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THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

HOUSE OF REPRESENTATIVES

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TAX LAWS AMENDMENT (2012 MEASURES NO. #) BILL: GEOTHERMAL  
ENERGY

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EXPLANATORY MEMORANDUM

(Circulated by the authority of the  
Deputy Prime Minister and Treasurer, the Hon Wayne Swan MP)



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# **Glossary**

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The following abbreviation and acronym is used throughout this explanatory memorandum.

<i>Abbreviation</i>	<i>Definition</i>
ITAA 1997	<i>Income Tax Assessment Act 1997</i>
Division 40	Division 40 of the ITAA 1997
Division 43	Division 43 of the ITAA 1997



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# ***General outline and financial impact***

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## **Deductibility of geothermal energy exploration expenditure**

The Tax Laws Amendment (2012 Measures No. X) Bill 2012: geothermal energy amends the *Income Tax Assessment Act 1997* (ITAA 1997) to extend the immediate deductibility of exploration expenditure provided to mining and petroleum explorers to geothermal energy explorers. Geothermal energy explorers will be entitled to equivalent treatment for their exploration or prospecting expenditure incurred on or after 1 July 2012 as that extended to mining and petroleum explorers. This includes an immediate tax deduction for the cost of depreciating assets first used for exploration or prospecting on or after 1 July 2012, provided certain criteria are met.

Under the existing law:

- geothermal exploration rights and geothermal exploration information are not defined as depreciating assets and therefore no deduction under Division 40 is available in respect of these assets;
- the definition of ‘exploration or prospecting’ does not 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;
- 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; and
- geothermal energy explorers’ expenditure incurred on activities in seeking to discover and evaluate geothermal energy resources may not be deductible at all in certain circumstances.

The amendments in this Bill will:

- include geothermal exploration rights and geothermal exploration information in the list of intangible assets included in the definition of ‘depreciating assets’;
- extend the definition of ‘exploration or prospecting’ to include exploration or prospecting for geothermal energy resources. This will

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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; and

- 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.

Other consequential amendments are made to facilitate the intended treatment.

***Date of effect:*** The measure applies to depreciating assets first used for geothermal energy exploration or prospecting on or after 1 July 2012 and expenditure incurred on geothermal energy exploration or prospecting on or after 1 July 2012.

***Proposal announced:*** The measure was announced by the Minister for Resources, Energy and Tourism on 24 March 2011.

***Financial impact:*** The measure has the following revenue implications:

<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>
Nil	\$0.0	-\$5 million	-\$5 million

***Compliance cost impact:*** The measure is expected to have a low compliance cost.



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# **Chapter 1**

## **Encouraging geothermal energy exploration**

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### **Outline of chapter**

1.1 This chapter explains the rationale for the alignment of the treatment of expenditure incurred on geothermal energy exploration or prospecting, with that provided for expenditure incurred on mining and petroleum exploration or prospecting.

### **Geothermal energy**

1.2 Geothermal energy is heat energy contained or stored in rock, water or any other material occurring naturally within the Earth. It is an emerging clean and renewable energy source with the potential to be used for the generation of electrical power in a largely emissions-free manner.

1.3 Prospective geothermal energy resources have been identified in every Australian State and the Northern Territory.

### **Extending deductibility to geothermal energy exploration**

1.4 Currently the definition of ‘exploration or prospecting’ in the ITAA 1997 does not extend to geothermal energy exploration. For this reason, geothermal energy explorers are treated differently to their mining and petroleum exploration counterparts.

1.5 Consistent with the Government’s policy objective of encouraging exploration or prospecting for geothermal energy resources, the amendments in the Bill extend deductibility of exploration or prospecting expenditure to taxpayers exploring for geothermal energy resources on an equivalent basis to that currently enjoyed by taxpayers exploring for traditional energy resources obtainable by mining.

1.6 These amendments align deductions for geothermal energy exploration with the deductions available to mining and petroleum explorers.



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## **Chapter 2**

# ***Extending deductibility of exploration expenditure to geothermal energy explorers***

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### **Outline of chapter**

2.1 The provisions in Schedule # of the Tax Laws Amendment (2012 Measures No. X) Bill 2011: geothermal energy amends the ITAA 1997 to extend deductibility of exploration or prospecting expenditure to geothermal energy exploration or prospecting. Geothermal energy explorers will be able claim deductions in an equivalent manner to mining and petroleum explorers.

### **Context of amendments**

2.2 The Policy Transition Group, established to consult on the detailed design of the Minerals Resource Rent Tax, recommended that that the income tax law should be amended to incorporate geothermal energy exploration into the wider definition of ‘exploration or prospecting’. This recommendation is consistent with the Australian Government’s policy objective of encouraging the development of geothermal energy production in Australia.

2.3 From 1 July 2012, geothermal energy explorers will be able to immediately deduct applicable exploration or prospecting expenditure incurred on or after that date on an equivalent basis to the deductions available to explorers for traditional resources obtainable by mining.

