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## Patent Box Consultation

Dear Mr Fischer,

The Australian Investment Council is pleased to present a submission to Treasury on the policy design of a patent box for the medical and biotechnology sectors. The Council welcomes the consultation for a patent box that encourages investment into, and the retention of, Australian medical and biotechnology companies.

As the industry association for private capital in Australia, the Council is supportive of policy initiatives and reforms that help ensure our economy is competitive, innovative and able to support Australia now and into the future. In particular, the Council encourages initiatives that help expand entrepreneurship, increase productivity and foster investment – initiatives that drive the development of skills and talent, productive capacity and innovation through technology.

Private capital investment has played a central role in the growth and expansion of thousands of businesses and represents a multi-billion-dollar contribution to the Australian economy each year. Our members are the standard-bearers of professional investment and include private equity (PE), venture capital (VC) and private credit (PC) funds, alongside family offices and institutional investors such as superannuation and sovereign wealth funds, as well as leading financial, legal and operational advisers. Our members include both Australian domestic and offshore-based firms.

Private capital fund managers invest billions of dollars into Australian companies every year. Australian-based PE and VC funds under management reached \$37 billion in 2020, which represents a growth in available capital to support investment into businesses across every industry sector of the economy. The industry now has a combined total of around \$14 billion in equity capital available to be invested in the short-term.

Investments made by private capital firms into Australian businesses directly result in the creation of new jobs and support growth in economic output across all sectors of the market. These investments represent 2.6 per cent of Australia's GDP output each year and are responsible for creating around 1 in 9 new Australian jobs according to independent analysis by Deloitte Access Economics.<sup>1</sup>

Australia has the capacity to be a world leader in the development of new medical technologies. To achieve this, the sector will need to be supported by a patent box regime that is competitive on a global scale and has the potential to attract investment, to accelerate our commercialisation pipeline, and to retain the IP within Australia.

In the Council's view, the patent box design principles should extend beyond the scope of the medical and biotechnology and clean energy sectors to include industries where Australia has a comparative advantage in areas such as food technology, agtech, space and quantum computing and critical minerals processing.

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<sup>1</sup> Private Equity Growth and Innovation, Deloitte 2018



While we recognise there would be a cost to the budget and that this policy design principle would require government support, the medium and long-term benefits to the national economy through employment and economic growth would outweigh the initial budgetary outlay.

The Council provides the following submission for consideration by the Treasury and looks forward to participating in any future discussion about the themes set out below as part of the government's work on patent boxes.

If you have any questions about specific points made in our submission, please do not hesitate to contact me or our policy team on [policy@aic.co](mailto:policy@aic.co).

Yours sincerely

Yasser El-Ansary

Chief Executive

## Introduction






The Australian Investment Council is supportive of policy initiatives and reforms that help ensure our economy is competitive, innovative and able to support Australia now and into the future. In particular, the Council encourages initiatives that help expand entrepreneurship, increase productivity and support investment – initiatives that drive the development of skills and talent, productive capacity and innovation through technology.

As Australia transitions into a knowledge-based economy, it is vitally important that the private sector partners with the government to regain the capacity to support the innovation ecosystem, emerging entrepreneurs and their businesses. Scaling-up new, fast-growth businesses can bring significant employment and economic benefits that will flow to all sectors of the Australian economy. It is therefore critical that the current generation of entrepreneurs is supported and encouraged to drive innovation and contribute to the next wave of employment and economic growth. Without this support, Australia risks losing the next generation of new, internationally competitive Australian businesses to other markets around the world.

A well-constructed patent box has the potential to support innovation through bridging the gap between research and development and commercialisation for new developments and discoveries in the medical and biotechnology sectors. This will generate a more competitive market for Australian businesses, enabling them to tap into the value created from developing and retaining IP in Australia and will create flow-on benefits to the economy through the development of new industries, employment and economic growth.

