



Australian Government

Commonwealth Grants Commission

2010 REVIEW

MINING REVENUE

**COMMISSION POSITION PAPER
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BACKGROUND

- 1 In 2005, the Heads of Treasury undertook a review of horizontal fiscal equalisation. A conclusion of that review was that Commission processes could be simplified. The 2010 Review terms of reference ask the Commission to simplify its assessments, provided to do so is consistent with the principle of equalisation.
- 2 We consider that simplification and equalisation can both be achieved and that simplification will improve the reliability and robustness of the processes and the acceptability of the outcomes. Both objectives can best be achieved through a rigorous application of the assessment guidelines. These guidelines require the 2010 Review assessment methods to:
 - establish a conceptual case for the assessment;
 - support the conceptual case with evidence, which is both comparable and reliable;
 - develop a reliable assessment method; and
 - demonstrate such an assessment would be material¹.
- 3 Our intention is to develop these methods jointly with States. For that reason, we have chosen an iterative process. This approach provides States with opportunities to contribute to the development of the final assessments.
- 4 The first iteration of the Mining revenue assessment was presented in staff discussion paper *2007/03-S Proposed Methods for Revenue Assessments*. Staff proposed:
 - assessing revenue from State mining royalties using value of production, separately for energy and non-energy minerals; and
 - assessing revenue from Grants in lieu of royalties² actual per capita.
- 5 States generally supported the proposed assessment.
- 6 This Commission position paper represents the second iteration of the Mining revenue assessment. It sets out our preliminary decisions on the assessment. These decisions provide the basis on which the Mining revenue assessment will be taken forward in consultation with States.
- 7 The paper reflects comments provided by the States during State visits and in State submissions received up until 15 August 2008. Comments received after this date will be considered alongside comments received from States in response to this paper.

¹ For a category to be deemed material, the average expense or revenue is greater than \$50 per capita, or the assessment is likely to redistribute more than \$30 per capita for any State.

² The Australian Government levies royalties on offshore oil and gas and, in the Northern Territory, uranium and shares the proceeds with the States. These grants represent the States' shares of those royalties.

PROPOSED ASSESSMENT

Overview

- 8 In discussion paper 2007/03, staff proposed that the 2010 Review equalisation budget contain a Mining revenue category comprising revenues from royalties on mining production, including those collected by the Australian Government and shared with the States.
- 9 Staff proposed assessing capacity using:
- value of production for energy and non-energy minerals.³ Each would be assessed separately to reflect the differences in the royalty rates applied to these minerals; and
 - actual revenues for Grants in lieu of royalties.

State views

- 10 Most States supported the value of production approach. New South Wales and the Northern Territory favoured a measure based on profitability, although the NT said value of production is what States use as the base.
- 11 Most States supported a separate assessment of energy and non-energy minerals.
- 12 All States supported including Grants in lieu of royalties in the category and assessing them actual per capita.

Commission view

- 13 The Commission intends to make separate assessments for energy minerals and non-energy minerals based on value of production data. We consider value of production is the only practical approach to assessing mining revenue. It also reflects what States do.
- 14 The Commission intends to assess Grants in lieu of royalties actual per capita.
- 15 The issues that were raised in the proposed assessment are:
- in which group should uranium and construction materials be included?
 - from which organisation should the Commission source its assessment data; and
 - from which organisation should the Commission source its revenue data?
- 16 These issues are discussed in the following sections.

³ The energy group comprises onshore oil and gas and all types of coal. The non-energy group comprises metallic, industrial and construction materials and onshore uranium for South Australia.

URANIUM

Proposal

- 17 Staff proposed classifying uranium to the non-energy group because the royalty rates on uranium were closer to those of non-energy minerals.

State views

- 18 States queried where uranium should be assessed. South Australia supported including it with non-energy minerals because of its comparable royalty rate.

Analysis

- 19 The Commission intends classifying minerals to the energy and non-energy groups according to their average royalty rates. The average royalty rate for energy minerals is 6.14 per cent and for non-energy minerals is 3.67 per cent (Table 7).
- 20 The royalty rates on uranium oxide (the concentrate produced from the ore) are:
- 2.0 per cent in Queensland;
 - 3.5 per cent in South Australia; and
 - in the Northern Territory the royalty rate is set on a mine-by-mine basis by the Australian Government. For the Ranger mine, the royalty rate is 5.5 per cent, 1.25 per cent being paid as Grants in lieu of royalties to the Northern Territory government and 4.25 per cent being paid to the Aboriginal Benefit Account.
- 21 Thus, uranium royalty rates are closer to those of non-energy minerals.

