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Dear Sir

**The new research and development tax incentive draft  
legislation("the draft R&D legislation")**

Thank you for the opportunity to comment on the draft R&D legislation.

The Property Council encourages Government to reform the R&D tax incentive regime however several amendments are necessary for our members to support the draft R&D legislation.

Our members are concerned that the proposed draft legislation will close off all access to R&D incentives for the property and construction industry and hold back future R&D in the sector.

It will unnecessarily exclude incentives for legitimate R&D projects that help drive innovation in the property sector. The draft R&D legislation will make it significantly harder for industry to undertake R&D and for Government to achieve its policy aims on affordable housing and climate change. The R&D incentives will be crucial to being able to "green" existing buildings and design new more efficient communities in the future.

We understand that there has been no underlying change in the policy to encourage R&D through the tax incentive regime. However we are concerned that the draft R&D legislation does not reflect the underlying policy and will effectively stop R&D incentives flowing to the property sector.

We acknowledge and appreciate that some changes have been made to the draft R&D legislation however, they do not address the problems with sufficient clarity.

We note that this submission should be read in conjunction with our previous submission dated 26 October 2009.

**The Voice of Leadership**

## **The Problem**

Following on from our previous submission we have highlighted three key concerns which will effectively exclude most property related R&D projects because the incentive:

- 1) requires eligible R&D *activities* to be:
  - (a) both highly technically risky and involve considerable novelty. The test is too difficult to apply, is at odds with other R&D incentive programs globally and will deny incentives to legitimate R&D projects;
  - (b) undertaken for the dominant purpose of supporting core R&D
- 2) proposes feedstock rules that fail to recognise commercial risk by reducing the incentive in line with any commercial value for R&D, irrespective of other costs; and
- 3) is only available to companies which excludes other structures from using the incentive, such as stapled groups where the R&D may be conducted by one entity in the group for the benefit of the whole stapled group;

The Property Council considers that each of these issues can be simply addressed while maintaining the integrity of the R&D provisions. The detail of each recommendation is outlined in the attached submission:

- 1) drop the dual test for innovation and technical risk;
- 2) provide further clarity by defining R&D projects rather than R&D activities through amendments to the legislation rather than the EM;
- 3) Adopt the current feedstock rules for the new R&D legislation; and
- 4) Allow the R&D incentive to be used by other entities including unit trusts.

We would appreciate the opportunity to discuss this submission with you further at your convenience.

In the meantime, please do not hesitate to contact me directly on 0406 45 45 49.

Yours sincerely



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***Submission:***  
***Treasury Review of***  
***R&D Incentives***

*Property Council of Australia*  
*February, 2010*



## 1 R&D Incentive Recommendations

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**Drop the dual test for innovation and technical risk and define R&D projects rather than R&D activities**

### Issue 1 –Definition of R&D Activities

#### The draft R&D Legislation

##### **355-20 R&D activities**

*R&D activities are core R&D activities or supporting R&D activities*

##### **355-25 Core R&D activities**

- (1) Core R&D activities are experimental activities that :
- (a) are systematic and investigative;
  - (b) involve considerable novelty and high levels of technical risk; and
  - (c) are conducted for the purpose of acquiring new knowledge or information, including knowledge or information about the creation of new or improved materials, products, devices, processes or services;

*other than activities mentioned in subsection 355-25(2)(excluded activities)*

....

##### **355-35 Supporting R&D activities**

- (1) Supporting R&D activities are activities undertaken for the dominant purpose of supporting core R&D activities

....

#### Discussion

##### **a) Core R&D**

The current definition of R&D activities requires that “core” R&D activities involve *either* innovation or high levels of technical risk. The consultation paper released by Treasury in September 2009 flagged the intention to tighten the definition so that both innovation (now called “considerable novelty”), and high levels of technical risk would be necessary. This was not the first time that such a change had been suggested. Most recently, in 2001, the same recommendation was met with widespread industry criticism and was rejected by Parliament because of the expected negative impact on business R&D expenditure.

