

Australian Business Council for Sustainable Energy

Submission to the Productivity Commission in
response to its Draft Research Report - "Reform
of Building Regulation"

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**Australian
Business Council
for Sustainable
Energy**

Australian Business Council for Sustainable Energy
Suite 304, 3rd Floor
60 Leicester St Carlton Victoria 3053
Tel. +61 3 9349 3077
Fax. +61 3 9349 3049
Email: admin@bcse.org.au
www.bcse.org.au

Overview and introduction

The Australian Business Council for Sustainable Energy (BCSE) welcomes the opportunity to make this submission on the Productivity Commission's Draft Research Report on "Reform of Building Regulation". The Productivity Commission's Inquiry into building regulation covers a wide range of issues, of which energy efficiency and environment comprise just two. This submission focuses on the energy and environment aspects of the Draft Research Report, as well as processes and structural issues that impact on these areas.

We have made a considered submission that benefits from ongoing BCSE engagement with the Australian sustainable energy industry in addition to leading research and analysis in this field. The focus of our submission has been on the built environment (residential and commercial buildings) and associated greenhouse emissions - these are key parts of the sustainable energy industry.

The development of the sustainable energy industry is critical to being able to deliver on the great potential that exists to reduce greenhouse emissions in Australia. Provided with the correct policy framework, the sustainable energy industry is poised to meet customers' energy needs in a manner that reduces greenhouse emissions while simultaneously increasing economic activity, jobs and investment.

Energy is central to the operation of the Australian economy and to the functioning of our homes and workplaces. How we generate it, use it, or conserve it, is critical to Australia's economic, social and environmental future. Energy efficiency in our built environment should therefore rightly be a cornerstone of the energy policy of all governments.

The combustion of fossil fuel to produce electricity and meet the energy needs of our factories and homes is the largest source of greenhouse emissions. To significantly reduce greenhouse emissions to a level that prevents catastrophic global warming requires two important steps; (i) we need to use energy more efficiently and (ii) the energy we do use needs to be produced from more sustainable sources.

In the future, energy efficiency and sustainable power will offer increasing potential to generate extra jobs, exports and import replacements. As Australia is well endowed with natural gas and renewable energy resources, our competitive energy cost position can be sustained long term and thus Australia's international competitiveness will be enhanced.

Overall, the Productivity Commission's conclusion seems to be that the Australian Building Codes Board has made substantial progress on reform and rationalisation of building regulation, but that further work is needed and that efforts could be more focused. This is consistent with BCSE's observations.

About the Australian Business Council for Sustainable Energy

The BCSE is the leading independent advocate for sustainable energy in Australia. The BCSE represents the broader sustainable energy industry covering renewables, waste-to-energy and gas-fired generation as well as energy efficiency. The BCSE has more than 250 organisations as members ranging from installers and designers of renewable energy systems to large project developers and equipment manufacturers and including both retailer and generator companies.

The BCSE undertakes a number of activities and programs to support the development of the sustainable energy industry in Australia. These activities are aimed at building industry capacity and capability; addressing impediments; and promoting the benefits to potential customers.

1. Draft Findings of Relevance to Sustainable Energy and Environment

An important overarching proposal is that the Mission Statement of the Australian Building Codes Board or its replacement be modified to specifically refer to environment, in addition to health, safety and amenity. *The BCSE strongly endorses this proposal.*

The Draft also proposes replacing the criteria of "efficiency and cost effectiveness in meeting community expectations" with "efficiency" in the Mission Statement. It is argued that use of the term "cost-effectiveness" is redundant, and that "community expectations" is a vague and potentially inappropriate criterion. While there are certainly some valid concerns about the present phrasing, use of the term "efficiency" as defined by the Productivity Commission raises significant concerns about interpretation.

A key issue with regard to consideration of environmental issues within building regulation is that it is community expectations, as reflected by the pressures felt by State and Commonwealth governments, that have led to their consideration in building and planning codes. Failure to explicitly incorporate consideration of community expectations and standards into the Mission Statement simply means that it will happen by osmosis, and will be slower and less efficient, and there will be more unnecessary conflict. The reality we face at present is that energy requirements are being (by usual standards) rushed through the regulatory process because State and Commonwealth governments have fallen well behind community expectations.

