

# **MINING OPERATIONS**

**AUSTRALIA**

EMBARGO: 11.30AM (CANBERRA TIME) THURS 4 NOV 2004

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## **I N Q U I R I E S**

- For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or John Ridley on Sydney (02) 9268 4541.

## NOTES

### ABOUT THIS PUBLICATION

This publication presents the first release of mining industry estimates from the Economic Activity Survey compiled using new statistical infrastructure. Estimates have been compiled on this new basis for each of 2001–02 and 2002–03. Effectively, a new statistical series has commenced with the 2001–02 collection.

The new infrastructure was described in *Information Paper: Improvements in ABS Economic Statistics [Arising from The New Tax System]* (cat. no. 1372.0), released by the ABS on 6 May 2002. The paper described a number of changes to the infrastructure supporting the compilation of ABS economic series. The changes make better use of data available from the taxation system to improve the efficiency, coverage and sample design of the surveys from which these series are sourced.

To facilitate comparisons over time, the effects of the infrastructure changes on the statistics have been measured, by showing data on both bases for 2000–01. For total mining, the estimates of Industry Value Added (IVA) on the new basis are marginally (0.9%) lower than those collected on the old basis, and the estimates of sales and service income are 4.3% higher. More details on the size of these effects can be found in Appendix 2.

Employment estimates (and related ratios) have not been included in this issue, due to methodological problems with deriving them from the taxation system data used. See Explanatory Notes paragraph 35 for details.

Details of Australia's mineral production shown in Chapter 4 are obtained from the various state and Northern Territory departments responsible for the collection of these statistics. See Explanatory Notes paragraphs 36–38 for more detail.

### CANCELLATION OF 2001–02 ISSUE

This publication contains previously unpublished information for the mining industry for both 2001–02 and 2002–03. This is because the scheduled 2001–02 issue of this publication was not produced, due to delays caused by the introduction of the new statistical infrastructure mentioned above.

### INFORMATION AVAILABLE ON-LINE

Information is available on-line via the *Mining Statistics* theme page. To access the theme page, go to the ABS web site home page <<http://abs.gov.au>>. Open the *Industry* link shown under THEMES (located in the left-side navigator "Quick links"), then open the *Mining Statistics* link shown under *Industry*.

Dennis Trewin  
Australian Statistician

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# CHAPTER 1

## SUMMARY, 2000-01 TO 2002-03 .....

### INTRODUCTION

The introduction of the New Tax System (TNTS) has had a number of significant implications for ABS statistics. Most of these changes affected the ABS Business Register (ABSBR) and, therefore, all ABS business collections which draw their populations from it. These changes have resulted in the adoption of a new statistical infrastructure. Because of this, data are presented for 2000-01 on an old and a new basis in Table 1.1.

Data shown on the "old basis" reflect the 2000-01 collection where data were collected from what the ABS refers to as management units. The "new basis" data reflect the new ABN unit / TAU based collections for 2001-02 and 2002-03. The "new basis" data also provide revised estimates for 2000-01, calculated as though the 2000-01 collection had been conducted on the same basis as the 2001-02 and 2002-03 collections.

For more information, see Explanatory Notes paragraphs 5-10 and Appendices 1 and 2. The Glossary provides definitions for terms used.

### DETAILED COMMENTARY

Please see:

- *Financial operations*: Chapter 2, page 9
- *Industry performance measures*: Chapter 3, page 32
- *Mineral production*: Chapter 4, page 36

