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Commercial Building Energy Efficiency Team
Department of the Environment, Water, Heritage and the Arts
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Dear Sir/Madam

The Australasian Energy Performance Contracting Association (AEPCA) welcomes the opportunity to comment on the consultation documents on the Mandatory Disclosure of Commercial Building Energy Efficiency.

As the peak body for companies that deliver cutting-edge energy efficiency services, AEPCA has extensive on-ground expertise in the commercial reality of technology and policy relating to greenhouse emissions and energy generation, distribution and use.

AEPCA notes the following high-level points:

- Mandatory disclosure is critical to drive energy efficiency in commercial buildings. AEPCA strongly supports the introduction of mandatory disclosure as soon as practicable, as an important compliment to the Carbon Pollution Reduction Scheme.
- Mandatory disclosure has two key functions. Firstly, it addresses information asymmetry in the purchase and leasing of buildings, and secondly it raises the awareness of energy efficiency, which is information that has public good features
- When it is introduced mandatory disclosure should include NABERS ratings of both base building and tenancies. The Australian Government should work with the property sector, AEPCA members and other experts to improve the NABERS tool so that tenancy ratings increasingly focus on energy use associated with the building itself, such as tenancy lighting and cooling systems.
- When it is introduced, mandatory disclosure should apply to all buildings and tenancies with a net lettable area over 2000m². The Australian Government should commence investigation of the costs and benefits of extending mandatory disclosure to all buildings and tenancies with an net lettable area over 1000m².
- Mandatory disclosure should be rapidly extended to hospitals, hotels and shopping centres.
- Public display certificates must be mandatory for all buildings owned or tenanted by Commonwealth, State or local governments, as in the UK. Display certificates should be considered for the private sector, with a trial in one or more cities.
- Energy Efficiency Assessment Reports (EEAR) should be designed to foster the implementation of energy saving measures, rather than simply being potentially inaccurate documents that sit on a shelf. AEPCA would welcome the opportunity to work with the Australian Government in the design of EEAR, so that EEAR provide building owners with clear and simple advice on potential cost savings and a route to actually implement energy saving opportunities.

- The penalty for non-compliance should be large enough to encourage compliance, and should be based on the floor area or ratable value of the tenancy/building. The minimum penalty should be \$50,000.
- After the introduction of the scheme, new or substantially remodelled buildings should be allowed to model their energy use or commit to achieve a particular NABERS rating. The modelling or commitment should be binding, so that the sale or tenancy contract stipulates that failing to achieve the rating will incur a substantial penalty.
- The body managing NABERS must have sufficient skills and funding to deliver the expansion of the NABERS scheme. AEPCA has concern that the NSW Government may not be able to manage a major expansion of NABERS.
- The Australian government should establish a technical advisory group to provide ongoing support in implementing and refining the Mandatory Disclosure scheme in the first few years of its operation. The group needs to be carefully set up so that it focuses on expert input, rather than being dominated by particular interest groups.
- Mandatory disclosure and energy efficiency standards for existing building standards are not mutually exclusive options. The Regulatory Impact Statement analysis of energy efficiency standards for existing buildings is flimsy and is insufficient to support or reject this policy option. AEPCA believes that this must be highlighted in internal and external reports on the RIS process, such as Cabinet Submissions.
- There are multiple market-failures that impede commercial energy efficiency. Mandatory disclosure must be accompanied with other policies, particularly access to finance to implement building upgrades.

Please do not hesitate to contact me on 03 8807 4650 should you require further information on any of the issues raised in this submission.

Yours sincerely

Rob Murray-Leach
Chief Executive Officer

Overview

AEPCA strongly supports the immediate introduction of Mandatory Disclosure of Commercial Building Energy Efficiency (henceforth referred to as 'Mandatory Disclosure').