### **Summary of new law**

2.4 The amendments extend deductions for expenditure incurred on geothermal energy exploration or prospecting on an equivalent basis to those provided for expenditure incurred on mining and petroleum exploration or prospecting. The amendments will allow taxpayers to immediately deduct their exploration or prospecting expenditure if they meet the applicable tests.

2.5 The amendments define ‘geothermal exploration rights’ and ‘geothermal exploration information’ as depreciating assets. Along with other depreciating assets first used for exploration or prospecting for geothermal energy resources (from which energy can be extracted by geothermal energy extraction), the cost of these assets can be deducted immediately in certain circumstances, rather than over the relevant asset’s effective life.

2.6 The amendments also extend the definition of ‘exploration or prospecting’ to encompass activities associated with geothermal energy exploration or prospecting, allowing expenditure of this nature to be deducted immediately in certain circumstances.

2.7 These immediate deductions are available only if: the relevant depreciating asset is *not* first used for—or the relevant exploration or prospecting expenditure is *not* expenditure on—development drilling of the resource or design or development of energy extraction from the resource. This limits the deductions to exploration or prospecting expenditures not related to development or extraction, as is the case with mining and petroleum exploration.

2.8 Other consequential technical amendments are made to ensure:

- that a balancing adjustment amount is not reduced to the extent that it is attributable to any non-taxable use of geothermal exploration information;
- deductions can be attributed to particular periods;
- deductions relevant to other types of activities (for such items as capital expenditure on landcare operations; connecting power to land or upgrading the connection; or the construction of capital works) are denied;
- tax cost setting for exploration and prospecting assets, potentially applicable when an entity joins a consolidated group, is outlined; and
- other relevant terms are defined.

### Comparison of key features of new law and current law

<i>New Law</i>	<i>Current Law</i>
<p>Geothermal exploration rights and geothermal exploration information are included in the definition of ‘depreciating assets’.</p>	<p>The existing law does not treat geothermal exploration rights or geothermal exploration information as depreciating assets under Division 40 of the ITAA 1997.</p> <p>Geothermal exploration rights are capital gains tax assets. Geothermal exploration information is not a capital gains tax asset.</p>
<p>The definition of ‘exploration or prospecting’ is extended to include geothermal energy exploration activities.</p> <p>As a consequence, definitions for ‘geothermal energy resources’ and ‘geothermal energy extraction’ have been included in the amendments.</p>	<p>The definition of ‘exploration or prospecting’ does not include geothermal energy exploration activities. The existing law defines ‘exploration or prospecting’ by reference to mining and petroleum exploration activities.</p>
<p>The cost of depreciating assets first used for exploration or prospecting for geothermal energy resources is immediately deductible if certain conditions are met, or may otherwise be deductible over the effective life of the depreciating asset if used for a taxable purpose.</p>	<p>The existing law does not allow geothermal exploration rights and geothermal exploration information to be deducted under Division 40 of the ITAA 1997 as they are intangible assets which are not recognised as depreciating assets.</p> <p>Geothermal exploration assets which are tangible depreciating assets may be depreciated over their effective lives, provided they are used for a taxable purpose.</p>
<p>Expenditure on ‘exploration or prospecting’ for geothermal energy resources from which energy can be extracted by geothermal energy extraction may be immediately deductible if certain criteria are met.</p>	<p>The existing law does not allow for expenditure on exploration or prospecting for geothermal energy resources to be deducted under Division 40 of the ITAA 1997 as the definition of ‘exploration or prospecting’ does not include geothermal energy exploration</p>

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## Detailed explanation of new law

### Geothermal exploration rights are included as depreciating assets

2.9 Mining, quarrying or prospecting rights are included as depreciating assets under Division 40. The cost of depreciating assets first used for exploration or prospecting for minerals obtainable by mining operations is able to be deducted immediately if certain criteria are met.

2.10 To bring deductions for geothermal energy exploration expenditure in line with those available for mining and petroleum exploration or prospecting expenditure, the amendments include geothermal exploration rights in the list of intangible assets that are defined as depreciating assets. It is important to note that geothermal extraction and production rights (or other related rights) have not been included as depreciating assets, only geothermal exploration rights. *[Schedule #, item 5, paragraph 40-30(2)(ba)]*

2.11 The definition of ‘geothermal exploration right’ is inserted in subsection 995-1(1). A **geothermal exploration right** means: (a) an authority, licence, permit or right under an Australian law to explore for geothermal energy resources; or (b) a lease of land that allows the lessee to explore for geothermal energy resources on the land; or (c) an interest in such an authority, licence, permit, right or lease. *[Schedule #, item 30, subsection 995-1(1)]*. Geothermal exploration rights are issued by State and Territory governments.