**1.1****KEY DATA(a), Mining industry subdivision and selected class .....**

| <i>Statistical infrastructure /<br/>Reference year</i> | <i>Sales and<br/>service<br/>income(b)</i> | <i>Wages and<br/>salaries(c)</i> | <i>Industry<br/>value<br/>added</i> | <i>Wages and<br/>salaries to<br/>sales and<br/>service<br/>income</i> |
|--|--|----------------------------------|-------------------------------------|---|
|  | \$m  | \$m                              | \$m                                 | ratio   |
| <b>11 Coal mining</b>                                  |  |                                  |                                     |   |
| Old basis  |  |                                  |                                     |   |
| 2000-01  | 11 610.5                                   | 1 690.0                          | 5 452.7                             | 0.15  |
| New basis  |  |                                  |                                     |   |
| 2000-01(d)   | 11 945.5                                   | 1 582.5                          | 5 560.5                             | 0.13  |
| 2001-02  | 15 456.3                                   | 1 679.9                          | 7 786.9                             | 0.11  |
| 2002-03  | 16 868.2                                   | 1 929.1                          | 8 253.7                             | 0.11  |
| <b>12 Oil and gas extraction</b>                       |  |                                  |                                     |   |
| Old basis  |  |                                  |                                     |   |
| 2000-01  | 18 486.8                                   | 662.9                            | 16 403.2                            | 0.04  |
| New basis  |  |                                  |                                     |   |
| 2000-01(d)   | 19 094.7                                   | 715.2                            | 16 655.3                            | 0.04  |
| 2001-02  | 17 335.6                                   | 706.0                            | 15 125.3                            | 0.04  |
| 2002-03  | 17 225.0                                   | 778.7                            | 15 263.3                            | 0.05  |
| <b>1311 Iron ore mining</b>                            |  |                                  |                                     |   |
| Old basis  |  |                                  |                                     |   |
| 2000-01  | 4 791.4                                    | 412.2                            | 3 072.7                             | 0.09  |
| New basis  |  |                                  |                                     |   |
| 2000-01(d)   | 4 865.8                                    | 410.9                            | 3 075.5                             | 0.08  |
| 2001-02  | 5 461.0                                    | 410.0                            | 4 062.6                             | 0.08  |
| 2002-03  | 5 306.5                                    | 499.6                            | 3 778.9                             | 0.09  |
| <b>1313 Copper ore mining</b>                          |  |                                  |                                     |   |
| Old basis  |  |                                  |                                     |   |
| 2000-01  | 3 356.4                                    | 294.1                            | 1 556.2                             | 0.09  |
| New basis  |  |                                  |                                     |   |
| 2000-01(d)   | 2 522.3                                    | 207.1                            | 1 202.1                             | 0.08  |
| 2001-02  | 2 390.3                                    | 215.5                            | 1 039.3                             | 0.09  |
| 2002-03  | 2 223.2                                    | 210.8                            | 824.6                               | 0.09  |
| <b>1314 Gold ore mining</b>                            |  |                                  |                                     |   |
| Old basis  |  |                                  |                                     |   |
| 2000-01  | 4 653.7                                    | 491.1                            | 1 761.9                             | 0.11  |
| New basis  |  |                                  |                                     |   |
| 2000-01(d)   | 4 396.6                                    | 471.4                            | 1 332.2                             | 0.11  |
| 2001-02  | 4 895.8                                    | 566.4                            | 1 718.8                             | 0.12  |
| 2002-03  | 5 931.9                                    | 670.1                            | 2 717.9                             | 0.11  |
| <b>1315 Mineral sand mining</b>                        |  |                                  |                                     |   |
| Old basis  |  |                                  |                                     |   |
| 2000-01  | 693.0                                      | 77.4                             | 343.9                               | 0.11  |
| New basis  |  |                                  |                                     |   |
| 2000-01(d)   | 829.8                                      | 88.0                             | 421.1                               | 0.11  |
| 2001-02  | 880.5                                      | 107.4                            | 399.5                               | 0.12  |
| 2002-03  | 868.8                                      | 108.1                            | 369.4                               | 0.12  |

(a) These data are from collections based on two successive statistical infrastructures. To assist users, data for 2000-01 are shown on the old basis (which used a management unit based infrastructure), and on the new basis (as bridged ABN unit / TAU estimates). Data for 2001-02 and 2002-03 are ABN unit / TAU estimates. See Explanatory Notes paragraphs 5-10 and Appendices 1 and 2. Value data are shown at current prices and, therefore, do not discount the impact of price changes.

(b) Includes rent, leasing and hiring income.

(c) Excludes the drawings of working proprietors.

(d) See Appendix 2 for more information.

