



## Tax Breaks for Green Buildings Consultation

### Submission Template

#### **Part A**

Please fill in the following details of the submitter.

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Please indicate the stakeholder group/s that you or your organisation belong to	Office buildings	<b>X</b>	Hotels	
	Shopping centres	<b>X</b>	Energy efficiency firms	<b>X</b>
	Construction companies	<b>X</b>	Taxation	
	Other (Please specify): <b>Green building / ESD consultants</b>			<b>X</b>

## Part B

*NOTE: It is intended that all submissions, including the names of the submitters, will be made publicly available online after the close of submissions, and may be used by DCCEE in subsequent publications, unless the submitter requests that the submission, or part of it, be treated as confidential. Please refer to Section 1.5 of the Consultation paper for further details.*

### Question 1

***What is a fair way of dealing with existing office buildings that cannot be rated using NABERS Base Building rating tool because of insufficient sub-metering? Is it appropriate to use NABERS Whole Building rating tool for the initial rating for this group of buildings?***

Comment: THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME

### Question 2

***What is a fair way to dealing with vacant buildings that cannot be rated accurately by NABERS? Is it appropriate that if a building was built before 1995 and has not undergone any major refurbishment since then, the building is deemed to be having a NABERS rating of 2 stars for the purpose of this program?***

Comment: THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME

### Question 3

***What are the factors that should be considered in designing an exemption regime?***

Comment: THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME

### Question 4

***Are NABERS ratings appropriate to be used to measure and verify energy efficiency performance of the buildings for the purpose of the Tax Breaks program?***

Comment:

The GBCA believes the most appropriate measure should be the greenhouse gas emissions associated with the building operations displayed more clearly as kilograms of carbon dioxide per square metre per year (or kg/CO2/m2/yr).

The GBCA believes NABERS Energy ratings are an effective way of indicating a building's operational energy performance as compared to other buildings. However, as raised we believe a kilograms of carbon dioxide per square metre per year (or kg/CO2/m2/yr) instead of a NABERS Energy ratings are not an is a more appropriate metric with which to convey energy efficiency or improvements in

**Comment [AA1]:** Should be:  
kgCO2/m2/a

energy efficiency for the 'Tax Breaks for Green Buildings' program. Whilst improvements in building energy efficiency are one of the desired outcomes of the program, the true objective should be reductions in greenhouse gas emissions or, more precisely, reductions in the carbon associated with building operations.

Although NABERS Energy ratings might be indicated using star ratings, the greenhouse gas emissions associated with the building operations would be displayed more clearly as kilograms of carbon dioxide per square metre per year (or  $\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$ ).

An improvement from 2 Star to 4 Star NABERS Energy can mean entirely different things depending on location, since the NABERS Energy star bands do not represent the same levels of efficiency or the same reductions in greenhouse gas emissions in each state and territory. An improvement from 2 Star to 4 Star NABERS Energy in the Northern Territory equates to a reduction of  $33\text{kg}/\text{CO}_2/\text{m}^2$  from  $80\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$  to  $47\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$ . However, an improvement from 2 Star to 4 Star NABERS Energy in Victoria equates to a reduction of  $90\text{kg}/\text{CO}_2/\text{m}^2$  from  $235\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$  to  $145\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$ . There is a difference of  $57\text{kg}/\text{CO}_2/\text{m}^2$  between the two locations, indicating that using the NABERS Energy ratings alone is neither an equitable nor an effective measure of energy efficiency performance for these purposes.

The GBCA suggests that the core metric used for the 'Tax Breaks for Green Buildings' program should be the greenhouse gas emissions, displayed as  $\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$ . The NABERS Energy rating tool can still be used to determine this figure and improvements upon it, using the '[benchmarking factor](#)' [Greenhouse Gas Intensity](#) (previously known as the 'normalised emissions') within NABERS Energy.

