

Comments on Consultation Regulation Impact Statement for Mandatory Disclosure of Commercial Office Building Energy Efficiency

Discussion

This paper has been prepared in response to the RIS prepared by The Allen Consulting Group and the comments provided herein address the proposed methodology of the scheme and highlight additional considerations for review by the Steering Committee. We acknowledge that the purpose of the scheme is to correct current 'failures' such as a lack of general information and transparency of commercial office energy efficiencies within the marketplace. We would appreciate consideration of the items outlined in this commentary paper for inclusion in the final guidelines of the proposed scheme.

Connell Wagner

Connell Wagner is a large multi-disciplinary engineering and management consultancy with a proven track record in the management of building projects. We appreciate that effective management is essential to the successful delivery of any project or service. A key factor in Connell Wagner's continued success is our demonstrated capability to work together with client personnel as part of an effective and cooperative project team.

Connell Wagner is committed to adopting sustainability principles in all aspects of its business and client services. We recognise the need to balance economic growth with social development and the protection of the environment. In demonstrating our commitment to these ideals, our corporate directive is to embed sustainability as an integral part of our culture, our skills and our deliverables.

Our approach to sustainability draws on the application of science and sound engineering design to meet client and community needs. We respond to both the broader sustainability and immediate climate change challenges by encouraging innovation and supporting scientific and engineering research into enhanced energy, building, water and infrastructure solutions that meet community needs, both now and into the future.

The focus of the RIS is to improve the level and quality of information in the marketplace relating to commercial office building energy performances. Options being considered under the scheme include:

Option 1: Mandatory disclosure of NABERS ratings for all buildings at time of lease or sale. This includes base building and tenancy ratings. Two thresholds are being considered at 2,000 or 5,000m²

Option 2: Voluntary code of practice, whereby building owners voluntarily provide information on portfolio energy efficiency performance using the NABERS assessment protocol

Option 3: Mandatory disclosure of NABERS ratings for all buildings with minimum benchmark set at 3 star NABERS ratings. Disclosure is to be provided at time of sale or lease. This scheme is to promote refurbishments and upgrades on existing building stock.

Under Options 1 & 3 a Building Energy Efficiency Certificate (BEEC) is to be prepared and submitted to the governing body based on past performance measures. The BEEC will be valid for 12 months only similar to a NABERS rating. Further an Energy Efficiency Assessment Report (EEAR) is to be prepared and submitted to the governing body and this document is to highlight future upgrade works and improvements for tenants and owners to consider. This document would remain valid for 7 years similar to a term of lease.

Connell Wagner in principle supports the implementation of the scheme to disclose energy efficiency ratings of existing commercial office buildings provided that the following items are addressed by the Steering Committee:

- Building thresholds
- Energy rating types
- Green Power
- Energy efficiency measures

1. Building thresholds

Commentary: The scheme is currently considering threshold limits of 2,000m² or 5,000m². In designing commercial office building, the size of the building will often have a bearing on the mechanical services design that is appropriate for the given capital expenditure. The feasibility of centralised plant is increased for developments over 5000m², however this may not be applicable for small developments around 2,000m². Other limitations that apply to smaller developments include overall losses in energy efficiency for provisions such as carparking. In large scale developments the energy consumption attributed from carparking facilities has a significantly smaller impact on the overall energy efficiency rating and therefore it is recommended that this scheme applies to larger

buildings to ensure that the smaller sized stock in the marketplace is not disadvantaged.

At present no threshold has been clearly identified for tenancies. The threshold for sub-leases and total tenancy ratings should be defined differently from overall base building thresholds as fitout sizes will vary significantly. The Steering Committee should recognise that different sub-lease conditions may exist such as multi-level tenancies, single floor or single areas within an existing floor space. Tenancy thresholds should consider the extent of space and extent of control that a prospective tenant may have on the existing space when sub-leasing a component of a pre-existing fitout.

Recommendations: The scheme is applied to developments where the NLA of the building exceeds 5,000m². This will ensure that small developments are not disadvantaged by the scheme.

Tenancy thresholds of 500m² or greater may be appropriate under the scheme. Disclosure of sub-lease energy efficiencies should only be imposed on sub-tenants when their energy consumption can be separately metered.

