

26 June 2012

The Manager  
Resource Tax Unit  
The Treasury

(By email: [resourcetax@treasury.gov.au](mailto:resourcetax@treasury.gov.au))

Dear Sir/Madam

**Submission on Tax Laws Amendment (2012 Measures No. 1) Bill 2012: Geothermal Energy**

**Introduction**

Thank you for giving us the opportunity to comment on the recent geothermal exposure draft legislation and accompanying explanatory materials (the Proposed Geothermal Amendments).

The QRC has a number of members exploring for geothermal energy. Accordingly, we have reviewed the Proposed Geothermal Amendments to ensure that they appropriately correct the existing tax anomaly for geothermal energy exploration.

Unfortunately we do not believe that they are satisfactory in this regard. We have outlined our reasons in the Summary below, and in more detail in the attached Appendix.

**Summary**

We believe the Proposed Geothermal Amendments may not deliver on the overriding policy intention in connection with the PTG's advice, and the Government's unequivocal acceptance of that advice.

This is because the Proposed Geothermal Amendments can, and would often be expected to, result in an income tax liability when a taxpayer converts their exploration right into a production right. Such a result is unlikely to encourage the small and financially constrained companies that typify the industry, and is inconsistent with the approach taken for the mining, petroleum and quarrying sectors of the resources industry.

We are also concerned that the Proposed Geothermal Amendments do not give effect to the income tax equivalence, promised by the PTG and the Government, between geothermal exploration, on the one hand, and petroleum, mining and quarrying exploration, on the other. Instead, the Proposed Geothermal Amendments would result in two sets of different exploration rules: one for each of petroleum, other minerals and quarrying, and another for geothermal. This is both unnecessary and inadvisable.

- Unnecessary because the existing exploration framework already satisfactorily deals with three different subjects - petroleum, other minerals and quarrying (two of which refer to energy). With little effort, Geothermal (another energy subject) can easily be integrated into that framework, but with appropriate and consistent results (across all subject matter)

- Inadvisable because two sets of rules directed towards the same end but formulated in a different way is likely to mislead and cause confusion about both sets of rules, where no confusion currently exists. The existing framework for exploration, of which geothermal was intended to simply be added, is longstanding, stable, accepted and understood, with judicial and ATO precedents having been established. Charting a separate course for geothermal is as dangerous for its unsettling impact on the existing framework as it is for geothermal, with taxpayers forced to grapple with whether the two sets of rules involve inadvertent differences of language and meaning.

There is an improved and simpler way of dealing with this issue of consistency: the Proposed Geothermal Amendments should be made equivalent to and aligned with the existing exploration rules by exactly replicating those rules, in the same way that the current exploration rules are replicated for the petroleum, mining and quarrying industries.

This tested approach currently works for the existing resources industry, and would also work for geothermal exploration. To adopt a different set of rules, even though the exact same end is in view, risks confusion and erodes the purpose for which the uniformed capital allowance regimes were introduced in the first place: to unite under common rules subject matter that was formally disparate but economically the same.

Should you require any clarification of the matters outlined in this submission, please do not hesitate to contact me on 07 3316 2522 in the first instance.

Yours sincerely



David Rynne  
**Director Economics and Infrastructure**

## Appendix 1 – Detailed Analysis of Proposed Geothermal Exploration Tax Provisions

### Background

The Proposed Geothermal Amendments are the direct result of:

- the Government's establishment of the PTG with one of their terms of reference being to "consider the best way to promote future exploration and ensure a pipeline of resource projects for future generations"<sup>1</sup>
- the PTG's recommendations and advice which included that "the Government should amend the income tax law to incorporate geothermal exploration into the wider definition of exploration"<sup>2</sup>
- the Government's acceptance of the PTG's recommendations generally<sup>3</sup>
- the Government's acceptance of the PTG's advice on the geothermal industry specifically.<sup>4</sup>

There is benefit in expanding on the summary above to consider in more detail the PTG's advice and supporting reasons, as well as the Government's announcement.