Developing IP, like any other asset, can be expensive and time-consuming, but is essential if developments are to be successfully commercialised on a global scale. Life science companies in particular work within a global environment and global patenting is an expensive process for many emerging companies needing to make critical decisions about which countries to enter early in the innovation life cycle. Any changes to the patent regime in Australia should therefore consider the global nature of the life sciences market and focus on creating a framework where medical and biotechnology companies in Australia can compete on a level playing field in an increasingly competitive global market.

**Fig.1. Top 5 patent filings in Australia by Country of Origin <sup>2</sup>**

				
<b>United States</b>	<b>Australia</b>	<b>China</b>	<b>Japan</b>	<b>Germany</b>
<b>2018</b>	<b>2018</b>	<b>2018</b>	<b>2018</b>	<b>2018</b>
<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>	<b>2019</b>
13,385	2,756	1,252	1,671	1,452
13,125	2,637	1,832	1,573	1,311

The latest data on standard patent applications in Australia for 2019 shows that the biotechnology industry is a major user of the Australian IP with 3,665 applications for Medical Technology, followed by Pharmaceuticals – 2,695 and Biotechnology – 2,655. The top five countries of origin for standard patent applications in Australia in 2019 were the United States with 13,125 followed by Australia, China, Japan and Germany. **(fig.1.)**

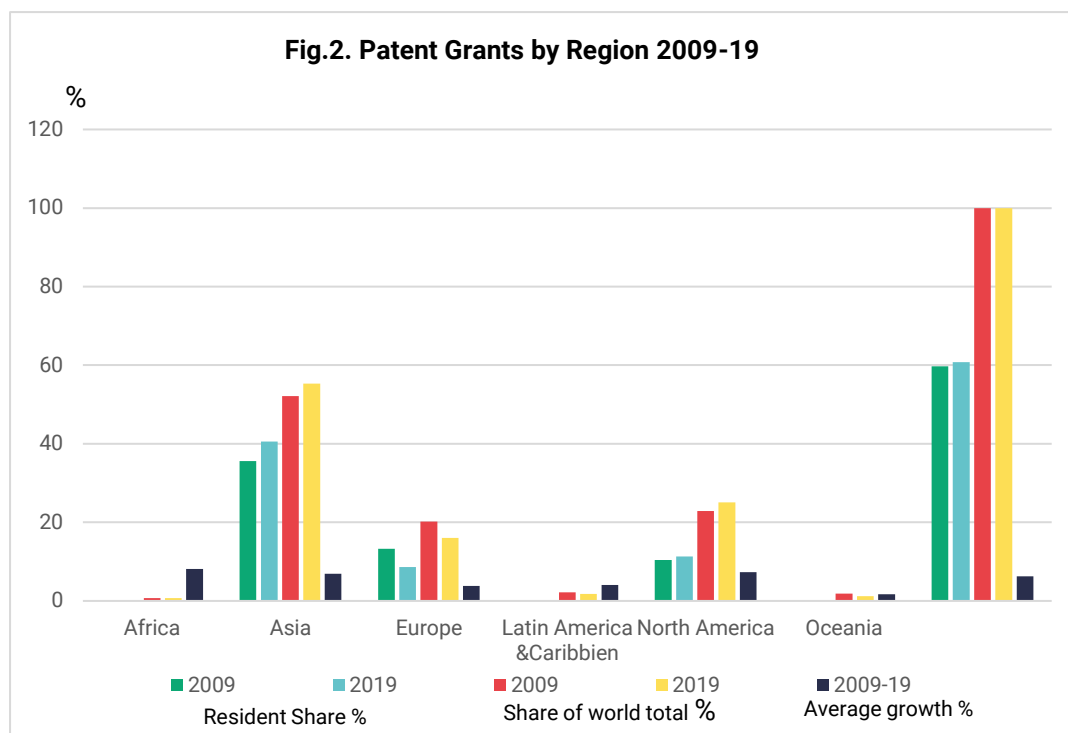
On the international scene, the US remains the primary destination country for patents, receiving 40 per cent of Australia's international filings. The European Patent Office was also a desirable destination with a 15 per cent growth year-to-year. <sup>3</sup> On average, in 2018, Australian residents filed 3.2 patent applications overseas for every standard patent application that they filed in Australia. However, on a world-scale Australia has a relatively small