Mandatory Disclosure is one of a number of key policies that need to be simultaneously applied to address all the market failures that impede energy efficiency in commercial buildings. There are a number of other key policies that need to be aggressively pursued. These include:

- Governments develop funding mechanisms and procurement processes to enable departments to invest in energy saving measures
- Ensuring that the private sector has access to finance for energy saving measures
- Educating building owners, tenants and managers about the benefits of energy efficiency
- Overcoming bounded rationality, organisational failures and principal-agent problems that impede investment in energy efficiency

AEPCA's members include Australia's top experts in implementing energy efficiency. AEPCA welcomes the opportunity for ongoing collaboration with the Australian Government to develop cost-effective energy efficiency policy.

1. The importance of mandatory disclosure

The need to introduce mandatory disclosure is clear. The current and previous Commonwealth Governments committed to introduce mandatory disclosure for commercial buildings on a number of occasions, including in the 2004 Energy White Paper. These commitments reflect the understanding that there are well-established information asymmetries and information failures in the building market. If left unaddressed, these market failures can result in adverse selection, driving down the energy efficiency of properties in the market.

The Productivity Commission (2005) highlighted that disclosure schemes need to be mandatory to cover the majority of the market, as building owners will be unlikely to voluntarily apply labels to either average or poorly performing buildings, so that prospective buyers and tenants are unable to distinguish between properties in the lower end of the market.

Mandatory disclosure is complementary to the Carbon Pollution Reduction Scheme, as it allows building owners and tenants to identify the impact of the carbon price and respond to it. Introducing mandatory disclosure will create incentives for property owners to enhance the energy efficiency of their properties, particularly when combined with other key policies, such as access to finance and education.

Mandatory disclosure can also raise general awareness of energy efficiency amongst building owners and tenants. This benefit is not widely discussed in the consultation documents, despite the significant potential benefits. Public display certificates and energy efficiency assessment reports could significantly strengthen this aspect of mandatory disclosure.

Despite the long-term commitment to mandatory disclosure, its introduction has been subject to major delays. Given that all the tools are available to immediately commence a mandatory disclosure scheme, further delay in introducing mandatory disclosure would be unacceptable.

2. Regulatory issues

The Consultation Regulation Document canvasses a range of legislative and constitutional options for introducing Mandatory Disclosure. AEPCA would strongly advocate that a method is selected that meets the following criteria:

- It allows the rapid introduction of mandatory disclosure
- Coverage is as wide as possible and loopholes for non-compliance are minimised
- All levels of government are required to participate in the scheme, due to the importance of governments leading by example

If the legislation is introduced using the Commonwealth's existing heads of constitutional power, the Commonwealth should subsequently seek to strengthen the legislation with a binding Inter-Governmental Agreement with State and Territory governments.

3. Rating tools and validity periods

The rating tool used to establish buildings' energy efficiency should accurately identify the **actual energy performance** of buildings in a consistent and transparent way. Basing mandatory disclosure on a tool that predicts energy use is unacceptable, as modelling approaches are unable to incorporate the complex interaction between building design, management and occupant behaviour.

A number of studies have shown that modelled approaches do not always correlate with buildings' actual energy performance. This is due to a number of factors, such as the significant impact of building maintenance on building performance (Regulatory Impact Statement, page 3). Furthermore, modelled approaches can encourage building owners to optimise certain *features* of a building, rather than actual energy use.

NABERS energy is currently the industry standard for measuring energy performance, and AEPCA would strongly recommend that NABERS energy be adopted as the tool for mandatory disclosure. There is scope to improve NABERS energy, with changes to NABERS introduced over time after the introduction of mandatory disclosure.

Building Energy Efficiency Certificates should be valid for 12 months. Once-off assessments of energy efficiency can rapidly become invalid, particularly in the event of a major refurbishment. In addition to ensuring the accuracy of ratings, 12-month validity would also support ongoing improvements to the NABERS tool, as it would limit the time that two versions are in circulation to one year. Prospective buyers and tenants would be able to compare ratings produced by two subsequent NABERS versions through simple web-tools or through simple disclosure methods.

If the Australian Government allows other rating tools to be used alongside NABERS, these tools must be at least as accurate as NABERS and must produce ratings that prospective tenants can compare with NABERS ratings. In addition, the validity periods for certificates may need to be reconsidered if other rating tools are permitted.

