



**WA Sustainable Energy Association Inc. (WA SEA)**

## **Proposed introduction of an R&D Tax Credit Scheme**

### **SUBMISSION TO TREASURY**

**Prepared by**

**Western Australian Sustainable Energy Association Inc.**

WA SEA: the peak industry body for enterprises supporting sustainable energy.

October 2009

# Table of Contents

Background .....	3
WASEA .....	3
About the Author .....	3
Statement of Conflict of Interests .....	3
Executive Summary .....	4
Commentary on the Principles proposed.....	6
Principle 1 .....	6
Companies incorporated in Australia.....	6
Tax exempt entities.....	6
R&D to be conducted in Australia.....	6
Location of IP ownership not relevant.....	7
WA SEA Recommendations .....	7
Principle 2 .....	7
Principle 3 .....	7
Refund Tax Credit.....	7
Non-enhanced deductions .....	8
Payments to associates .....	8
Principle 4 .....	8
Administration .....	8
WA SEA Recommendations .....	8
Principle 5 .....	9
WA SEA Recommendations .....	9
Principle 6 .....	9
Core R&D and Supporting R&D – An issue of definition .....	9
WA SEA Recommendations .....	12
Principle 7 .....	12
Capping of eligible expenditure as a proportion of “core R&D activities” .....	12
Sole Purpose test.....	12
Production and dual use exclusions .....	13
Net expenditure.....	13
Lowered assistance rates .....	14
WA SEA Recommendations .....	14
Comments on the Questions .....	15
Question 1 .....	15
Question 2.....	15
Question 3.....	16
Question 4.....	16
Part a) .....	16
Part b) .....	16
Part c) .....	16
Part d) .....	17
Part e) .....	17
Question 5.....	17
Part a) .....	17
Part b) .....	18
Question 6.....	18

# Background

## WASEA

WA SEA is a peak industry body formed to provide support and advocacy for organisations involved in and committed to the introduction of more efficient and sustainable energy use practices in domestic and industrial circumstances.

Formed in 2002, WA SEA has grown significantly over the past years, now reaching over 250 members, both individuals and organisations.

The constitutional objects of the Association are:

*'On behalf of the people of Western Australia, the Association will vigorously promote the development and adoption of sustainable energy so that by the year 2030 more than 30% of Western Australia's energy use is displaced by sustainable energy practices so that energy demand is 30% below that measured in the year 2000, and more than 30% of energy use is derived from sustainable sources.'*

WA SEA's core role is in making sure that government policy is supportive of business involvement in renewable energy. It's about advocacy, as such, the flow of information within the sector is also important. WA SEA aims to provide a vital conduit between businesses involved in sustainable energy and all levels of government.

## About the Author

Neil Prentice has worked with the R&D Tax Concession scheme since 1993 in his roles with claimant companies and an advisor to claimant companies. In addition to this he has been involved in the commercialisation of University research and the creation of high technology start up companies. Mr Prentice holds degrees in Chemistry, Biotechnology and Marketing.

## Statement of Conflict of Interests

WA SEA does not provide any services for money in relation to the R&D Tax Concession or the proposed R&D Tax Credit or any Federal grant scheme. As a not-for-profit organisation, WA SEA is not eligible to benefit from the scheme.

# Executive Summary

The proposed R&D Tax Credit Scheme is a welcome improvement to the current tax Concession scheme which has been in place for over 20 years, and has been revised a number of times since its inception. WA SEA, as a representative body for the sustainable energy industry, supports mechanisms to improve R&D undertaken in Australia that will positively benefit the development of the sustainable energy industry and associated research.

Many of the businesses that are currently involved in the sustainable energy industry are small, manufacturing oriented businesses that are focused on bringing new technologies to market or larger companies who have established manufacturing operations. The R&D Tax Credit scheme will potentially provide significant benefits to the development of Australian capacity in sustainable energy technologies. However, WA SEA recognises that sustainable energy technologies are currently lagging behind overseas 'first movers' and that in many cases, overseas collaboration will be needed to boost Australia's performance in this area.

The stated goal of the R&D Tax Credit scheme is to increase the amount of R&D that is undertaken in Australia, while the program remains "revenue neutral". WA SEA is of the opinion that the scheme also needs to ensure that the quality of R&D is high and that various sectors are not disadvantaged by the changes proposed. Many of the suggested changes have the potential to significantly impact the sustainable energy industry and as such, should be carefully examined. The current R&D tax Concession was cited by the Garnaut Climate Change Review (p. 437) as one of the mechanisms for addressing the future constraints of a low carbon economy. Due to these changes, WA SEA has developed a number of recommendations to ensure that the sustainable energy industry is not disadvantaged by these changes, and a summary of the recommendations can be found at the end of this summary.