<sup>2</sup> [Australian Intellectual Property Report 2020](#), Australian Government

<sup>3</sup> [Australian Intellectual Property Report 2020](#), Ibid



number of patents accounting for less than 3 per cent of an estimated 1.5 million patents granted worldwide in 2019. <sup>4</sup> (fig.2.) <sup>5</sup>



A 2014 study published in the *Journal of Public Economics* <sup>6</sup> found that businesses are more likely to locate patents in countries offering relatively lower effective tax rates on income derived from patents than in countries with higher rates. All else equal, businesses prefer countries where they have associated real innovative activity. Their estimates also show that while patent boxes do attract IP from foreign countries, the tax revenue loss due to the lower preferential tax rate tends to exceed the revenue gains from additional patents, resulting in a net revenue loss.

Within this context, the recommendations set out below will encourage companies to base their medical and biotechnology research and development (**R&D**) operations, and commercialise innovation in Australia and will create additional incentives to retain ownership of eligible patented innovations within our domestic economy.

<sup>4</sup> World intellectual property indicators, 2020

<sup>5</sup> World intellectual property indicators, 2020

<sup>6</sup> Ownership of intellectual property and corporate taxation, *Journal of Public Economics*, April 2014



## Summary of Recommendations

**Recommendation 1:** *Implement a 'gold standard' patent box to support the innovation economy*

Expand the scope of the patent box so it aligns with priority industry sectors in the government's *Digital Growth Strategy 2030* and *Modern Manufacturing Strategy*.

**Recommendation 2:** *Grandfather the eligible date for standard patents to 11 May 2018*

Recognise the long lead time in the commercialisation of medical and biotechnology inventions by grandfathering the date for patents eligible under the patent box regime to 11 May 2018 for standard applications made to IP Australia.

**Recommendation 3:** *Set the effective concessional tax rate at 10 per cent*

Introduce a concessional tax rate of 10 per cent to ensure Australia is competitive with other patent box regimes.

**Recommendation 4:** *Recognise manufacturing as an integral component of the patent box*

Include manufacturing patents and income streams from manufacturing as part of the patent box framework.

**Recommendation 5:** *Recognise patents registered in jurisdictions commensurate with Australia*

Include Australian-owned IP filed in other 'like' jurisdictions to foster a more competitive patent box regime.

**Recommendation 6:** *Clarify the definition of medical and biotechnology*

Include clear definitions and guidance on what is included or excluded in the definitions of medical and biotechnology in the framework for the patent box regime.

**Recommendation 7:** *Ensure the substantial activity requirement is consistent with the RDTI*

Apply a consistent approach to the substantial activity requirement with the RDTI where R&D is not available in Australia where a non-majority component for R&D can be conducted overseas under the substantial activity requirement.

**Recommendation 8:** *Include examples of eligible activities*

Include guidance in the patent box that provides clarity and consistency on eligible activities, and how the RDTI applies to indirect costs, activities such as clinical trials, grants and overseas expenditure.

**Recommendation 9:** *Harness Australia's comparative advantage in low emissions technology*

Include low emissions technologies in the patent box alongside medical and biotechnology and priority industries where Australia has a comparative advantage.



**Recommendation 10:** *Design a patent box regime which is easy to administer, does not require complex internal transfer pricing reports and is globally competitive*

Ensure the patent box regime allows emerging companies to comply without the need for complex internal transfer pricing analysis between the patent box and the rest of the corporate group. The regime should effectively interact with Australia's complex tax consolidation regime which would otherwise prevent a wholly-owned group company (e.g. an IP owning company) from being recognised as a separate entity from an Australian income tax perspective.



# Patent box design considerations

## 1. Design a 'gold standard' patent box

In the Council's view, there is a window of opportunity to design the new 'gold standard' patent box regime to strongly support the innovation economy through going 'narrow and deep' in developing sectors beyond medical and biotechnology where Australia has a comparative advantage. This could be achieved through alignment with priority industry sectors in government's Digital Economy Growth Strategy 2030<sup>7</sup> and Modern Manufacturing Strategy<sup>8</sup> to focus on areas such as clean technology, food technology, agtech, space and quantum computing and critical minerals processing.

