



**Parliament of Australia**  
**Parliamentary Budget Office**

**Phil Bowen PSM FCPA**  
**Parliamentary Budget Officer**

Senator Christine Milne  
Leader of the Australian Greens  
Parliament House  
CANBERRA ACT 2600

Dear Senator Milne

Please find attached a response to your costing request on *Improved Mining Tax*  
(14 August 2013).

The responses to these requests will be released on the PBO website ([www.aph.gov.au/pbo](http://www.aph.gov.au/pbo)).

If you have any queries about this costing, please do not hesitate to contact Colin Brown on  
(02) 6277 9530.

Yours sincerely

Phil Bowen

19 August 2013

## COSTING – ELECTION CARETAKER PERIOD

| Name of proposal:                             | Improved mining tax                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Summary of proposal:                          | <p>The proposal would expand the Minerals Resources Rent Tax (MRRT) to include:</p> <ul style="list-style-type: none"> <li>(i) a 40 per cent tax rate (including abolition of the 25 per cent extraction allowance, so that the effective tax rate is 40 per cent)</li> <li>(ii) royalties credited at rates in place at 1 July 2011</li> <li>(iii) all minerals in the MRRT</li> <li>(iv) reducing the uplift rate to be the bond rate plus 2 percentage points, and</li> <li>(v) restricting the starting base for existing projects to the depreciated book value of what companies have actually spent on mining infrastructure.</li> </ul> <p>The intention of the proposal is for the MRRT to be more like that proposed by the Henry Tax Review and the first Rudd Government's proposed resource super profits tax (RSPT) and to increase the amount of tax paid by mining companies.</p> <p>The proposal would have effect from 1 July 2014.</p> |
| Person/party requesting costing:              | Senator Milne, Australian Greens                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Date costing request received:                | 14 August 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Date costing completed:                       | 19 August 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Date of public release of policy:             | 14 July 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Agencies from which information was obtained: | Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

### Costing overview

This proposal is estimated to increase both the underlying cash and fiscal balances by around \$20.8 billion over the period from 2013-14 to 2016-17. This impact is entirely due to increased revenue.

## POLICY COSTING – ELECTION CARETAKER PERIOD

**Table 1: Financial implications for improved mining tax (outturn prices)<sup>(a)</sup>**

| Impact on:                    | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|-------------------------------|---------|---------|---------|---------|
| Underlying cash balance (\$m) | -       | 5,000   | 7,000   | 8,800   |
| Fiscal balance (\$m)          | -       | 5,000   | 7,000   | 8,800   |

(a) A positive number for the fiscal balance indicates an increase in revenue in accrual terms. A positive number for the underlying cash balance indicates an increase in revenue in cash terms.

A detailed breakdown of the elements of this costing is included at [Attachment A](#).

The proposal would have an ongoing impact that extends beyond the forward estimates period.

Departmental expenses are not expected to be significant and have not been included in this costing.

This costing is considered to be of very low reliability.

- There is no direct tax information on which to base the estimates, which rely heavily on assumptions and there is no reliable information on likely taxpayer responses to the policy. The model relies on Australian Bureau of Statistics (ABS) data for much of the analysis.
- The model uses a ‘tops down’ approach which treats each commodity as a single entity, so variations in company circumstances are not taken into account.
- The estimates are extremely sensitive to factors such as changes in commodity prices and the exchange rate. These can result in very large variations in the expected revenue relative to the change in the Australian dollar value of commodities.

### Key assumptions

Assumptions detailed in the costing request:

- This proposal would have effect from 1 July 2014.

The PBO has made the following assumptions regarding this advice.

### General assumptions

- Over the projection period in the model, production costs are assumed to be proportional to the level of mining output, with the ‘price’ of non-labour production costs further increasing in line with the implicit price deflator of Gross Domestic Product (GDP) and unit labour costs further increasing in line with total average weekly earnings.
- Estimates have been rounded to the nearest \$100 million.