4. Tenancy energy use

Buildings are complex, dynamic structures. In addition to tenancies using a large proportion of the energy consumed in buildings, the energy used by tenants affects base building energy use. For example, base building HVAC energy use will be increased or reduced depending on whether tenants have their own cooling systems and or inefficient lighting. Furthermore, it is desirable to encourage building owners to work closely with tenants to improve building energy efficiency, as retrofits that involve both building owners and tenants can be more integrated and cost-effective.

Therefore, AEPCA strongly recommends that mandatory disclosure should include both base building energy use and tenancy energy use at the inception of the scheme. As tenancy ratings currently include energy use that may not pass from tenant to tenant, such as energy used by specific pieces of equipment, the Building Energy Efficiency Certificate should separate out tenancy and base building energy use. For example, a tenancy might be advertised as having a “4 star base building rating and 3 star tenancy rating”. This approach is strongly preferred given that it involves limited additional costs, as stated in the Regulation Impact Statement:

The cost of a base building and tenancy assessment does not differ significantly from the cost of a base building only.

In the longer-term, the Australian Government should work with the property sector, AEPCA members and other experts to examine options to better align NABERS tenancy ratings to energy use that is associated with the building, not the tenant. As noted, NABERS tenancy ratings currently include both the energy use that relates to the building, such as lighting systems, and energy use that relates specifically to tenants, such as office equipment and IT systems. There are a variety of options that experts could explore to fine tune the NABERS rating process for tenancies.

The ease with which building owners can gain access to energy data for tenancies will affect the costs of the mandatory disclosure scheme. Acquiring data for whole buildings can be relatively straightforward; for multi-tenanted buildings data acquisition can be more complex. AEPCA looks forward to working with the Australian Government to identify mechanisms that lower the cost of data acquisition.

5. Threshold for inclusion

The Australian Government has undertaken a Regulatory Impact Statement on the basis of including all buildings in the scheme over 2000m² or 5000m². AEPCA recommends that, at the point of introduction, the scheme should be applied to all buildings over 2000m².

However, AEPCA recommends that the Australian Government should start investigations into extending the scheme to all buildings over 1000m². There may be substantial benefits in including all buildings between 1000m² and 2000m². Anecdotal evidence suggests that these buildings are relatively inefficient and so the opportunities for cost-effective energy efficiency improvement could be substantial.

6. Building types

It is appropriate that the scheme commence with BCA class 5 buildings and expand rapidly to capture other types of buildings, particularly hospitals, hotels and shopping centres.

7. Public Display Certificates

AEPCA would strongly urge that mandatory public display certificates be considered as part of the scheme. Mandatory disclosure could drive energy efficiency through two main routes:

- i. Reducing information asymmetry between building owners and prospective buyers and tenants. This is achieved by providing both information on a specific building and information on efficiency in the general market, allowing prospective buyers/tenants to compare a particular building with other buildings in the market.

- ii. Raising awareness of building energy efficiency and creating demand for more energy efficiency. This is particularly important in the government sector, where the rate of building turnover is very low.

Public Display Certificates will substantially enhance the effectiveness of the scheme in raising awareness of both energy efficiency and the general rating of buildings in the market, facilitating comparison and generating demand. In particular, display certificates raise the awareness of existing tenants and building owners about the energy efficiency of their leases, encouraging them to work together to improve the energy efficiency of buildings. This is critical where tenancy turnover is low.

At a minimum, at the point that the scheme is introduced public display certificates should be mandatory for all buildings that are occupied in whole or part by governments (see page 72 of the Consultation Regulation Document).

Likewise, at the point that the scheme is introduced public display certificates should be mandatory for buildings with private tenants in *specified areas*, such as the City of Melbourne and City of Sydney. This would act as a trial for a wider application of this approach. The Australia Government should work with local governments in specified areas to ensure that this approach is effective.

Public display certificates should be valid for one year, in line with the current NABERS scheme.