While we recognise there would be a cost to budget and this design feature would require government approval, the longer term benefits to the economy would outweigh the initial cost outlay of implementing a broader patent box. The benefits of patent boxes are demonstrated in a number of international studies. Research conducted by the National Bureau of Economic Research in 2019 found the introduction of patent boxes across 13 European countries from 2000-2014 resulted in a 30% decrease of patents transferred out of the countries and evidence of patents transferred to the countries.<sup>9</sup> This study along with research by Alstadsæter et al show that while the introduction of a patent box regime does not generally lead to an increase in local R&D spending or patented inventions, if the patent box regime incorporates local R&D development conditions, this appears to have a positive impact on domestic inventorship.<sup>10</sup>

**Recommendation 1:** *Implement a 'gold standard' patent box to support the innovation economy*

Expand the scope of the patent box so it aligns with priority industry sectors in the government's *Digital Growth Strategy 2030* and *Modern Manufacturing Strategy*.

## 2. Unique attributes of medical and biotechnology

The time from when initial research is conducted to commercialisation of medical and biotechnology inventions takes approximately 10 years. IP within these sectors is generally distributed amongst multiple jurisdictions due to a number of factors including: research that is done through international collaborations; R&D that can only be carried out offshore due to capabilities specific to certain countries and institutions; and clinical trials that need to be conducted in countries with larger populations to achieve quantifiable results.

Because of the long lead time from early research to commercialisation, companies do not begin to make revenue until years three or four. It is at this transitional stage from pre-revenue to revenue, that offshore regimes become a viable option for medical and biotechnology companies for translating or commercialising their IP in jurisdictions outside of Australia. One solution to encourage a pipeline of medical and biotechnology inventions and to retain the IP within Australia would be to recognise existing IP for companies in the pre-revenue stage by making patents granted by IP Australia three years prior to 11 May 2021 eligible for the patent box. This would have little or no impact to the budget.

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<sup>7</sup> [Digital Economy Strategy 2030](#), Australian Government, May 2021

<sup>8</sup> [Making it Happen: The Australian Government's Modern Manufacturing Strategy](#), October 2020

<sup>9</sup> [Should there be lower taxes on patent income?](#) National Bureau of Economic Research, June 2019

<sup>10</sup> [Patent boxes design, patents location, and local R&D](#), Alstadsæter et al



**Recommendation 2:** *Grandfather the eligible date for standard patents to 11 May 2018*

Recognise the long lead time in the commercialisation of medical and biotechnology inventions by grandfathering the date for patents eligible under the patent box regime to 11 May 2018 for standard applications filed with IP Australia.

### 3. Build a globally competitive patent box regime

More than 20 countries have similar patent boxes in place and adhere to the OECD's guidelines, including the UK, France Ireland and Luxemburg. Each patent box applies to existing and new patented innovations and the majority offer separate tax incentives for domestic R&D investment. Tax rates in these jurisdictions are competitive for example, the UK (10%) Ireland (6.25%) and Luxemburg (4.99%). Further competition for lower tax rates is highly probable following the G7 meeting in June 2021 where it was agreed to set a global corporate minimum tax rate of 15 per cent. Experience shows that other countries will 'race to the bottom' and set their corporate tax rates at 15 per cent which means that a 17 per cent tax rate may quickly become uncompetitive.

It is the Council's view that the proposed tax rate of 17 per cent for the Australian patent box will not be sufficient to make Australia competitive with these jurisdictions or to meet the design objectives of the patent box to attract and retain IP in Australia. When combined with the current company tax rate and relatively high costs of commercialisation, the 17 per cent tax rate would not make the proposed patent box competitive enough with other regimes.

There is a unique opportunity to build a competitive patent box regime to attract and retain innovation in Australia. An important attribute of this regime will be to include a tax rate which is highly competitive with other jurisdictions.