**1.1****KEY DATA(a), Mining industry subdivision and selected class *continued*** .....

| <i>Statistical infrastructure /<br/>Reference year</i>  | <i>Sales and<br/>service<br/>income(b)</i> | <i>Wages and<br/>salaries(c)</i> | <i>Industry<br/>value<br/>added</i> | <i>Wages and<br/>salaries to<br/>sales and<br/>service<br/>income</i> |
|---|--|----------------------------------|-------------------------------------|---|
|   | \$m  | \$m                              | \$m                                 | ratio   |
| <b>1317 Silver-lead-zinc ore mining</b>   |  |                                  |                                     |   |
| Old basis   |  |                                  |                                     |   |
| 2000-01   | 2 144.0                                    | 215.7                            | 911.8                               | 0.10  |
| New basis   |  |                                  |                                     |   |
| 2000-01(d)  | 2 147.6                                    | 216.5                            | 913.6                               | 0.10  |
| 2001-02   | 1 700.3                                    | 249.5                            | 361.3                               | 0.15  |
| 2002-03   | 1 774.9                                    | 216.2                            | 678.7                               | 0.12  |
| <b>1312, 1316 and 1319 Bauxite mining, nickel<br/>ore mining and metal ore mining n.e.c.(e)</b> |  |                                  |                                     |   |
| Old basis   |  |                                  |                                     |   |
| 2000-01   | 2 906.1                                    | 222.3                            | 1 494.0                             | 0.08  |
| New basis   |  |                                  |                                     |   |
| 2000-01(d)  | 2 759.5                                    | 274.6                            | 1 281.2                             | 0.10  |
| 2001-02   | 2 406.7                                    | 265.5                            | 1 145.5                             | 0.11  |
| 2002-03   | 2 749.8                                    | 239.7                            | 1 366.7                             | 0.09  |
| <b>13 Total metal ore mining</b>  |  |                                  |                                     |   |
| Old basis   |  |                                  |                                     |   |
| 2000-01   | 18 544.6                                   | 1 712.8                          | 9 140.5                             | 0.09  |
| New basis   |  |                                  |                                     |   |
| 2000-01(d)  | 17 521.7                                   | 1 668.6                          | 8 225.8                             | 0.10  |
| 2001-02   | 17 734.5                                   | 1 814.3                          | 8 727.1                             | 0.10  |
| 2002-03   | 18 855.1                                   | 1 944.5                          | 9 736.2                             | 0.10  |
| <b>11-13 Total coal mining, oil and gas extraction</b>  |  |                                  |                                     |   |
| Old basis   |  |                                  |                                     |   |
| 2000-01   | 48 641.9                                   | 4 065.7                          | 30 996.4                            | 0.08  |
| New basis   |  |                                  |                                     |   |
| 2000-01(d)  | 48 561.8                                   | 3 966.3                          | 30 441.6                            | 0.08  |
| 2001-02   | 50 526.4                                   | 4 200.2                          | 31 639.3                            | 0.08  |
| 2002-03   | 52 948.3                                   | 4 652.3                          | 33 253.3                            | 0.09  |
| <b>14 Other mining</b>  |  |                                  |                                     |   |
| Old basis   |  |                                  |                                     |   |
| 2000-01   | 1 920.2                                    | 306.8                            | 909.3                               | 0.16  |
| New basis   |  |                                  |                                     |   |
| 2000-01(d)  | 2 671.0                                    | 408.2                            | 1 190.9                             | 0.15  |
| 2001-02   | 3 366.4                                    | 468.4                            | 1 693.5                             | 0.14  |
| 2002-03   | 3 995.5                                    | 479.4                            | 1 940.5                             | 0.12  |

(a) These data are from collections based on two successive statistical infrastructures. To assist users, data for 2000-01 are shown on the old basis (which used a management unit based infrastructure), and on the new basis (as bridged ABN unit / TAU estimates). Data for 2001-02 and 2002-03 are ABN unit / TAU estimates. See Explanatory Notes paragraphs 5-10 and Appendices 1 and 2. Value data are shown at current prices and, therefore, do not discount the impact of price changes.

(b) Includes rent, leasing and hiring income.

(c) Excludes the drawings of working proprietors.

(d) See Appendix 2 for more information.

(e) Data for ANZSIC Class 1312 BAUXITE MINING were recorded as nil for 2000-01 as no management units were classified to this class.