### Impact on company tax

- As the MRRT paid by a company is deductible for company tax purposes, changes to MRRT liabilities will change company tax collections. The magnitude of the change in company tax is 30 per cent of the change in the MRRT.

### Timing assumptions

- The PBO has assumed that the MRRT is collected via a quarterly instalment system.

## POLICY COSTING – ELECTION CARETAKER PERIOD

### Methodology

The costing uses a ‘tops down’ commodity model, covering iron ore, metallurgical coal, thermal coal, gold, copper, nickel, alumina, refined copper and refined nickel. Each mineral is modelled as if it were a single entity under the MRRT, effectively assuming full transferability of unused project expenses within that commodity sector.

Crude oil and Liquefied Natural Gas (LNG) are assumed to remain subject to the Petroleum Resources Rent Tax (PRRT) and have not been included in the MRRT modelling.

The focus of the model is on export sales and volumes. The model excludes coal used in domestic electricity generation on the basis that the majority of such coal is sourced as part of vertically integrated production processes which overall do not generate the ‘super profits’ that are subject to the MRRT. For similar reasons, brown coal is not covered by the model.

The model starts from commodity prices and volumes to estimate the Australian dollar value of sales income for each commodity at the port. Following that:

- Operating costs are deducted (however, certain costs such as depreciation and interest expenses are not deductible).
  - Operating costs include an allowance for the profits on downstream capital in order to ‘net back’ the returns on capital to the run of mine (ROM) stockpile, which is the taxing point for the MRRT.
- Capital expenditure is immediately expensed (that is fully deductible in the year the capital concerned is installed ready for use).
- Royalties are grossed up by dividing by the MRRT effective tax rate and the grossed up amount is treated as a deductible expense.
- Starting base allowances are deducted by either:
  - a deduction equal to the assumed market value of starting assets, written off over the effective life of the relevant assets (assumed average of 17 years), or
  - a deduction equal to the book value of assets, written off over five years, with 36 per cent deducted in year one, 24 per cent in year two, 15 per cent in year three, 15 per cent in year four, and 10 per cent in year five with unused deductions uplifted at the 10 year bond rate.

This depends on which provides the more favourable outcome to miners given that they can elect which method to apply. Base MRRT revenue is calculated assuming that miners will elect to deduct the market value of starting assets as this is more favourable.

- MRRT assessable income is calculated by deducting operating costs, capital expenditure, royalty deductions and starting base allowances from sales revenue.
- Where there is an MRRT loss, the loss is only attributed to starting base allowances, after deducting ‘other’ expenses. Losses attributable to ‘other’ expenses are uplifted at the 10 year bond rate plus an uplift factor. Note that no MRRT losses are expected under the current model parameters.
- Where there is positive MRRT assessable income, MRRT is assessed at the MRRT tax rate, discounted by the extraction allowance.

## POLICY COSTING – ELECTION CARETAKER PERIOD

### *Policy parameters*

The **base case** in the model assumes the following key policy parameters hold.

- The MRRT rate is 30 per cent, discounted by the 25 per cent extraction allowance to give an effective MRRT rate of 22.5 per cent.
- State royalties are levied at actual rates estimated to be applicable in each projection year:
  - the royalty rate used for iron ore is the Western Australian average ad valorem royalty rate, with the rate estimated from WA State Budget papers, and
  - the royalty rate used for metallurgical coal is the average of the ad valorem rates applicable in Queensland and New South Wales. The Queensland rates take account of the graduated value based royalty rates announced in the 2012-13 Queensland Budget. The New South Wales rates take account of the different rates that apply to open cut, shallow underground and deep underground mines but do not include the royalty increases foreshadowed in the 2011-12 NSW Budget (and reiterated in the 2012-13 Budget), for which a revenue target has been announced but no specific rates put forward.
- Undeducted MRRT operating costs, unused capital expense deduction and royalty deductions are carried forward at the 10 year bond rate plus 7 per cent ‘uplift’.
- Starting base deductions are claimed under the market value method and deducted over the average effective life of the starting base assets (as opposed to the alternative option of using book values written off over five years).

