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Australian Academy of Science

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## Australian Academy of Science Submission to the Treasury Patent Box consultation

The Australian Academy of Science (the Academy) welcomes the opportunity to contribute to the Treasury's Patent Box consultation.

## Patent box for medical and biotechnology applications

The rate of new medical and biotechnology patents being filed in Australia is declining, indicating a possible need to boost the incentives to patent in Australia. While there has been some evidence internationally that patent box schemes can boost raw patent numbers, there is little evidence that this equates to increased rates of innovation and translation.

The Patent Box scheme is designed as an extra incentive for knowledge translation rather than necessarily supporting the creation of new knowledge, a necessary role currently played by the Research and Development Tax Incentive, as well as sustained public support for research, and in particular fundamental research.

The Academy's view is that a patent box, in and of itself, is not a sufficient substitute for a coordinated science and technology strategy. Industry Innovation and Science Australia (IISA) identified opportunities for Government investment in innovation, science, and research "that could be improved".¹ IISA has identified prospects for the whole of government alignment of science investments with priorities; better evaluation of investments; developing fewer, long term, sustainable and at scale science investment programs (currently there are 202 programs over 13 portfolios); fragmentation of policy and funding and no strategic balance in science investments.

In particular, the Academy would highlight the recommendation of IISA to "Ensuring investment in basic research does not fall below current levels (22 per cent of overall R&D investment) so that it can underpin future commercial opportunities." Maintaining effort in the patient capital that nurtures the ideas and discoveries which can be translated is a vital part of the value chain, which an effective patent box regime can accelerate into jobs and industrial development in Australia. The Academy has identified the declining proportion of Australian investment in fundamental research as a threat to the continued strength of Australia's innovation pipeline.<sup>2</sup>

## Extension of the patent box for clean energy technology applications

The consultation paper indicates that the patent box scheme may be extended to promote the generation of clean energy technologies. The rate of new patents being filed in Australia for climate mitigation and adaptation technologies has been slowly declining since 2010. Any extension to the patent box scheme for clean energy technologies should cover the suite of climate mitigation and adaptation technologies.

The scaling and uptake of low-emissions technology is a pressing issue in the energy sector.<sup>3</sup> This should be considered when selecting policy approaches to benefit the low emissions technology industry in Australia.

## References

- 1. Industry Innovation and Science. Driving effective Government investment in innovation, science and research. (2021).
- 2. Australian Academy of Science. How is science funded in Australia? . Sci. Aust. (2021).
- 3. Australian Council of Learned Academies. Australian Energy Transition Research Plan. https://acola.org/australian-energy-transition\_research-plan-2021/ (2021) [Accessed 13 August 2021].