rather than to cover on-site electricity use) may be problematic for distribution network operators in parts of the

¹ <https://www.asbec.asn.au/research-items/unlocking-the-pathway-why-electrification-is-the-key-to-net-zero-buildings/>

electricity grid where solar is already being curtailed due to excess solar exports in the middle of the day.

- 2) On-site solar PV's emissions reduction benefit relative to consuming electricity from the grid after the mid-to-late 2030s is likely to be negligible as the grid is likely to be already close to zero emissions. Therefore, connecting additional solar PV beyond that needed to cover a building's electricity use is very unlikely to offset the direct emissions from a building's gas consumption because the only electricity it will be displacing is near-zero emissions electricity.
- 3) Allowing buildings to be constructed with gas – even if those emissions could be offset – risks locking in gas infrastructure to service these buildings, for the lifetime of the building (assumed to be 50 years in the CRIS modelling). This could slow the transition away from gas, which is necessary to achieve global emissions reduction goals and risks building stranded assets.

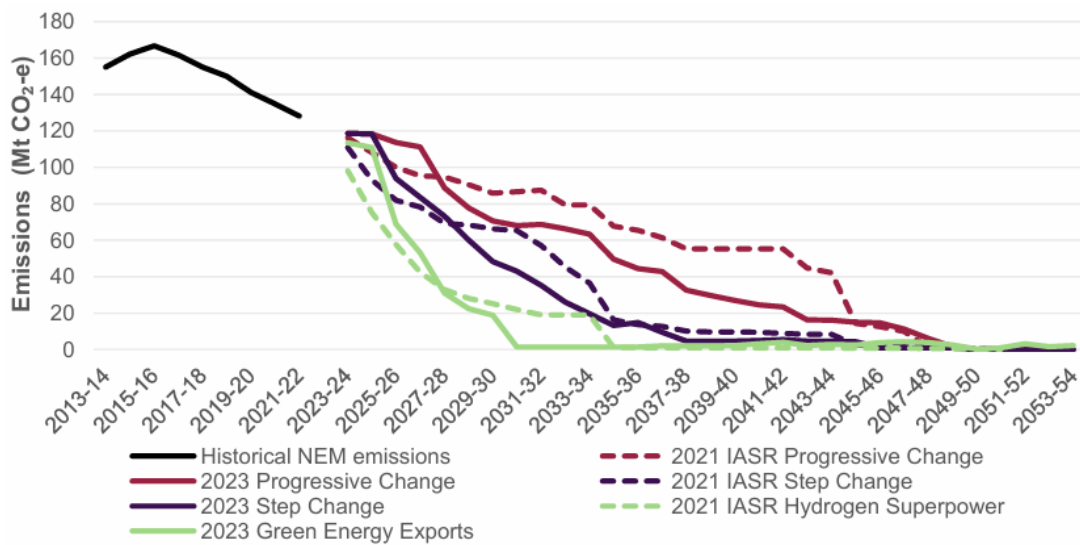
The EEC believes the results of the CRIS are likely to be skewed by electricity emissions factors that are not in line with Australian and State and Territory Government emissions reduction targets, renewable energy targets, nor announced retirement dates for large coal-fired powerplants.

The CRIS relies on electricity emissions factors from Hutley (2024)². These factors are based on emissions factors from the Australian Government's emissions projections to 2035 and then decline at a rate of around 10% per annum to reach close to zero emissions by 2050. Hutley argues this approach is in line with AEMO's 2022 Integrated System Plan modelling. This therefore overstates the likely emissions from electricity in the period after 2035:

- Emissions are unlikely to decrease linearly as modelled. For example, in Victoria, emissions are likely to decrease in a step-change manner, as the state's two remaining brown coal plants reach the end of their economic life. While there is some uncertainty as to when Loy Yang B will retire, AGL and the Victorian Government already have agreed that Loy Yang A, the larger of the two plants, will retire in 2035.
- AEMO has recently released the 2024 ISP, and GHG emissions under each of its modelled scenarios decline significantly faster than the 2022 ISP (Figure 1)

² Hutley (2024), *Economic Parameters for technical work (NCC)*, https://consultation.abcb.gov.au/engagement/consultation-ris-commercial-energy-efficiency/supporting_documents/Commercial%20EE%20CRIS%20Econ%20parameters.pdf

Figure 1 Actual and forecast NEM emission trajectories from multi-sector modelling, all scenarios



AEMO (2023), *2023 Inputs, Assumptions and Scenarios Report*, July 2023, p.42, <https://aemo.com.au/-/media/files/major-publications/isp/2023/2023-inputs-assumptions-and-scenarios-report.pdf?la=en>. Note: These assumptions are used in the 2024 ISP, released in June 2024.

The EEC strongly recommends revising some of the modelling assumptions in advance of the Decision RIS (particularly the electricity emissions factors and assumptions around electrification in the base case). Doing so is likely to show that incentivising the construction all-electric buildings from day 1 is highly economic, while also being more consistent with Australia’s emissions reduction policies.

The EEC thanks you again for the opportunity to comment on the CRIS and looks forward to collaborating closely with you on these matters.

Kind regards,

Jeremy Sung
Head of Policy, EEC