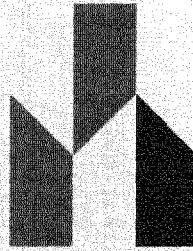


Secretary:

RECEIVED

25 NOV 2003

HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON
ENVIRONMENT AND HERITAGE



**MASTER BUILDERS
AUSTRALIA**

Sustainable Cities 2025

November 2003

INTRODUCTION

Master Builders Australia welcomes the opportunity to make a submission to the House of Representatives Inquiry into Sustainable Cities 2025.

Our submission covers only questions raised in the Discussion Paper – Sustainable Cities 2025 that are relevant to the work of Master Builders in regard to:

- *the development of building codes and standards that contribute to the efficient management of the built environment and in particular to the reduction of greenhouse gas emissions*
- *the planning, design and construction of buildings that adopt best practice in environment and energy efficient principles and processes*

Master Builders Australia represents the interests of all sectors of the building and construction industry. The Association consists of nine State and Territory Builders' Associations with over 24,000 members.

The members range in size from large multinational and national contractors to small subcontracting businesses.

The building and construction industry in Australia contributes almost \$70 billion of activity annually. It has approximately 210,000 businesses and 440,000 specialist trades businesses operating within it, employing some 773,000 persons.

Housing construction is the largest of the three distinct sectors within the industry, undertaking work amounting to around \$32.5 billion; followed by civil and engineering construction with a turnover of \$24.5 billion; and commercial and industrial construction at around \$15.5 billion.

Ninety-five percent of all businesses in the building and construction industry employ less than 5 people, while less than 1% have 20 or more employees.

Master Builders has identified that the issue of a sustainable built environment is pivotal to Australia's initiatives in regard to our commitments to manage the world's environment at both a domestic and global level. Master Builders has contributed to efforts to meet these commitments through its work on various industry and government committees including:

- Australian Building Codes Board (ABCB) Energy Efficiency Committees for both housing and commercial structures
- Australian Building Energy Council (ABEC)
- Australian Greenhouse Office (AGO) Advisory Committees including the "Your Home, Your Lifestyle, Your Future" suite of products
- Environment Australia Advisory Committees including the Greenhouse Challenge Initiative, Waste Wise and the National Australian Building Environment Rating Scheme (NABERS)
- Standards Australia Environment and Energy Advisory Committees.

Master Builders has also contributed to the development of policies and programs related to the sustainability of the built environment through the development and delivery of a raft of training programs to equip builders with the skills to pursue sustainable outcomes. Master Builders has also published a number of documents to encourage both housing and commercial builders to offer environmentally sustainable solutions to its clients.

Master Builders has also recognised the contribution of its members to pursue environmental and energy efficiencies through its extensive National Energy and Environment Awards which have been supported by both the AGO and Environment Australia. These awards are now recognised by the industry as a key opportunity to showcase the advances that are being made by contractors and designers to improve the built environment.

Master Builders pursues its environment and energy initiatives against the background of the following broad policy principles and objectives which should be pursued as part of the Sustainable Cities program.

Broad Principles

Master Builders supports the principle of sustainable development which maintains the capacity of society, the economy and the environment to satisfy the needs and living standards of both current and future generations but which at all times is affordable and economically sustainable. We believe therefore that economic development and environmental protection should be seen as mutually reinforcing goals without one subsuming the other.

An innovative building industry providing a diversity of improved environmental solutions is as fundamental towards achieving sustainable development as is the need to improve practices that prevent environmental damage.

A meaningful environmental sustainability policy must be based on dialogue between industry and government and be underpinned by the following three fundamental principles:

- government regulations which encourage technological innovation and voluntary industry approaches to best practice environmental management;
- environmental standards that are appropriate to Australia's own circumstances and which are nationally consistent and affordable;
- a whole of government approach (federal, State and local) to policy making and implementation based on scientific assessments and maximum co-operation and consultation among government agencies in conjunction with industry and community representatives.