2.12 Geothermal energy resources and geothermal energy extraction are defined in subsection 995-1(1) by reference to new subsections 40-730(7A) and (7B). **Geothermal energy resources** are matter occurring naturally within the Earth and containing energy as heat. **Geothermal energy extraction** means operations that are for the extraction of energy from geothermal energy resources and that are for the purpose of producing assessable income. *[Schedule #, item 21, subsection 40-730(7A), subsection 40-730(7B)]* References to these definitions are also included in subsection 995-1(1). *[Schedule #, Items 27 and 28, subsection 995-1(1)]*.

### Geothermal exploration information is included as a depreciating asset

2.13 Mining, quarrying or prospecting information is included in the list of intangible assets that are included in the definition of ‘depreciating

asset' under the ITAA 1997. The cost of such a depreciating asset is able to be immediately deducted under Division 40 provided certain criteria are met.

2.14 To align deductions for geothermal energy exploration with deductions available for mining and petroleum exploration or prospecting, the amendments include 'geothermal exploration information' in the list of intangible assets that are included as depreciating assets. This allows for an immediate deduction for the cost of geothermal exploration information by applying new subsection 40-80(1A) if the other conditions of that provision are satisfied. [*Schedule #, item 5, paragraph 40-30(2)(bb)*]

2.15 'Geothermal exploration information' is defined in subsection 995-1(1) by reference to new subsection 40-730(9). ***Geothermal exploration information*** is geological, geophysical or technical information that: (a) relates to the presence, absence or extent of geothermal energy resources in an area; or (b) is likely to help in determining the presence, absence or extent of such resources in an area. [*Schedule #, item 22, subsection 40-730(9)*]. A reference to the definition of 'geothermal energy information' is also inserted into subsection 995(1)-1. [*Schedule #, Item 29, subsection 995-1(1)*]

### **Geothermal exploration information is held by an entity**

2.16 In order to deduct an amount for the decline in value of a depreciating asset, you must first 'hold' the depreciating asset. The table in section 40-40 is used to work out the holder of a depreciating asset. If an entity holds geothermal exploration information that is relevant to: geothermal energy extraction they carry on, or propose to carry on, or a business that includes exploration or prospecting for geothermal energy resources which they carry on, then the holder of the information is the entity. The entity holds the information even if the information is generally available because the information is still of special value to the entity. [*Schedule #, item 6, section 40-40, table item 9A*]

### **The cost of a depreciating asset first used in geothermal energy exploration may be immediately deductible**

2.17 Subsection 40-80(1) applies to depreciating assets first used for exploration or prospecting for minerals or quarry materials obtainable by mining operations. It provides that in certain circumstances an asset's decline in value is the asset's cost with the consequence that an immediate deduction of the asset's cost is available. A depreciating asset starts to decline in value when it is first used or installed ready for use for any

purpose by the taxpayer (section 40-60). Therefore, no deduction is available until the asset is actually used or installed ready for use.

2.18 Section 40-80 is amended to extend the immediate deductibility for the cost of a depreciating asset to geothermal energy explorers. Subject to a number of conditions, the decline in value of a depreciating asset a taxpayer holds is the asset's cost if the taxpayer first uses the asset for exploration or prospecting for 'geothermal energy resources' from which geothermal energy can be extracted by 'geothermal energy extraction'. 'Geothermal energy resources' and 'geothermal energy extraction' are defined terms and are explained at paragraph 2.12. [*Schedule #, item 7, paragraph 40-80(1A)(a)*]

2.19 In the context of Division 40, the use of an intangible depreciating asset requires consideration of the nature of the asset. For example, a geothermal exploration right permits a holder to explore for geothermal energy resources in a particular area. Therefore, the taxpayer will use the right for the purposes of Division 40 if they use it to explore for geothermal energy resources.

2.20 The first use of a geothermal exploration right for exploration or prospecting may include the conduct of something that has been described as a 'proof-of-concept' demonstration. Such a demonstration is said to involve the drilling of an initial well of sufficient depth to reach the predetermined necessary temperature and to tap a pre-existing underground water reservoir. If an underground reservoir does not exist, fracturing of the rock is undertaken to allow fluid injection and passage and to create a reservoir and underground heat exchange. A second well is then drilled to intersect the reservoir, away from the first hole, and testing is undertaken to provide information on how much fluid can be circulated through the underground heat exchange, and at what temperature.

2.21 An immediate deduction is not available if, when the asset is first used, it is used for development drilling for geothermal energy resources or for the design or development of geothermal energy extraction. This is to ensure that the immediate deduction is available for the cost of depreciating assets first used for exploration or prospecting only, and not first used for development or extraction of a geothermal energy resource. [*Schedule #, item 7, paragraph 40-80(1A)(b)*]

2.22 Other examples of a disqualifying use under paragraph 40-80(1A)(b) are as follows:

- preparing a site for geothermal energy extraction;
- providing water, light and power for use on the site for future geothermal energy extraction;



- feasibility studies (other than those that are conducted to determine that geothermal energy extraction is both technically feasible and economically viable in respect of the discovered geothermal energy resource);
- determining the size and location of development wells and any other infrastructure;
- any activity conducted in preparation for the drilling of development wells after exploitation of the geothermal energy resource has been proven to be technically feasible and economically viable; and
- the construction of any infrastructure related to or to be used in the geothermal energy extraction.