### PTG

The PTG discerned and acknowledged that an "anomaly" with respect to the income tax law's treatment of geothermal exploration, being that exploration for geothermal resources is "**excluded**" from the definition of exploration under Division 40 of the *Income Tax Assessment Act 1997*.<sup>5</sup> Accordingly, the PTG advised the Government as follows:

"Consistent with the Australian Government's policy objective of encouraging the development of geothermal energy, the PTG believes that the Government should amend the income tax law to **incorporate geothermal exploration into the wider definition of exploration.**"<sup>6</sup>

The PTG's advice and reasons are clear. The income tax law should be amended to "incorporate" geothermal exploration into the **existing** income tax treatment of exploration – that is, the "wider definition of exploration", as the current "exclusion" of geothermal exploration is "anomalous". So, the issue is not with the existing income tax platform, but that geothermal exploration is not presently included.

### Government

The Government accepted the PTG's advice on geothermal exploration saying:<sup>7</sup>

"As part of its historic resource taxation reforms and its support for renewable energy the Gillard Government today announced a further boost for Australia's geothermal industry in the form of an immediate tax deduction for exploration of geothermal energy sources from 1 July 2012. Existing income tax law provides an immediate tax deduction for expenditure incurred when exploring or prospecting for minerals, petroleum or quarry minerals. Updating the tax law by **extending the definition of exploration**, will ensure exploration for geothermal energy receives the **same treatment** as traditional hydrocarbon energy sources.

...  
'The amendment to the tax law is a win for the Geothermal industry in Australia that **will help remove barriers to investment in geothermal energy and improve the economics of geothermal exploration,**' Minister Ferguson said."

---

<sup>1</sup> Page 133 of *Policy Transition Group Report to the Australian Government, New Resource Taxation Arrangements*.

<sup>2</sup> *Policy Transition Group Report to the Australian Government, Minerals and Petroleum Exploration*.

<sup>3</sup> Joint Media Release of 24 March 2011.

<sup>4</sup> Media Release of 24 March 2011.

<sup>5</sup> Page 5 of *Policy Transition Group Report to the Australian Government, Minerals and Petroleum Exploration*.

<sup>6</sup> Page 7 of *Policy Transition Group Report to the Australian Government, Minerals and Petroleum Exploration* (bold added).

<sup>7</sup> Media Release of 24 March 2011 (bold added).

The Government's announcement further confirmed that what was in view was "extending" the **existing** treatment of exploration to geothermal exploration so that geothermal exploration could obtain the "same treatment" as other energy sources. So, the issue is not with the existing income tax platform, but that geothermal exploration is not presently included.

### Treasury

Not surprisingly, the explanatory materials echo the Government's announcement that geothermal exploration should be treated the "same" as the exploration, which is currently covered, saying things like the following:

- geothermal energy explorers will be entitled to an "equivalent treatment" to that received by mining and petroleum explorers<sup>8</sup>
- geothermal exploration expenditure will be deducted in an "equivalent manner"<sup>9</sup>
- there will be "alignment" of the treatment of geothermal exploration expenditure with that provided for mining and petroleum expenditure<sup>10</sup>
- geothermal exploration expenditure will be treated on an "equivalent basis" to that enjoyed by taxpayers exploring for traditional energy resources<sup>11</sup>
- the amendments will "align" deductions for geothermal energy exploration with deductions available to mining and petroleum explorers.<sup>12</sup>

The general outline and financial impact of the explanatory materials describes essentially how the "same treatment" for geothermal exploration expenditure would be achieved as follows:<sup>13</sup>

