



Australian
Institute of
Architects

Australian Institute
of Architects

Mandatory Disclosure

of Commercial Office

Building Energy Efficiency

Submission to the
Department of the
Environment, Water, Heritage
and the Arts

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PREFACE

SUBMISSION BY

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- This submission is made by the Australian Institute of Architects (the Institute) to the Commercial Building Energy Efficiency Team of the Department of the Environment, Water, Heritage and the Arts (DEWHA) in response to the release of the Mandatory Disclosure of Commercial Office Building Energy Efficiency Consultation Regulation Document (CRD) and Consultation Regulation Impact Statement (CRIS) and further information provided at stakeholder workshops attended in Queensland, Adelaide and Hobart.
- This submission has been prepared with the assistance of the National Sustainability Committee of the Institute, particularly its Chair, Peter Scott.
- At the time of this submission the Executive of the Institute is: Howard Tanner (National President), Melinda Dodson (President-Elect), Alec Tzannes (Immediate Past President), Andrew Vorrasi and Rod Mollett.
- The Chief Executive Officer is David Parken.

INFORMATION

- The Australian Institute of Architects is an independent voluntary subscription-based member organization with almost 10,000 members, of which 6,070 are architects and is one of the 96 member associations of the International Union of Architects (UIA).
- The Institute was formed in 1930 when state architectural Institutes combined to form a unified national association with the following aims:
 - To advance architecture
 - To maintain the integrity and standing of the profession
 - To promote the profession's views nationally and internationally, and
 - To encourage the study of architecture

- Since then, the Institute has evolved into a dynamic and progressive national organisation with active programs in many areas relating to the architectural profession. It also provides services to other sectors of the community.
- By promoting better, responsible and sustainable design, the Institute actively lobbies to maintain and improve the quality of our built environment. By raising the design standards of our cities, urban areas, commercial and residential buildings, architects and the Institute have a major role in shaping Australia's future.
- The Institute has established the highest professional standards. Institute architects are encouraged to undertake Continuing Professional Development (CPD) and are obliged to behave in accordance with the Institute's Code of Professional Conduct and as a result are informed and up-to-date on all architectural matters.
- In answer to growing environmental concerns within society, the Institute abides by a Sustainability Policy and produces the Environment Design Guide. Impeccably researched and presented, this service offers quarterly supplements containing articles on all aspects of design in order to develop projects which are ecologically sustainable.
- As a further service to members, the Institute conducts research on relevant issues such as market conditions, staffing levels and practice operating costs. By analysing the results, the Institute is able to monitor issues which affect its members and provide informed advice.
- At almost 10,000 members, the Institute represents the largest group of non-engineer design professionals in Australia.

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GLOSSARY

ASBEC	Australian Sustainable Built Environment Council
BEEC	Building Energy Efficiency Certificate
BRCC	Business Roundtable on Climate Change
CBD	Central Business District
CCTG	ASBEC Climate Change Task Group
CIE	Centre for International Economics
CPD	Continuing Professional Development
CPRS	Carbon Pollution Reduction Scheme
CRD	Mandatory Disclosure of Commercial Office Building Energy Efficiency Consultation Regulation Document
CRIS	Mandatory Disclosure of Commercial Office Building Energy Efficiency Consultation Regulation Impact Statement
DEC	UK Display Energy Certificate
DEWHA	Department of the Environment, Water, Heritage and the Arts
GHG	Greenhouse Gas Emissions
The Institute	The Royal Australian Institute of Architects trading as the Institute of Architects
The Second Plank	'The Second Plank – Building a Low Carbon Economy with Energy Efficient Buildings'
UIA	International Union of Architects