**1.1**KEY DATA(a), Mining industry subdivision and selected class *continued* .....

| <i>Statistical infrastructure /<br/>Reference year</i> | <i>Sales and<br/>service<br/>income(b)</i> | <i>Wages and<br/>salaries(c)</i> | <i>Industry<br/>value<br/>added</i> | <i>Wages and<br/>salaries to<br/>sales and<br/>service<br/>income</i> |
|--|--|----------------------------------|-------------------------------------|---|
|  | \$m  | \$m                              | \$m                                 | ratio   |
| <b>15 Services to mining</b>                           |  |                                  |                                     |   |
| Old basis  |  |                                  |                                     |   |
| 2000-01  | 3 070.1                                    | 961.8                            | 1 060.4                             | 0.31  |
| New basis  |  |                                  |                                     |   |
| 2000-01(d)   | 4 720.8                                    | 1 245.3                          | 1 041.1                             | 0.26  |
| 2001-02  | 5 717.0                                    | 1 427.7                          | 2 119.7                             | 0.25  |
| 2002-03  | 6 529.5                                    | 1 562.4                          | 2 450.7                             | 0.24  |
| <b>11-15 Total mining</b>                              |  |                                  |                                     |   |
| Old basis  |  |                                  |                                     |   |
| 2000-01  | 53 632.2                                   | 5 334.3                          | 32 966.1                            | 0.10  |
| New basis  |  |                                  |                                     |   |
| 2000-01(d)   | 55 953.7                                   | 5 619.8                          | 32 673.6                            | 0.10  |
| 2001-02  | 59 609.8                                   | 6 096.3                          | 35 452.5                            | 0.10  |
| 2002-03  | 63 473.3                                   | 6 694.1                          | 37 644.4                            | 0.11  |

- (a) These data are from collections based on two successive statistical infrastructures. To assist users, data for 2000-01 are shown on the old basis (which used a management unit based infrastructure), and on the new basis (as bridged ABN unit / TAU estimates). Data for 2001-02 and 2002-03 are ABN unit / TAU estimates. See Explanatory Notes paragraphs 5-10 and Appendices 1 and 2. Value data are shown at current prices and, therefore, do not discount the impact of price changes.
- (b) Includes rent, leasing and hiring income.
- (c) Excludes the drawings of working proprietors.
- (d) See Appendix 2 for more information.

## INTRODUCTION

Statistics in this Chapter relate to all subdivisions of the mining industry as classified by the Australian and New Zealand Standard Industrial Classification (ANZSIC). These data are presented at the ABN unit / TAU level and, therefore, can contain data about activities normally associated with industries other than mining. (See Explanatory Notes paragraphs 5–19 for further details). The commentary refers to summary tables 2.1 and 2.2, with more detailed tables following. The Glossary provides definitions for the more specific terms used.

## SUMMARY

Selected indicators for the Australian mining industry showed increases, in current price terms, from 2001–02 to 2002–03. These increases related to sales and service income (up 6.5%), industry value added (up 6.2%), trading profit (up 4.4%), earnings before interest and tax (up 20%), operating profit before tax (up 27%), net worth (up 17%) and net capital expenditure (up 72%). The increases occurred despite lower export prices for a number of mineral commodities, and the negative income effects of a higher Australian dollar between these years.

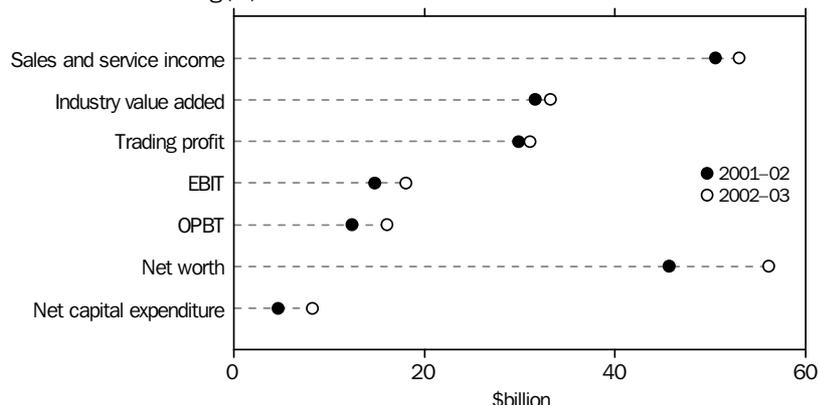
The Minerals Council of Australia's *Minerals Industry Survey Report, 2003* reported that average US dollar world mineral prices rose by 4% during 2002–03. This increase was partly driven by a recovery in commodity demand due to renewed economic activity in Asia, particularly China. However, with the Australian dollar having risen in value by about 12% between 2001–02 and 2002–03, this translated into a 9% fall in the Reserve Bank of Australia's Australian dollar non-rural commodity price index in the same period.

Export earnings for iron ore, nickel, LPG, diamonds and gold were higher in 2002–03, as reported in ABARE's *Australian Mineral Statistics*. These commodities recorded increases in export earnings of between 3% and 27%, reflecting a combination of increases in export volumes and higher average export prices. In particular, US dollar prices for nickel and iron ore increased by 30% and 12% respectively during 2002–03 – largely due to stronger demand for these commodities in Asia. Oil export earnings remained relatively static during 2002–03. While world oil prices increased by more than 20% over the previous financial year, reflecting international concerns over disruption of oil supplies, the increased prices were offset by the stronger Australian dollar and decreased oil production from several Australian oil fields.