The recommendations that follow are intended to ensure that the scheme not only operates effectively but also reflects the practical realities of industry based R&D. The important point to not forget in this instance is that the development part of R&D is equally as important to ensure that practical solutions are implemented to address future needs. Without legislation that meets industry practice in terms of both language used and industry best practice, then the scheme will fail to fulfil its maximum potential to improve Australian R&D efforts.

## Summary of WA SEA Recommendations

1. Companies undertaking R&D in Australia should be eligible to claim R&D expenditure incurred overseas where it is not possible to undertake this in Australia.
2. The amount of expenditure the amount eligible to be claimed as part of the R&D Project under the R&D Tax Credit should be majority undertaken in Australia. An artificial limitation percentage (e.g. 10%) should be avoided.
3. Companies undertaking R&D overseas should not be required to seek pre-registration or other approval prior to undertaking such R&D and maintain eligibility of expenditure. However, the company may need to disclose the amount of R&D expenditure incurred in undertaking R&D overseas. Should pre-registration requirements be maintained, then the process for approval should be significantly simplified.
4. To ease administration and legislative compliance issues, the current legislative structure should eliminate the current multiple sectioned (S73B-Z) and replace this with a single section, which is written in clear English.
5. Prescriptive 'rulings' should be avoided unless the applicant would specifically seek them, allowing a simpler self-assessment scheme

6. AusIndustry and ATO policy and practices on information to be provided for reviews and the information required to be provided by companies needs to be clearly enunciated to stakeholders to minimise costs for compliance.
7. WA SEA supports the principle of the requirements being enacted in legislation but would not support any attempt to specifically make this a legislated requirement for individual companies claiming the concession. That is, that the 'additionality' and 'spillover' concepts are not enacted as an operative provision of the Act and that it is not a test for R&D eligibility.
8. WA SEA supports the principle of assessment of R&D activity eligibility when considered within the framework of an R&D project. Otherwise, there is a risk of unfairly treating some existing taxpayers benefiting from existing government schemes.
9. Looking at "activities" as smaller parts of a project and assessing the Innovation and/or High Levels of Technical Risk on this basis does achieve a tightening of eligibility but may be at the cost of supporting the purpose of the Act to encourage R&D.
10. An R&D activity basis without the necessary reference to its context with a project causes confusion in terms and is more likely to cause disputes.
11. To match industry and scientific practice with legislative definitions and Frascati, the concept of systematic, investigative and experimental needs to be applied to the conduct of the R&D and the interaction of the different R&D activities within a project.
12. The R&D eligibility definition can be altered to provide a more fair structure where the Innovation **and** High Levels of Technical Risk are applied.  
For example:

***Eligible R&D activities** means basic, or applied research, or experimental development work that together are undertaken in a systematic, investigative and experimental manner as part of an **R&D project** that is undertaken for the purpose of producing new knowledge or improvements and*

*(a) the project involves both innovation and/or high levels of technical risk within it or in its outcomes; or*

*(b) is directly related to the purpose of the project*

13. Capping and proportional expenditure eligibility are bad policy as they have the potential to create distortions in the behavioural drivers for undertaking R&D. Furthermore, they are likely to have a proportionally larger impact on some business sectors over others, particularly in new and emerging industries.
14. The purpose test should at best be a "dominant purpose" test and should not be a "sole purpose" test.
15. Dual purpose and production activities should be allowable as this principle is in line with Frascati and is a reflection of the true costs of R&D.

# Commentary on the Principles proposed

## ***Principle 1***

### **Companies incorporated in Australia.**

WA SEA agrees that only Australian incorporated, tax paying companies should be eligible to R&D benefits. Foreign companies that operate without a corporate entity in Australia which is required to pay tax should not be able to avail themselves of benefits subsidised by Australian tax payers.

### **Tax exempt entities**

WA SEA agrees with the principle that the threshold for claiming the R&D refundable Tax Credit should include companies where ownership is up to 50% by an Australian based tax exempt entity. In many cases that we are aware of, companies owned by tax exempt entities at levels above 50% are effectively independent and that they are not able to source any significant funding even from large and well off organisations such as Go8 universities.

The 25% limit was unrealistically low for many research intensive start up companies, and that maintaining cash positioning at such early stages of investment is critical to the longer term success of the businesses.

### **R&D to be conducted in Australia.**

While it is recognised that the majority of R&D needs to be undertaken in Australia to meet the policy objectives of the scheme, it is also necessary to recognise that some activities cannot be currently undertaken in Australia due to the lack of technical or intellectual infrastructure that is available for some technologies. This is particularly relevant in the areas of renewable energy technology development, where Australia lacks the infrastructure and some technical capability that is already existing overseas. This lack of infrastructure is due to the low level of support and research in Australia compared to other countries.