**Recommendation 3:** *Set the effective concessional tax rate at 10 per cent*

Introduce a concessional tax rate of 10 per cent to ensure the Australian patent box is competitive with other patent box regimes.

### 4. Manufacturing

Manufacturing is integral to the commercialisation of medical and biotechnology inventions. To develop a 'gold standard' patent box regime, patents relating to manufacturing need to be included as where a product is made and where it is sold are important considerations when determining where to file patents.

**Recommendation 4:** *Recognise manufacturing as an integral component of the patent box*

Include manufacturing patents and income streams from manufacturing as part of the patent box framework.

## Eligible IP to enter the patent box

### 5. Patents in other jurisdictions

One of the challenges of the patent box design is in dealing with multiple patents that may have been filed in different jurisdictions. As outlined in **point 1**, the unique attributes of medical and biotechnology mean that an invention will often be developed in collaboration with a number of different countries which may also mean that patents for specific aspects of the invention are filed in jurisdictions outside of Australia where there are sales and manufacturing opportunities. Limiting the patent box to Australian patents would not be a competitively viable option as it would exclude Australian-owned IP filed in other jurisdictions.





**Recommendation 5:** *Recognise patents registered in jurisdictions commensurate with Australia*

Include Australian-owned IP filed in other 'like' jurisdictions when a company elects to be in the patent box regime to foster a more competitive framework.

## Targeting medical and biotechnology

### 6. Definition of medical and biotechnology

Targeting medical and biotechnology is a relatively small component of Australia's ecosystem. The Council's recommendation (**outlined in Recommendation 1**) is to broaden the scope of the patent box to align with priority industry sectors in the government's *Digital Growth Strategy 2030* and *Modern Manufacturing Strategy*. A key question regarding medical and biotechnology is how is it to be defined? For example, is medical defined as human science or will it cover animal science? Australia has a comparative advantage in animal sciences so inclusion of this industry vertical could prove advantageous in meeting the objectives of the patent box regime.

**Recommendation 6:** *Clarify the definition of medical and biotechnology*

Include clear definitions and guidance on what is included or excluded in the definitions of medical and biotechnology in the framework for the patent box regime.

## Applying the substantial activity requirement

### 7. Research and Development

The nature of medical and biotechnology innovation in Australia requires international collaboration to fill gaps in areas such as clinical trials, technologies and R&D which cannot be met in Australia. Excluding R&D that is only available offshore would significantly impair the competitiveness of the patent box regime and would be inconsistent how the R&D Tax Incentive (**RDTI**) is applied in Australia.

**Recommendation 7:** *Ensure the substantial activity requirement is consistent with the RDTI*

Apply a consistent approach to the substantial activity requirement with the RDTI where R&D is not available in Australia where a non-majority component for R&D can be conducted overseas under the substantial activity requirement.

Under the current R&D regime, there are numerous examples of inconsistencies where applicants have received refunds for their R&D expenditure which were later rejected by the Australian Taxation Office. This about-turn on eligibility has had a material effect on many early stage businesses who have relied on their access to RDTI refundable offsets in order to fund ongoing cashflow investment into R&D activities. Additionally, these unexpected rulings have created uncertainty in the business community which has led to some businesses and entrepreneurs being reluctant to lodge RDTI claims. As a result, investment into R&D activities, and the associated job creation, has been reduced.

A more balanced description of eligible versus ineligible activities in the R&D guidance would also support the government's intent that the system be utilised as a mechanism to assist genuine R&D investment and activities. This includes further clarification on what constitutes an eligible R&D activity and an eligible R&D expense. Information on the allocation of R&D spend to indirect costs is one area that is creating confusion amongst claimants. While the process is straight forward for allocating direct R&D spend it is not the case for indirect costs including items such as salaries, rent and other overheads.



### Timing of activities

In certain circumstances such as clinical trials, more clarity is needed around the timing of activities. As an example, a life sciences company may be planning a clinical trial in two years which may or may not proceed. Guidance on how this scenario may or may not impact an application is needed.

