

Mr Manners and Mr Fisher
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12 March 2019

Re: Review of the Commercial Building Disclosure Program – Issues Paper

Dear Mr Manners and Mr Fisher,

Thank you for the opportunity to comment on the Commercial Building Disclosure (CBD) Program Issues Paper. The Energy Efficiency Council (EEC) is the peak body for energy efficiency, energy management and demand response. Our members include energy management companies, independent experts and various levels of government.

The EEC recommends that the CBD Program is:

1. Continued indefinitely, due to the substantial benefits that it delivers to Australia in terms of improved customer choice, reduced energy bills, reduced greenhouse gas emissions and more comfortable, healthy and productive workplaces.
2. Extended from offices to also cover (in order from highest to lowest priority) shopping centres, hotels and data centres. The impact of the CBD program in these sectors would be dramatically enhanced by complementary policies, including support for building owners and governments giving preference (where possible) to hotels that have higher NABERS ratings for their events and accommodation needs.
3. Expanded into office tenancies through a careful review of the options. Tenancy Lighting Assessments (TLAs) provide valuable information to building owners and tenants, but are not currently well understood by the market and do not cover all forms of energy use. The TLA aspect of the CBD program should be reviewed alongside mandatory NABERS Tenancy ratings – at the very least governments should adopt minimum TLA requirements for their accommodation and the TLA tool should be refined and better marketed.

This letter is accompanied by an attachment that expands on these points and responds to a number of the detailed questions in the Issues Paper. We look forward to continuing to work with the Centre for International Economics (CIE) and the Australian Government to enhance the CBD program. If you have any questions, please contact me at rob.murray-leach@eec.org.au or 0414 065 556.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Rob Murray-Leach", is written over a light blue rectangular background.

Rob Murray-Leach
Head of Policy, Energy Efficiency Council



energy efficiency
COUNCIL

**Energy Efficiency Council submission on the
Review of the Commercial Building Disclosure Program**

Recommendation 1: Continue the CBD Program

The CBD Program has delivered significant benefits to the Australian economy and must be continued. The first independent review of the CBD program, conducted by ACIL Allen Consulting, used very conservative methodologies to estimate the benefits of the program. This conservative approach was likely necessary given the political context at the time, but still found that:

- On an energy basis alone, the CBD program delivered a minimum total net benefit of \$44 million in 2010-14, with a benefit-cost ratio of 2.58.
- If the productivity gains of people working in offices are included, the total benefits of the CBD program were at least \$211.8 million in 2010-14, with a benefit-cost ratio of 8.62.

The data in the CIE Issues Paper indicates that the CBD program continues to deliver significant benefits to Australia. Offices that participate in the CBD program reduced their energy use per square meter by a remarkable 29 per cent between 2010 and 2018. While we strongly encourage the CIE to use a less conservative methodology to estimate the benefits of the CBD program than that adopted in first review, we are extremely confident that even an equivalently conservative analysis would find that the CBD program has delivered substantial benefits in the period 2010-18.

Recommendation 2: Expand the CBD program to shopping centres, hotels and potentially data centres

There are strong cases to expand the CBD program to shopping centres, hotels, and data centres. However, the arguments for expanding the CBD program to these sectors are different for each sector.

The case for expanding the CBD program to shopping centres is extremely clear. A few large investors own the vast majority of shopping centres, and many of these investors also own office buildings that already participate in the CBD program. As a result, in 2017 over 34 per cent of the 588 shopping centres over 120,000 m² had voluntary NABERS ratings. This suggests that the sector is ripe for being covered by the CBD program, and the relatively low number of large facilities means that making NABERS ratings mandatory for large shopping centres at the points of sale and lease of larger tenancies would have a low regulatory burden.

The information from NABERS ratings is most likely to be used by shopping centre owners themselves to drive better cost and comfort outcomes, and potentially a handful of sophisticated tenants (e.g. supermarkets) will use NABERS ratings to encourage shopping centres to enhance their ratings. Therefore, expansion of the CBD program to shopping centre owners should be complemented with significant investment in research and outreach to identify and educate less sophisticated owners about the opportunities for energy savings, particularly entities that own fewer than ten shopping centres.

There is also a strong case for expanding the CBD program to hotels. Unlike shopping centres, less than one per cent of hotels currently have voluntary formal NABERS ratings. While this suggests that there will be material education and compliance

costs associated with expanding the CBD program to the hotel sector, it also suggests that this expansion could dramatically increase the energy literacy and energy efficiency of the hotel sector. The low level of voluntary rating in the hotel sector means that it is extremely likely that the vast majority of hotel owners are unaware of how inefficient their properties are, and unaware of the extremely cost-effective opportunities they have to reduce their energy bills.

The expansion of the CBD program to hotels would be far more effective if Australian governments also adopted policies to preference hotels with higher NABERS ratings for events and accommodation. This suggests that hotels should be required to get NABERS ratings every few years and then disclose it on their websites, especially for events. The EEC also recommends that the CBD program should initially focus on large hotels, ideally in areas where there is competition for event spaces and business accommodation (e.g. capital city centres).