2.23 In order to be entitled to the immediate deduction of a depreciating asset's cost, at that asset's start time the entity must be involved to some extent in geothermal energy extraction. That is, the entity either carries on geothermal energy extraction; or it would be reasonable to conclude that they proposed to carry on geothermal energy extraction; or the entity carries on a business of, or a business that included, exploration or prospecting for geothermal energy resources from which energy can be extracted by geothermal energy extraction, and expenditure on the asset was necessarily incurred in carrying on that business. The entity may satisfy more than one of these criteria. [*Schedule #, item 7, subsection 40-80(1A)(c)*]

**Example 2.1: Immediately deducting the cost of a depreciating asset – tangible capital assets**

Greensteam Pty Ltd is a geothermal energy exploration company searching for geothermal energy resources in the Great Sandy Desert. Greensteam Pty Ltd carries on a business that includes exploration or prospecting for geothermal energy resources from which energy can be extracted by geothermal energy extraction.

Greensteam Pty Ltd estimates that it will need to drill over 500 exploration wells as part of its exploration program. Rather than lease drilling machinery to conduct the exploration work, Greensteam Pty Ltd determines that it would be cheaper to purchase its own drill rig. Greensteam Pty Ltd purchases a drill rig on 15 May 2013 for \$500,000 and uses it to explore for geothermal energy resources. The first exploratory drill hole undertaken as part of Greensteam Pty Ltd's exploration program is drilled in search of hot underground water. The drilling of this first hole constitutes a use of the drill rig for exploration or prospecting for geothermal energy resources.

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.

Greensteam Pty Ltd is able to immediately deduct the cost of the drill rig under subsection 40-25(1) by applying subsection 40-80(1A).

**Example 2.2: Immediately deducting the cost of a depreciating asset – geothermal exploration right**

TectonicBlock is a small geothermal energy exploration company operating in the south east of Western Australia. TectonicBlock holds four geothermal exploration rights (tenements) on which it has been conducting geological surveys for geothermal energy resources. Early indications from the exploration work it has carried out look promising, however TectonicBlock do not have the specialised skill to conduct more advanced exploration.

CityLights Energy Co is a large geothermal energy exploration company that carries on geothermal energy extraction elsewhere in the State. The company hears about TectonicBlock's promising exploration results and offers them \$1 million for their four tenements. TectonicBlock agrees to the sale. CityLights Energy Co, after acquiring the exploration tenements, proceeds to conduct additional geological surveys on each of the tenements.

CityLights Energy Co is not carrying out development drilling for geothermal energy resources or undertaking design or development of geothermal energy extraction on the four tenements.

The cost of the geothermal exploration rights acquired by CityLights Energy Co is immediately deductible under subsection 40-25(1) by applying subsection 40-80(1A).

**Example 2.3: Exploration expenditure which is not immediately deductible**

CityLights Energy Co, having conducted exploration activities on its four geothermal exploration rights (tenements) which indicated geothermal energy resources that are technically feasible to extract, has also undertaken economic viability studies and determined that, coupled with the technical feasibility findings, geothermal energy extraction was economically feasible on all tenements and that an extraction plant should be established.

However, CityLights Energy Co, having insufficient funding to develop the resources on all four tenements, disposed of their least attractive tenement to Steamy Turbine Co for \$2 million.

Steamy Turbine Co, concurrently with the decision to purchase the tenement, makes the decision to extract and develop the geothermal energy resource based on the findings of CityLights Energy Co's studies. The company applies to the relevant State government authority for the grant of a geothermal production licence with the expectation that it will be approved within six months.

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.

The cost of Steamy Turbine Co's geothermal exploration right is not immediately deductible applying subsection 40-80(1A). The purpose of the first additional hole drilled was to determine how to extract the geothermal energy resource and therefore the right was first used for designing and developing geothermal energy extraction. Instead, Steamy Turbine Co will claim a decline in value deduction over the effective life of the geothermal exploration right under subsection 40-25(1) of Division 40.

#### **Example 2.4: When a geothermal exploration right ends**

Steamy Turbine Co is granted a geothermal production licence by the relevant State government authority. The geothermal production licence that has been granted relates to the same area that the company's geothermal exploration right previously covered.

A geothermal production licence is not a depreciating asset under Division 40 of the ITAA 1997. Instead, it is a CGT asset subject to the CGT provisions and not Division 40. When the geothermal production licence is granted by the relevant State government authority to Steamy Turbine Co, the geothermal exploration right is surrendered or cancelled such that the right will end.