### Overseas Expenditure

Some R&D is not possible in Australia due to the need to access certain facilities and expertise that are not available domestically. There is some confusion on how claims in these circumstances would be assessed. This is an area that the Council's members are seeking more guidance on.

**Recommendation 8:** *Include examples of eligible activities*

Include guidance in the patent box that provides clarity and consistency on eligible activities, and how the RDTI applies to indirect costs, activities such as clinical trials, grants and overseas expenditure.

## Low Emissions technologies

The Council supports the government's objective to lower emissions through Cleantech innovation as a practical way to help achieve Australia's economic recovery in the medium to long-term. This can be done through the development and commercialisation of new technologies, which can come with the added benefits of employment creation, economic stimulus and the generation of new domestic industries. This objective can be achieved through fostering deeper and more meaningful partnerships between industry, government and academic institutions, and increasing the skills of our workforce. Additionally, the role of Cleantech should be central in any relevant new regulation and legislation to help create an environment that incentivises investment and removes regulatory burdens. Australia needs to adapt to such [global] shifts and position our next generation of industries to exploit Australia's emerging comparative advantages.

Australia is at the global forefront of energy transition. As a nation, we have the highest rooftop solar penetration in the world, are a global leader in distributed energy assets, and in areas such as repurposing of batteries for new technologies. Our country also has a geographical advantage which provides an abundance of natural resources for renewable energy and access to wind and sun on vast tracts of otherwise unused or sparsely populated land. As a result of our high level of solar generation, for example, Australia has been at the forefront of addressing the transition from the old model of central electricity generation to the new model of distributed generation and the challenge that applies to grid reliability and stability. The change will ultimately be replicated globally, but Australia already has the knowledge and experience to become a leader in how to manage the transition and to develop the tools and technologies required to achieve this. Further, as traditional fossil fuels are phased out, there is considerable potential for Australia to develop a hydrogen economy as a future export market with nearby nations.

Including innovations that foster the development of low emissions technologies and build on Australia's comparative advantage should be included in the patent box as a priority. These developments should exclude any greenwashing initiatives for example, where wood pellets replace coal and create more carbon emissions.

**Recommendation 9:** *Harness Australia's comparative advantage in low emissions technology*

Include low emissions technologies in the patent box alongside medical and biotechnology and priority industries where Australia has a comparative advantage.



## Simplicity in design and integration with Australia's complex tax system

Australia already has one of the most complex taxation systems in the world. In this context, it will be important for the design of the patent box regime to be easy to administer and to effectively interact with the broader complexities of the domestic taxation system. Australian corporates are generally taxed as a single tax unit under the *Tax Consolidation Regime* introduced in 2002. This means that the legal entity conducting business operations is still grouped with patent-owning Australian tax resident companies.

With the introduction of differential tax rates for 'ordinary' income and 'patent box income', it will be important to ensure that:

- 1) entities are still able to file a single tax return;
- 2) entities are not forced to prepare complex and expensive 'transfer pricing' style documents to deal with the interaction between the 'operating company' and the 'patent box company' noting that Australia does not have a domestic transfer pricing regime; and
- 3) corporates are able to rely on legislative short-cuts to determine what should be taxed at patent box rates and general rates.

Emerging companies in the sectors which are intended to be supported in the patent box design are generally not well enough resourced to implement complex tracking mechanisms for different revenue streams and expenditure. As noted above, there is often a very long lead time between when expenditure is incurred and when patent box income is derived. We would further recommend that losses continue to be allowed to be offset against trading income and be eligible for current incentives and that the regime should merely be focussed on taxing the relevant income stream at the concessional rate.

**Recommendation 10:** *Design a patent box regime which is easy to administer, does not require complex internal transfer pricing reports and is globally competitive*

Ensure the patent box regime allows emerging companies to comply without the need for complex internal transfer pricing analysis between the patent box and the rest of the corporate group. The regime should effectively interact with Australia's complex tax consolidation regime which would otherwise prevent a wholly-owned group company (e.g. an IP owning company) from being recognised as a separate entity from an Australian income tax perspective.