The case for data centres is quite different than that for offices, shopping centres and hotels. Some data centres already advertise their energy efficiency to clients using the 'Power Usage Effectiveness' (PUE) measure, but the lack of standardization in PUE calculations means that this rating can be inflated. The NABERS Data Centre tool solves this issue by improving the trustworthiness and comparability of PUE ratings, although in some data centers this can require significant outlay on additional metering and potentially disruption of services. The EEC does not have firm views on the case for expanding the CBD Program to Data Centres but, due to the small number of data centres in the country, the total cost of expansion will likely be relatively modest.

Recommendation 3: Explore opportunities for office tenancies

Office tenancies account for a large proportion of energy use in offices. Improving tenants' understanding of the energy efficiency of tenancy fittings (e.g. lights) and their own appliances presents a significant opportunity to reduce their energy bills.

Disclosing the energy efficiency of tenancies is more complex than disclosing the energy efficiency of base-buildings. While NABERS base-building ratings would be largely unaffected by tenant changes, a NABERS Tenancy rating from a previous tenant would provide less useful information for a prospective tenant than a TLA, as occupant equipment and behavior strongly affects NABERS Tenancy ratings.

While TLAs have had some impact in driving lighting upgrades, apocryphal information suggests that TLAs are having less of an impact on tenant lighting than NABERS ratings are on base buildings. This is partly due to building owners being wary of changing lights in tenancies while they are occupied, which can introduce a significant delay between receiving a TLA and upgrading tenancy lighting. However, it also appears that tenants and building owners pay less attention to TLAs.

We believe that the CBD review should have a dedicated stream looking at tenancy issues that combines both TLAs and NABERS Tenancy ratings. At the very least, governments should adopt minimum TLA requirements for their accommodation and the TLA tool should be refined and better marketed. The refinement of the TLA tool should particularly focus on its legibility – while NABERS provides an easily understood star rating, TLAs are more complex to understand.

EEC responses to other questions in the Issues Paper

What is the cost of developing a Building Energy Efficiency Certificate? (BEEC)

The cost of a BEEC will vary depending on whether it is the first rating or a subsequent rating. The first time a building gets a BEEC, a consultant needs to undertake a TLA and find floor-plans and key data on the building's operations, and the costs of gathering this information increases with the size of the building. For subsequent NABERS ratings, a consultant needs to undertake far less work and the cost varies less with building size.

For a large office building, the cost for developing the first BEEC (including a TLA) is generally under \$10,000, and the cost is significantly smaller for smaller buildings. For most office buildings, the cost for updating a BEEC is under \$5,000.

How are people improving and maintaining the NABERS ratings for buildings?

Many buildings receive poor NABERS ratings in their first BEEC, and improve their NABERS ratings over time. EEC members suggest that there are four broad phases of improving a building's NABERS ratings:

1. **Addressing documentation, metering and processes:** In the first couple of years building managers address issues that have lowered a building's NABERS rating, such as the lack of sub-metering for retail spaces and poor documentation of operational hours etc.

These changes are NOT gaming – poor documentation might have resulted in a building initially receiving a lower rating than they should have on their energy alone, and improving this documentation is simply resolving this problem. In addition, these changes are likely to lead to improvement in building management and energy efficiency – getting sub-metering for retail spaces will likely drive improvements in the management of both the base-building and the retail space.

EEC members noted that the NABERS team recently tightened how building owners can demonstrate a building's hours of operation, which is likely to have lowered NABERS ratings for many buildings.

2. **First-pass energy efficiency improvements:** Building managers rapidly undertake low-cost upgrades that do not disrupt their operations, such as tweaking the programming of the building management system (BMS) and upgrading safety lighting and car-park lighting.
3. **Subsequent energy efficiency upgrades:** Building managers then undertake a series of building upgrades at appropriate times (e.g. before tenancy changes and at equipment retirement) including common area lighting, tenant lighting, chiller upgrades and major upgrades to the BMS.
4. **Maintenance:** EEC members highlighted the importance of ongoing NABERS ratings to ensuring that buildings are well maintained. In particular, changes in building management personnel often results in the degradation of

building performance. NABERS ratings are a critical tool to help these new personnel learn about the features of the building and return it to high performance.

Are energy efficiency upgrades delivering the expected results?

EEC members noted that less sophisticated building owners rarely seek data to demonstrate that an energy efficiency upgrade has improved the performance of their buildings. As a result, there is no comprehensive data on this issue. While EEC members operate at a high standard and aim to deliver the results that are promised, it is likely that some upgrade projects that do not involve EEC members would deliver below expectations.

EEC members use the Certified Measurement and Verification Protocol (CMVP) and/or informal NABERS ratings to demonstrate that energy efficiency upgrades have delivered the expected results – companies that aren't using this approach might not be delivering the savings that they promise. This highlights that improving the performance of buildings requires more than just mandatory disclosure at the point of lease and sale – it requires education to encourage building managers to pay ongoing attention to their energy performance, particularly before, during and after building upgrades.