As subsection 40-30(6) will not apply to the situation where a geothermal production right (the new right) is a continuation of a geothermal exploration right (the right ending), a balancing adjustment event will occur when the geothermal exploration right ends.

If the termination value of the right is less than its adjustable value, Steamy Turbine Co will be entitled to deduct the balancing adjustment

amount. If not, Steamy Turbine Co will include the balancing adjustment amount in its assessable income.

Depending on the amount deducted as decline in value deductions by Steamy Turbine Co over the effective life of the geothermal exploration right, the balancing adjustment event will likely result in a deduction of the balance of the \$2 million cost of the right to Steamy Turbine Co.

### **Deduction for expenditure on exploration or prospecting for geothermal energy resources**

2.24 Expenditure on exploration or prospecting that is not expenditure which forms part of the cost of a depreciating asset may qualify for an immediate deduction under subsection 40-730(1). *[Schedule #, item 15, subsection 40-730(2)]*

2.25 Subsection 40-730(1) provides an immediate deduction for expenditure incurred on exploration or prospecting for minerals, petroleum or quarry materials which are obtainable by mining operations. Expenditure is only deductible if the taxpayer satisfies certain conditions. A new sub-heading is inserted to separate paragraphs relating to exploration and prospecting for minerals and exploration and prospecting for geothermal energy resources. *[Schedule #, item 14, above subsection 40-730(1)]*

2.26 The bill amends section 40-730 to allow an immediate deduction for expenditure incurred on exploration or prospecting for 'geothermal energy resources' that is not the cost of a depreciating asset. *[Schedule #, item 15, subsection 40-730(2A)]*

2.27 In order to be entitled to a deduction under subsection 40-730(2A) a number of conditions must be satisfied.

2.28 The first condition is that expenditure must be incurred on exploration or prospecting for 'geothermal energy resources' from which energy can be extracted by 'geothermal energy extraction'. *[Schedule #, item 15, subsection 40-730(2A)]*

2.29 To ensure that deductions cannot be made twice, deductions for the cost of assets are available under the general provision of Subdivision 40-B. *[Schedule #, item 16, subsection 40-730(3)]*

2.30 Above subsection 40-730(3) a new heading 'Definitions' is inserted to indicate that the remaining subsections of the section refer to definitions. *[Schedule #, item 17, above subsection 40-730(3)]*

2.31 The definition of ‘exploration or prospecting’ has been amended to include ‘geothermal energy resources’ in paragraph 40-730(4)(b). (‘Geothermal energy resources’ is a defined term and is explained at paragraph 2.12). The amendment has been made in this way because the nature of exploration or prospecting activities for geothermal energy resources is more similar to exploration or prospecting activities associated with petroleum mining than with exploration or prospecting activities associated with mining in general or quarrying. The amendment allows for exploration expenditure incurred on geological, geophysical and geochemical surveys, exploration drilling and appraisal drilling for ‘geothermal energy resources’ (which is not the cost of a depreciating asset), to be immediately deductible. *[Schedule #, item 18, paragraph 40-730(4)(b)]*

2.32 The definition of ‘exploration or prospecting’ is amended by paragraph 40-730(4)(c) to include feasibility studies to evaluate the economic feasibility of extracting energy from geothermal energy resources, once they have been discovered. *[Schedule #, item 19, paragraph 40-730(4)(c)]*

2.33 The definition of ‘exploration or prospecting’ is amended to include obtaining ‘geothermal exploration information’ associated with the search for and evaluation of areas containing ‘geothermal energy resources’. (‘Geothermal exploration information’ is a defined term and is explained in paragraph 2.15.). *[Schedule #, item 20, paragraph 40-730(4)(e)]*

2.34 The second condition is that the entity must have carried on ‘geothermal energy extraction’; or it would be reasonable to conclude that they proposed to carry on ‘geothermal energy extraction’; or that the entity carried on a business of, or a business that included, exploration or prospecting for ‘geothermal energy resources’ from which energy can be extracted by ‘geothermal energy extraction’, and the expenditure on the asset was necessarily incurred in carrying on that business. *[Schedule #, item 15, subsection 40-730(2A)]*

**Example 2.5: Immediately deducting expenditure incurred on a feasibility study**

BubblyWater Pty Ltd carries on geothermal energy extraction. Following extensive drilling of exploration wells on one of its exploration tenements, BubblyWater Pty Ltd is confident that they have discovered a geothermal energy resource from which geothermal energy extraction is technically feasible and thus may occur in the future.

BubblyWater Pty Ltd engages a contractor, Ecofease, to undertake a feasibility study to evaluate the economic viability of extracting energy from the geothermal energy resource. The feasibility study will allow BubblyWater Pty Ltd to determine whether, coupled with the technical feasibility findings, the geothermal energy resource is economically feasible for future development. The feasibility study costs BubblyWater Pty Ltd \$450,000 dollars.

The expenditure incurred by BubblyWater Pty Ltd on the feasibility study is not incurred on development drilling for geothermal energy resources or for the design or development of geothermal energy extraction.