Furthermore, rather than pinning the 'Tax Breaks' program to certain NABERS Energy star ratings, it would be more worthwhile [to](#) use the program to reward and incentivise improvements of a certain magnitude. For instance, the program could reward an improvement of  $50\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$ , whether from  $150\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$  to  $100\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$  or from  $90\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$  to  $40\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$ . The key objective is to provide an incentive for building owners to reduce the greenhouse gas emissions, and therefore the key environmental impact, associated with their buildings. A reduction of  $50\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$  is considered a significant improvement, although this might be increased to an improvement of  $60\text{kg}/\text{CO}_2/\text{m}^2/\text{pa}$  upon consultation with industry bodies. Building owners would use the NABERS Energy rating tool to determine the level of greenhouse gas emission and improvements in energy efficiency / emissions to be rewarded.

The Green Star rating tools operated by the Green Building Council of Australia (GBCA) contains an Energy category in which the minimum requirement for rating tool compliance, as well as each best practice benchmark, is established using the metric of  $\text{kg}/\text{CO}_2$ . This system, currently used for commercial office and retail centre developments, is used to calculate the Green Star points for the key Energy category credits, based upon improvements upon a standard benchmark. No Green Star rating tool currently exists for hotel developments.

Further information on the calculations of greenhouse gas emissions for Green Star rating tools for commercial office developments can be found on the GBCA website [here](#).

In more general terms, it is important that the Australian Government's focus broadens over the next twelve months to include more issues than energy efficiency and more incentives than those for energy efficiency improvements / greenhouse gas reductions. The GBCA calls for a widening of

focus to include metrics and incentives relating to water, waste and indoor environment quality, amongst others.

Question 5

***Are there any other measuring methodologies should be considered? If yes, how can the credibility of these methodologies and the assessors be guaranteed?***

Comment: **SEE RESPONSE TO QUESTION 4**

Question 6

***Is it appropriate to use a global retrofit costing approach for the Tax Breaks program?***

Comment:

A global retrofit approach, or an approach in which the costs for all measures, technologies, practices and systems involved in the retrofit can be included for the purposes of calculations for the program, is appropriate. Significant improvements in energy efficiency, and significant reductions in greenhouse gas emissions, can best be achieved through retrofits that include a number of elements, i.e. installing an efficient chiller will have a substantial and cost-effective impact, but may need to be coupled with other changes such as lighting, insulation, sub-metering or shading, to achieve a major reduction in kg/CO<sub>2</sub>/m<sup>2</sup>/pa.

Question 7

***Should non capital expenditures be allowed for this program? If so, what non capital expenditures should be allowed?***

Comment:

There are considerable non-capital expenses involved in retrofitting projects. If these are not eligible for the program, it may be considered a barrier to undertaking the project. Non-capital expenditures such as consultants fees, services design and modelling, or staff training in workplace management might all be included, as well as facility management training and commissioning to ensure benefits are long-term rather than short-term.

Question 8

***What is a reasonable range for the cap on non capital expenditure (e.g. 5 per cent to 10 per cent of the total project cost)?***

Comment:

It is likely that different organisations will provide widely-differing answers to this question. GBCA member organisations that manufacture and distribute plant and machinery would encourage more incentives for capital expenditure (chillers, meters or systems) with a lower cap for non-capital costs. GBCA member organisations from a professional services background would encourage more

incentives for non-capital expenditure (consultants' fees, services, modelling) with a higher cap for non-capital costs. However, in order to achieve the best possible outcome, it will be necessary to balance incentives for capital and non-capital expenditure. Firstly, it is recommended that the cap on non-capital expenditure be placed at 10%, with the potential to claim up to 15% for smaller projects (i.e. less than 3,000m<sup>2</sup> of NLA) for which non-capital expenditure represents a larger percentage of the overall costs. Secondly, it is recommended that, in line with the GBCA's answer to Question 23 / the General Comment section, more time is taken over the consultation and implementation of the 'Tax Breaks' program so as to confirm a program which will achieve the maximum environmental benefits for the lowest capital outlay, with the correct balance achieved between incentives for capital and non-capital expenditure.

#### Question 9

***Should the same maximum value in \$/m<sup>2</sup> be used for all of the three sectors?***

Comment:

This is a complex issue and the GBCA would like to highlight, for both Question 9 and Question 10, the factors involved in the decision. Whilst the maximum value might be seen to set 'restrictions' on the amount of work which might be done which can qualify for the 'Tax Breaks' program, it will also ensure more of an equitable approach.