Problem	Fix
Geothermal exploration rights and geothermal exploration information are <b>not</b> defined as depreciating assets and therefore no deduction under Division 40 is available in respect of these assets.	<b>Include</b> geothermal exploration rights and geothermal exploration information in the list of intangible assets included in the definition of 'depreciating assets'.
The definition of 'exploration or prospecting' does <b>not</b> include geothermal energy exploration activities. As a result, geothermal energy explorers may only deduct the cost of their tangible depreciating assets over the effective life of the assets provided it can be demonstrated that the assets are being used for a taxable purpose.	<b>Extend</b> the definition of 'exploration or prospecting' to include exploration or prospecting for geothermal energy sources. This will allow geothermal energy explorers to deduct immediately the cost of the tangible and intangible depreciating assets they acquire if they first use the assets for exploration or prospecting provided certain criteria are met.
Mining and petroleum explorers may deduct immediately the cost of tangible and intangible depreciating assets they hold if they first use those assets for exploration or prospecting and provided certain criteria are met.	Allow geothermal energy explorers to deduct expenditure incurred on exploration or prospecting for geothermal energy resources in an equivalent manner to mining and petroleum explorers.
Geothermal energy explorer's expenditure incurred on activities in seeking to discover and evaluate geothermal energy resources may not be deductible at all in certain circumstances.	

The essential changes required, are set out in the first two rows:

<sup>8</sup> Page 3 of the explanatory materials.

<sup>9</sup> Page 3 of the explanatory materials.

<sup>10</sup> Paragraph 1.1.

<sup>11</sup> Paragraph 1.5.

<sup>12</sup> Paragraph 1.6.

<sup>13</sup> For ease of reading, we have tabulated the dot-points set out in the general outline and financial impact

- expand the currently limiting definition of a 'depreciating asset' to include geothermal exploration rights
- extend the currently limiting definition of 'exploration or prospecting' to include geothermal exploration activities.

### **Does the balancing adjustment for geothermal exploration according with intended policy?**

A balancing adjustment will happen when a geothermal exploration right converts into a production right. The balancing adjustment would generally be a positive one, such that the taxpayer becomes, subject to income tax. This is a very negative policy result.

Consider this example:

- a taxpayer acquires a geothermal exploration right, which is first used for exploration or prospecting
- the taxpayer incurs expenditure in relation to the right in carrying out exploration or prospecting
- the acquisition and subsequent expenditure give rise to deductions under proposed subsection 40-80(1A) of \$100
- the taxpayer is a junior explorer only and so has no assessable income; accordingly, the deductions result in a tax loss of \$100 which may be carried forward
- the results of the taxpayer's exploration demonstrate that the exploration right is valuable, such that the taxpayer ought to proceed to convert the exploration right to a production right
- the production licence has a value of \$150 on conversion
- the conversion will result in an assessable balancing adjustment of \$150 (being the \$150 value of the production right less the \$0 tax basis of the exploration right)

Thus the taxpayer becomes liable to income tax in this example, even though it has not sold its exploration right, and in fact has just converted it into a production right. This should not occur, and does not arise in the petroleum, mining and quarrying industries.

### **“Same treatment” for geothermal exploration**

The exposure draft is not currently designed to deliver the “same treatment” for geothermal exploration as the petroleum, mining and quarrying industries receive.

Having said this, the exposure draft's treatment comes close, as is demonstrated by means of the following comparison using the example of existing subsection 40-80(1) and proposed subsection 40-80(1A):

<b>Mining, petroleum and quarrying</b>	<b>Geothermal</b>
(1) The decline in value of a *depreciating asset you *hold is the asset's *cost if:	(1A) The decline in value of a *depreciating asset you *hold is the asset's *cost if:
(a) you first use the asset for *exploration or prospecting for *minerals, or quarry materials, obtainable by *mining operations; and	(a) you first use the asset for *exploration or prospecting for *geothermal energy resources from which energy can be extracted by *geothermal energy extraction; and
(b) when you first use the asset, you do not use it for:	(b) when you first use the asset, you do not use it for:
(i) development drilling for *petroleum; or	(i) development drilling for *geothermal; or
(ii) operations in the course of working a mining property, quarrying property or petroleum field; and	(ii) design or development of geothermal energy extraction; and
(c) you satisfy one or more of these subparagraphs at the asset's start time:	(c) you satisfy one or more of these subparagraphs at the asset's start time:
(i) you carry on *mining operations;	(i) you carry on geothermal energy extraction;
(ii) it would be reasonable to conclude you proposed to carry on such operations;	(ii) it would be reasonable to conclude you proposed to carry on geothermal energy extraction;
(iii) you carry on a *business of, or a business that included, exploration or prospecting for minerals or quarry materials obtainable by such operations, and expenditure on the asset was necessarily incurred in carrying on that business.	(iii) you carry on a *business of, or a business that included, exploration or prospecting for geothermal energy extraction, and expenditure on the asset was necessarily incurred in carrying on that business.