If the Building Code processes included explicit monitoring of community expectations and formal mechanisms for their debate and consideration, we would be much better placed today. Social scientists and community consultation specialists can assist in the development of effective methods of monitoring and responding to community expectations. This may create tensions within the existing building code development process, because it is lacking in such features at present, and the views that are likely to emerge from effective processes may differ from the 'accepted wisdom' of many who now dominate building code development.

BCSE agrees that there is value in reviewing the Mission Statement, but considers the Productivity Commission's proposal to be too narrow, so that it could be used to exclude action on issues of importance. More discussion and consultation is required on this issue.

From a perspective of environmental and energy issues, the *Key Points* include:

- "better articulating the performance-based requirements"

BCSE agrees with the Productivity commission's comments that many of the present provisions fall short of being true performance-based measures. Indeed, similar problems apply to voluntary environmental schemes such as the Green Building Council's rating scheme - which may well become mandatory over time. There is a need for ongoing discussion about methods of moving further in this direction. Part of the problem is the heavy emphasis that is placed on development of comprehensive Deemed to Satisfy (DTS) options. As we move further towards performance-based systems, it becomes increasingly difficult to develop DTS options that exclude loopholes and are reasonably straightforward. In the recent review of the residential energy efficiency provisions, the ABCB's Steering Committee proposed that simplified DTS options that erred on the conservative side be developed, so that time and cost could be saved. The consequence of such an approach would be that application of the simpler DTS options could mean that a builder over-achieved on energy efficiency. However, it was the view of the Steering Committee that such a builder could simply choose between the risk of spending more on over-compliance, or spending some money to pay for performance-based assessment. However, the ABCB Board over-ruled this approach.

BCSE recommends that DTS options be simplified and structured to create incentives for users to shift towards performance-based approaches. Intensive effort is needed in this area to educate regulators and practitioners, and to improve measurement and monitoring techniques and infrastructure. For example, regulations could require more comprehensive sub metering of water and energy on sites.

- "examining ways to enhance compliance and enforcement systems"

The improved articulation of performance-based requirements discussed above also links to the issue of enhancing compliance and enforcement. As they attempt to respond to performance-based requirements, many DTS requirements are becoming more complex and difficult to enforce using traditional inspections. With increasing pressures on the resources of local government, the effectiveness of enforcement is falling. At the same time, it is becoming increasingly clear that private certifiers face significant conflicts of interest between ensuring compliance and gaining future employment, so that their role in enforcement is coming under question.

Traditionally, building regulators have drawn a boundary at the time of completion/occupancy of a building. However, the shift towards performance-based requirements, recognition of the importance of maintaining performance over the life of buildings, and government policy commitments (such as the mandatory disclosure of energy performance at time of resale or lease of buildings) mean that there is a case to reconsider this situation. For example, in the broader regulatory context, the Victorian EPA now uses 'Sustainability Covenants' as a mechanism to enforce ongoing compliance by industry. Within the energy/greenhouse field, the voluntary Australian Building Greenhouse Rating Scheme includes a 'Commitment Agreement' for new buildings.

When a developer wishes to claim an ABGR rating during construction (for example, to attract tenants before a building is completed) a commitment agreement is established. This is a legally binding agreement that requires the developer (or whoever owns the building after completion) to demonstrate by providing energy billing data and other information that the completed building is actually achieving the claimed level of performance. While the choice to seek an ABGR rating is voluntary, once involved in the scheme, a participant therefore accepts a mechanism that ensures accountability: this strengthens the credibility of the scheme because prospective tenants can be confident they will get what the developer claims will be provided. The developer allocates responsibilities among designers, contractors etc according to normal contractual processes, and the rights and obligations can be passed on to buyers of the project in the same way that other rights and responsibilities are transferred. In principle, these kinds of approaches could be applied to building regulation, and could dramatically reduce the cost and resource requirements of enforcement. However, to do so would require review of the present artificial boundary applied by building regulators, and cooperation with those involved in regulation of ongoing operation of buildings and their component systems.