The cost of the feasibility study is immediately deductible to BubblyWater Pty Ltd under subsection 40-730(2A).

2.35 An entity is not entitled to an immediate deduction under subsection 40-730(2A) if the expenditure in question was on development drilling for 'geothermal energy resources' or the design or development of 'geothermal energy extraction'. This is to ensure that the immediate deduction is available for expenditure incurred on exploration or prospecting only, and not expenditure on developmental work or extraction of a 'geothermal energy resource'. [*Schedule #, item 15, subsection 40-730(2B)*]

2.36 Examples of expenditure that is disqualified from deduction by subsection 40-730(2B) are similar to those that disqualify expenditure found in 2.22.

**Example 2.6: Exploration expenditure which is not immediately deductible**

Percolating Power Co holds a geothermal exploration right and conducts exploration activities on the tenement, the results of which indicate a geothermal energy resource that is technically feasible to extract. The company undertakes further work to determine if development of the resource is economically viable. Based on the these findings, the company determines that geothermal energy extraction is economically feasible and that a power plant should be established to utilise the geothermal energy extracted to produce electricity to be fed into the transmission lines of the local grid.

The company applies to the relevant State government authority for the grant of a geothermal production licence with the expectation that it will be approved within six months.

In the meantime, 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. It spends \$1 million on this additional work.

The expenditure incurred on additional drilling is not incurred on exploration or prospecting for geothermal energy resources from which energy can be extracted by geothermal energy extraction. Rather, the character of the expenditure is such that the expenditure is directed towards the design or development of geothermal energy extraction under subsection 40-730(2B). As a result, the cost of the additional drilling work is not immediately deductible under subsection 40-730(2A).

Generally, the expenditure incurred on design work that leads to the development of depreciating assets forms part of the cost of those assets. The amendment to subsection 40-730(3) excludes that expenditure from deduction under subsection 40-730(2A). Deductions of those expenditures, as part of those costs, is generally subject to ordinary decline in value deductions as is the case for the costs of any other electricity producer's energy generation assets.

**Example 2.7: No immediate deduction for expenditure incurred on design or development**

Mezzie Energy Co carries on geothermal energy extraction and currently holds a geothermal exploration right (tenement) north of Adelaide. They have 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. Expenditure on the drilling program is \$1 million.

As the expenditure incurred by Mezzie Energy Co on the drilling is expenditure on the design of geothermal energy extraction, they are not entitled to an immediate deduction for expenditure incurred on the drilling program under subsection 40-730(2A).

**Example 2.8: No deductions for non-geothermal businesses**

Energy For The Future Co currently carries on a business generating solar energy. It is considering expanding its business by exploring for geothermal energy resources in Queensland. Before it applies for geothermal exploration rights, it purchases a series of maps providing

geothermal exploration information from the Queensland Geological Survey Service for \$5,000.

Energy For The Future Co is not entitled to an immediate deduction under subsection 40-730(2A) for the expenditure incurred on the geothermal exploration information contained in the maps. This is because they do not carry on geothermal energy extraction, nor do they carry on a business of, or a business that included, exploration or prospecting for geothermal energy resources from which energy can be extracted by geothermal energy extraction. Due to the preliminary nature of Energy For The Future Co's activities regarding a possible geothermal energy venture, it would not be reasonable to conclude that it proposed to carry on geothermal energy extraction.

### **An amount received for the provision of geothermal exploration information is assessable income**

2.37 Under section 15-40 an amount received for providing mining, quarrying or prospecting information to another entity is assessable income if the entity continues to hold the information and the amount received is not assessable as ordinary income under section 6-5.

2.38 Consideration received for dealing with or disclosing such information will be ordinary income assessable under section 6-5 where:

- the information is disclosed for the purpose of profit-making, or
- the information is dealt with or disclosed under an agreement for the provision of a service that involves sharing the information with another person and has no adverse effect on the profit-yielding structure of the business.

2.39 However, where the consideration received for dealing with or disclosing such information does not give rise to ordinary income, the amount is not assessable under section 6-5. The amount is statutory income and is included in assessable under section 15-40.

2.40 To ensure that geothermal exploration information is treated in the same manner as mining, quarrying or prospecting information, section 15-40 is amended to ensure that an amount received by an entity for providing geothermal exploration information to another entity is assessable income, providing they continue to hold that information and the information is not assessable as ordinary income. [*Schedule #, item 4, section 15-40*].



2.41 ‘Geothermal energy’ and a reference to providing geothermal exploration information are added to the list of provisions about assessable income [*Schedule #, Item 1, section 10-5*].