8. Energy Efficiency Assessment Report (EEAR)

EEARs are a vital mechanism help building owners and tenants respond to mandatory disclosure. The purpose of mandatory disclosure is to reveal how buildings perform and so encourage building owners and tenants to implement cost-effective measures to upgrade building energy efficiency.

EEARs need to be designed to help building owners implement energy efficiency upgrades, rather than simply be documents that sit on shelves. Basic audit programs have been relatively ineffective at driving change in commercial building energy efficiency. Audits need to be accompanied by pathways to implementation.

The effectiveness of EEARs will entirely depend on how they are designed and delivered. A poorly developed EEAR program will have no impact and could actually impede energy efficiency upgrades.

An inaccurate EEAR that recommends complex energy efficiency upgrades or underestimates the potential for cost-effective energy efficiency may reduce the chance that a building owner undertakes *any* energy efficiency upgrades. The worst type of EEAR would be inaccurate building audits carried out by poorly qualified specialists. This highlights the importance of experts with appropriate qualifications delivering EEAR.

However, even a relatively 'accurate' EEAR that consists of a list of technical recommendations (eg. HVAC upgrades) could prevent significant energy efficiency gains being achieved. If a building owner contracts an energy service company, the company implements a package of energy efficiency upgrades that optimise the overall performance of the building.

However, if a building owner acts on a basic EEAR by hiring contractors to upgrade only a handful of specific pieces of equipment, the opportunity to upgrade the performance of the whole building will be lost. For example, if a company only invests in projects with a short return on investment (ROI), this prevents an energy service company subsequently

packaging these investments with a short ROI with investments that have a longer ROI to deliver much more substantial energy efficiency benefits than either the short or long ROI investments can deliver on their own.

Therefore, EEAR need to focus on encouraging building owners and tenants to take the 'next step' in upgrading energy efficiency. Rather than the 'next step' being the building owner directly installing a new HVAC system, the 'next step' is engaging an energy service company to deliver an integrated package of energy efficiency upgrades.

Given the complexity of designing an effective EEAR system, AEPCA urges Australian Government to work closely with experts to develop this component of mandatory disclosure. AEPCA recommends that EEAR should be either:

- Simple documents that include:
 - o Basic information on the financial benefits of upgrading buildings eg. *"Your building is rated 2 Star NABERS. Generally, upgrading a building of this size from 2 Star to 4 Star would save \$100,000 in energy costs per annum, but the benefits could be significantly greater depending on the design of your building."*; and
 - o Step by step information on how to engage energy efficiency specialists, including information on energy performance contacts and lighting contracts.

or

- Scoping studies undertaken by suitably qualified energy service companies. This would enable service companies to work with building owners to encourage them to proceed directly to the implementation phase of energy efficiency upgrades, and would allow energy service companies to deliver other Australian Government programs, such as education, awareness raising or grant schemes.

9. Penalty for non-compliance

The penalty for non-compliance needs to be large enough to encourage compliance, considering both the financial benefits for non-compliance and the risk of prosecution. The proposed fine of \$8,000 is manifestly inadequate.

Owners of particularly inefficient buildings could benefit significantly by engaging tenants that are unaware of the energy performance of the building. Long-term tenancies can exceed several million dollars in value. The penalty should be large enough to outweigh any such benefit by a factor of several times, particularly if owners believe that the chance of prosecution is relatively low. It is suggested that the penalty should be based on the floor area or ratable value of the tenancy and base building, with a minimum penalty of \$50,000.

Large penalties will also reduce the investment that is necessary for effective enforcement, lowering the cost to government.

10. Modelling NABERS performance

As noted in point 3, the rating tool used to establish buildings energy efficiency should accurately identify the actual energy performance of buildings. Modelling the performance of a building goes against this aim.

However, where construction or renovation have not been completed or are only recently completed building owners will not be able to provide enough data for NABERS ratings. In these cases building owners should be required to commit to achieving a particular NABERS performance at the first rating.