However, it also needs to be recognised that in some cases there may be a considerable amount of R&D that cannot be done in Australia and that it is necessary in some cases for this to be undertaken overseas for the R&D to achieve successful outcomes. This amount in some cases may well exceed the previous 10% limit. It is our opinion that the *majority* of the project needs to be undertaken in Australia to be eligible, but may need to demonstrate what the flow on benefits to Australia would be. Benefits in this case may include:

- transfer of technology / know how to Australian companies;
- improved products / processes etc. available in the local market;
- greater value adding to companies undertaking this R&D in terms of profits and therefore greater tax payable;
- flow on benefits for end users, improving their business.

Previous limitations such as the 10% rule are an anachronism in a globalised economy and this needs to be recognised in the legislation.

One issue that needs improvement in dealing with claims is the process of requiring pre-approval before the expenditure is deemed eligible. This process is cumbersome and slow and does not provide

certainty for the applicant as overseas work has often commenced prior to approval being formally given. This process should be amended to allow applicants to claim R&D concessions (to a maximum of 10% of the anticipated project costs) without the pre-approval process. Furthermore, the eligibility should not be limited solely to “supporting R&D activities”, but should be available for “core R&D activities” as well. This, however, is stated in light of our comments on the nature of R&D activities set out later in this document.

### **Location of IP ownership not relevant.**

WA SEA agrees with the principle that the location of ownership of Intellectual Property (IP) should not be determinative of eligibility for R&D support. In many cases an Australian company may wish to exploit IP overseas through a number of structures and that artificial limitations on the location of IP ownership can potentially have negative financial consequences on such companies.

### **WA SEA Recommendations**

1. Companies undertaking R&D in Australia should be eligible to claim R&D expenditure incurred overseas where it is not possible to undertake this in Australia.
2. The amount of expenditure the amount eligible to be claimed as part of the R&D Project under the R&D Tax Credit should be majority undertaken in Australia. An artificial limitation percentage (e.g. 10%) should be avoided.
3. Companies undertaking R&D overseas should not be required to seek pre-registration or other approval prior to undertaking such R&D and maintain eligibility of expenditure. However, the company may need to disclose the amount of R&D expenditure incurred in undertaking R&D overseas. Should pre-registration requirements be maintained, then the process for approval should be significantly simplified

## ***Principle 2***

WA SEA supports the move from an accelerated deductions basis to a credit basis for support for R&D undertaken. This provides a decoupling of the deduction rate and the corporate tax rate and reflects the position taken in many other comparable OECD jurisdictions.

## ***Principle 3***

### **Refund Tax Credit**

As for Principle 2, WA SEA strongly supports both the increase in the rate of benefit to companies and also their increase to support the small to medium enterprise (SME) sector. The increase of the turnover cap to \$20 million and the removal of artificial limitations such as the expenditure cap are a positive sign that Government policy is reflecting the needs of business and does not create unintended distortions in limiting expenditure to meet eligibility needs.

The intent to remove this cap is therefore applauded as is the increase in the scope of potential benefits arising to SMEs who undertake R&D in Australia.

## **Non-enhanced deductions**

The issues raised regarding the treatment of non-enhanced deductions will be addresses in Question 2 below.

## **Payments to associates**

The issues raised regarding payments to Associates will be addresses in Question 3 below.

## ***Principle 4***

### **Administration**

WA SEA is s strong supporter of improvements to administration of Government programs, however, we have received feedback that in the past, that administrative 'guidelines' have been interpreted too rigorously by Assessors. To maintain flexibility in the program, materials supporting the program need to be clear, but not to place limitations on the interpretation of regulations which acts as a disincentive for claimants in the longer term. Current practice requirements for overseas activities and other issues require approvals from AusIndustry which are overly bureaucratic and can be removed to simplify the administrative system and make the concession easier to access.

Currently, the legislation is confusing an complex, being brought to its current state by a patchwork of amendments over the past 20+ years. Scrapping the whole legislations and rewriting to s clear, plain English standard in line with the principles of the 1997 Act would be advantageous.

The comments at paragraph 47 stating that companies will be now required to distinguish between core and supporting activities is not new nor for companies has it proven to be a beneficial administrative path. In the past when companies are assessed by AusIndustry, it is almost universal for the company to be asked early in the process to identify all activities in the contended project as either 'core' or 'supporting' activities. Normally attached to this request is information on the cost for each of those activities no ascribed, which seems to be a more important factor in ascertaining the eligibility than the content or context of the work involved. In terms of reviews, AusIndustry needs to clearly explain its processes and information requirements for businesses.

This administrative requirement also relates to the points made below in relation to the definition of eligibility in Principle 6.