Export earnings for black coal fell by 11%. The decrease was largely due to a 16% fall in export earnings for steaming coal, reflecting a 23% decrease in average export price which more than offset a 9% increase in export volume. Export earnings for zinc and copper also fell by 7%. Zinc prices fell 3% in US dollar terms during 2002–03 and by 13% in Australian dollar terms. However, the fall in copper export earnings resulted from an 8% decrease in export volumes. In the gold industry, production costs decreased with considerable corporate restructuring as well as increases in productivity.

SUMMARY *continued*

SELECTED INDICATORS, Coal mining, Oil and gas extraction and Metal ore mining(a)



(a) ANZSIC subdivisions 11-13.

SALES AND SERVICE INCOME

Sales and service income for total mining was \$63.5b in 2002-03, an increase of \$3.9b (6.5%) over the previous year. Sales and service income for the 'core' mining industries of coal mining, oil and gas extraction, and metal ore mining increased by \$2.4b (4.8%) to \$52.9b in 2002-03.

The coal mining industry's sales and service income increased by \$1.4b (9.1%) to \$16.9b despite a decline in coal prices during the 2002-03 financial year, as a significant number of coal producers reported for the year ending December 2002 (see Explanatory Notes paragraph 21 for more details).

The value of sales and service income for the oil and gas extraction industry remained relatively unchanged at \$17.2b. Sales and service income for the metal ore mining industry increased by \$1.1b (6.3%) to \$18.9b, predominantly due to a large increase in the gold ore mining industry. The continued restructuring of the gold ore mining industry led to an increase in the value of sales and service income of \$1.0b (21%) to \$5.9b. Other mining experienced a \$629m (19%) increase to \$4.0b in the value of sales and service income over the previous year. Within the services to mining industries, sales and service income increased by \$813m (14%) to \$6.5b during the reporting period.

INDUSTRY VALUE ADDED

In value terms, national production as measured by IVA increased by \$2.2b (6.2%) to \$37.6b in 2002-03. IVA for the coal mining, oil and gas extraction, and metal ore mining industries increased by \$1.6b (5.1%) to \$33.3b.

Contributing 40.5% to total mining IVA, the oil and gas extraction industry was the most significant contributor to IVA in 2002-03 recording a value of \$15.3b, which was relatively unchanged compared to 2001-02. IVA for the metal ore mining industries increased by \$1.0b (12%) to \$9.7b, and by \$467m (6.0%) to \$8.3b for coal mining.

TRADING PROFIT

Total trading profit for the mining industry in 2002-03 was \$34.7b, an increase of \$1.5b (4.4%) over the previous year. For the coal mining, oil and gas extraction and metal ore mining industries, trading profit rose by \$1.1b (3.8%) to \$31.0b. The coal mining industry recorded an increase in trading profit of \$351m (4.8%) rising to \$7.7b in 2002-03. Trading profit for the oil and gas extraction industry remained relatively

