



4 February 2010

General Manager  
Business Tax Division  
The Treasury  
Langton Crescent  
PARKES ACT 2600  
(via e-mail)

Dear Sir/Madam,

On behalf of Ceramic Fuel Cells Limited we would like to provide you with feedback on the exposure draft of the Tax Laws Amendment (Research and Development) Bill 2010 released 18 December 2009 ("the exposure draft").

Our company commends the Government's stated intent in delivering a "more generous, more predictable, and less complex tax incentive", however we do not believe the legislation achieves this intent in its present form.

Whilst we understand the Government's intention to tighten eligibility in order to focus incentives on worthy activities which will benefit the broader Australian economy, we believe the combination of *the high number* of tightening measures contained in the exposure draft serves to drastically reduce the generosity, accessibility and attractiveness of the R&D Tax Incentive program.

## Background

CFCL is a world leader in developing solid oxide fuel cell (SOFC) technology to provide reliable, energy efficient, high quality, and low-emission electricity from widely available natural gas and renewable fuels. CFCL is developing SOFC products for small-scale on-site micro combined heat and power (m-CHP) and distributed generation units that co-generate electricity and heat for domestic use.

CFCL's SOFC technology has the potential to improve fuel conversion efficiencies and provide significant environmental benefits: CFCL's SOFC can achieve up to 50% electrical efficiency using natural gas and can reduce carbon dioxide emissions by up to 60% compared to coal fired electricity generation.

CFCL is now at an advanced stage of development, and is moving swiftly towards commercialisation. Since 1992, CFCL has developed its own fuel cells and complete fuel cell 'stacks', and has also succeeded in creating the highly engineered 'balance of plant' that surrounds the fuel cell stack and controls the inputs (fuel, air and water), outputs (heat and electricity), timing, and temperature controls.

With over 100 skilled staff and extensive patented technology, CFCL is pursuing partnerships for manufacture, production and use of its fuel cells in delivering electricity to the domestic European and Asian markets.



## Major concerns

Within the exposure draft, there are now five key ways in which eligibility has been significantly tightened and claims will be curtailed, making the system *less generous, more complex and less predictable* to Australian businesses.

1. The requirement for “considerable novelty” in place of “innovation” – this both raises the bar for eligibility of potential claimants while increasing uncertainty, by replacing a well understood and defined term. Innovation is a well understood term; the relationship between innovation, productivity and growth is similarly well understood, both across OECD countries and in a local context. The shift in term definitely **favours “blue sky” R&D, common in academia, over business innovation**, ie. the incremental improvements which are vital to business competitiveness;
2. The introduction of the “and” test for the eligibility test of considerable novelty and high levels of technical risk. We believe that this change to the definition will lead to the exclusion of many genuine R&D activities which should be supported and which are currently eligible for support under the existing R&D tax concession. As a stand-alone measure this change may be acceptable, but in combination with the other new eligibility restrictions it will exclude too many meritorious R&D endeavours and considerably reduce overall support for innovation. If this change is to be adopted, then other proposed restrictions should not be introduced otherwise the aim of the new tax credit, to provide a more generous concession, will not be fulfilled.
3. The introduction of the “dominant purpose” test for supporting activities. This represents a significant tightening over the existing test in the current program, which only requires that a support activity be carried out for “a” purpose directly related to the core R&D activities. This new test will greatly reduce the amount of eligible support activities which may be claimed, and will also impose a severe evidentiary burden on claimants of the new R&D tax credit. Many support activities will have a commercial purpose as well as an R&D purpose; providing evidence that one purpose is clearly dominant over the other will be almost impossible in many cases. This introduces considerable uncertainty over the eligibility of claimed supporting activities and is highly undesirable as a consequence. Please note, this uncertainty is acknowledged within the Explanatory Memorandum in the discussion of the new test.
4. The apparently arbitrary exclusion of a large number of activities from being either core or supporting activities, via the repurposing of the former s73B(2C) of the Income Tax Assessment Act 1936 (ITAA 1936). We believe that this change, while having obvious negative consequences for the computer science and information technology industries in Australia, also has (possibly unintended) consequences, including that:



- a. the expansive drafting of s.355-35(2)(h) suggests that manufacturing industries will have eligible R&D processes, including trials, drastically reduced;
  - b. s.355-35(2)(i) is broadly drafted and confusing; and
  - c. s.355-35(2)(o, p, q and r) which will result in the exclusion of the majority of IT-related R&D from obtaining support under the program.
5. The “augmented feedstock provisions”, effectively limit R&D Incentives to the net expenditure on the R&D activities. This obviously decreases the generosity of the incentive, however it has other major consequences:
  - a. it makes the incentive less predictable, as the value of the output may be clawed back at a future date, making budgeting projects and accounting for incentives difficult (i.e. how would one calculate and disclose the potential liability?);
  - b. **it favours failure over success.** We believe that having taken on the technical and financial risk of an R&D activity, a claimant should not be negatively treated at an indeterminate point in the future due to the disposal of the outputs of R&D;
  - c. the scope of what is included in the “output’s cost” should not include labour and plant depreciation. A company takes on a real *opportunity cost* by diverting staff and assets from normal commercial duties to an R&D activity – this cost is in fact never fully recovered, even if the outputs of R&D are sold. The current feedstock provisions of the R&D Tax Concession, which deal only with material inputs and energy, amply claw back incentives on profitable trial activities.

## Submission Request

There is, presently, a unique opportunity to draft the legislation precisely and specifically to meet the policy intent – this opportunity should not be missed. Given the above issues and complexities in the current exposure draft, we submit that the Government should:

1. **Leave in place the well understood term “Innovation” in the definition and remove the term “considerable novelty”;**
2. **Delete the exclusions list, thereby not using it as a means to limit supporting activities or, if absolutely necessary to achieve policy objectives, redraft s.355-35(2) to clarify those activities which are intended to be excluded;**
3. **Remove the specific exclusions on computer software to ensure that genuinely undertaken R&D which is information technology related is supported by the R&D tax credit program going forward; and**





4. **Revert to the existing feedstock provisions of s73B of the ITAA 1936 which, we believe, effectively limit incentives to net cost of trials or, alternatively, quarantine some specific activities from being treated as input costs in the augmented feedstock provisions. We request that two categories of costs be quarantined (and not included in the feedstock calculation), being labour and plant depreciation.**

If the above changes are made to the exposure draft, the Government will be able to achieve its objectives for the new tax credit – that is, to implement a more generous, more predictable and less complex incentive which targets additionality and spillovers, whilst maintaining revenue neutrality.

However, if the Exposure Draft is implemented in its current form, the direct outcome would be a significant lowering of the support for innovation in Australian businesses, including Ceramic Fuel Cells Limited. As a result, in the long term, the Government risks losing scientific, information and engineering and other technical industries (and jobs) offshore, as well as constricting the development of products, technologies and processes which would otherwise boost productivity – the very lever which the Government has stated will support an ageing population. Reduced effectiveness and uptake of the R&D Tax Incentive will also negatively affect Australia's Business Expenditure on R&D ("BERD").

Thank you for considering our response,

Yours sincerely,

Glenn Raines CPA

**Group Financial Controller**

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