Master Builders recognises the need for the development of appropriate strategies to improve the built environment to minimise greenhouse gas emissions. The development of such strategies should include the following principles:

- a strategic "whole of government" approach should be adopted to ensure that measures and policies are implemented in a way that lowers the costs of implementing Australia's international obligations and distributes the cost burden equitably across the community;
- a market based voluntary approach is more likely to produce more efficient and least costly outcomes; and
- raising industry awareness of both the magnitude of the task and the manner in which greenhouse gas emissions can be minimised through efficient design and building innovations.

Policy Objectives

Master Builders strongly supports strategies that encourage voluntary measures by industry. Given the severity of the problem outlined in the CSIRO report "Scoping Study of Minimum Energy Performance Requirements for Incorporation into the Building Code of Australia", Master Builders believes that the ABCB should continue to be supported by Government and industry in the development and introduction of minimum energy provisions through the Building Code of Australia (BCA). The provisions that have been adopted in the BCA and are currently being implemented across State and Territory jurisdictions are considered appropriate at this point in time.

The most critical objective should therefore be to develop objective means to monitor cost effective energy efficiency initiatives suitable for introduction within the building industry that can minimise greenhouse gas emissions from the construction and operation of buildings. Such an objective sets out not only the environmental goal but also the method by which it will be achieved and evaluated.

Master Builders also believes that best practice regulation requires the early preparation of a Regulatory Impact Statement (RIS) on all proposed regulation and that sufficient time is available for the public and industry to provide comment on the RIS.

The RIS must be quantifiable so that it clearly demonstrates that energy efficiency measures provide a suitable means to demonstrate that both environmental and economic benefits will be achieved.

In so far as the ABCB is to develop minimum standards within the BCA, Master Builders believes that the aim should be to achieve national consensus and avoid State and Territory variations and additions even though some jurisdictions already have energy measures in their appendices to the BCA. Indeed, in the absence of such BCA provisions, there is the risk that some planning authorities will introduce their own energy efficiency measures through planning processes.

This has already been the case in South Australia where local planning authorities are introducing environmental planning principles where they believe that the BCA provisions have not gone far enough. These changes have been made even though consultation with industry has clearly indicated that such principles are not in the interests of the community and potentially would mean that the 68 local authorities in South Australia could have 68 variations.

The proliferation of different standards with differing benchmarks in terms of scope and stringency will have an undesirable effect upon industry and the community and this is another reason why Master Builders endorses the efforts by the ABCB in this area.

If however there should be any differences between the BCA requirements in different locations *these should only be based on climate or other factors* rather than mere jurisdictional boundaries. Energy codes and standards should be drafted in such a manner to ensure that similar buildings should be able to be built anywhere within a specific zone and be able to meet the same performance criteria and have comparable solutions.

As a start point, Master Builders believes that the objectives of energy regulations and standards should acknowledge that many of the measures that can be taken (such as optimising the building's orientation, aspect ratio and location of windows) may not involve a cost. Some measures may require an owner to incur a cost but this could be recovered or offset, either fully or partially, through energy savings.

In the context of agreed stringency for energy measures for housing, Master Builders believes that these should be cost effective under agreed principles for the economic life of the dwelling. The reference to the economic life basis for housing should be based on a loan payback period which is in the order of 30 years.

In the context of agreed stringency for energy measures for commercial / industrial buildings the different economic life of systems and elements need to be recognised. In addition the construction of non-residential buildings involves a range of additional commercial issues such as taxation arrangements. Thus the payback period is more complex relating to the economic life of not merely the building but of the various installed systems (eg. mechanical) and services (eg. air-conditioning, lighting, etc). Therefore the approach that should be adopted in determining the scope of energy efficient standards for commercial buildings should be to not only identify all energy consuming systems but also the practicality of, or the need to, regulate such systems.

Furthermore, sustainability of buildings used for manufacturing purposes can be further enhanced if the manufacturing processes are efficient and contribute to the self sufficiency of the building's operation through the adoption of such innovations as the utilisation of manufacturing waste to fuel the plant and equipment.