It would not be desirable that any maximum value in \$/m<sup>2</sup> acts as a deterrent against any project making energy efficiency improvements or reductions in greenhouse gas emissions over and above a certain magnitude, i.e. over and above 50kg<sub>CO2</sub>/m<sup>2</sup>. In basic terms, every kg<sub>CO2</sub>/m<sup>2</sup> reduction is a good thing, and projects should be encouraged to make larger reductions if at all possible. Any project wanting to achieve a reduction of 90kg<sub>CO2</sub>/m<sup>2</sup>/pa, for example, should be encouraged to do so, rather than 'limit' the potential reduction.

At the same time, these reductions should be achieved in the most cost-effective way; spending \$5,000/m<sup>2</sup> to achieve a reduction of 50kg<sub>CO2</sub>/m<sup>2</sup> is not an effective or efficient way in which to lower greenhouse gas emissions if the same reduction might be achieved for \$50/m<sup>2</sup>. A maximum value might, therefore, help to lower the amount spent on achieving a stated decrease in greenhouse gas emissions, whilst also preventing certain projects from obtaining an over-large proportion of funding as compared to other projects of a similar size.

It is recommended that any maximum value is related more to the reduction in greenhouse gases rather than simply the size of the project – in other words, setting a maximum \$/kg<sub>CO2</sub>/m<sup>2</sup> of cost to the program would be a better measure of improvement and success than simply examining the cost per square metre. This approach would also provide a useful metric for the cost of emissions reductions so that the program might evolve and future initiatives focus upon the most cost-effective solutions.

However, if a maximum value in \$/m<sup>2</sup> is set, this maximum value should be the same across all three of the sectors mentioned.

It is recommended that, in line with the GBCA's answer to Question 23 / the General Comment section, more time is taken over the consultation and implementation of the 'Tax Breaks' program

so as to confirm a program which will achieve the maximum environmental benefits for the lowest capital outlay, with the correct maximum value used for all three relevant sectors.

Question 10

***What factors should be considered in determining the maximum values in \$/m2 (or \$/room for hotels) for the sectors?***

Comment: **SEE RESPONSE TO QUESTION 9.**

Question 11

***Should a maximum value in \$/m2 or \$/room be used for hotels? (note: further discussion of using building area or number of rooms as a parameter for the hotel sector is included in Chapter 3.)***

Comment: **THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME**

Question 12

***Are there any opportunities to improve the transparency and integrity of the program through the application and assessment process?***

Comment: **THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME**

Question 13

***Is it appropriate to use the proposed competitive approach, including the proposed sectoral concession factor, to assess applications from three different sectors together (i.e. applications are competing with applications from all of the three sectors in the same round)?***

Comment:

The GBCA believes that applications from the three different sectors can be assessed together. The objectives are to improve energy efficiency and reduce greenhouse gas emissions in a cost-effective manner, and these can be achieved by looking at applications from all three sectors so as to compare and assess their cost-effectiveness and balance of capital and non-capital expenditure.

However, the competitive approach should not be used if the approach, and the priority for different projects, is based upon the NABERS Energy star rating achieved. Instead, any priority should be based upon the improvement in energy efficiency and reduction in greenhouse gas emissions measured in kg/CO2/m2/yr (as indicated in the GBCA response to Question 4).

Question 14

***Under the proposed competitive approach, should different Cap1 be set for each sector? What factors should be considered in setting the Cap1s?***

Comment: THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME

Question 15

***Should number of rooms, instead of building area, be used in calculating the PCI for hotels? If building area is used for hotels as well, what would be an appropriate definition and verification method for the hotel sector?***

Comment: THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME

Question 16

***Is it appropriate to use the proposed entitlement approach, including the use of different values of Cap1 for different sectors and star rating improvement ranges, to process applications from all of the three different sectors together (i.e. applications from all of the three sectors are competing together and with each other on a first come first served basis)?***

Comment:

Please see the GBCA response to Question 9 for comment on caps.