Element (i) increases the MRRT effective rate to 40 per cent, by setting the headline rate to 40 per cent and the extraction allowance discount to zero.

Element (ii) sets the weighted average State royalty rate for each commodity to the average rate for the 2010-11 year (as a proxy for the rates applicable at 1 July 2011).

Element (iii) extends the MRRT to all minerals by adding LNG, gold, copper, nickel, crude oil, alumina, refined copper and refined nickel to those minerals modelled previously.

Element (iv) reduces the uplift factor for undeducted MRRT expenses from the 10 year bond rate plus 7 per cent to the 10 year bond rate plus 2 per cent.

Element (v) switches the basis for starting base allowance deductions from the market value deducted on a straight line basis over the lesser of 25 years or the market value of the assets, with no uplift, to the alternative deductions for book value of assets over five years (according to the 36/24/15/15/10 schedule) with uplift of unused deductions at the 10 year bond rate.

### **Data sources**

- 2012-13 Mid-Year Economic and Fiscal Outlook
- ABS Cat. No. 8415.0, *Mining Operations Australia*, 2006-07
- ABS Cat. No. 8155.0, *Australian Industry*, 2010-11
- Reserve Bank of Australia, Index of commodity prices, exchange rates, bond rates

## POLICY COSTING – ELECTION CARETAKER PERIOD

- Bureau of Resource and Energy Economics, Commodity Statistics, March 2013
- Coal Services Pty Limited, *Australian Black Coal Mining Summary* 2009-10
- New South Wales Treasury, State Budget papers (various)
- Queensland Treasury, State Budget papers (various)
- Western Australia, State Budget papers (various)
- Index Mundi, monthly commodity price indices  
<http://www.indexmundi.com/commodities/?commodity=iron-ore&months=12>

## ATTACHMENT A: BASE REVENUE AND DETAILED RESULTS

This attachment includes the estimated revenue impact for each element of this costing using 2013 Pre-Election Economic and Fiscal Outlook report parameters. Base MRRT revenue, including PBO estimates of the different mineral compositions, is also provided.

### Base MRRT revenue published in the 2013 Pre-Election Economic and Fiscal Outlook

| Estimated MRRT as at the 2013 Pre-Election Economic and Fiscal Outlook |            |            |              |              |
|------------------------------------------------------------------------|------------|------------|--------------|--------------|
|                                                                        | 2013-14    | 2014-15    | 2015-16      | 2016-17      |
| Iron ore(a)                                                            | 600        | 600        | 900          | 1,400        |
| Metallurgical coal(a)                                                  | 100        | 200        | 200          | 400          |
| Thermal coal(a)                                                        | 0          | 0          | 0            | 0            |
| <b>Total</b>                                                           | <b>700</b> | <b>800</b> | <b>1,100</b> | <b>1,800</b> |

(a) PBO estimates of the composition of MRRT revenue.

### Detailed estimates for elements (i) to (v)

The impact of each of the costing elements is shown separately in the following sections. There are some interactions between these elements that means that they do not necessarily sum to the total of the policy costing.

#### *Element (i) Impose an MRRT tax rate of 40 per cent (including abolition of the 25 per cent extraction allowance, so that the effective tax rate is 40 per cent)*

This element is estimated to increase both the underlying cash and fiscal balances by around \$11.6 billion over the period from 2013-14 to 2016-17. This impact is entirely due to increased revenue.