The September 2009 proposed tightening was again met with strong opposition and most public submissions opposed the new twin definition.

Unfortunately the draft R&D legislation:

- 1) proposes a definition that requires both "considerable novelty" (ie: innovation) *and* high levels of technical risk to qualify as "core" R&D activities.
- 2) introduces new and uncertain terminology by replacing "*innovation*" with "*considerable novelty*".

The tightening of the definition not only unnecessarily raises the bar in terms of what will be considered eligible R&D, but it also adds uncertainty as to what is meant by the new terminology. The new approach means that some legitimate R&D which has a high level of risk but may not be arguably regarded as innovative will fail this test. This is particularly the case when a difficult site means that conventional technology has to be employed in a new way and R&D is necessary to determine how to apply the technology – Arguably, it is not innovative because it is conventional technology or alternatively if the definition is less stringent the considerable innovation relates to the unusual application of existing technology. Unfortunately, there is no certainty regarding how the draft legislation should be applied.

#### **For example:**

A company wants to develop a site which has profile that would ordinarily make it unsuitable for the desired development. In particular, it may be badly contaminated or have poor geotechnical characteristics. The company would be faced with significant technical uncertainty, but it may not necessarily create an "innovative" solution. The R&D would still be essential to being able to successfully build on the site and the knowledge can be used on other builds – the new knowledge would relate to a different application of standard technology.

The legislation has not clarified R&D but made it more difficult to apply and uncertain in its operation. This does not meet the stated Government policy objectives.

Equally, the example could apply to retro-fit of buildings to make them energy efficient. There is definite flow on benefits for further projects but R&D may involve new applications for existing technologies.

In addition, where you look at the definition objectively as a whole, it is difficult to identify any single activity that meets all of the current eligibility requirements in its own right – ie, R&D activity that is undertaken for the requisite purpose **and** is systematic **and** investigative **and** experimental **and** involves innovation **and** high levels of technical risk.

The proposed tightening of the definition highlights the problem of providing a definition of R&D *activities* rather than a definition of R&D *projects*. While it is acknowledged that the draft explanatory materials makes reference to "a set of related activities" satisfying the criteria for core R&D, this does not help the operation of the legislation because it is not stated in the draft bill. It would be preferred that the legislation itself directly addresses the problem of activities and whole projects as the legislation does not make it clear that the test *is* applied to whole projects.

To explain the issue, an R&D *project* overall may be undertaken for the requisite purpose **and** be systematic **and** be investigative **and** experimental **and** involve innovation **and** involve high levels of technical risk **but** the individual *activities* that make up that R&D

project may satisfy only specific aspects of the criteria. By examining the activities individually, a legitimate R&D project is likely to fail the criteria.

### **For example: 250m High (75 storey) Slender Building Design**

A development company is currently constructing an 75 storey tower, 250m high that due to the unique site, needs to be exceptionally slender. Most structures have a maximum 8:1 slenderness ratio, but this tower requires a ratio of 13:1 to fit the 1500m<sup>2</sup> block.

It is absolutely critical to conduct R&D on the building design for vital components.

The overall project R&D is an innovative (novel) and risky engineering feat which has never been carried out in Australia on a residential tower. Each of the components that are critical to the core R&D project involve:

- 1) design/fabrication of dampner tanks on the roof to reduce building sway;
- (2) design/fabrication of a 250m high curtain wall to form the external façade of the building to cope with building height, wind pressure and volume/weight of glass;
- (3) design/fabrication of a 10 storey basement to cope with the structural pressure of the building (the deepest basement on a residential tower in the Brisbane CBD);

Unfortunately, if you take the Core R&D twin test for each individual activity, some of the activities on their own might fail one of the tests despite being vital to the design and development of the R&D project.

### **Construction of dampner tanks on roof top**

*Is this innovative?* Yes as the design and use of such a system has never been done on such a slender residential building in Australia. This allows the acquisition of new knowledge to the construction and engineering fields.