2.42 The heading for section 15-40 has been substituted with the new heading ‘Providing mining, quarrying or prospecting information or geothermal exploration information’. [*Schedule #, Item 3 section 15-40*]

### **Balancing adjustments**

2.43 Where a balancing adjustment event occurs for a depreciating asset and the termination value differs from the adjustable value of the asset, the difference between those two amounts (the balancing adjustment amount) is either assessable (if the termination value exceeds adjustable value) or deductible (if the adjustable value exceeds termination value) (section 40-285). Section 40-290 provides for the balancing adjustment amount to be reduced if the taxpayer’s deductions for the depreciating asset (or deductions of specified earlier holders of the asset) were reduced under section 40-25.

2.44 If a balancing adjustment event occurs in relation to a depreciating asset which is mining, quarrying or prospecting information (as defined in section 40-730(8)), there can be no reduction to the balancing adjustment amount under section 40-290(5). This is intended to reflect the exclusion of such information from any residual capital gains consideration; as such information is not a CGT asset.

2.45 The amendments in the Bill specifically extend this same treatment to geothermal exploration information. Geothermal exploration expenditure is not a CGT asset and so it is appropriate that there be no reduction to any balancing adjustment amount concerning it under section 40-290(5) because residual capital gains treatment (CGT Event K7) will not apply to the amount of the reduction – the effect of the event is fully recognised under Division 40. [*Schedule #, item 8, subsection 40-290(5)*]

### **Attributing deduction to periods**

2.46 Section 165-55 sets out the rules for attributing deductions to particular periods. This is one of the steps involved in determining the notional loss or notional taxable income for the period under section 165-50.

2.47 Under subsection 165-55(2), certain deductions are attributable to periods in proportion to the length of the period. The deductions which are attributable to periods in proportion to the length of the period include deductions for depreciating assets; deductions for exploration and

prospecting or mining capital expenditure in connection with mining or quarrying; any other deductions for expenditure which are spread over two or more years and deductions for capital expenditure in connection with Australian films.

2.48 The amendments in the Bill amend section 165-55(2) by the inclusion of a new subparagraph (ba) which creates a new category of deductions that are attributed to each period in proportion to the length of the period. The new subparagraph includes deductions for exploration and prospecting for geothermal energy resources. This amendment ensures consistent treatment between the attribution of mining exploration or prospecting expenditure and geothermal energy exploration or prospecting expenditure. *[Schedule #, item 24, section 165-55(2)(ba)]*

### **Denying deductions for landcare**

2.49 Section 40-630 provides an immediate deduction for capital expenditure incurred by a taxpayer on a landcare operation. 'Landcare operation' is defined in section 40-635.

2.50 The deduction is available if the taxpayer incurs the capital expenditure at a particular time in an income year on a landcare operation for land in Australia, and at that time the land is used by the taxpayer for carrying on a 'primary production business' (as defined in subsection 995-1(1)). Alternatively, the operation has to be on rural land in Australia used by the taxpayer at the time for carrying on a business for a taxable purpose from the use of that land.

2.51 No deduction is available if the land is used for carrying on a business of 'mining operations' (defined in subsection 40-730(7)).

2.52 To ensure consistency between the treatment of mining operations and geothermal energy extraction, the amendments in the Bill extend the denial of landcare deductions to geothermal energy extraction. *[Schedule #, items 9, 10, and 11, paragraph 40-630(1)(b), subsection 40-630(1)(note) and paragraphs 40-630(1A)(b), (1B)(b) and (3)(b)]*

#### **Example 2.9: Deduction for expenditure on landcare operation not available**

ExplosiveGeo is a geothermal energy company extracting geothermal energy from a production licence in South Australia. Explosive Geo incurs expenditure installing a drainage control system to assist with water run-off in the production area.

ExplosiveGeo is not entitled to an immediate deduction for the expenditure incurred on installing the drainage system as it is carrying on

a business of geothermal energy extraction and the drainage system is not a 'landcare operation' under section 40-630. However, ExplosiveGeo may be entitled to a decline in value deduction for the cost of the drainage system under subsection 40-25(1).

### **Denying deductions for electricity and phone lines**

2.53 Section 40-650 deals with the amounts that cannot be deducted under Subdivision 40-G which relates to capital deductions for primary producers. The section limits the deductions available for the cost of connecting electricity and telephone lines under section 40-645.

2.54 The effect of subsection 40-650(3) is to deny a deduction for capital expenditure incurred in providing water, light or power for use on, access to or communication with, the site of 'mining operations' or geothermal energy extraction. Similarly a deduction is denied for contributions to the cost of providing water, light or power for mining operations or that extraction. *[Schedule #, items 12 and 13, paragraphs 40-630(3)(a) and 40-630(3)(b)]*

2.55 The excluded expenditure would generally qualify for deduction as 'mining capital expenditure' (paragraph 40-860(1)(d)) over the life of the project under section 40-830.