#### Element (i) - Increase MRRT rate to 40% (in isolation)

| Revenue impact (\$ million) <sup>(a)</sup> |          |              |              |              |
|--------------------------------------------|----------|--------------|--------------|--------------|
|                                            | 2013-14  | 2014-15      | 2015-16      | 2016-17      |
| Iron ore                                   | 0        | 2,300        | 3,400        | 4,200        |
| Metallurgical coal                         | 0        | 400          | 600          | 700          |
| Thermal coal                               | 0        | 0            | 0            | 0            |
| <b>Total</b>                               | <b>0</b> | <b>2,700</b> | <b>4,000</b> | <b>4,900</b> |

#### MRRT revenue including the impact of Element (i) <sup>(b)</sup>

|                    | 2013-14    | 2014-15      | 2015-16      | 2016-17      |
|--------------------|------------|--------------|--------------|--------------|
| Iron ore           | 600        | 2,900        | 4,300        | 5,600        |
| Metallurgical coal | 100        | 600          | 800          | 1,100        |
| Thermal coal       | 0          | 0            | 0            | 0            |
| <b>Total</b>       | <b>700</b> | <b>3,500</b> | <b>5,100</b> | <b>6,700</b> |

Footnotes:

(a) Impact relative to 2013 PEFO estimates.

(b) Revenue impact of MRRT net of company tax deduction and credits for State royalties.

## POLICY COSTING – ELECTION CARETAKER PERIOD

### *Element (ii) Royalties credited at the royalty rates in place at 1 July 2011*

This element is estimated to increase both the underlying cash and fiscal balances by around \$1.7 billion over the period from 2013-14 to 2016-17. This impact is entirely due to increased revenue.

### **Element (ii) Royalties credited at rates in place as at 1 July 2011 (in isolation)**

#### **Revenue impact (\$ million) <sup>(a)</sup>**

|                    | 2013-14  | 2014-15    | 2015-16    | 2016-17    |
|--------------------|----------|------------|------------|------------|
| Iron ore           | 0        | 400        | 600        | 700        |
| Metallurgical coal | 0        | 0          | 0          | 0          |
| Thermal coal       | 0        | 0          | 0          | 0          |
| <b>Total</b>       | <b>0</b> | <b>400</b> | <b>600</b> | <b>700</b> |

#### **MRRT revenue including the impact of Element (ii) <sup>(b)</sup>**

|                    | 2013-14    | 2014-15      | 2015-16      | 2016-17      |
|--------------------|------------|--------------|--------------|--------------|
| Iron ore           | 600        | 1,000        | 1,500        | 2,100        |
| Metallurgical coal | 100        | 200          | 200          | 400          |
| Thermal coal       | 0          | 0            | 0            | 0            |
| <b>Total</b>       | <b>700</b> | <b>1,200</b> | <b>1,700</b> | <b>2,500</b> |

Footnotes:

(a) Impact relative to 2013 PEFO estimates.

(b) Revenue impact of MRRT net of company tax deduction and credits for State royalties.

## POLICY COSTING – ELECTION CARETAKER PERIOD

### ***Element (iii) Include all minerals in the MRRT***

This element is estimated to increase both the underlying cash and fiscal balances by around \$1.7 billion over the period from 2013-14 to 2016-17. This impact is entirely due to increased revenue.

### **Element (iii) Expand MRRT coverage to include all minerals (in isolation)**

#### **Revenue impact (\$ million) <sup>(a)</sup>**

|                    | 2013-14  | 2014-15    | 2015-16    | 2016-17    |
|--------------------|----------|------------|------------|------------|
| Iron ore           | 0        | 0          | 0          | 0          |
| Metallurgical coal | 0        | 0          | 0          | 0          |
| Thermal coal       | 0        | 0          | 0          | 0          |
| Gold               | 0        | 600        | 600        | 500        |
| Copper             | 0        | 0          | 0          | 0          |
| Nickel             | 0        | 0          | 0          | 0          |
| Alumina            | 0        | 0          | 0          | 0          |
| Refined Copper     | 0        | 0          | 0          | 0          |
| Refined Nickel     | 0        | 0          | 0          | 0          |
| <b>Total</b>       | <b>0</b> | <b>600</b> | <b>600</b> | <b>500</b> |