*Is this of high technical risk?*

Not necessarily as dampners can be engineered to work on all styles and sizes of buildings. Dampners have been around for many years and specialist engineers can make them work.

The main risk if any would be the verification that the installed system complies with the design.

### **Construction of curtain walling**

*Is this innovative*

*Arguably no*, the construction of a curtain wall system around a high-rise residential tower is not new or a novelty.

*Is this of high technical risk?*

Yes. The installation of the curtain walling at such a height with the wind pressures is of concern to the installer as well as the weight of the glass on structure.

## **Construction of a 10 storey basement**

This is the deepest basement in conjunction with a residential tower in Brisbane

*Is this innovative*

*No*, the construction of a deep basement is not a new idea or innovative. This is a necessary evil to house cars and comply with Councils Planning Codes

*Is this of high technical risk?*

*Yes*. The fact that leading excavation companies have not dug a hole that deep in CBD Brisbane means that it has had high technical risk. The risk involved digging through unknown stratum and having to modify the design during excavation was also of concern.

The risk of ensuring that the loading out of the material from such a small site and of such depth was also a major engineering feat that was unknown at design phase and of a high technical risk

As a result, the R&D project overall clearly meets the necessary core tests but might fail on individual critical activities that make up the project.

## **b) Supporting R&D**

The draft R&D legislation prescribes that supporting activities should only be eligible where they are for the dominant purpose of supporting core R&D. This will effectively exclude many activities that are done in support of the R&D but do not meet the dominant purpose test.

R&D within the construction industry typically involves undertaking activities (particularly supporting activities) as part of the commercial activity of the company. This is a necessary part of attempting to develop new and improved processes and acquire new knowledge.

It is unreasonable to prescribe that supporting activities should only be eligible where they are for the dominant purpose of supporting core R&D. Such a requirement focuses far too narrowly on the "research" element in R&D and fails to appreciate the significance of the "development" aspect.

In order to determine the technical outcome of many construction related R&D projects, it is essential that the R&D activities are extended into a commercial environment. New building techniques that are investigated under an R&D project have to be tested in many cases, by the partial build of the project to conclude the R&D. The initial build is clearly an activity supporting R&D because without the partial build, the success of the R&D design cannot be verified. Unfortunately, the dominant purpose of the build itself is not to support the R&D, but to construct the actual building. The Property and Construction industry works on a scale that would make individual prototypes impractical, expensive and ineffective.

Excluding supporting activities unless they are undertaken for the dominant purpose of supporting core activities will significantly reduce the amount of funding for R&D in the construction industry that will be provided by the new R&D Tax Incentive.

### **For example: 250m High (75 storey) Slender Building Design**

Taking the example above, the supporting activities for the R&D on the slender building R&D project would include:

- a) Constructing critical components of the building structure to be able to properly verify the success of the R&D project;
- b) Testing the structure upon partial completion of the building  
Example: Applying dynamic forces on the structure to test the structural adequacy of the structure
- c) Testing the dampner tanks upon completion of the structure to ensure the minimization of the sway of the building
- d) Geotechnical testing of the stratum during excavation to ensure adequate bearing capacity of the foundation to support the weight of 250m high building.
- e) Expert advice from façade engineer for the curtain wall during construction
- f) Expert advice and inspection of the dampner tanks from both the aerodynamics engineer as well as the structural engineering.

These activities from a practical perspective are clearly done in support of the core R&D and are necessary to verify the R&D. Given however that the construction and testing is carried out on a structure that will be (if successful), part of the actual building being constructed, it is not clear that they satisfy the technical definition of supporting R&D under the proposed legislation. Although they are supporting R&D activities, they are ultimately undertaken for the dominant purpose of building/monitoring the project.

This is an impractical outcome which would unfairly deny legitimate R&D concessions.

### **Recommendations**

We recommend that the requirement that core R&D activities involve both “considerable novelty” and high levels of technical risk should not be adopted. There is no certainty regarding what the concepts mean together and how strictly they will be applied. We further recommend that the requirement for supporting R&D activities to be undertaken for the dominant purpose of supporting core R&D should be relaxed.