2.56 To ensure consistency between the treatment of mining operations and geothermal energy extraction, the amendments in the Bill extend the denial of these deductions to geothermal energy extraction. *[Schedule #, items 12 and 13, paragraphs 40-650(3)(a) and 40-650(3)(b)].*

#### **Example 2.10: Denying deductions for expenditure on electricity and phone lines**

Greensteam Pty Ltd carries on geothermal energy extraction activities on Shaun's Camel Farm in the Great Sandy Desert. Greensteam Pty Ltd has promised its contracted scientist, Birgit, air-conditioning to allow her to work in the extreme heat.

In lieu of paying Shaun for access to his farm and for the use of his workers quarters for Birgit, Greensteam Pty Ltd uses its technicians to install power and air-conditioning into Shaun's employee housing.

The cost of installing power by Greensteam Pty Ltd cannot be deducted under the electricity and telephone line provisions of sections 40-645 and 40-650.

## **Deductions for construction expenditure**

2.57 Capital works that are currently written off under other specific provisions such as those associated with exploration and prospecting are specifically excluded from Subdivision 43-B.

2.58 Subdivision 43-B explains the meaning of construction expenditure. Subsection 43-70(1) defines 'construction expenditure' as capital expenditure incurred in respect of the construction of capital works (section 43-20). However, subsection 43-70(1) is limited by subsection 43-70(2) which lists exclusions from the definition of 'construction expenditure'.

2.59 Subparagraph 43-70(2)(fa)(iv) precludes consideration under Division 43 in respect of expenditure that is the cost of a depreciating asset that the taxpayer can deduct applying subsection 40-80(1), that is, the cost of depreciating assets first used for exploration or prospecting of minerals or quarrying materials.

2.60 The amendments in the Bill extend this preclusion of consideration under Division 43 to expenditure incurred on depreciating assets that the taxpayer can deduct by applying the new subsection 40-80(1A) which deals with depreciating assets first used in exploration and prospecting for geothermal energy resources. [*Schedule #, item 23, subparagraph 43-70(2)(fa)(iv)*]

### **Example 2.11: Denying deductions for construction expenditure**

GeoFlamingo Corporation is a geothermal energy explorer which constructs temporary housing on one of its exploration tenements to house its team of geologists who are conducting exploration drilling.

The expenditure on the temporary housing forms the cost of a depreciating asset which is first used for exploration or prospecting for geothermal energy resources from which geothermal energy can be extracted by geothermal energy extraction. As an immediate deduction is available under subsection 40-80(1A), consideration of the expenditure under Division 43 is precluded by subparagraph 43-70(2)(fa)(iv).

## **Tax cost setting for exploration and prospecting**

2.61 Under subsection 40-80(1), the decline in value of a depreciating asset that is first used for exploration or prospecting is taken to be the cost of the asset so long as the taxpayer has met the conditions ascribed in subsection 40-80(1). Generally, this will mean that an immediate deduction is available for the cost of the asset in that year under

subsection 40-25(1). Where subsection 40-80(1) applies, the taxpayer does not have to make a choice to use either the diminishing value method (section 40-70) or the prime cost method (section 40-75) to calculate the decline in value of the asset.

2.62 However, section 716-300 ensures that where an entity joins a consolidated group and the entity had previously deducted the cost of a depreciating asset first used for exploration or prospecting applying subsection 40-80(1), the asset's decline in value is deemed to have been calculated by the joining entity using the prime cost method. This affects the method and the effective life to be used by the head company of the consolidated group in working out the decline in value of the asset.

2.63 If the joining entity deducted an amount for the decline in value of a depreciating asset other than by applying subsection 40-80(1) (for example the decline in value of a depreciating asset other than one first used for exploration or prospecting was calculated on the basis of its effective life under section 40-70 or section 40-75), section 716-300 would not apply and whichever method was adopted by the joining entity would continue to apply to the head company under subsection 701-55(2).

2.64 The amendments in the Bill extend section 716-300 treatment to depreciating assets first used for geothermal energy exploration or prospecting. That is, if a joining entity deducted an amount for the decline in value of a depreciating asset applying the new subsection 40-80(1A), the asset's decline in value is deemed to have been calculated using the prime cost method. This will affect the method and the effective life to be used by the head company of the consolidated group in working out the decline in value of the asset. *[Schedule #, items 25 and 26, paragraphs 716-300(1)(b) and (c) and subsection 716-300(1)(note)]*

## **List of Provisions about deductions**

2.65 The amendments in the Bill update the list of provisions about deductions. Under the 'capital allowances' section of the table, references to exploration and prospecting are updated to include references to section 40-80(1A) and 40-730. 'Geothermal exploration information' and 'geothermal exploration rights' are also added to their table with references to Subdivision 40-B. *[Schedule #, item 2, section 12-5, table item headed "Capital Allowances"]*

## **Application**

2.66 These provisions are prospective. The modifications will only apply to amounts received and expenditure incurred on or after 1 July 2012 or to depreciating assets whose start time occurs on or after 1 July

2012. There is no backdating of the application of the provisions prior to their announcement nor are there transitional provisions that apply from announcement. *[Schedule #, item 31, Application]*

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