#### **MRRT revenue including the impact of Element (iii) <sup>(b)</sup>**

|                    | 2013-14    | 2014-15      | 2015-16      | 2016-17      |
|--------------------|------------|--------------|--------------|--------------|
| Iron ore           | 600        | 600          | 900          | 1,400        |
| Metallurgical coal | 100        | 200          | 200          | 400          |
| Thermal coal       | 0          | 0            | 0            | 0            |
| Gold               | 0          | 600          | 600          | 500          |
| Copper             | 0          | 0            | 0            | 0            |
| Nickel             | 0          | 0            | 0            | 0            |
| Alumina            | 0          | 0            | 0            | 0            |
| Refined Copper     | 0          | 0            | 0            | 0            |
| Refined Nickel     | 0          | 0            | 0            | 0            |
| <b>Total</b>       | <b>700</b> | <b>1,400</b> | <b>1,700</b> | <b>2,300</b> |

Footnotes:

(a) Impact relative to 2013 PEFO estimates.

(b) Revenue impact of MRRT net of company tax deduction and credits for State royalties.

## POLICY COSTING – ELECTION CARETAKER PERIOD

### *Element (iv) Reduce the uplift rate from the bond rate plus 7 percentage points to the bond rate plus 2 percentage points.*

This element is not estimated to have an impact on either the underlying cash or fiscal balances over the period from 2013-14 to 2016-17.

#### **Element (iv) Uplift rate at 10 year bond rate plus 2%**

##### **Revenue impact (\$ million) <sup>(a)</sup>**

|                     | 2013-14  | 2014-15  | 2015-16  | 2016-17  |
|---------------------|----------|----------|----------|----------|
| Iron ore            | 0        | 0        | 0        | 0        |
| Metallurgical coal  | 0        | 0        | 0        | 0        |
| <b>Thermal coal</b> | 0        | 0        | 0        | 0        |
| <b>Total</b>        | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |

##### **MRRT revenue including the impact of Element (iv) <sup>(b)</sup>**

|                    | 2013-14    | 2014-15    | 2015-16      | 2016-17      |
|--------------------|------------|------------|--------------|--------------|
| Iron ore           | 600        | 600        | 900          | 1,400        |
| Metallurgical coal | 100        | 200        | 200          | 400          |
| Thermal coal       | 0          | 0          | 0            | 0            |
| <b>Total</b>       | <b>700</b> | <b>800</b> | <b>1,100</b> | <b>1,800</b> |

Footnotes:

(a) Impact relative to 2013 PEFO estimates.

(b) Revenue impact of MRRT net of company tax deduction and credits for State royalties.

### *Element (v) Restrict the starting base for existing projects to the depreciated book value of what companies have actually spent on mining infrastructure.*

This element is estimated to increase both the underlying cash and fiscal balances by around \$4.0 billion over the period from 2013-14 to 2016-17. This impact is entirely due to increased revenue.

#### **Element (v) Starting base deduction set to book value - depreciated over 5 years**

##### **Revenue impact (\$ million) <sup>(a)</sup>**

|                     | 2013-14  | 2014-15    | 2015-16      | 2016-17      |
|---------------------|----------|------------|--------------|--------------|
| Iron ore            | 0        | 900        | 1,300        | 1,500        |
| Metallurgical coal  | 0        | 0          | 100          | 200          |
| <b>Thermal coal</b> | 0        | 0          | 0            | 0            |
| <b>Total</b>        | <b>0</b> | <b>900</b> | <b>1,400</b> | <b>1,700</b> |

##### **MRRT revenue including the impact of Element (v) <sup>(b)</sup>**

|                    | 2013-14    | 2014-15      | 2015-16      | 2016-17      |
|--------------------|------------|--------------|--------------|--------------|
| Iron ore           | 600        | 1,500        | 2,200        | 2,900        |
| Metallurgical coal | 100        | 200          | 300          | 600          |
| Thermal coal       | 0          | 0            | 0            | 0            |
| <b>Total</b>       | <b>700</b> | <b>1,700</b> | <b>2,500</b> | <b>3,500</b> |

Footnotes:

(a) Impact relative to 2013 PEFO estimates.

(b) Revenue impact of MRRT net of company tax deduction and credits for State royalties.