### **WA SEA Recommendations**

4. To ease administration and legislative compliance issues, the current legislative structure should eliminate the current multiple sectioned (S73B-Z) and replace this with a single section, which is written in clear English.
5. Prescriptive 'rulings' should be avoided unless the applicant would specifically seek them, allowing a simpler self-assessment scheme
6. AusIndustry and ATO policy and practices on information to be provided for reviews and the information required to be provided by companies needs to be clearly enunciated to stakeholders to minimise costs for compliance.

## ***Principle 5***

WA SEA is in agreement that the R&D Tax Credits should be directed at assisting and or accelerating the undertaking of R&D that will provide flow on benefits. However, the use of this as eligibility criteria is of some concern to WA SEA and its members. A discussion with Government stakeholders indicates that this will not be the case.

Existing research in this areas indicates that societal benefit of R&D and innovation already have a greater payback than those received by private companies (Garnaut Climate Change Review, p441). As such it is indicative that any research undertaken under an R&D support scheme is likely to have spillover benefits.

### **WA SEA Recommendations**

7. WA SEA supports the principle of the requirements being enacted in legislation but would not support any attempt to specifically make this a legislated requirement for individual companies claiming the concession. That is, that the 'additionality' and 'spillover' concepts are not enacted as an operative provision of the Act and that it is not a test for R&D eligibility.

## ***Principle 6***

### **Core R&D and Supporting R&D – An issue of definition**

The issue of changes to operative definitions of what qualifies for eligible R&D activities is an issue of significant concern to WA SEA and its members. The concept of “core” and “supporting” activities was introduced as an administrative interpretation without the support of legislation. We do not believe that it is in the best interests of either tax payers, or in the furtherance of the purpose of the R&D provisions that law will now be changed to meet an artificial administrative definition.

Statements in the Consultative Document, regarding the changes being derived from the Frascati Manual (2002 Ed. hereafter “*Frascati*”), are, we believe, a misinterpretation of the concepts put forward. For example, Frascati states that:

*Research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.*

The nature of explanation within paragraphs 63 and 64 of Frascati do not not talk about an “R&D activity” in the singular manner, rather basic and applied *research* and experimental *development as* activities, in the plural and not the singular. We are of the opinion that as Frascati is for collecting statistical information, not for tax law, that a too narrow interpretation of the concepts set forth in this document may have the unintended consequence of disallowing what would be otherwise eligible R&D.

### ***Projects versus activities.***

The use of the term “activity” in the past has lead to a deal of confusion for many parties, as industry does not work on R&D on the basis of activities, rather that they work on R&D in terms of “*projects*”. In both the legislation and in administration, the terminology used by all stake holders needs to be consistent and that there is a common lexicon in use between the parties. Without a common understanding of meaning, a situation of potential disagreements arises.

The legislative definition of an “*R&D activity*,” in WA SEA's opinion, focuses eligibility tests at a low level rather than looking holistic approach to R&D eligibility. This statement is based on the assumption that a project is constructed of a number of smaller, interrelated “R&D activities”, and that the term activities connotes a scale smaller than “project” regardless of the size of either one. This precept has been fostered by AusIndustry in relation to both the form of application and assessment of claims over the history of the R&D concession.

WA SEA does not believe that the purpose of the R&D Tax Credit scheme would be furthered by maintaining an “activity” based scheme, rather that definitions should be based around the assessments of projects, of which activities are merely a subset and that both the project and activity basis for eligibility of expenditure are defined within the legislation.

Interestingly, it has been consistent policy over many years of the R&D Tax Concession, that claimants identify R&D projects and that R&D projects consist of sub-sets of R&D activities when applying to register for the concession. It is on this basis that AusIndustry has been assessing R&D Projects and their activities for more than a decade. It should be noted however, that within the R&D provisions, R&D projects were never defined within the legislation.

To move to a project basis for assessment which recognises an appropriately holistic approach a new definition may be better to achieve the intended outcomes. For example the definition may read

***Eligible R&D activities*** means basic, or applied research, or experimental development work that together are undertaken in a systematic, investigative and experimental manner as part of an ***R&D project*** that is undertaken for the purpose of producing new knowledge or improvements and

- (a) the project involves both innovation and/or high levels of technical risk within it or in its outcomes; or
- (b) is directly related to the purpose of the project.

It should also be noted that some countries such as the UK, for example, qualifies R&D expenditure on a project basis and not on an activity basis. Furthermore, other countries use the term “*activities*” not *activity*” which recognises the interrelated nature of R&D rather than taking a “mosaiacing” approach of breaking down projects to smaller components, where individually it may be difficult to assess the nature of innovation or technical risk in any singular activity, regardless of the innovation in the outcomes or the technical risk incurred in its undertaking. This issue was brought to light in the *Charles IFE vs Industry Research and Development Board* case, which showed the weakness of this approach in addressing the realities of commercial R&D.