The proposed entitlement approach may ensure that the tax breaks are spread over four years, but the benefit of spreading reductions in greenhouse gas emissions over four years rather than encouraging those reductions from the earliest opportunity is not clear.

Whilst the entitlement approach and concept of spreading the allocation over four years will enable a range of applications from different owners at different stages of project-readiness, this may also lengthen the time taken to achieve maximum environmental benefit for the program.

The time-lag appears to be the most significant concern when considering the different approaches, particularly when the length of project work is taken into account; projects which may need to wait an extra year to apply under the following financial year's entitlement allocation may then have several more years to wait before confirmation is provided, once the works have been finished and proper assessment and documentation provided. This element of risk and delay is likely to provide the largest deterrent to the entitlement approach and year-by-year allocation.

Question 17

***Under the proposed entitlement approach, should different Cap1 be set for each sector and star rating improvement range? What factors should be considered in setting the Cap1s?***

Comment: THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME

Question 18

***Should funds (in terms of total value of the projects approved) be quarantined for each sector? What are the factors that need to be considered in quarantining the funds?***

Comment:

The GBCA believes that funds should not be quarantined for each sector, but made available for those projects from all three sectors applying for the Tax Breaks from one main fund. It is recommended that projects from all three sectors are requested to register their project so that relevant funds can be allocated, or earmarked, for this project in particular; the amount can then be remitted against the allocation once the works and process is complete. Since the principle objectives are improvements in energy efficiency and reductions in greenhouse gas emissions, kg/CO2/m2/yr would be just as relevant coming from the hotel sector as from the commercial office sector or retail sector, and thus quarantining may have the end result of restricting more easily-achievable emissions reductions from one sector whilst trying to encourage another.

Question 19

***Is the information required sufficient to ensure the integrity of the application and assessment processes? Are the proposed requirements for the provision of information appropriate or overly onerous?***

Comment: THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME

Question 20

***Is there any other information that should be made publicly available on the proposed register to improve the transparency and accountability of the program? Is there any information of an application that should not be made publicly available (e.g. due to commercial sensitivity or privacy issues)?***

Comment: THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME

Question 21

***What are the factors that need to be considered in designing the compliance regime? Are there any other measures that could be included to increase the robustness and effectiveness of the compliance regime?***

Comment: THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME



Question 22

***What level and/or type of sanctions would be appropriate for each type of non-compliance outlined in Section 4.3.3? Are there any other activities that should be considered as non-compliance?***

Comment: **THE GBCA HAS NO COMMENT ON THIS ISSUE AT THIS TIME**

General comment

***Please include any other comments or information you believe might help improve the design of the Tax Breaks program.***

Comment:

The GBCA, and many of the GBCA member organisations, would prefer not to see such a worthwhile program as 'Tax Breaks for Green Buildings' rushed into operation by 1<sup>st</sup> July 2011 [if it creates unintended consequences](#); there are many factors to be considered and many organisations involved in and affected by the program. A proper consultation period, particularly on issues such as the metric to be used for program qualification, the extent of non-capital expenditure which can be claimed, or the timing of the release of funds, will ensure that a worthwhile, collaborative program is released. The GBCA would urge that due time is given for consideration of feedback and discussion of concerns with the appropriate sectors.

In summary, the GBCA's four key concerns at this stage of the consultation for the 'Tax Breaks for Green Buildings' program are:

1. The metric used to gauge improvements in energy efficiency or reductions in greenhouse gas emissions for the Tax Breaks program should not be the NABERS Energy star ratings themselves but  $\text{kg}/\text{CO}_2/\text{m}^2$ , which the NABERS Energy tool can demonstrate
2. Timing of the allocation of funds, especially given the different approaches being considered and the potential delay and risk between application and project completion and program compensation
3. Allocation of funds should not solely be on the basis of 'first in best dressed' but might take into account an allocation of funds to each application which can then be earmarked to that project, with the relevant amount remitted to the owner once the improvements have been demonstrated
4. The allocation of specific funds between hotel, retail and commercial office sector is not seen as necessary, since the objective of the program should be improvements in energy efficiency or reductions in greenhouse gas emissions rather than sector-specific changes.