Commission view

- 22 The Commission intends to assess uranium with the non-energy group because the rates of royalty on uranium are comparable to those applying to non-energy minerals.

CONSTRUCTION MATERIALS

Proposal

- 23 Staff proposed classifying construction materials to non-energy group.

State views

- 24 Some States queried whether construction materials needed to be included given their low revenues and low values.

Analysis

25 Table 1 shows revenue raised from volume based minerals, which roughly correspond to the ABS's construction materials. It confirms the States' observation that revenues from construction materials are minor. Table 2 illustrates that including or excluding construction materials will not have a material⁴ impact on the mining assessment. It is consistent with the States' view that the value of construction materials is low.

Table 1 Revenue per capita for volume based minerals, 2008 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
2001-02	0.28	0.80	0.38	3.15	0.97	0.86	0.00	0.00	0.77
2002-03	0.30	0.75	0.90	3.01	1.06	0.91	0.00	0.00	0.86
2003-04	0.16	0.79	0.82	3.23	1.10	1.00	0.00	0.00	0.83
2004-05	0.26	0.74	0.77	3.47	1.21	1.17	0.00	0.00	0.88
2005-06	0.41	1.03	0.91	3.63	1.16	1.19	0.00	0.00	1.05
2006-07	0.40	1.01	0.58	3.95	1.40	1.14	0.00	0.00	1.02

Source: 2008 Update, Mining Revenue assessment.

Table 2 Financial impact of including construction minerals, 2008 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Distribution	0.12	0.30	0.17	-1.60	0.22	0.24	0.00	-0.86	0.17

Source: 2008 Update, Mining Revenue assessment.

26 The royalty rates on construction materials are lower than those for non-energy minerals and much lower than those for energy minerals. There is a case for excluding them altogether. However, the revenue raised from construction materials forms part of the average revenue that makes up the Mining revenue category and the value of construction materials is included in the non-energy values provided by the ABS. Table 2 showed that excluding construction materials does not have a material impact on the assessment, but it would unnecessarily complicate it — it would require us to remove construction materials data from both average revenue and the revenue base.

Commission view

27 The Commission intends to include construction minerals with non-energy minerals, because their inclusion is not material and it would unnecessarily complicate the assessment to exclude them.

⁴ An assessment is material if it redistributes \$10 per capita for any State.

SOURCE OF ASSESSMENT DATA

Proposal

28 Staff proposed sourcing mining assessment data from the ABS, subject to confidentiality issues.

State views

29 Queensland and Western Australia supported the proposal.

30 New South Wales preferred to use data from the Australian Bureau of Agricultural and Resource Economics (ABARE) because it was resource focused. It was concerned that ABS data was industry focused and may include non-mining activity. This could occur where an organisation's principal activity was mining. The ABS would classify all of its activity as mining, including its non-mining activity.

31 Tasmania noted that ABS value of production data and the ABARE value of production data produced different outcomes. It said further work was required to determine which was the better source of data.

32 The Northern Territory noted a lack of consistency across States in valuation methodology for minerals and said the Commission should investigate the materiality of this issue.

33 States raised two concerns about ABS data:

- confidentiality issues meant some data required for the assessment were not published; and
- it did not publish data in time for inclusion in the last year of the assessment period.

Analysis

34 The ABS advises that its data are not industry based, they are commodity centred. The ABS sources these data from States' Mines Departments.

35 Different State valuation methods means there are comparability issues at the margin for energy minerals. The Commission is continuing to work with the ABS and States to improve the comparability of these data, but we understand the remaining comparability issues are minor.

36 For most non-energy minerals, ABS data are comparable with ABARE data. The exceptions are bauxite and, to a lesser extent, iron ore. The ABS estimates measure production at an earlier stage in the production process (essentially a 'mine gate' stage), which is more in line with the stage at which States value production for royalty purposes. ABARE uses metal content as the valuation basis and includes processing costs beyond the mine gate. Its valuations include production costs that are not subject to royalties and so its estimates are higher than ABS estimates. Table 3 shows the differences for the major non-energy minerals.