As stated in our submission to the original consultation paper, we recommend that consideration be given to moving away from a definition of R&D activities in favour of a definition of R&D projects. This would provide far greater clarity than the currently proposed definition and explanatory materials.

A suitable definition of R&D project might be:

*“Eligible R&D project means a group of activities which, collectively:*

*(a) are undertaken for the purpose of:*

*(i) acquiring new knowledge; or*

*(ii) creating new or improved materials, products, devices, processes or services;*

*(b) are undertaken in a systematic, investigative and experimental manner; and*

*(c) involve either innovation or a high level of technical risk;*

*and includes all activities necessary to achieve the desired purpose.”*



We also note that the reference to “a set of related activities” in the draft explanatory memorandum needs to be moved into the draft R&D legislation and expanded upon to make it clear that the test applies to whole R&D projects.

## Issue 2 – Access to the new incentive

**Allow the R&D incentive to be used by other entities including unit trusts.**

### The draft R&D Legislation

#### **355-40 R&D entities**

*(1) Each of the following is an R&D entity:*

- (a) a body corporate incorporated under an Australian law;*
- (b) a body corporate incorporated under a foreign law that is an Australian resident.*

### **Discussion**

The draft R&D legislation limits the new incentive to companies and creates a bias against businesses operating via other legitimate structures. This, in turn, can create a bias against certain industries where the use of alternative structures is common.

Businesses operate through a variety of structures, with valid commercial reasons for doing so. This is particularly the case in the property and construction industry, where the use of unit trusts features strongly.

For example in a stapled group, a unit trust that owns real property may commission and pay a fellow member of the stapled group to conduct R&D activities in relation to the real property. In these circumstances the economic group has borne the cost of the R&D and the unit trust should be able to claim the R&D incentive.

We see no material problems with extending the new program beyond companies and urge the Government to extend its operation. We note that the tax credit introduced in New Zealand was open to a range of entities including trusts, partnerships and even individuals. We are not aware of any additional administrative difficulties arising from this.

### **Recommendation**

We recommended that the new R&D tax incentive should be open to other entities, not just companies. Limiting claimants to companies fails to recognise the various entities (particularly unit trusts in the property and construction industry) that legitimately conduct or commission R&D of the type the Government wishes to encourage and support.

For unit trusts, the R&D incentive could be structured as either:

- (a) a cash payment to the unit trust; or
- (b) a deduction for the unit trust which would form part of a non-assessable distribution by the unit trust for which no CGT event E4 cost base reduction is required to be made.

## Issue 3 – Feedstock

### Adopt the current feedstock rules for the new R&D legislation

#### ***Explanatory Materials – Augmented feedstock rule***

- 2.49 *The current R&D Tax Concession contains a limited "feedstock" rule, which applies where goods or materials are produced or acquired in order to be the subject of processing or transformation in R&D activities.*
- 2.50 *This current feedstock rule effectively acts to reduce the amount that is recognised as a cost of the R&D activities where the outputs from the processing or transformation are marketable. ...*
- 2.51 *The new R&D tax incentive extends this feedstock principle to all cases where R&D activities (including supporting R&D activities) produce direct output – termed "feedstock output" – that is of value. This reduces the extent to which the R&D tax incentive provides an unwarranted subsidy to activities that are already directly profitable.*

#### **355-5 Object**

- (1) The object of this Division is to encourage industry to conduct R&D activities that might otherwise not be conducted because of technical uncertainty, in cases where the knowledge is likely to spillover to the benefit of the wider Australian economy.*

#### **Discussion**

In its proposed form, the new feedstock rule will operate to discourage R&D in the property and construction industry. Successful property construction R&D usually results in the creation of a building which is in effect the R&D "test build" and the costs of the R&D will then be artificially diluted for the purposes of the R&D incentive to the extent of the commercial value of the building. It does not take into account the true costs of R&D or the impact on profit/loss of the overall project, only the value of the R&D build.