This “project” type approach has also been taken in how Australian R&D grant programs have operated, for example the now defunct R&D Start and Commercial Ready programmes as well as Climate Ready. It would be a nonsensical outcome that a project which competes and succeeds on a competitive basis that was eligible for 50% funding would not be eligible for a lower rate concessional scheme which may not have any immediate cash flow impact for the organisation. Further explanation of this comment is demonstrated below in the discussion of Innovation and High Levels of Technical Risk.

On the basis that the legislative framework should match industry accepted practice and terminology, we would propose that definitions for R&D activities be subsumed within the framework of an R&D project definition which is the trigger for the eligibility of expenditure.

### ***The SIE criteria***

In terms of changes to how the term “R&D activity” is interpreted, WA SEA disagrees with the premise that a single activity must be in an of itself “*systematic, investigative and experimental*” (SIE), rather that

all of the R&D activities combined within *an R&D project* are together seen as systematic, investigative and experimental. This interpretation is more in line with the intent exhibited in the statement in paragraph 63 of Frascati.

Viewing R&D activities together prevents the reductionist view that each stage (activity) of an R&D project is not intimately linked and contingent or consequent to other stages / activities and that together the activities comply with the SIE definition.

***Innovation and High Levels of Technical Risk.***

WA SEA support the premise that R&D eligible under the R&D tax Credit scheme should require that there is both Innovation and High Levels of Technical Risk involved. However, we disagree that there should be a requirement for these to reside both within the same activity to make it a “core activity”. Furthermore, we believe that if the test should involve *both* Innovation and High levels of technical Risk (rather than the previous “*or*” test), that R&D eligibility should be seen at the project level.

The arguments put forward in the published discussion paper commenting on the likelihood of benefits flowing across the economy for activities with only one or the other of these two test being met are unsupported opinion. The basis for these comments is that we are unaware of any independent, published research that supports the basis of these claims. That these statements then underlie the principles for the critical definition of the legislative amendments is of significant concern to WASEA and its members. In addition to this these comments do not necessarily reflect the realities of the undertaking of R&D in a commercial situation, where benefits for a successful project are more likely to flow where the R&D project is a success, and not just from some smaller part of it (the activity).

Another matter of concern is that by creating dissonant definitions between R&D grant programs and the R&D Tax Credit Scheme. An example of this is shown in the table below.

<b>Activity #</b>	<b>Core / Supporting</b>	<b>Innovation</b>	<b>High Technical Risk</b>
1	Core	Yes	No
2	Supporting	No	No
3	Core	No	Yes
4	Supporting	No	No

As can be seen in this example, the **R&D project** which was successful for an R&D grant contains both innovation and high levels of technical risk, however, because these are not ascribed to the same R&D activity, the R&D project expenditure as a whole is ineligible for the R&D Tax Credit scheme.

The inclusion of the “*and*” terminology rather than the previous “*or*” without the consideration of its possible consequences to companies and fulfilment of the *purpose* of the R&D Credit (encouragement of more R&D) and its interactions with other R&D support mechanisms is a dangerous trap. Those companies who may be receiving grants already when the R&D Credit is enacted may find themselves falling foul of this definition and then being liable for significant tax payment on grants received, without recourse to offsetting the expenditure utilising the R&D Credit program. This is particularly an issue where those companies would be incurring this expenditure on capital, rather than revenue account, as no deductions would be allowable under other tax provisions.

## WA SEA Recommendations

8. WA SEA supports the principle of assessment of R&D activity eligibility when considered within the framework of an R&D project. Otherwise, there is a risk of unfairly treating some existing taxpayers benefiting from existing government schemes.
9. Looking at “activities” as smaller parts of a project and assessing the Innovation and/or High Levels of Technical Risk on this basis does achieve a tightening of eligibility but may be at the cost of supporting the purpose of the Act to encourage R&D.
10. An R&D activity basis without the necessary reference to its context with a project causes confusion in terms and is more likely to cause disputes.
11. To match industry and scientific practice with legislative definitions and Frascati, the concept of systematic, investigative and experimental needs to be applied to the conduct of the R&D and the interaction of the different R&D activities within a project.
12. The R&D eligibility definition can be altered to provide a more fair structure where the Innovation and High Levels of Technical Risk are applied. For example:

***Eligible R&D activities** means basic, or applied research, or experimental development work that together are undertaken in a systematic, investigative and experimental manner as part of an **R&D project** that is undertaken for the purpose of producing new knowledge or improvements and*

*(a) the project involves both innovation and/or high levels of technical risk within it or in its outcomes; or*

*(b) is directly related to the purpose of the project*

## Principle 7

### Capping of eligible expenditure as a proportion of “core R&D activities”

The limitation of a expenditure based on a “core” vs. “supporting” R&D activities basis, in WA SEA’s opinion, is not a reasonable method for limiting the scope of supporting activities. Due to significant differences in the nature of R&D across different industries, it is likely to have a negative impact on the encouragement of R&D in many sectors. For example, the sustainable energy industry, which is very broad is likely to have a greater effect on the manufacturing and integrated solution providers in the industry than it would on basic technology developers. Such limitations are artificial and tend to create distortions in behaviour, both from companies and the in the minds of some R&D Tax advisors, on how R&D expenditure should be planned and executed. This is due to the change in the potential value proposition of the R&D from a commercial and financial payback point of view.