Proposed subsection 40-80(1A) almost perfectly replicates existing subsection 40-80(1). However, we submit that it should be made identical. It is of course to be expected that subsection (1A) ought to be capable of perfectly replicating subsection (1) as subsection (1) is itself capable of attending to petroleum, other minerals and quarrying; so geothermal energy should not pose any challenge. Nevertheless, as can be readily discerned above, proposed subparagraph 40-80(1)(b)(ii) adopts different language from existing subparagraph 40-80(1)(b)(ii). This is unnecessary and we submit inadvisable.

The difference in drafting is unnecessary. In the case of existing subsection 40-80(1) and proposed subsection 40-80(1A), this may be demonstrated by having regard to the relevant examples employed by the explanatory materials. The following discussion summarises the result under the explanatory materials' examples, the critical facts relevant to those results and how those results would equally be delivered if the existing wording for mining, petroleum and quarrying exploration were used for geothermal exploration.

Example	Result	Determining facts	Result under existing law
2.1	Cost of drill rig is deductible under subsection 40-80(1A)	<p>“The first exploratory drill hole ... is drilled in search of hot underground water.”</p> <p>“At that time Greensteam Pty Ltd does not know that the required conditions will be found in the drill hole and so it does not use the drill rig for development drilling for geothermal energy resources or for the design or development of geothermal energy extraction.”</p>	The same result is obtained under subsection 40-80(1). This is pure exploration expenditure as the concept is applied for petroleum, other minerals and quarrying.
2.2	Cost of geothermal exploration rights is deductible under subsection 40-80(1A)	<p>“CityLights energy Co ... hears about TectonicBlock’s promising exploration results ... after acquiring the exploration tenements, [CityLights Energy Co] proceeds to conduct additional geological surveys on each of the tenements.”</p>	The same result is obtained under subsection 40-80(1). This is pure exploration expenditure as the concept is applied for petroleum, other minerals and quarrying. The subsequent drilling does not constitute operations in the course of working the right.
2.3	Cost of geothermal exploration rights is not deductible under subsection 40-80(1A)	<p>“Steamy Turbine Co, concurrently makes the decision to extract and develop the geothermal energy resource based on the findings of CityLights Energy Co’s studies.”</p> <p>“In the meantime, Steamy Turbine Co continues to use its geothermal exploration right by drilling further holes to determine where the best energy flows are located and where their extraction and power plant should be built.”</p>	Based on existing ATO precedent, the same result is obtained under subsection 40-80(1). The subsequent drilling, which occurs following a decision to extract and develop the geothermal energy, constitutes operations in the course of working the right. (See ATO ID 2010/66.)
2.5	The cost of feasibility studies is deductible under subsection 40-730(2A)	<p>“The feasibility study will allow BubblyWater Pty Ltd to determine whether ... the geothermal energy resource is economically feasible for future development.”</p>	The same result is obtained under subsection 40-730. This is pure exploration expenditure as the concept is applied for petroleum, other minerals and quarrying.
2.6	The drilling expenditure is not deductible under section 40-730(2A)	<p>“ ... the company determines that geothermal energy extraction is economically feasible and that a power plant should be established to produce electricity ... “</p>	Based on existing ATO precedent, the same result is obtained under subsection 40-80(1). The subsequent drilling, which occurs following a decision to extract and

		“ ... Percolating Power Co continues to use its exploration right to drill further holes to determine where the best energy flows are located and where the power plant should be built.”	develop the geothermal energy, constitutes operations in the course of working the right. (See ATO ID 2010/66.)
2.7	The drilling expenditure is not deductible under subsection 40-730(2A)	“Mezzie Energy Co ... [has] conducted a proof-of-concept demonstration on the tenement and are satisfied that a proven, economically feasible, geothermal energy resource exists.  Mezzie Energy Co embarks on a drilling program to determine the size and location of development wells.”	Based on existing ATO precedent, the same result is obtained under subsection 40-80(1). The subsequent drilling, which occurs following a decision to extract and develop the geothermal energy, constitutes operations in the course of working the right. (See ATO ID 2010/66.)