EXECUTIVE SUMMARY

- The Institute is pleased to provide comment on the Department of the Environment, Water, Heritage and the Art's Mandatory Disclosure of Commercial Building Energy Efficiency – Consultation Regulation Document and Consultation Regulation Impact Statement.
- The Institute is a member of the Australian Sustainable Built Environment Council (ASBEC), a peak body of key national organisations committed to a sustainable built environment in Australia. Through its Climate Change Task Group (CCTG), ASBEC commissioned economic analysis from the Centre for International Economics (CIE) to assist the CCTG in its effort to stimulate discussion about the complementary role that energy efficiency can play in supporting the CPRS. The CIE's analysis resulted in a report titled 'The Second Plank – Building a Low Carbon Economy with Energy Efficiency Buildings' (The Second Plank) which discusses several policy measures that could be pursued to allow the built environment to contribute its potential in GHG emission reduction.
- The building sector accounts for 23% of GHG emissions in Australia^① and, through energy efficiency measures, can make a substantial contribution to greenhouse gas abatement (60 Mt by 2030^②).
- The Carbon Pollution Reduction Scheme (CPRS) proposed for Australia will require complimentary measures to enable the building sector to reach its full abatement potential.
- The proposed Mandatory Disclosure of Commercial Office Building Energy Efficiency will send important messages to the market about the value of energy efficiency, and allow for informed consumer behaviour, although leaving increased efficiency as a voluntary, market- lead action.
- The Institute supports measures that facilitate the incorporation of greater energy efficiency measures into commercial office (and other) buildings.
- The proposal should be considered as one of a number of additional policy proposals to complement the CPRS, to assist the building sector to achieve its full abatement potential.
- In fully realising the building sector's potential, savings will flow to the wider economy, in the order of \$38 billion annually by 2050^③, through a reduction in the economy adjustment costs foreshadowed in the CPRS scheme.

SUBMISSION

BACKGROUND

- Climate change is being driven by the anthropogenic production of GHGs, with carbon dioxide a major component of these gases.
- It is widely recognised that there is an urgent need for management and reduction of GHG emissions globally if the planet is to avert significant climate change affecting the wellbeing of millions of people.
- The current government was elected with a long-term commitment to reducing Australia's carbon pollution by 60 per cent from 2000 levels by 2050. When Australia ratified the Kyoto Protocol it committed to restraining its greenhouse gas emissions to an average of 1990 levels across the period 2008-2012 (source: Australian Government Fact Sheet, December 2008 – see attachment).

KEY POINT RESPONSES TO THE CONSULTATION REGULATION DOCUMENT AND CONSULTATION REGULATION IMPACT STATEMENT

- This response focuses on what the Institute perceives to be the main issues arising from the CRD and CRIS.
- These are:

LIMITED ANTICIPATED EXTENT OF OUTCOMES

- It is anticipated in the CRIS, under the Option 1(a) scenario, that the number of buildings in which energy efficiency upgrades will be initiated as a result of the mandatory disclosure of commercial office buildings energy efficiency will be “84 transactions over the ten-year life of the program⁴”. This extends to 97 transactions if the recommended Option 1 (a+c) is adopted.
- That is, that the program will be deemed successful if less than 10 buildings Australia-wide per annum (2.88% of NABERS Energy ratings initiated as a result of the proposed measure) have energy efficiency improvements incorporated as a result of this measure.
- This result seems to be an inadequate response to the measure given:
 - a) the quantum of the impacts of GHG emissions in terms of climate change, and
 - b) that more than 97% of the proposed mandatory disclosure measures will result in no action at all from building owners to improve the energy efficiency of their properties.

FAILURE TO TAKE INTO ACCOUNT ALL BENEFITS ACCRUING FROM GHG EMISSION ABATEMENT MEASURES WITHIN THE COMMERCIAL OFFICE BUILDING SECTOR – THE INADEQUACY OF THE OPTIONS AND BENEFITS ASSESSED IN THE CRIS

- The cost/benefit analyses described in the CRIS are all couched in limited financial terms. This approach is summarised in Fig. 4.8 of the CRIS. In particular the high identified cost of Option 3 (mandatory energy efficiency improvement of the commercial office building stock over a 10 year period) set against only immediate savings in energy cost to the tenant/landlord is used to discredit this option as a viable one.
- Reference could usefully be made to ASBEC's 'The Second Plank' report which identifies that there is a strong economic case to be made for "deep cuts plus" in the GHG emissions of the building sector.
- In particular 'The Second Plank' report builds upon and extends analysis originally contained in a report released by the Business Roundtable on Climate Change (BRCC) in March 2006 entitled 'Deep Cuts in Greenhouse Gas Emissions'. This report assessed the cost of achieving a 60% reduction in GHG emissions by 2050 from a baseline of year 2000 emission levels. The "deep cuts plus" described in 'The Second Plank' report explicitly factor in the GHG emission abatement potential of the building sector through energy efficiency and electricity demand reduction measures.
- The outcome of the analysis contained in 'The Second Plank' report is that including significant energy efficiency measures in the building sector as part of a national broad-based GHG abatement strategy (i.e. a 60% reduction in GHG emissions by 2050 from a baseline of year 2000 emissions) would:
 - reduce the cost of each tonne of GHG emissions under a CPRS by around 14%
 - Substantially reduce the expected loss in economic activity as a result of the implementation of a CPRS to the tune of \$38 billion per annum by 2050
 - Lower adverse impacts on employment anticipated as a result of the implementation of a CPRS.
- These findings are supported by a study by McKinsey & Co, quoted in the CRD, which found that 60Mt of GHG emission savings could be delivered by the building sector (residential and commercial) by 2030 at an average community net saving of \$130/t. These savings were primarily to be found in the commercial (office) building sector.
- The Institute believes that when a wider view of the likely benefits, including the wider community benefits outlined above, are taken into account, significant measures to encourage and enforce energy efficiency improvements in the commercial office building (and other) building sectors have a much more positive cost/benefit outcome than outlined in the CRIS.