Should any cap for R&D expenditure be put in place, then it should not be on a proportional expenditure basis. Capping and scaling of benefits essentially provides a “tipping point” for behavioural change which distorts market behaviour and does not necessarily promote the purpose of the R&D Tax Credit scheme.

### Sole Purpose test

WA SEA doe not accept that a “sole purpose” test is in line with the purpose of the R&D Tax Credit Scheme as it excludes multiple purposes for the same activity and this in turn may disadvantage smaller businesses without the resources to undertake combined R&D / non-R&D work separately. Duplication of activities under a sole purpose test imposes a financial penalty on smaller companies which even a Refundable R&D Credit cannot cover. Therefore, the imposition of a “sole purpose” test

provides a commercial disadvantage to smaller businesses, particularly those entering the market against larger, well established players who have undertaken R&D without the limitations now being proposed.

This issue is significant to the Sustainable Energy industry in Australia, which is a very young industry with many new entrants and technologies under development. By imposing a “sole purpose” test on these businesses who are competing against large established fossil fuel energy providers is a significant disincentive to undertaking R&D in Australia and building Australia's capabilities in this the Sustainable energy area to meet our national and international obligations on carbon dioxide emissions. Similarly we see that a “dominant purpose” test would have a similar if somewhat reduced effect, although it would be less of a distortion/ disincentive than the proposed “sole purpose” test.

### **Production and dual use exclusions**

Similarly to the points made in the above paragraphs, WA SEA believes that the exclusion of production and dual use / purpose activities would have a negative impact on smaller businesses and those who are in new and emerging markets.

Exclusion of the production environment based R&D (whether sold or not) would again disadvantage smaller manufacturers and those in early growth stage industries such as sustainable energy manufacturing businesses in Australia. This disincentive to manufacturing in this sector would continue to contribute to Australia's need to maintain importation of renewable energy technologies, rather than the development of the industry within Australia.

Furthermore the exclusion of dual purpose activities such as corporate services or administration would disadvantage smaller businesses against larger ones where dedicated administration etc. are available to service the R&D staff by disallowing apportionment of this type of expenditure.

### **Net expenditure**

This issue is a difficult one to address as the issue of net expenditure covers much more than applications involving feedstock or contractual issues. When R&D is undertaken as part of a contract, for which there is a set contract price, the “guaranteed” return in the contract price does not guarantee profitability or even to cover all costs of R&D, particularly where the R&D may be undertaken as part of a larger project. In addition, it only covers the issues where expenditure is incurred during a particular time frame and does not cover the potential risk of future failure or re-mediation required due to a 'failure' of the R&D outcomes after a period of time, for which the company undertaking the R&D would be responsible for fixing.

In addition to this, smaller companies, may also factor in the potential future R&D Tax Credit benefits when assigning a price to a contract in order to make a bid with a novel solution more competitive, as they may lack the economies of scale of larger companies. While the R&D process will reduce technical risk in applications of technology it cannot totally eliminate it in either the short or long term, and therefore by making supporting activities claimable on a net expenditure basis only, it may significantly increase their financial risk as well. Furthermore, some companies may only be able to undertake R&D in certain industries where the project is supported by external funding and that some return is required to finance the activities and not just mitigate financial risk. By applying this across the concept across the board to all companies, it would act as a disincentive for smaller business to develop novel solutions, which may not be considered by larger competitors.

Should a net expenditure rule be imposed on R&D undertaken as part of a contract situation, it should only be on the basis of netting off costs in respect of supporting activities. The inclusion of core activities within this offsetting, would act as a significant disincentive to many smaller businesses who would be potentially affected by this.

### **Lowered assistance rates**

The separation of core and supporting activities into a differential system where the treatment of expenditure is separate is not supported by WA SEA. The separation of these costs and different treatments for purposes of the R&D Credit will likely add additional compliance costs to the preparation of claims, without addition value being added in respect of the R&D. While this may reduce the burden on the public purse, there is a real potential for additional cost to the claimant from which only advisors will benefit. These additional compliance costs will act to reduce the value of R&D claims to business, particularly smaller businesses and therefore reduce the incentive to undertake R&D.

