

19 April 2010

General Manager
Business Tax Division
The Treasury
Langton Crescent
PARKES ACT 2600
Email: rdtaxcredit@treasury.gov.au

Re: The New Research and Development Tax Incentive: Second Exposure Draft

Dear Mr Antioch,

The Clean Energy Council (CEC) is the peak body representing Australia's clean energy and energy efficiency industries. Its priorities are to:

- create the optimal conditions in Australia to stimulate investment in the development and deployment of the world's best clean energy technologies;
- develop effective legislation and regulation to reduce energy demand and improve its efficient use; and
- work to reduce costs and remove all other barriers to accessing clean energy.

The CEC advocates the development of policies on behalf of more than 350 member companies at federal and state government levels and promotes understanding of the industry and its potential through channels such as industry events, forums, conferences, newsletters and publications. The clean energy industry includes generation of electricity using wind, hydro, solar, biomass, geothermal and ocean energy as well as the emerging technologies and service providers in the energy efficiency sector, which includes solar hot water and cogeneration.

The CEC welcomes the opportunity to provide a submission on the second exposure draft of the new research and development tax incentive. The CEC commends the government for recognising the need to accelerate some type of research and development, but believes that more support is required to drive the innovation and investment needed if Australia is to develop its clean energy industry to a point where it will be self sustaining.

In the 2008 report "Australia's Low Pollution Future: The Economics of Climate Change Mitigation" the Treasurer recognised that early action to mitigate greenhouse gases was less expensive than later action. Early action will require the accelerated support of research and development of clean energy technologies.

The development of new clean energy sources – like wind, solar, geothermal, ocean and other technologies have significant potential to play a vital role in reducing greenhouse emissions. Overall, however, clean technologies require further development to enable them to replace traditional fuel sources on a large enough scale to reduce emissions by the levels required.

Whilst the CEC welcomes the Australian Government's development of climate change policies and its significant investment and funding opportunities to foster innovation and investment in clean technologies, we believe that the new R&D legislation will fundamentally impact the clean technology industry, and undermine the broader climate change initiatives.

Specifically, the CEC wishes to express its concerns with a number of aspects of the proposed legislation. In particular, the CEC believes that the dominant purpose rule and the lack of recognition of either applied research or experimental development as a core R&D activity will be of particular detriment to Australian clean technology companies, by significantly narrowing the definition of R&D. Large grant programs, such as Solar Flagships whilst welcomed, do not incentivise SME clean technology companies to undertake risky R&D, thereby threatening the intellectual capability of the Australian clean technology industry.

The CEC also has concerns that these changes will increase complexity and result in uncertainty for claimants, particularly those in the SME market. The CEC also considers the new legislation will put Australian firms at a competitive disadvantage, and will de-incentivise multinational companies' R&D expenditure in Australian clean

technology, at a time of increased tax competition – contrary to the stated objective of attracting spill over benefits from R&D activity in Australia.

A recent paper commissioned by the CEC from University of Sydney economist Andrew Wait identified three reasons for underinvestment in development of clean low-emission energy technologies relative to the socially-preferred level:

1. Private (for profit) firms engaged in this research are unlikely to capture the full benefit generated by their investment (there is a positive externality or spill-over from the investment).
2. Given the potential for free-riding, there is a possible second-mover advantage in the R&D market for clean technologies. When they prefer to be an imitator rather than an innovator, firms will reduce or delay their investment, to the detriment of society overall.
3. The price of carbon-intensive energy is too low given that the prices of these fuel sources do not reflect their full cost to society. This makes the price of carbon intensive (traditional) energy artificially low compared with alternative energy sources. This substantially reduces the incentive to invest in alternative clean technologies.

The government should therefore use its policy instruments to address each market failure as directly as possible. Given there are several failures, it is likely that the best policy will use a multiple instruments. Specifically:

- The government could implement subsidies, grants, tax incentives or other incentive scheme to address the research and development (R&D) investment externalities (number 1 above). These schemes should aim to be the same relative size as the estimated externality and, as far as possible, they should be technology neutral.
- Policies designed to encourage firms to innovate and be market leaders, rather than imitators, need to explicitly address the anticipated relative payoff from innovating compared with waiting for the new technology to be developed by someone else (number 2 above). There are different options that could be explored all with their own advantages and disadvantages, such as R&D subsidies, tightening intellectual property rights or prizes for successful innovation. The key element of each of these policy instruments is it needs to make being a market leader more attractive relative to being a follower.
- Policies that facilitate innovation in new clean technologies are unlikely to induce a sufficient reduction in emissions on their own. The price of carbon-intense energy is too low compared with the alternative sources; without an increase in the relative price of carbon-intense energy there will be underinvestment in clean technologies.

The CEC has already called for a further \$4 billion of government investment in the development of emerging clean energy technologies. Further to this there are no specific income tax incentives in existing Australian tax law to encourage private investment in emerging clean energy technologies.

Therefore the CEC suggests the government needs to commit to policies that change the relative price of traditional technologies compared with new low-emission sources..

The CEC believes that the new legislation will have a detrimental impact on the entire clean technology industry by removing incentives for the private sector to invest to the optimal level of R&D investment.

If committed to addressing climate change and supporting clean energy innovation, CEC believes the Australian Government should pursue feasible policies that help boost local and international support for clean technology R&D. This includes removing the specific aspects of the legislation as described above.

Yours Faithfully



Mathew Warren

Chief Executive Officer