In regard to the commercial building greenhouse gas emissions share by source, over 89% is contributed by the generation and use of electricity with lighting, heating, cooling and ventilation being the main contributors (84%) to the use of electricity. Similarly, over 36% of users being in the public administration and commercial services sectors, provides a challenge for these users to pursue sustainable options.

Master Builders, as part of its policy and program development, has concentrated on pursuing the benefits that can be achieved through proper design, construction, operation and maintenance of a structure. These benefits include minimising impacts on the environment, lowering energy bills, lowering maintenance and operations costs, enhanced community profile and increased leasability of buildings by occupiers who are pursuing sustainable solutions to meet their needs.

However, it must be recognised that the successful implementation of sustainable environmental outcomes in the first instance starts with the client taking the responsibility for such outcomes. If the client and/or community are not prepared to pay, then it is not the responsibility of the builder to pay for such outcomes.

It is against these broad policy principles and objectives that Master Builders has considered the questions posed in the Discussion Paper "Sustainable Cities 2025".

1. How can green construction and refurbishment techniques be integrated into standard building practices?

"Green construction" techniques are being gradually adopted by the industry in both the commercial and residential sectors through the adoption of both mandatory requirements through the BCA as mentioned above as well as voluntary initiatives by organisations that are pursuing niche markets.

However the mass adoption of efficient "green construction" techniques must be accompanied by educational/ awareness programs around Australia that outline the ongoing benefits to the environment and cost savings that can be achieved if they are adopted by building owners. These programs must be targeted at clients, building contractors, designers, consumers and the broader community.

Building professionals also must be provided with the tools to enable them to pursue the "greener" building options. If cost effective and easy to use systems were available widely in the market, it is our view that owners would insist on these to be incorporated into their new or refurbished buildings. There are some good examples of this occurring now, however the benefits and technology has not been marketed well to date.

To further regulate for "green construction" would be a difficult task to get the balance right and avoid stifling development of those initiatives where a measured amount of sustainable design in a building has delivered improved outcomes. The added challenge is that whilst a holistic nationally consistent approach is the correct way to implement much needed it cuts across several jurisdictions and state legislation and would be difficult to implement in an efficient way. Therefore the creation of an overarching organisation that has the carriage of the development of policy and programs with the active involvement of industry to pursue "green construction" should be considered.

2. How can eco-efficiency innovations be promoted to achieve a market value in both commercial and residential buildings?

Promotion to the commercial and domestic markets would be through the development of marketing programs by state planning and building administrations. Local government could assist in delivering innovations to the market on how buildings could achieve eco-efficiencies in the construction phase and after handover of the buildings. Organisations like the Master Builders would be a good conduit to deliver this information and awareness to property owners/developers, as would the different designer associations.

3. What are the impediments to eco-efficiency principles being taken up across new housing developments and commercial areas?

With any new initiatives it is difficult to have them taken up across any delivery area in society. Access to information systems, processes and procedures is one high impediment. Changing tried and tested construction techniques is daunting to most developers and builders due to uncertainties with the performance of the new system because in all cases today there have to be warranties or guarantees met by the builder to the building owner. Call backs to fix or maintain systems that are not performing to the expected standard is costly for the builder but not efficient in its own right.

The cost of implementation of new design and construction principles to achieve a more sustainable built environment can be viewed as too expensive and not deliver a cost-effective, efficient, sustainable building or environment. As such, clients have to be convinced that there is a trade off between initial cost outlays and medium to long term benefits. Designers and builders must also be convinced that pursuit of such efficiencies do not necessarily mean an increase in cost but an increased effort in identifying building design and construction solutions that are economically sustainable.

Similarly the renovation of existing housing stock has to be seen by consumers as an opportunity to pursue sustainable construction options as long as the benefits are clearly determined and trade-offs carefully calculated and marketed to both clients and builders.

4. *What type of incentives or standards for new developments might be appropriate to encourage more sustainable residential complexes?*

There are attempts from all levels of government to deliver more sustainable buildings, however this is an ad hoc approach and there should be a national push to develop a national guideline or code to deliver acceptable sustainable standards in new developments.

However the adoption of a national approach should not lead to further pressure to increase the cost of construction through the pursuit of national control of construction.