- Given the forecast costs to building owners of improving the commercial office building stock by one NABERS Energy star (i.e. from 2 stars to 3 stars) is identified as over \$1000 million (if applied to properties over 2000m² NLA), and that the Institute recognises that this is a very significant figure, even after deducting \$360 million in anticipated direct energy efficiency gains, reference could also usefully be made to the policies that are proposed in ‘The Second Plank’ that would support these measures. These policies are:
 - Introduction of a national white certificate scheme that would provide a potential vehicle for building owners to recover costs (or part thereof) of energy efficiency measures incorporated into commercial office buildings from energy retailers. White certificate schemes currently operate in NSW and Victoria, and are slated to come into effect in Queensland and South Australia, as well as operating in Italy, France and the UK.
 - Introduction of green depreciation that would provide a tax incentive for building owners to accelerate plans to incorporate energy efficiency measures into commercial office buildings.
 - Government support for renovation of existing commercial office buildings to achieve energy efficiencies. Measures in line with this policy already exist (e.g. Green Building Fund) and could be extended or expanded to facilitate additional support for building owners.
- The Institute believes that a further and wider analysis of the cost/benefit equation in relation to much more significant measures to procure energy efficiency in commercial office buildings (e.g. Option 3) needs to be made before a decision is finalised to adopt the proposed Option 1(a+c) model.

LANDLORD/TENANT RELATIONSHIP – A PARTICULAR ASPECT OF THE PERCEIVED MARKET FAILURES THAT PRESENT A BARRIER TO IMPROVED COMMERCIAL OFFICE BUILDING ENERGY EFFICIENCY

- There is a fundamental issue with additional costs imposed through legislation on building owners through the requirement for mandatory disclosure of commercial office building energy efficiency. It is, as identified in the CRD and particularly in the CRIS, that it is predominantly building owners who will carry the cost of mandatory disclosure and the cost of any energy efficiency renovation that might be carried out as a result, but predominantly tenants that will benefit through increased leverage in lease negotiations and/or decreased energy costs: “Many (positive-return energy-efficiency measures related to improvements in buildings and appliances) can be categorised as market failures arising from misaligned incentives, for example, those between builders and tenants, where it benefits the tenant but not the builder to install insulation or energy-efficient lighting⁵”.

- Because of the length and structure of many commercial office leases it will take some time for any benefits (i.e. higher rent) to begin to flow to the building owner.
- Some method of addressing this delay in rental compensation for any energy efficiency renovation works (the ultimate aim of the proposed legislation) that do occur is likely to encourage the uptake of those energy efficiency renovations. The policies outlined above (national white certificates, green depreciation and Government support for commercial office building renovation) will help to address this delay and are to be encouraged to support the proposed legislation.
- As an aside to the above, one outcome of the mandatory disclosure proposal is that B or lower grade commercial office properties that currently do not suffer significant rental differentiation from A or Premium grade commercial office properties (as occurs in smaller CBDs like Hobart) are likely to come under downward rental return pressure as a result of the proposal. This could force owners of these buildings to adopt energy efficiency measures in line with the ultimate intent of the mandatory disclosure proposal, but might also put excessive pressure on these owners (e.g. if it was uneconomic to renovate a building) and result in the removal of such properties from the market, which could have negative outcomes for tenants (e.g. less competition and choice).

NABERS ENERGY TOOL

- There are some widely recognised anomalies in the NABERS Energy tool that should be addressed, notwithstanding that it is probably the most appropriate tool for the proposed measurement of energy use purpose at this time.
- One is that fact that Tasmania is penalised under the tool, presumably to provide a “like for like” comparison with other states and the Northern Territory. This results in outcomes that are counter-productive in relation to GHG emission reduction (e.g. adoption of gas in preference to hydro-electricity is favoured under the tool when in fact it results in a significant increase in GHG emissions).
- Another is the fact that Victoria “has higher emission thresholds as the system tries to account for lower quality fuel[©]”. This is illogical when the abatement of GHG emissions is the ultimate goal of the legislation (and presumably the tool). Furthermore, on this basis, if the compensatory Victorian emission threshold is to be retained then Tasmania should have a lower emission threshold to account for higher quality power generation infrastructure.