Table 3 Value of production, ABS and ABARE data, 2005-06^(a)

Data source	Bauxite	Copper	Gold	Iron ore
	\$m	\$m	\$m	\$m
ABS estimate	874	6 221.0	5 491.0	13 155.0
ABARE estimate	8 242.5	6 493.1	6 229.1	14 166.0
Difference	-7 368.5	-272.1	-738.1	-1 011.0

(a) Data are for 2005-06 since this is the last year for which actual ABS data are available.

Source: ABARE and ABS estimates of value of production.

37 Table 4 suggests the choice of data source will have a material impact on the mining assessment. The Commission considers that ABS is the better source of data because by excluding production costs, it produces an estimate that is closer to the tax base on which States levy royalties.

Table 4 Financial impact of using ABS data, 2008 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
ABS data ^(a)	92.18	159.06	-115.19	-580.63	91.80	121.51	174.33	-149.42	82.32
ABARE data	95.06	162.75	-112.82	-605.60	99.44	131.28	174.38	-212.8	84.99
Difference	-2.88	-3.69	-2.37	24.97	-7.64	-9.77	-0.05	63.38	-2.67

(a) The ABS data include estimates for 2006-07.

Source: ABARE and ABS estimates of value of production.

38 The Commission acknowledges State concerns about two aspects of ABS data:

- confidentiality issues. For Tasmania, the ABS does not separate coal from metallic minerals; and
- timing issues. The ABS is currently not able to provide data for the last year of the assessment period.

39 The Commission is working with the ABS to overcome these concerns. In the interim, the Commission will continue to estimate these data, as it does now.

Commission view

40 The Commission intends to use ABS as its source of mining assessment data because they reflect 'what States do' in valuing minerals for royalty purposes.

SOURCE OF REVENUE DATA

Proposal

41 Staff proposed using Government Finance Statistics (GFS) revenue data published by ABS.

State views

42 No State commented on this issue.

Analysis

- 43 There are two sources of mining royalty data:
- GFS data; and
 - State mines department data.
- 44 In theory, the two sources of data should be the same. However, as a result of timing differences they are not.
- 45 The assessment requires revenue data for both energy and non-energy minerals. State mines department data provide this dissection but GFS does not. However, GFS is the source of revenue for the other revenue assessments.
- 46 Our preference is to use GFS data for consistency with the other revenue assessments, but to use the State mines department data to estimate a split between energy and non-energy minerals. Table 5 shows how this could be achieved, the State mines department data are grossed up to equal GFS data — as is done in the existing assessments.

Table 5 Aligning State mining department revenue data to GFS revenue data, 2005-06

Component	Data supplied by		Data used in the assessment
	State mines departments	GFS data	
	\$m	\$m	\$m
Energy minerals	1 793.0	na	1 854.1 ^(a)
Non-energy minerals	1 463.6	na	1 513.4 ^(a)
Sub-total	3 256.6	3 367.4	3 367.4 ^(a)
Grants in lieu of royalties	664.1	664.1	664.1
Total	3 920.7	4 031.5	4 031.5

(a) Revenues from energy and non-energy minerals are scaled so they total to the GFS figure.

Source: State mines departments and GFS.

Commission view

- 47 To ensure consistency with other revenue categories, the Commission intends to use ABS GFS data as its source for mining revenue and to use State mines department data to support an energy/non-energy split.

PRELIMINARY ASSESSMENT

- 48 The Commission intends to assess Mining revenue capacity using:
- value of production for energy minerals;
 - value of production for non-energy minerals; and
 - actual revenues for Grants in lieu of royalties.

- 49 We propose to source mining assessment data from the ABS. We also propose to use ABS GFS data as its source of total mining revenue, but to use State mines department data to split this estimate between energy and non-energy minerals. Table 6 shows this split for 2005-06.
- 50 Table 7 presents the mining revenue assessment and Table 8 calculates a category factor.

CONCLUSIONS

- 51 The Commission intends to assess Mining revenue in three parts:
- energy minerals, using ABS value of production data;
 - non-energy minerals, using ABS value of production data; and
 - Grants in lieu of royalties, using actual revenue data.