BCSE recommends that methods of enforcement that involve measurement of actual performance against performance requirements be implemented for building codes so that enforcement cost and complexity can be minimised while the community (and building occupants) can be confident that required performance is being achieved.

- "examining ways to reduce the erosion of a national approach to building regulation by actions of local governments using planning powers" and

The Productivity Commission's concern about the 'erosion of a national approach...' fails to address the core issues. First, apart from NSW, other States have the power to overrule local government planning rules but, in some cases, choose not to. Even within NSW, developments such as the introduction of BASIX are being used to rein in inconsistencies across local

jurisdictions. Second, BCSE's observation is that the key driver of the tendency of local councils to attempt to drive environmental performance is the failure of State and Commonwealth governments to respond in a timely manner to issues of importance to the broad community.

Indeed, it seems that building industry organisations have increasingly greater influence, and the community less influence, the further the tier of government is from the community. For example, in Victoria a Parliamentary Committee recommended in 1976 that mandatory insulation should be introduced in homes. It was 1991 before this occurred. It was 1997 when the prime Minister announced action on building energy efficiency, yet it will be 2006 before (very weak) codes will apply to most non-residential buildings. It is not surprising that other jurisdictions have taken unilateral action.

BCSE recommends that the Productivity Commission strengthen mechanisms for community issues to be considered promptly by developers of Building Codes, and that the problem of inconsistency be solved by active leadership, instead of attempts to disenfranchise the community.

- "examining ways to constrain, and bring rigour to, proposals for incorporating environmental objectives (including energy efficiency) in the BCA"

There is no doubt that it is appropriate to bring rigour to the development of all building regulations. But why should this be emphasised with regard to environmental issues? Further, why should the aim be to constrain environmental regulation when the overall development of regulations must meet clear requirements. This point seems to indicate a bias against environmental regulation.

BCSE recommends that the phrase 'to constrain' be removed and that this key point be framed as an objective for all aspects of the BCA.

2. Proposed Intergovernmental Agreement

The Draft Report also recommends that a new Intergovernmental Agreement be negotiated. Among other things, this should:

- "Replace the Australian Building Codes Board with the Australian Building Regulation Board (ABRB)"
- "clarify the objectives of building regulation reform"
- "strengthen the commitment to national consistency"
- "emphasise the importance of the ABRB giving priority to its core business"
- "strengthen the use of regulatory impact statements"
- "outline the future work agenda, drawing on recommendations from this study"

BCSE does not have a strong view on the name of the organisation, although the proposal to include the term 'regulation' in its title seems unduly restrictive, given the trend towards blending regulation with market-based measures. The other recommendations should be viewed in the context of points made by BCSE elsewhere in this submission.

3. Draft Recommendations

A number of draft recommendations have significance for sustainable energy and environment:

- 5.5 Where a building solution imposes maintenance requirements throughout the life of a building, these should be required by regulation to be documented and prospective owners and occupiers should be informed of these requirements.

This issue provides an opportunity to focus building regulation on life-cycle costing and impacts. A critical factor underpinning this is the treatment of discount rates and estimation of lifetimes. Some useful work in this area was done for the ABCB by ATECH Pty Ltd in a paper available from the ABCB website. This recommendation also raises issues with regard to the enforcement of regulations that involve ongoing performance, as discussed earlier in this submission.

- 6.6 The ABCB (or its replacement) should set up a rigorous framework to assess whether it is appropriate to include any additional mandatory requirements in relation to environmental objectives in the BCA.

The assumptions that seem to underly the language used in this recommendation are of serious concern to the BCSE, and are discussed below. Rigor should be applied to all aspects of the BCA.

- 6.7 The ABCB (or its replacement) should put in place a system for assessing mandatory standards for building energy efficiency to ensure they are soundly based (with benefits greater than costs) and that they are applied consistently across jurisdictions.

