

28 September 2015

Ms Georgy Wood
Future Industries Team
Department of Economic Development, Jobs, Transport and Resources
1 Spring Street
MELBOURNE VIC 3000

By email: fi.construction@ecodev.vic.gov.au

Dear Ms Wood,

Re: Victoria's Future Industries Construction Technologies Discussion Paper

Thank you for the opportunity to provide comment on the Construction Technologies Discussion Paper.

The Property Council welcomes the State Government's policy focus on the growth of the construction industry, a vital pillar of this state's economy. Along with property related financial professionals and services, the industry is the state's greatest taxpayer and employer. Annually, it generates 24 per cent of Victoria's total tax revenue and is responsible for \$37.5 billion of direct and indirect economic output.

Finding ways to unlock industry's contributions will create more prosperity for Victorians through jobs growth and by developing strong, liveable communities. Rising construction costs, the need to compete globally and a growing focus on productivity are just a few compelling reasons for the sector to explore new technologies and processes which can deliver material efficiencies and better outcomes.

Should you have any questions regarding our submission, please contact Sandra Qian, Policy Advisor at sqian@propertycouncil.com.au.

Yours Sincerely,



Jennifer Cunich
Victorian Executive Director

About the Property Council

The Property Council of Australia is the largest advocacy organisation for the property sector with over 2000 member companies throughout Australia that represent property assets of over \$300 billion. Members of the Property Council are involved in the entire property investment cycle; the financing, design, development and maintenance of property, and the services that underpin the industry.

How can the uptake of Building Information Modelling be encouraged on Victorian construction projects?

Greater uptake of BIM will depend on its ability to drive productivity in a way that provides value for money and satisfies, or exceeds client and user expectations.

In Victoria, industry awareness of BIM is growing and the drive for improved productivity is facilitating the growing integration of project teams. However, the commitment to and use of BIM is still relatively immature. As noted in the discussion paper, a key challenge is the financial outlay involved in the move to BIM, which includes capital investments in software, training and time. Smaller organisations in particular will view the implementation of BIM with trepidation, and anecdotal evidence suggests that there is a common perception of BIM as the preserve of larger organisations.

The Property Council recommends that Government attention should be given to educating and communicating the benefits of BIM, such as:

- Present the business case for BIM, using evidence of the benefits that will drive the return on investment for projects;
- Train businesses on how to evaluate the cost and benefits relating to BIM implementation;
- Ensure that education and technical training is accessible at all levels and sectors of the industry. Industry must be sufficiently skilled to lead BIM during design and construction, and utilise it in an optimal manner to inform the initial development of new projects;
- Promote wider discussion around the benefits of BIM through private sector partnerships;
- Develop a standardised national data classification and non-proprietary open standard data structure or file format for BIM; and,
- Support industry adoption of internationally recognised standards such as ISO 19650- Specification for information management for the capital/delivery phase of construction projects using building information modelling (currently under development).

What would be the costs and benefits of requiring the use of BIM on all significant public sector projects?

The Property Council does not support government mandating the use of BIM on public sector projects. We believe that if the technology has proven benefits, change will happen when the market has a commercial rationale for adopting and driving it.

We are concerned about the impact that such a requirement could have, for the following reasons:

Firstly, 'one size fits all' requirement on all major government projects is not cost effective, particularly as the commercial rationale for using BIM can vary considerably depending on the project type and approach.

Secondly, given the various barriers in the process of adopting BIM, organisations which cannot afford, or justify the technological and financial outlay in transitioning to BIM will be unfairly discriminated against. These organisations include SMES and organisations for which BIM is not applicable, or appropriate, to the nature of their typical workload.

Thirdly, mandating BIM on government projects will not necessarily expedite its use by private sector clients. To deliver the best project outcomes, industry will use any technology and process at their disposal, all of which can offer significant benefits.

Any commitment to public sector projects must be accompanied by efforts to minimise the cost of delivery. Government should not enforce the use of BIM in the delivery of projects as this could add significant costs to contractors which will be passed down the supply chain to clients and the end user. Put simply, the Government's first responsibility is to the taxpayer, not a desired industry outcome.

How can more be gained by using Victoria's design and construction capabilities in green smart building to demonstrate new possibilities?

Promoting the integration of BIM and automated construction techniques will result in less wastage and more efficient use of materials. In terms of building operation, the development of more intelligent technology that can optimise building performance in real time, integrated into the BIM model will be a significant source of energy savings.

There is also a real opportunity in terms of grey energy related to manufacturing the building components. As additive manufacturing (e.g. 3D printing) develops, the location of materials will take on greater importance within the manufacturing sector. This will mean localised or regional manufacturing may become more significant, together with manufacturing not requiring large production runs to be viable. This could significantly reduce transport energy usage, inventory costs and related wastage.

Finally, continued support by governments for demonstrably smart and sustainable buildings, communities and infrastructure will help to enhance the value of local assets, as well as promote a skilled design and construction community able to sell its skills worldwide.

How can firms be encouraged and supported to develop and experiment with new processes to improve the efficiency of the building process?

Further R&D tax concessions will encourage the development of new technologies and processes which can improve the efficiency of the building process. Greater take-up of these technologies can be promoted using tax concessions and planning concessions, rather than targeted regulation and subsidies. Public private partnerships can also be used to promote innovative solutions, as the size and length of the contract usually allows for more investment by private contractors.

Are there regulatory or attitudinal barriers that inhibit the uptake of new material or processes on Victorian construction projects?

Many design and construction projects on the market are strongly focused on risk management and control, which stifles the potential for industry to adopt new materials and processes. These attitudinal barriers can be addressed with greater shared responsibility between government and industry in the procurement process. Moreover, an excessively conservative or punitive approach to regulating new methods and materials means industry will be less willing to consider viable alternatives regardless of their performance because of the negative perception that it may attract.