This commitment should be legally binding and any contracts or sales entered into on the basis of modelled or committed NABERS ratings should stipulate the compensation that will be paid out to purchasers or tenants in the event that a NABERS rating differs substantially from the modelled performance. This should not detract from the ability of purchasers or tenants to sue the seller or landlord in the event that NABERS rating differs substantially from the modelled performance.

Building owners may wish to model energy performance prior to sale or lease in order to ensure that they are likely to meet their target. In these cases the Building Energy Efficiency Certificate should clearly identify that the certificate is only based on modelled, not actual, energy efficiency.

Where the owner of an existing building do not have a legitimate reason for lacking 12 months of energy use data they should be subject to a fine and required to commit to a particular NABERS rating, as for new or remodelled buildings.

11. Governance and administration

The scheme should be administered by an effective and well-resourced body. While AEPCA acknowledges the work that the NSW Government has undertaken to develop the NABERS scheme, if the scheme is to expand to have a national focus it should be managed by the Commonwealth Government. Given that much of the institutional knowledge and expertise around NABERS is based in Sydney, it is recommended that the Commonwealth Government negotiate with the NSW Government to transfer existing NSW Government staff to a Commonwealth Government unit based in Sydney.

12. Technical Advisory Group

The effectiveness of the mandatory disclosure scheme, including the reporting component, public display certificates and Energy Efficiency Assessment Reports, will depend on the details. A technical advisory group should be established to assist in the implementation and review of the scheme, to ensure that the details of the scheme are refined and improved over time. The group should be established for at least the first six years of the scheme, allowing for several rounds of review.

The goal of the Technical Advisory Group should be to ensure that the scheme is as well designed as possible, rather than providing commentary on whether the scheme should be in operation. To be effective, the group would need to focus on technical expertise and representation from the industry, including property owners, tenants and energy service companies, but should not be dominated by particular interest groups.

13. Complementary policies

Mandatory Disclosure of Commercial Office Building Energy Efficiency is one of a number of key policies that need to be simultaneously applied to address all the market failures that impede energy efficiency in commercial buildings. There are a number of other key policies that need to be aggressively pursued. These include:

- Governments putting financial instruments in place to enable departments to invest in energy saving measures, and addressing procurement processes to support agencies to invest in energy saving measures
- Ensuring that the private sector has access to finance for energy saving measures
- Educating building owners, tenants and managers about the benefits of energy efficiency
- Overcoming bounded rationality, organisational failures and principal-agent problems that impede investment in energy efficiency
- Addressing the balance between demand-side, supply-side and infrastructure investment in the energy system, to ensure that the most cost-effective investments are pursued.

A suite of key policies are outlined in Attachment 1.

Mandatory disclosure can play a role in facilitating other policies, such as linking ratings to fiscal and promotional benefits. Linking mandatory disclosure to incentives may increase support for the scheme in the property sector.

14. Energy efficiency standards for existing buildings

Mandatory disclosure and energy efficiency standards for existing building standards are not mutually exclusive options. AEPCA understands that the Regulatory Impact Statement (RIS) had to assess a number of alternative options to mandatory disclosure. However, the RIS includes insufficient sensitivity analysis on energy efficiency standards to support or reject this option.

The RIS only examines **one option** for energy efficiency standards for existing commercial buildings, a requirement for all buildings to perform at a 3 stars rating (page 27). This is despite the statement on page 47 that buildings would need to improve by 2.6 star ratings for this approach to breakeven, a full 1.6 stars above the proposed approach. This appears to be nonsensical.

The estimates of the costs and benefits of mandatory energy efficiency upgrades are based on very limited analysis, with benefits estimated at \$3 per square metre if the rating of a building is increased by one star. If energy prices increase to the extent predicted by most market analysts, due to changes in fuel costs, water availability, infrastructure costs and the carbon price, it would strongly affect this figure. Similarly, the cost of upgrading the energy efficiency of a building will decrease over time as the scale of the market for upgrades increases.

In fact, there are a wide variety of options for energy efficiency standards for existing commercial buildings, alongside other options such as requiring the implementation of improvements with set payback periods (page 47). The Australian Government may wish to consider trialling one or more of these options in the future, and these options should not be ruled out based on the basis of the flimsy analysis in the RIS.