While, in principle, this sounds like a worthy objective, the assumptions that seem to underly the language used in this recommendation are of serious concern to the BCSE, and are discussed below. As with recommendation 6.6, this should apply to all aspects of the BCA, and there should be no need to single out energy efficiency.

- 6.9 The future work agenda for the ABCB (or its replacement) should include an examination of ways to reduce the scope for the national consistency objective of building regulation to be eroded inappropriately by Local Governments through their planning approval processes.

Again, this is a worthy goal. However, past experience has shown that most environmental and sustainable energy innovation in buildings has occurred at the local and State levels. Powerful vested interest groups have been extremely successful at managing agendas and slowing progress at the national level. This issue has been discussed earlier in this submission. *Local action can be avoided by a dramatic improvement in process and performance at the state and national level, as discussed above. A key path forward here is for national development of rating mechanisms and evaluation techniques, and encouragement of Councils to use them.* So if a Council wishes to achieve a higher standard of performance in a particular area, it could use a standard approach that is based on good science and is compatible with approaches used elsewhere. This would allow local authorities to respond to local circumstances, but would maximise consistency.

- 7.3 Work should aim to identify and communicate best practices that improve compliance and enforcement.

These issues have been weakpoints in energy regulation, so BCSE strongly supports improvement. As noted earlier in this submission, there is also an opportunity to take into

account opportunities for synergies with recent Commonwealth and State Government proposals to introduce mandatory reporting on energy performance at time of resale or lease, as well as developments such as the Australian Building Greenhouse Rating Scheme's Commitment Agreement approach. A key concern is that the complexity of new energy codes and their lack of objective measurability makes it difficult and resource-intensive to enforce them. Approaches such as the ABGR Commitment Agreement, and formal links to ongoing reporting of performance could offer innovative and low resource cost but effective enforcement mechanisms, as discussed earlier in this submission.

- 11.2 Establish building codes and standards that are the minimum necessary to address efficiently relevant health, safety, amenity and environmental concerns.

Statements such as this one have been used by opponents of regulation to argue in favour of regulation only removing the worst performers, rather than achieving the optimal efficient and cost-effective outcome taking into account a comprehensive perspective. For example, in the case of regulation to mitigate climate change, failure to achieve an optimal outcome at the societal level for buildings could mean that industry and other emitters have to pay higher mitigation costs than would otherwise be necessary. Many within the building industry fail to appreciate this bigger picture. *While the tests proposed for this objective seem reasonable, the word "minimum" should be replaced by "optimum".*

Other key issues raised in the paper include:

- Discussion of the relative merits of regulation versus market-based measures for energy and environmental issues.

BCSE's view is that it is not a matter of choice between one or the other- both are needed. And, given the building industry's culture and track record, it is important to set energy and environmental standards at levels that deliver maximum cost-effective greenhouse abatement and other benefits.

- Consideration of the tensions between planning codes and building regulation.

While many within the building industry want to see planning codes withdraw from many building related issues to streamline processes, the reality from an energy and environment perspective is that the earlier in the design and development process that these factors are built-in, the cheaper and more effective they can be. This reflects the systems-based approach that underpins successful environmental strategies. *BCSE sees a need for effective meshing of planning and building requirements, so that each plays an appropriate role, with effective mechanisms whereby planning requirements can be enforced by building inspectors and certifiers, as is being introduced under the BASIX scheme in NSW. There is a need to view regulation from a whole-of-process-and-building-life perspective, rather than looking at regulation in separate boxes. Such an integrated perspective offers the potential for significant economic efficiency improvements. This potential has not been captured by the Productivity Commission's Draft Report.*

- Discussion of the role of Regulatory Impact Statements.

While the Productivity Commission acknowledges that the ABCB has performed well in this area, it advocates requiring local government to comply with similar procedures, and it further proposes tougher standards of proof, particularly for sustainable energy and environmental issues. This may not gain community support, as it can be seen as an attempt to further delay implementation of regulations and measures that the community supports. Already a large proportion of the ABCB's resources are allocated to compliance

with regulatory review processes, and these processes are a key element in the unacceptable delay in implementation of sustainable energy requirements. In turn, such delays increase the likelihood that local and state governments will act on their own initiative. *BCSE recommends that more substantial resources be allocated to this area, with the aim of improving performance while reducing time delays and developing standardisation.*

- Submissions to the Inquiry highlighted widespread concerns about Australian Standards referenced in the regulations.