### **WA SEA Recommendations**

13. Capping and proportional expenditure eligibility are bad policy as they have the potential to create distortions in the behavioural drivers for undertaking R&D. Furthermore, they are likely to have a proportionally larger impact on some business sectors over others, particularly in new and emerging industries.
14. The purpose test should at best be a “dominant purpose” test and should not be a “sole purpose” test.
15. Dual purpose and production activities should be allowable as this principle is in line with Frascati and is a reflection of the true costs of R&D.

# Comments on the Questions

## Question 1

The exclusion of R&D undertaken overseas as part of of Australian based R&D project is impractical as it is an acknowledged fact that Australia lacks facilities and skills in some areas and it is impractical to purpose build these for a single project. Furthermore, disallowing of overseas R&D project eligibility can impact the viability of co-operative projects undertaken within joint ventures or alliances, where benefits will accrue to Australia in the long term.

International R&D expenditure should be eligible where:

- majority of R&D is undertaken in Australia
- there is a realisation of Australian infrastructure limitations in undertaking R&D; and
- when project would be unduly delayed by prior approval under the current provisional certificate scheme.

## Question 2

The current treatment of non-concessional amounts should remain under the R&D credit scheme, with the possible exception of interest costs. The reasons for this are:

- core technologies is particularly important to SME entities, eligible for the Refundable R&D Tax Credit as:
  - access to third party technologies often critical to project success and the ordinary capital allowances for access to the technology are not conducive to promoting R&D and negatively impact the cost benefit analysis for projects requiring such in-licensing activities;
  - smaller companies more affected by its removal, and more specifically early stage university / public researcher spin out companies utilising licensing of IP from a University for R&D and commercialisation
- Residual Feedstock should remain eligible for all companies as the risk involved in undertaking the work is not mitigated by the recovered costs, which in some cases may well be a loss making situation. In addition to this, different tax treatment of essentially indivisible expenditure will add a significant compliance burden, especially for smaller companies.
- Non-"at risk" expenditure is a difficult issue as the determination of when any financial risk in relation to the R&D is no longer there. Significant issues related to this are:
  - A lack of clarity on this issue as no guidance on 'guaranteed' returns, originally part of syndication but now applied to all R&D, is clear on how this became a normal R&D issue after the expiry of the Syndication program.
  - Is R&D under a contract for service not "at risk", in a particular year is a short term view that does not recognise the risk in longer term outcomes of R&D, particularly where it deals with liability and warranties, which places a contingent liability risk on the company undertaking R&D.
  - Similar to the point made for Residual feedstock above, the different treatment for "not at risk" expenditure imposes additional compliance costs on companies to determine the not at risk expenditure and potentially treat this differently.

As a final point on this, where R&D is undertaken at an early stage for a company, the expenditure may be on capital account and therefore not deductible under other provisions of the Income Tax Assessment Acts (1936 and 1997). Without the normal deductibility of the expenditure guaranteed,

then this can impose a significant capital cost barrier to companies in a loss position, particularly where non-deductibility of the non-concessional expenditure may mean there is a tax liability and the cash flow benefit of any Refundable Tax Credit is subsequently eroded.

### **Question 3**

The issue of accrued costs and their deductibility under the R&D Tax Credit should remain as:

- The removal may unfairly disadvantage smaller companies where there are cash flow issues which need to accrue expenses until such times the cash flow allows them to be paid.
- issues of potential different treatment of tax payers between consolidated and non-consolidated groups for what would otherwise be the same circumstances e.g. different treatment for companies involved in joint ventures (JVs)

If accruals based costs are to be limited, then the limitation should be that they must be actually paid (in cash) within 13 months of the end of the financial year in which they are accrued.

### **Question 4**

#### **Part a)**

The use of a supporting R&D activities expenditure cap as a proportion of the cost of core R&D activities is problematic as:

- any proportional limitation would need to be based on the industry in which the company operates but due to individual companies' circumstances it would be difficult to determine what the applicable rate is for any industry
- there is too much potential variability between core & supporting R&D activity in the same project but between different income years which may distort R&D behaviours and decisions; and
- If there is a cap, then this is the wrong approach to managing perceived "whole of project" claims as it creates a distorted environment by penalising smaller companies and emerging technology areas with artificial limits that may act as a disincentive to undertake R&D.

#### **Part b)**

In relation to the issue of the "purpose" of R&D activities, there are issues of practicality that need to be addressed so that legislation does not run counter to its intended outcomes. As such in respect of the purpose tests proposed:

- The "sole purpose" test for SMEs can be difficult to fit in with industry practice as there may be cash flow and operational considerations which make some R&D financially impractical to undertake where the sole purpose test is a requirement for R&D expenditure eligibility.
- A predominant purpose test is a more suitable eligibility test than the "sole purpose" test, but again is not an ideal outcome due to the practical considerations for SME and growing companies competing in globalised markets.