AEPCA would strongly recommend that any internal and external reports on the RIS process, including Cabinet Submissions, should highlight that the RIS analysis was insufficient to support or reject of other mandatory standards for existing buildings.

References and further reading

Productivity Commission 2005, The Private Cost Effectiveness of Improving Energy Efficiency, Productivity Commission, Canberra.

ATTACHMENT 1

Complementary policies to maximise energy efficiency

AEPCA recommends the following policies as priorities at a national level:

I. Governments improve the energy efficiency of their own operations

Governments are large consumers of energy and play a critical role in both driving the market for energy efficiency and setting an example to the private sector. For example, the decision by the Commonwealth Government to occupy 4.5 Star rated buildings is driving changes across the property sector. However, to date most governments have made only limited and sporadic improvements in their own energy efficiency.

AEPCA strongly recommends that all levels of government in Australia:

- Commit to genuine improvements in energy efficiency, and implement rigorous measurement and verification standards to ensure these gains are genuine
- Streamline the purchasing process for energy efficiency services, including a commitment to EPCs as a preferred service model
- Establish dedicated budgets to drive energy efficiency
- Set up a central team of energy efficiency procurement experts to assist each department to improve their energy efficiency.
- Set energy efficiency targets and policies that are binding on all departments
- Set a low internal rate of return target for energy efficiency investments, to reflect the long-term stability of government operations

II. Green economic stimulus packages

In the current economic climate a range of stimulus packages are being considered to bolster the Australian economy. AEPCA urges that any stimulus packages should be designed to improve the environmental performance and competitiveness of the Australian economy. Stimulus packages should not help perpetuate outmoded business models, but transform Australian companies so that they thrive in a global carbon-constrained economy.

In particular, AEPCA recommends that any stimulus packages to the building and industry sectors should be tied to improvements in energy efficiency. One option to deliver this is 'Green Depreciation' (see CIE 2008). To drive innovation, rather than just compliance, the scale of government support that a company receives should be tied to the scale of improvement in energy intensity.

III. Internalise the benefits from avoided electricity transmission infrastructure

Investing in energy efficiency can reduce the need to invest in electricity infrastructure. Electricity transmission infrastructure is largely delivered by monopolies operating under government regulation. Current regulations mean that infrastructure providers are paid to build infrastructure, but infrastructure providers or other private companies cannot receive compensation if they offset the need for infrastructure by investing in energy efficiency. AEPCA welcomes the opportunity to further discuss options to address this barrier.

IV. White certificates

White certificate schemes can account for the spillover benefits from energy efficiency (such as avoided electricity transmission infrastructure) and provide an incentive for experts to assist households and businesses improve their energy efficiency. White certificates can be cost-effective if designed well.

V. Financial products for energy efficiency

Access to capital can impede energy efficiency investments. The Australian Government has recognised this and introduced a Green Loans program for households. AEPCA recommends that the Australian Government work with the finance sector to develop a range of suitable financial products to assist the private sector to invest in energy efficiency.

VI. Research and development (R&D) programs for energy efficiency

Some energy efficiency R&D takes place in organisations that have access to traditional sources of R&D funding. However, R&D in energy efficiency also occur when companies develop new installation techniques, combine existing technologies in novel ways and optimise the performance of a whole production process or building. Specific incentive programs will be needed to support these types of R&D.

VII. Market transformation programs for products and services

A range of approaches are required to drive market transformation for energy efficient products and services. A well-designed program that combines tailored incentive programs, labels, standards and education can deliver cost-effective energy savings, particularly in the long-term.

VIII. Performance standards for appliances and new and existing buildings

Building and appliance standards are consistently amongst the most cost-effective method to drive energy efficiency. In addition to progressively raising standards for new buildings and appliances over time, the Australian Government should investigate introducing performance standards for existing buildings. Setting standards that existing buildings have to meet at some point in the future, such as 2020, would ensure that improvements occur during normal refurbishment cycles.