So any difference between the existing exploration rules and those proposed for geothermal, at least in the case of existing subsection 40-80(1) and proposed subsection 40-80(1A), is **unnecessary**.

The design of subsection 40-80(1) is to put paragraph 40-80(1)(a) in contradistinction with paragraph 40-80(1)(b). That is to say, a taxpayer cannot first use a depreciating asset for exploration or prospecting and yet at the same time first use the asset for development or for operations in the course of working a mine. This reflects the longstanding income tax position that a taxpayer is either in exploration or prospecting phase or in development or operation. This dichotomy and the dividing line continues to be that explained in the explanatory memorandum to Division 40:<sup>14</sup>

“The meaning of exploration or prospecting is not defined exhaustively and so takes its ordinary meaning. However, it is defined to include a number of things that commonly are undertaken in performing activities, such as geographical mapping, geophysical survey, exploratory drilling, studies to evaluate the economic feasibility of mining or quarrying, and so on. It does not, however, include expenditure on **developing** or operating a mining or quarrying field or site. The point at which a decision to proceed to actual mining operations has been made, is the dividing line between exploration and prospecting on one hand, and **development** and operation of the other.”

Development is not exploration in the case of petroleum, other minerals and quarrying, and it would not constitute such for geothermal exploration. It is unnecessary for the Proposed Geothermal Amendments to depart from the existing income tax platform which already delivers appropriate results.

More is involved in our submission than it is unnecessary for proposed subsection 40-80(1A) to depart from existing subsection 40-80(1); although that’s a sufficient reason to be cautious. It is also inadvisable to depart from the existing platform. To unnecessarily introduce a second set of rules, directed towards achieving the “same treatment”, but using different drafting is likely to mislead and cause confusion about **both** sets of rules. It will cause taxpayers and their advisers to question the meaning and intention of the existing rules in ways that cannot entirely be predicted. Some will reinterpret the rules on the basis, for example, that existing subsection 40-80(1) must be different in intent and meaning to proposed subsection 40-80(1A). Some will conclude that existing subsection 40-80(1) is more restrictive and others will argue the contrary. The same process will carry out with proposed subsection 40-80(1A).

It would be difficult to counter these approaches on the basis that the “same treatment” was intended. This is because the rejoinder will be that if the same treatment was intended why was the entirety of the platform to subsection 40-80(1) not adopted. The thinking will proceed on the basis that there must have been some reason

<sup>14</sup> Paragraph 7.10.

for the difference in language. Nothing good can come from different sets of words where the “same treatment” is in view. A difference in language will be disruptive to both sets of rules. The long established judicial and ATO precedents will needlessly be thrown into question. In fact, it is not clear whether they could be applied to geothermal exploration, given the different drafting approach taken.

There is a much simpler and better way of dealing with this issue of consistency: the Proposed Geothermal Amendments can best be made equivalent to and aligned with the existing exploration rules by **exactly** replicating those rules, in the same way that the current exploration rules are currently replicated for petroleum exploration, other mineral exploration and quarrying exploration. This tested approach currently works for the existing mining, petroleum and quarrying industries, and it will work for geothermal exploration. To adopt a different set of rules, even though the exact same end is in view, risks confusion and erodes the purpose for which the uniformed capital allowance regime was introduced in the first place: to unite under common rules subject matter that was formally disparate but economically the same.

For completeness we note that our discussion above focuses on the differences in drafting adopted in proposed sub-section 40-80(1A) to that in existing sub-section 40-80(1). However the proposed sub-section 40-730(2B) also adopts similar problematic drafting to that proposed in sub-section 40-80(1A). Accordingly, for the reasons noted above, we also submit that the drafting changes for section 40-730(2B) should mirror those currently used for mining, petroleum and quarrying in existing sub-section 40-730(2).

End.