Incentives for owners could include additional savings in energy costs by government rebates for owners who choose to adopt minimum requirements when building eco-efficient buildings.

Local governments could reduce rates, waiver or reduce fees and charges for applicants seeking Council approvals for such proposed developments. Water authorities could also look at an incentive program for reduced fees and charges for buildings that do not draw on the services and infrastructure needs when sustainable water management systems and programs are included in the building or surrounding environment.

Appropriate tax incentives, such as accelerated depreciation and rebates, would also be an appropriate policy response.

5. *Are existing building standards and product labelling sufficient to enable informed consumer choices and to ensure that the use of eco-efficiency materials and designs are maximised?*

Existing standards and product labelling go a long way to inform consumers. However, an independent approval or accreditation body could assess all initiatives in the production of materials and designs and approve such against an industry standard or industry practice to ensure consistency and is supported by a national brand that is instantly recognised in the community that this material or system meets industry guidelines and is accredited. This will help designers and certifiers in using new systems in buildings.

We do not believe that Standards Australia would be an appropriate body to undertake this role

6. What planning models and zones can we use to accommodate the different lifestyle needs and preferences of Australians in cities?

The models need to be as flexible as possible to accommodate the variety of lifestyles that exist in our current and future communities. There is a need to consider higher density, inner city living and to concentrate higher density ratios around middle and outer transport nodes and develop transport systems that effectively cater for this network.

However as inner city areas are being remodelled to cater for new innovative sustainable buildings, attention needs to be given to the propensity for inner city local authorities to stifle such development to protect self interests of existing residents. We believe local Government therefore should be limited in their ability to ignore or override broad policy objectives in this area. In addition we believe there is a need for education campaigns targeted at local communities and their planning authorities to highlight the overall long term benefits of sustainable development.

Medium density should be further encouraged in middle-ring suburbs to ensure our aging population is suitably catered for with options like dual occupancy initiatives to allow empty-nesters to retain local networks, services and retain familiar neighbourhood locations, while reducing the allotment area to allow ease of garden maintenance.

Living in satellite cities should be encouraged, however transport and infrastructure systems would need to be enhanced to make this option more viable.

7. Are urban hubs and communities concentrated around public transport nodes an appropriate future model to suit Australian lifestyle needs?

Urban hubs concentrated around public transit nodes would be an appropriate model for the future because it diversifies activity centres of business into urban areas other than a central business centre. This will take pressure off the central infrastructure and spreads the load over multiple business or activity centres. Living adjacent to activity centres would also be highly desirable for singles or working couples who are focussed on careers and do not necessarily use private transport.

However distance between urban hubs can be a potential problem if additional daily travel is required for shopping, school and leisure trips in private vehicles where inadequate public transport is available.

8. How do we transform inner city projects and existing suburban development into more sustainable forms of community living?

Sustainable forms of community living are often underpinned by community assets such as recreation facilities, open space and security measures that provide a lifestyle with which residents would be comfortable. In many instances, this is currently funded by developer contributions levied by local councils. We believe that this form of funding is unsustainable for the future. Therefore, the challenge will be how to appropriately underwrite the costs of such facilities in the future to remove the current inequities inherent in development contributions. The discussion in question six above is also relevant in this context.

Consideration also needs to be given to those authorities that shut out opportunities to pursue sustainable options by using heritage and neighbourhood character arguments to sustain reasons for not approving development applications.

9. How do we ensure that further urban expansion occurs as planned community development?

Traditionally this process has been handed to local government to administer. It is Master Builder's view that State government should continue to develop state planning policy and work more closely with local government to ensure a more consistent and coordinated planning process.

However it is also clear that many developments are stifled by the poor track record of governments in providing timely approvals of new developments and potential investors are quickly lost to those jurisdictions that are providing endorsement of applications.

We consider that planning authorities require government leadership to put systems in place that facilitate the timely approval for new developments that introduce sustainable buildings and infrastructure. For local authorities to lead by example, communities will respond, and demand sustainable cities from their governments and planning authorities

JB