DISPLAY OF NABERS ENERGY PERFORMANCE RATING/BEEC

- Given that the aim of the legislation is to make the energy efficiency of commercial office buildings more apparent, the Institute sees no reason why the NABERS Energy website should not be required to publish the NABERS Energy assessments of properties once they have been carried out under the Mandatory Disclosure proposal.
- Withholding this information seems to be at odds with the intent of the legislation which is to encourage the uptake of energy efficiency renovations by, in effect, public shaming of building owners. Not to publish the NABERS Energy reports is contrary to this intent.
- Similarly the Institute sees no reason why the BEEC should not be required to be displayed in the building to which it relates. The Institute notes that DEC's (for public or publically accessible buildings), as required by the UK Display Energy Regulations, are required to be displayed to help raise general public awareness of energy use (and energy efficiency initiatives and improvements/declines over time). Display of BEECs would achieve the same aim.

TRAINING

- The CRD states that the “scheme will ... need to provide a mechanism by which a potential assessor becomes and maintains accredited⁷”.
- One of the concerns that has been repeatedly raised with the Institute is that of the currently lack of suitably qualified assessors to service the assessment requirements of the proposed scheme. The Institute notes that the European Union Energy Performance of Building Directive (which was enacted in the UK as the Energy Performance Certificate and Display Energy Certificate Regulations) allowed a delay in application of the Directive for three years to accommodate a “lack of qualified and/or accredited experts⁸”, and that “there is currently a shortage of Commercial Energy Assessors which is maintaining prices⁹” of Commercial Energy Assessments in the UK – this is five years after the relevant legislation was enacted in the UK.
- The Institute believes that it will be essential for an appropriate level of additional training to be made available to the commercial building sector and associated building sector professionals to ensure that the implementation of the scheme is not delayed and/or that the cost of having assessments undertaken is not unnecessarily inflated due to a lack of competition. In particular it may be necessary to facilitate the qualification and availability of trainers to provide this training, and to do so in the very short term.

SUMMARY

- The Institute supports the Mandatory Disclosure of Commercial Office Building Energy Efficiency, but urges DEWHA to address potential shortfalls in the proposal as it now stands, in particular:
 - The ambition of the scheme seems severely limited given the GHG abatement potential of the commercial office building sector.
 - The cost/benefit analyses undertaken are very limited in scope and do not address the potential economic benefits of a much greater scope of action in the wider context of the impact of the CPRS on the Australian economy.
 - Potential negative financial impacts on building owners, as a result of a delay in rental adjustments to reflect increased costs resulting from the proposal, are not addressed.
 - Anomalies in the NABERS Energy tool should be addressed before its use is extended so substantially.
 - Consideration should be given to wider publication of NABERS Energy reports created under this proposal, and of BEECs in the buildings to which they relate as a public education exercise.
 - The need for training of assessors is not addressed, and should be an integral part of the program to prevent unnecessary delays in implementation of the scheme.

- The Institute calls on DEWHA to offer further industry consultation following any refinement of the scheme as a result of submissions to the CRD and CRIS. The timeframe for submissions in this round is considered inadequate (e.g. no more than one week between some stakeholder workshops and the deadline for submission of comments). A more reasonable timeframe should be considered.

REFERENCES

- ① *The Second Plank – Building a Low Carbon Economy with Energy Efficient Buildings*, ASBEC Climate Change Task Group, 2009, p.8
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- ② *An Australian Cost Curve for Greenhouse Gas Reduction*, McKinsey & Company, February 2008
http://www.mckinsey.com/locations/australia_newzealand/knowledge/pdf/1802_carbon.pdf
- ③ *The Second Plank – Building a Low Carbon Economy with Energy Efficient Buildings*, ASBEC Climate Change Task Group, 2009, p.36
http://asbec.asn.au/files/ASBEC%20CCTG%20Second%20Plank%20Report%202.0_0.pdf
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http://www.mckinsey.com/locations/australia_newzealand/knowledge/pdf/1802_carbon.pdf
- ⑥ *Mandatory Disclosure of Commercial Office Building Energy Efficiency Consultation Regulation Document*, Pitt & Sherry, December 2008, p.36
- ⑦ *ibid*, p.57
- ⑧ *ibid*, p.71
- ⑨ *ibid*, p.83