

## **Submission commenting on the proposal for mandatory disclosure of energy performance of office buildings**

Dear Sir/Madam,

I hope that you will accept my submission as it will arrive before start of business on Monday 2 March.

I attended the public information session in Melbourne and am generally in support of mandatory disclosure of base building energy performance. I have undertaken the NABERS training and am an accredited assessor, but have not yet updated my registration since I moved companies from Umow Lai to Meinhardt in Melbourne in November last year. I do intend to do re-register soon.

I support the disclosure of base building energy performance through a fair and nationally consistent energy efficiency benchmarking system. Currently NABERS Energy does not fulfil that aim.

The aspects of unfairness are as follows:

1. The inclusion of energy consumption by internal carparks without normalisation is unfair for office buildings located in places (usually inner city locations) where internal carparks are necessary. For a fairer approach NABERS should normalise for the number of carparks located internally in the building. The Green Building Council of Australia have already highlighted this flaw and compensate for it in their green star office rating tool by allowing an additional one or two credits where internal car park energy is included.
2. The NABERS Energy starbands for each jurisdiction have been set based on a bell-curve statistical analysis of actual building performance in those markets. Therefore the decrease in energy consumption in MJ/m<sup>2</sup>pa is different in each jurisdiction. A nationally consistent scheme would develop a nation-wide bell-curve corrected for the minor impacts of climate differences.
3. The climate correction factors in NABERS for each jurisdiction seem quite arbitrary when compared with the Property Council of Australia's (PCA) Energy Guidelines energy breakdown figures for offices in each State/Territory capital. These factors are intended to normalise relative to the Sydney climate. In fact the climate corrections indicated by the PCA figures are generally far lower than those in the NABERS Energy scheme.
4. Arbitrary decisions by jurisdiction bureaucrats (in Victoria in particular by SEAV a number of years ago) have resulted in starbands being set to fulfil local agendas rather than making a nationally consistent scheme

The results of these inequities are that the difficulty in achieving a particular star rating is different for each jurisdiction. If mandatory disclosure is to be nationally consistent and fair then the NABERS scheme needs to be rejigged to take out the inconsistencies. As the scheme currently stands ESD consultants like myself have to inform our clients that the Victorian targets are far more stringent than those for Sydney. Companies that operate across State/Territory boundaries deserve better consistency from the greenhouse measurement scheme that is supposed to provide the "market" with information. They need a scheme where a given star level is as easy or as hard to achieve in one place as another. It would be rather silly if the energy satr rating system for fridges changed its stringency across borders - that Westinghouse model is a 5 star in NSW, but only a 3.5 star in Victoria. It would create more confusion in the market than necessary. Yet that is exactly the situation we have currently with NABERS Energy. National proerty owners can't understand why 5 star operational ratings are possible in many sydney buildings, yet seem unattainable in the Melbourne market.

I have attached a spreadsheet containing a number of graphs that show the relative energy intensity of base buildings at the various star band levels. They do not indicate a nationally consistent measure of energy efficiency. I have graphed the star-bands for all-electric buildings, and those for base buildings with natural gas-fired heating. (I have adopted a natural gas percentage for each capital that is informed by the PCA targets for gas-heated offices).

The PCA targets for Best Practice in existing buildings translate to the following base building NABERS Energy star ratings: Sydney 4.5, Melbourne 3, Canberra and Adelaide 3.5, Hobart, Perth and Brisbane 4, and Darwin 5 for all electric buildings. The PCA targets for gas-electric buildings translate to the following NABERS ratings: Sydney 5, Melbourne, Canberra and Adelaide 4, Hobart 3.5, Perth 4, Brisbane 4.5 and Darwin 5. NABERS should be recalibrated to create a number of jurisdiction-specific MJ/m<sup>2</sup>pa lines that are all parallel on the graphs for gas-electric base buildings (the most greenhouse efficient fuel mix). In this way, a consistent starband increment could be set at say 160MJ/m<sup>2</sup>pa (multiplied by the relevant local greenhouse intensity factors for the fuels) for the typical gas-electric ratios appropriate for an efficiently run gas-electric building. These curves would not be coincident, but be climate-corrected so that they are parallel to one another. Darwin with its highest demand for cooling electricity would have the highest correction factor and therefore be the highest line when graphed as MJ/m<sup>2</sup>pa as per my spreadsheet graphs. Climate correction factors indicated by the PCA targets are as follows: Sydney 0, Melbourne 8 (not 39 as per NABERS), Canberra 1 (not 29), Adelaide 0, Perth -5 (not 14), Brisbane -20 (not -10) and Darwin -27 (not -25). I can't comment on Hobart as this is based on normalised energy not greenhouse intensity.

Finally I suggest that the mandatory disclosure of tenancy ratings has no use. Tenancy energy consumption is influenced by tenant energy management behaviours, the tenant's office equipment and the tenancy lighting grid. A NABERS Energy tenancy rating will provide no useful measure of the efficiency of the lighting grid, the only factor that is of interest to the new tenant. Regardless of this, the difficulty in the base building owner in forcing the existing tenant to cooperate in a NABERS tenancy rating also renders this initiative totally impractical.

Please do not hesitate to call if you wish to discuss these matters further.

Kind regards,  
Michael Shaw