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Dear Commissioners,

AUSTRALIAN PRODUCTIVITY COMMISSION
REVIEW OF PUBLIC SUPPORT FOR SCIENCE AND INNOVATION
- DRAFT RESEARCH REPORT

Thank you for giving Rio Tinto the opportunity to respond to the Commission's draft research report. Rio Tinto welcomes the draft report and believes it is a significant contribution to the debate about public support for science and innovation. We are encouraged by the general tone of the draft report which suggests that the current level and balance of public support is about right.

Having read the draft report, we would like to offer responses to those findings that we feel are of particular relevance to Rio Tinto:

Finding 5.1 : Several impediments to innovation should be addressed, including:

- **There should be greater flexibility in pay structures for teachers to help address science and maths teacher shortages**

As noted in our original submission, the continued supply of high quality graduates and post-graduates is critical to our operations and we have been impacted by the shortage in engineering skills identified in the draft report. We acknowledge that price signals in the form of higher salaries may help to reverse the trend, but we remain concerned at the ongoing shortages of public sector science and engineering teachers. Further, we would extend this concern to universities where we would argue that an increasing focus on research is sometimes at the cost of teaching capability.

Ultimately we believe these trends are likely to impact on both the supply and the quality of local graduates, independently of any price signals in the labour markets. We would be keen to see a specific recommendation on this in the final report.

Finding 9.1 : The R&D tax concession could be improved by:

- **Shifting the orientation of the concession towards its 175% incremental component**
- **Changing the base on which the incremental subsidy is paid to a firm's ratio of R&D to sales at a given, fixed date**

We would support a move to apply the R&D tax concession in a more targeted way and in particular a shift towards a higher level of subsidy for transformational innovation; however, we agree with the comments in the draft report that a simple widening of the incremental scheme could result in a perverse set of incentives. We note the draft finding that the system could be improved by changing the base on which the incremental subsidy is paid. We would point out however, that while a fixed base relative to sales at a given point in time would work well for firms and industry sectors which experience a relatively smooth sales profile, it might be problematic when applied to cyclical industry sectors such as mining.

We question the underlying assumption that *"much of the R&D undertaken in Australia"* involves *"product-based incremental change"* and would have taken place anyway. We would argue that the definition of eligible R&D as *"investigative and experimental activity that involves innovation or high levels of technical risk"*, together with the existing list of exclusions, is adequate to exclude routine incremental product development. For an industry such as ours with its reliance on long term capital investment, significant incremental process improvement can be slow in the absence of external incentives, but when it happens the impacts are likely to be industry-wide.

Finding 9.4 : The CRC programme could be improved in several ways :

- **The original objectives of the programme - the translation of research outputs into economic benefits - should be reinstated. This is likely to produce better outcomes than focusing public support on the commercialisation of industrial research alone**
- **The share of the public funding should be aligned to the level of social benefits provided by each CRC, thereby reducing some of the large rates of subsidy to business collaborators**

We agree with a number of the findings relating to CRC programmes. However, once again we would question the draft finding that shifts in the focus of the CRC program have resulted in CRCs pursuing research that firms would have undertaken anyway. If this were the case then we would question why a large firm would choose to enter into collaborative arrangements with its competitors and take on the additional administrative and reporting overheads of a CRC structure.

However, we agree that there is scope for reviewing the existing cost-sharing mechanisms associated with CRCs, and particularly the incentives that support genuinely new and industry-changing projects

We note the draft findings that the original objectives of the programme should be restated and that the share of public funding could be better aligned with the level of social benefits provided by each CRC. In this regard we would also emphasise areas where the industrial and commercial benefits are currently unclear or difficult to quantify such as the immediate challenges posed by climate change, water management and sustainable energy.

We also support the suggestion in the draft report that greater flexibility is required in the management of CRC project portfolios, particularly where projects or CRCs are failing to meet their targets.

Finding 9.5 : A complement to the CRC program with broader collaboration goals could be developed which supports smaller, shorter and more flexible collaborative arrangements between groups of firms either independently or in conjunction with universities and public sector research agencies -

We would welcome any initiatives to support more flexible collaborative arrangements with universities and across research agencies.

In summary, we would restate our view that a critical outcome of public sector support is the development of a world-class science base. While existing incentives such as the 125% tax concession are important, they are unlikely to play a key role in influencing Rio Tinto's decision on where to locate significant research infrastructure, particularly infrastructure that is aimed at unlocking breakthrough technologies. Such decisions are far more likely to be influenced by the existence of a critical mass of world-class research facilities and researchers supporting basic science, with which we can establish strong relationships.

Yours sincerely,

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