Outstanding issues

- 52 There are two minor issues yet to be resolved. The Commission will work with the ABS to:
- resolve the confidentiality of Tasmanian coal data. If we cannot resolve this issue, we will continue to source the data from Tasmania; and
 - investigate whether the ABS can provide mining data in time for it to be included in the last year of the assessment period. If not, we will continue to estimate assessment data for the last year, as we do now.

Table 6 Revenue data, Mining revenue, 2005-06

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Revenue data supplied by State mines departments									
A. Energy minerals	447	24.1	1 226.8	27.1	63.2	0.5	0	4.3	1 793.0
B. Non-energy minerals	58.7	5.5	223.1	1 041.6	59.3	28.2	0	47.1	1 463.6
C. Grants in Lieu or Royalties	0	0	0	660.8	0	0	0	3.3	664.1
D. Total [D = A + B + C]	505.7	29.6	1 449.9	1 729.5	122.5	28.7	0	54.7	3 920.7
Revenue data scaled to match GFS data									
E. Energy minerals	462.2	24.9	1 268.6	28	65.4	0.5	0	4.4	1 854.1
F. Non-energy minerals	60.7	5.7	230.7	1 077.0	61.4	29.1	0	48.7	1 513.4
G. Grants in Lieu or Royalties	0	0	0	660.8	0	0	0	3.3	664.1
H. Total [H = E + F + G]	522.9	30.6	1 499.3	1 765.8	126.8	29.6	0	56.4	4 031.5

Source: Actual revenue data provided by State Treasuries, classified to the 2010 Review category structure by the Commission.

Table 7 Assessed revenue, Mining revenue, 2005-06

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Energy minerals component									
A. Actual revenue (\$m)	462.2	24.9	1 268.6	28	65.4	0.5	0	4.4	1 854.1
B. Assessed revenue base (\$m)	8 531.0	846.4	19 020.6	515.1	1 186.1	24.6	0	68.6	30 192.3
C. Average tax rate (%) [$C_{Aust} = A_{Aust} / B_{Aust}$]									6.14
D. Assessed revenue (\$m) [$D = C_{Aust} * B$]	523.9	52	1 168.0	31.6	72.8	1.5	0	4.2	1 854.1
Non-energy minerals component									
E. Actual revenue (\$m)	60.7	5.7	230.7	1 077.0	61.4	29.1	0	48.7	1 513.4
F. Assessed revenue base (\$m)	3 221.9	1 128.4	8 408.5	23 771.0	2 166.7	913.3	0	1 615.3	41 225.1
H. Average tax rate (%) [$H_{Aust} = E_{Aust} / F_{Aust}$]									3.67
I. Assessed revenue (\$m) [$I = H_{Aust} * F$]	120.7	25.5	300.4	902.8	82.2	37.5	0.0	44.3	1 513.4
Grants in Lieu component									
J. Actual revenue (\$m)	0	0	0	660.8	0	0	0	3.3	664.1
K. Assessed revenue (\$m)									
[K=J, actual per capita assessment]	0	0	0	660.8	0	0	0	3.3	664.1
L. Assessed revenue (\$m) [$K = D + I + K$]	644.6	77.5	1 468.4	1 595.1	155.0	39.0	.0	51.9	4 031.5

Source: Actual revenue data is GFS data. Assessed revenue base data for energy and non-energy minerals is ABS value of production data.

Table 8 **Category factor, Mining revenue, 2005-06**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
A. Population (persons)	6 788 983	5 090 985	4 048 855	2 038 605	1 560 479	488 468	332 238	208 721	20 557 334
B. Actual revenue (\$m)	512.5	29.6	1 484.1	1 804.0	122.6	24.0	.0	54.7	4 031.5
C. Assessed revenue (\$m) [Row L, Table 7]	644.6	77.5	1 468.4	1 595.1	155.0	39.0	.0	51.9	4 031.5
D. Assessed revenue per capita (\$pc) [D = C/A]	94.94	15.22	362.68	782.47	99.35	79.83	0.00	248.43	196.11
E. Category factor % [E=D/D _{Aust}]	48.41	7.76	184.94	398.99	50.66	40.70	0.00	126.68	100.00

Source: Actual revenue data is GFS data provided by State Treasuries, classified to the 2010 Review category structure by the Commission.