2. Energy rating types

Commentary: The scheme discusses the use of NABERS base building and tenancy ratings at the time of sale, sub-lease or re-negotiation of lease agreements between owners and tenants. Under the proposed scheme tenant and base building ratings are being considered. It is important to understand what is gained from each different type of NABERS rating that is available in the market ie. Base building, Tenancy and Whole Building.

NABERS ratings: Base building ratings provide an indication of the efficiency of all house services attributed to HVAC, common lighting, lifts, pumps, core facilities, carparking and other items that cannot be excluded from commercial office facilities.

Tenancy ratings assess tenant lighting, supplementary HVAC, communications, computers and other equipment associated with tenant uses only.

Whole buildings ratings consider the tenant loads in association with the base building loads. A whole building rating can be subjective if a comparison is to be drawn between a prospective tenant and how a current tenant is operating in that building.

It is essential that the scheme promotes the use of base building ratings and not whole building ratings. A whole building assessment would be misleading for prospective tenants when assessing multiple buildings in terms of the energy efficiencies.

Existing building stock limitations: We note that some existing building stock may not have pre-existing facilities that can assess tenant and base building energy consumption separately. Where this is the case a whole building rating may be considered feasible under the scheme for the first 18 months after which base building and tenancy rating provisions should apply. Appropriate upgrades of the base building must be undertaken during a set term to ensure energy consumption data can be recorded separately for tenants and base building.

For Option 1, the scheme is proposing that when a single tenant moves out of a building that a base building and tenancy rating is completed. We note that each tenancy fitout is unique and one tenancy energy assessment should not be used as a reference point for our another tenancy may perform in the building as the lighting design, occupancy rates and supplementary HVAC may differ significantly. Tenancy ratings should be considered when renewing lease agreements between existing owners and tenants to drive energy efficiency upgrades through the Energy Efficiency Assessment Report (EEAR), however they should not be used as a measure for new tenants.

Recommendations: The scheme does not promote whole building ratings. Whole building ratings should only be considered in the initial rollout of the scheme for a period of no more than 18 months. This will allow building owners to undertake the necessary metering upgrades that would be required.

Base building ratings provide the most versatile rating measure for future tenants to compare multiple buildings on an equal basis.

Tenancy ratings should only be considered when tenants are sub-leasing spaces in existing fitouts. This information provides the new lessee with an understanding of our energy efficient the current fitout is operating.

When a lease has expired for one tenant and a new tenant is prospective the same space, the old tenancy energy rating should not be used to gauge our energy efficient the new prospective tenants fitout will be. Tenancy ratings have the potential to differ significantly in energy efficiencies due to varying occupancy rates, lighting design and supplementary HVAC and equipment loads.

3. Green Power

Commentary: Options for Green Power have been considered in the RIS. Green Power does not promote energy efficiency measures for commercial buildings; rather it provides a measure for reducing greenhouse gas outputs and promotes green technology sources. Since the objective of this scheme to provide an avenue for promoting energy efficiency and disclosure of market information, then the use of Green Power is irrelevant under the scheme. All ratings should be a function of hard energy data rather than GHG output and the potential GHG reductions.

Recommendations: The scheme excludes Green Power from the scheme. This will ensure that hard data is used to drive energy efficiencies in lieu of GHG outputs.

4. Energy Efficiency

Commentary: Energy efficiency of commercial buildings is a function of the total system design. HVAC systems account for 40-55% of the total energy consumption for base building commercial buildings typically. Energy efficiency often results in a loss of water efficiency in a commercial building, through the adoption of cooling towers which consume millions of litres of water annually. To obtain a better overall measure of the environmental impact of one building in comparison to another, the scheme should consider measuring and reporting on water efficiencies as well as energy efficiencies. This will allow tenants to compare different buildings with different HVAC systems on a more equitable basis.

Recommendations: The Steering Committee considers the adoption of NABERS Water ratings in association with NABERS Energy ratings as part of the scheme. This will provide a true measure of the environmental impact of a building.

Contact: Connell Wagner

sustainability@conwag.com