Unfortunately, given the cost involved in property R&D, there is real concern that it will effectively remove any material R&D incentives for the sector, and potentially make the R&D projects more commercially unattractive compared to simpler, traditional construction projects.

Consider, for example, a situation where a company has a contract to construct a building for a fixed price of \$300m. There is a reasonable level of confidence that the building can be constructed using standard techniques for a cost of \$290m. Alternatively, the company has the opportunity to undertake R&D that is expected to deliver a better building and develop technologies which may be applicable to future construction projects. However it is estimated that this option will result in total costs of

\$300m meaning that **if** the project is successful, the company will only breakeven (ie, it will forego profit of \$10m)

If we assume that there is \$50m of eligible R&D included within the construction, then this would provide the company with a permanent tax benefit of \$5m. This may be sufficient to encourage the company to undertake the R&D.

However, under the proposed feedstock rules, the tax benefit is effectively reduced to nil (apart from any minor benefit received for conceptual design) if the total costs are \$300m and the company receives payment of \$300m. This is so regardless of whether the R&D is considered to be successful or not.

In this situation, there is no incentive for the company to undertake the R&D. The R&D Tax Credit provides no upside for the company.

Although the Government R&D regime is intended to encourage R&D, the property industry will receive little or no R&D incentives. Thus, it will be substantially harder to undertake R&D for new construction techniques, especially where the innovation relates to a one-off build design that cannot be replicated in subsequent projects to recover the cost outlay.

The proposed feedstock rule is akin to a clawback provision, which effectively introduces a new commercial profit risk into an R&D project that the industry is unable to completely control once the R&D is underway. Failed property R&D may be partially subsidised and successful property R&D will be commercially penalised in comparison to a more inefficient build technique that has no R&D cost.

In addition, the proposed rules will be complex to apply in situations where R&D activities span more than one financial year. In particular, the requirement to determine a market value for something which is not completed will be problematic and will inevitably lead to adjustments to claims being necessary in subsequent years. This added layer of complexity further erodes the attractiveness of the R&D "incentive".

Our members do not support the proposed feedstock rules.

## **Recommendation**

We recommend that the proposed augmented feedstock rule be omitted and replaced with the current feedstock rules.

## **Overall View**

Property Council members are deeply concerned that the draft R&D legislation does not adequately address the key issues which need to be resolved before our members can support the draft R&D legislation.

Our members consider that, this current draft legislation will close off all access to R&D incentives for the property and construction industry and hold back innovation in the sector. Many worthwhile projects that have significant technical uncertainty or involve innovation will no longer qualify for any meaningful level of support. These projects currently provide many benefits to the broader economy in terms of jobs, housing and the advancement of technology. However, the decision to undertake these projects is often influenced by the support provided via the R&D tax incentive. There is a real risk that many worthwhile projects will not be undertaken and technological advancements in the property and construction industry in Australia will stagnate, resulting in Australia lagging behind the rest of the world.

In addition to the worked life examples in the submission above, the following actual real life examples from our member companies highlight the detrimental impact that the proposed legislation will have.

### **Example 1**

Company A had a contract to design and construct a commercial building. The company could have used only existing technologies and processes to meet the basic contract requirement. However, by including the estimated R&D Tax Concession benefit from the prototyping expenditure in the building, supported by an Advanced Registration process, the company made a business case to reinvest these funds in the building.

This project sought to develop technologies and processes to achieve 6 GreenStar building performance at a construction cost similar to a traditional building. The major advances achieved in this project have lead to sustainable development proposals, without a price premium, gaining more market acceptance.

This is an important advance to the benefit of the industry and is a large step toward minimising the carbon footprint of commercial buildings. This project would not have proceeded in this manner without the R&D Tax Concession benefit.

If the proposed legislation was enacted, the company would be entitled to very little support for the significant R&D required in a project such as this. As a result, the company would complete the contract using standard technologies and processes. Ultimately, this would be to the detriment of the industry and the broader Australian economy.