#### **Part c)**

The exclusion of dual use and production activities would create a distortion in R&D behaviours and taxation equity as:

- Production oriented R&D is vital in some industries; such as manufacturing and production type businesses, and would therefore act as a disincentive towards R&D in these areas as it would place more value on the R&D undertaken in non-production type environments.
- Even if activities are dual use their exclusion from eligibility as part of the R&D program would then introduce a higher penalty for R&D failure for business as if the outcomes of production or

processing are unsuccessful, there would be no chance of recovering even some of the failure cost through the R&D Tax Credit. Therefore, companies, in particular manufacturing and processing oriented companies would face additional financial risk in undertaking the R&D which then acts as a disincentive to undertake some riskier R&D projects.

- The exclusion of corporate services / administration would create a competitive disadvantage for smaller companies and emerging / growth industries as these businesses generally don't have the resource for dedicated staff in these areas to support R&D projects, compared to larger companies. As such, smaller companies may be placed at a cost disadvantage to larger and better resourced competitors within the same sector.

#### **Part d)**

The issue of deductibility on a net expenditure is a difficult issue as it raises the issue of what guaranteed return is and whether or not netting of short term returns is a behavioural modifier that rewards R&D "failure". In addition to the issue of rewarding failure (you only get more benefits when the R&D costs much more than you expected) net income offsetting also raises other issues such as:

- how to match or offset "guaranteed income" against expenditure when these fall within different income years;
- guaranteed income versus future contractual obligations such as warranty and liabilities and who bears the risk of future failure, even if that it does not occur in the same financial year? What happens when something goes wrong and the R&D company has to later foot the bill and therefore the 'guaranteed income' that they receive and was earlier netted off then has to be spent to deal with the company's liabilities?
- Feedstock provision expansion would be better than total recouping of expenditure
  - Similarly to the issues raised above with guaranteed income, the issue of warranties and liabilities remains an issue, sale value may not reflect the realities of future liabilities arising.
  - Offsetting feedstock type expenditures against all activities (including core activities) creates a distortion in the regime against manufacturing companies in particular and would act to reduce the incentive for undertaking manufacturing oriented R&D, compared to R&D which does not involve value adding processes.

#### **Part e)**

A lowered rate for supporting activities does not promote the purpose of the R&D Credit scheme as it removes incentives for companies to undertake R&D which may have positive flow on effects to industry as there is no rationale for doing this other than for the government to save money. As supporting activities are integral to the commercial success of R&D projects, the reduction in the effective rate of support does not necessarily promote undertaking additional R&D and may, depending on the industry, make it not viable to initially pursue higher innovative and higher risk projects due to the uncertainty in success and a reduced return on the R&D investment due to the lowered rate of support.

### **Question 5**

#### **Part a)**

The definitions of "excluded activities" needs to take into account the changes both in the nature of business and also the recognition of this in Frascati. As the original business environment has changed significantly since the 1980's and has become as much service as product driven, the

manufacturing and process orientation of many businesses have changed and the R&D Tax Credit scheme needs to reflect this if Australia is to remain internationally competitive. For example, the following types of research are no longer excluded from the definitions in chapter 2:

- Market research;
- humanities / social sciences research;
- Pre-production activities; and
- testing and compliance activities where these are not merely QC control mechanism.

It appears that now Frascati recognises that these types of activities underlie growth in service businesses as well as being used by businesses to improve the potential successful outcomes of any R&D by knowing and meeting end user behavioural and usability needs. Activities such as these are necessary to maintain quality of R&D in meeting market needs and fitness for purpose and improve the quality of R&D undertaken.

On one point that may particularly impact sustainable energy research in Australia, there is a need to remove core activity exclusion for “exploration” where this is related to sustainable energy projects in such areas as geothermal energy generation for both hot rock and hot sedimentary aquifer discovery. In Australia, while there are any number of capable geologists and geophysicists, the nature of geothermal exploration and research make it inherently technically risky and the development of models and techniques for exploration and the proving of these new models requires that this type of activity is undertaken.

## **Part b)**

In WA SEA’s opinion, no additional excluded activities are required.

## **Question 6**

In WA SEA’s opinion, the eligibility of software needs to take into account changes to the market and quantum leaps IT technology and its applications. As such we would recommend that the legislation should specifically include as eligible:

1. software that is later incorporated into hardware, such as control systems incorporated into interactive networks such as smart grid systems for improvements to power management and hardwired controllers for renewable energy generation management (e.g. wind, tracking solar etc.)
2. modelling and replication of “real world” physics and physical processes where they are improvements to existing technologies or for the **purpose** of making new discoveries

On the matter of the existing “multiple sale” criteria, this no longer reflects industry practice as users are licensed and software is rarely “sold” other than in shrink-wrap boxes, but even these are merely licenses. As such, this provision needs to be seriously addressed