The lack of public accountability of Standards processes (particularly since cutbacks in funding for community input and increasing pressure on SAI to self-fund), dominance by vested interests, etc were typical concerns. On the other hand, some industry groups expressed concern that some elements of 'best practice' were creeping into regulations, instead of them focusing on regulating minimum standards. The PC recommends examination of the "appropriateness of a private company (Standards Australia International) being the sole Australian representative in international standards forums..." *BCSE also sees a need for review of the public accountability of standards development processes.*

- Consultation effectiveness is also discussed in the draft report.

Submissions commented that the ABCB consultation tended to focus on the building industry itself, not the occupiers of buildings or the broader community. Any improvement here is likely to increase pressure to perform on building energy and sustainability issues. On the other hand, some find themselves overwhelmed by the calls for consultation. *Lack of effective involvement of the broader community, and of occupants of buildings, is a serious weakness in the existing system, and more resources must be allocated to this.*

4. The Tone of the Draft Report

BCSE certainly considers that sustainable energy and environmental issues should be carefully and appropriately evaluated before inclusion in regulations. However, it is disturbing to note the numerous statements in the Draft Report that imply these issues should receive particularly stringent evaluation, and to see what seems to be a bias against use of regulatory mechanisms for management of these issues.

For example, the use of the term "constrain" in relation to environmental objectives indicates a negative attitude to inclusion of such measures in building regulations: this is not a sign of a balanced approach. Of particular interest to BCSE is the statement on page 86 that

"in the case of energy efficiency, where information gaps are likely to be relatively small and where information is reasonably easily obtained (especially through compulsory 'star' rating systems), the optimal level of mandated building performance is likely to be quite low."

We believe that perception is absolutely incorrect and inappropriate, and could be a serious barrier to the pursuit of optimal energy requirements in Building Regulations. On the other hand, the same paragraph notes that consideration of externalities is an appropriate issue for regulation, as the consumer has no incentive to take them into account.

With regard to energy efficiency, the Productivity Commission makes the point that its previous study into commercial buildings led it to conclude that "market-based approaches are the most direct way of accounting for externalities. The Commission considered that mandatory technical

performance standards for energy or input efficiency were likely to be distortionary, inefficient and inflexible, targeting only the commercial buildings sector and possibly stifling further innovation (PC 1999a)." Clearly the Productivity Commission view differs from that of States and the Commonwealth Government, let alone the vast majority in the community and many within the building industry. But the existence of this view means the PC may see delay and dilution of energy (and environmental) requirements as being a legitimate activity in the interests of economic efficiency. This is an extremely disturbing situation.

The benefit of regulation in creating a level playing field to minimise risk exposure for builders implementing environmental measures, as well as the benefits from standardisation, accelerated technology development and economies of scale, seem not to be recognised by the Productivity Commission. For example, the certainty created for increased sales of double glazing by introduction of the mandatory 5-star rating in Victoria has led to a significant reduction in the price of double glazing.

As noted earlier, BCSE takes the view that a combination of regulation and market-based measures is desirable in the buildings area. However, governments have strongly resisted use of market-based measures in the past. For example, both Commonwealth and State governments have failed to link first home buyer incentives to building energy efficiency and environmental performance. And while the oil industry receives fiscal incentives for oil exploration (increased in the Government's recent Energy Statement), building purchasers receive no equivalent incentive to save energy.

We look forward to seeing the Productivity Commission successfully negotiate with governments market-based measures to encourage improved energy and environmental performance. If it succeeds, it will be a major breakthrough. ***But such measures would only complement regulatory action, not replace it.***

5. Conclusion

The BCSE sees many worthwhile recommendations in the Draft Report. However, some, as discussed above, are ill-conceived and out of step with consensus across a wide range of stakeholders. BCSE would be pleased to discuss these issues further with the Commission.