### **Example 2**

XYZ Constructors Pty Limited ("XYZ") is a property and funds management business with activities in commercial, retail and residential property development and construction. It employs 1,500 people in Australia and has a reputation for quality, innovation and the successful delivery of major projects.

XYZ entered into a fixed price contract to design and construct a building which is required to achieve unique design and superior environmental specifications. These specifications will potentially result in a 6 Star Green Star Design rating for this commercial building. The structure of the building is based on a unique diagrid design which requires it to be built and tested in-situ and therefore will involve a considerable

amount of ongoing research, design and testing. The design will be a showpiece for environmental sustainability in Australia.

The R&D claim relates to the experimental activities undertaken for the development of the building design and innovative construction methodology. Testing was required to determine whether the building would be able to support the load stresses and the incorporation of the environmentally friendly designs involved and therefore included some activities that would normally be undertaken in constructing the building, such as ongoing monitoring of the structure as the load increases.

### ***Potential problems arising due to introduction of new legislation***

#### ***Supporting R&D activities***

The R&D activities can only be conducted by constructing part of the building. Under the proposed new legislation this partial construction of the building will probably not be deemed to be a supporting R&D activity as, whilst the construction activities are required to support the design, development and testing component of the R&D activities, this is not the dominant purpose for them. The dominant purpose of the building activities is in fact to construct the building in order to fulfill XYZ's contractual obligations and not for the carrying out of R&D activities.

#### ***Feedstock rule***

For the purposes of the feedstock rule, the direct output of the R&D activities is the completion of the new commercial building. That is, notwithstanding that the experimental activities create new knowledge/improvements, in these circumstances they were conducted to produce environmental improvements to enable XYZ to complete the building project within which the experiments were conducted.

Under the proposed new legislation, the revenue (lease income) from completing the contract will be allocated to the cost of non-R&D activities undertaken to complete the building, and the residual applied against the costs of the non-quarantined R&D activities to determine the feedstock adjustment amount. This would have the effect of significantly reducing any R&D benefits available and would also severely increase the administration burden of calculation of what costs are available as R&D expenditure (especially since the building is leased for 15 years).

If in this instance, XYZ's novel approach and innovative construction methodology was ultimately successful and the R&D costs were fully funded by the building contract, then the feedstock rule would have the effect of confining the claimable R&D cost to the quarantined amounts (the conceptual design and new information created). This would dramatically reduce any claim by the company as all of the testing, modelling and development required would not be claimable as a supporting R&D activity. The proposed new "supporting activity" and "augmented feedstock" rules add complexity and will substantially diminish the incentive for companies to undertake R&D activities.

### **Example 3**

A construction company is currently undertaking a high rise building development which presents an option to utilise either traditional construction techniques, or non-traditional techniques. The non-traditional techniques would involve constructing the structural frame of the building in steel rather than concrete and experimenting with new types of concrete floors.

With respect to the floors, the standard approach is to use concrete with steel reinforcing. A proposed alternative is to use a fibre reinforced concrete. While some preliminary work has been undertaken in Europe, this technology is unproven – particularly in a high rise development. It is thought that, if proven, this technology could generate savings (time, money and environmental) in future developments.

The proposed R&D would see the experimental development of the technology whereby the initial floors are constructed using traditional steel reinforcing, but with the steel reinforcing gradually removed and fibres gradually phased in on subsequent floors, to the point where no steel reinforcing is included and the floors are completely fibre reinforced. The floors would need to be tested and monitored during this process, and, if successful, the new technology would be used fully on the remaining floors.

However, there is significant technical risk associated with the non-standard approach. Furthermore, conceptual design and feasibility work has shown that the non-standard approach is likely to also be more expensive. This combination of added risk and expense means that the company is more likely to proceed with traditional techniques rather than seek to advance the construction technology.

The remaining factor that may sway this decision is the R&D tax incentive. Under the current legislation, the company would be entitled to a significant benefit for its R&D efforts. However, under the proposed legislation, this benefit would be drastically reduced. Effectively, the proposed legislation has removed the incentive for the company to explore this R&D further.