|  |   |
|--|---|
| <p>TRADING PROFIT<br/><i>continued</i></p> | <p>unchanged at \$14.6b. Improved prices for a number of commodities as well as increases in production assisted the metal ore mining industry to achieve an increase in trading profit of \$720m (9.0%) to \$8.7b in 2002–03.</p>  |
| <p>EARNINGS BEFORE INTEREST AND TAX</p>    | <p>EBIT increased by \$3.2b (20%) to \$19.0b for all mining industries. EBIT in the coal mining, oil and gas extraction and metal ore mining industries increased by \$3.2b (22%) to \$18.1b in 2002–03. The coal mining industry reported a decrease in EBIT of \$311m (7.2%) to \$4.0b, while EBIT in the oil and gas extraction industry decreased by \$416m (4.3%) to \$9.3b during 2002–03. Within the metal ore mining industry, EBIT increased by \$4.0b (518%) to \$4.7b, following corporate restructuring after significant asset write-downs in a small number of component industries in 2001–02. In 2002–03, EBIT for other mining was relatively unchanged at \$884m.</p>   |
| <p>OPERATING PROFIT BEFORE TAX</p>         | <p>Overall movements in OPBT essentially mirrored those in EBIT, although they differed for individual industries. OPBT for all mining industries increased by \$3.6b (27%) to \$16.7b in 2002–03. OPBT for the coal mining, oil and gas extraction and metal ore mining industries increased by \$3.6b (29%) to \$16.1b. OPBT for the coal mining industry decreased by \$282m (7.1%) to \$3.7b, while OPBT in the oil and gas extraction industry was relatively unchanged at \$8.7b. The metal ore mining industry recorded an increase in OPBT of \$4.2b to \$3.7b. OPBT for other mining was relatively unchanged at \$752m.</p>   |
| <p>NET CAPITAL EXPENDITURE</p>             | <p>Total net capital expenditure for the mining industry in 2002–03 was \$8.6b, up by \$3.6b (72%) on the previous year. Net capital expenditure for the coal mining, oil and gas extraction and metal ore mining industries increased by \$3.6b (77%) to \$8.3b. Expansion of operations in the coal mining industry contributed to an increase in net capital expenditure of \$688m (65%) to \$1.7b.</p> <p>Renewed spending on several large projects led to increases in net capital expenditure in the metal ore mining industry and the oil and gas extraction industry. Net capital expenditure in the oil and gas extraction industry increased by \$324m (13%) to \$2.8b. Net capital expenditure in the metal ore mining industry increased by \$2.6b (226%) to \$3.7b. Iron ore mining and, to a lesser extent, gold ore mining were the major contributors to the increases in expenditure for the metal ore mining industry.</p> |
| <p>STATE AND TERRITORY SUMMARY</p>         | <p>The following analysis relates to ANZSIC subdivisions 11–14 (COAL MINING, OIL AND GAS EXTRACTION, METAL ORE MINING and OTHER MINING) only. ANZSIC subdivision 15 (SERVICES TO MINING) is excluded from the analysis.</p> <p>Table 2.16 summarises sales and service income and IVA data for each state and territory for 2001–02 and 2002–03. This includes state and/or territory estimates for businesses which operate across more than one state or territory, based on additional data supplied by those businesses (see Explanatory Notes paragraph 31 for more details).</p>  |
| <p><i>Sales and service income</i></p>     | <p>Between 2001–02 and 2002–03, sales and service income increased for New South Wales and the Australian Capital Territory, Queensland, South Australia and Western Australia. Western Australia recorded the largest percentage and absolute increase, rising \$2.9b (13%) to \$24.6b. Queensland recorded a \$1.1b (8.9%) increase to \$13.9b, while New South Wales and the Australian Capital Territory recorded a \$896m (11%) increase to</p>  |

*Sales and service income continued* \$8.9b. Victoria recorded the largest absolute decrease, falling \$1.1b (18%) to \$4.9b, while the Northern Territory recorded the largest percentage decrease, falling 26% (\$796m) to \$2.3b.

In 2002–03, Western Australia accounted for 43% of sales and service income for the total mining sector, followed by Queensland at 24%; New South Wales and the Australian Capital Territory contributed 16% of the total.

*Industry value added* The increased sales and service income in 2002–03 contributed to corresponding increases in IVA. In absolute terms, Western Australia recorded the largest increase, a \$2.3b (15%) rise to \$17.4b. New South Wales and the Australian Capital Territory recorded a \$916m (26%) increase to \$4.5b while Queensland recorded a \$429m (7.0%) increase to \$6.5b. In 2002–03, Western Australia contributed 50% of industry value added for the total mining sector with \$17.4b. Queensland contributed 19%, followed by New South Wales and the Australian Capital Territory at 13%.

## 2.1 SUMMARY DETAILS, Financial performance

| INDUSTRY SUBDIVISION AND SELECTED CLASS |  | Sales<br>and<br>service<br>income(a) | Wages<br>and<br>salaries(b) | Industry<br>value<br>added | Trading<br>profit | Earnings<br>before<br>interest<br>and tax | Operating<br>profit<br>before tax |
|---|--|--------------------------------------|-----------------------------|----------------------------|-------------------|---|-----------------------------------|
| ANZSIC code                             | Description  | \$m                                  | \$m                         | \$m                        | \$m               | \$m                                       | \$m                               |
| 2001-02                                 |  |                                      |                             |                            |                   |   |                                   |
| 11                                      | Coal mining  | 15 456.3                             | 1 679.9                     | 7 786.9                    | 7 375.1           | 4 332.7                                   | 3 942.4                           |
| 12                                      | Oil and gas extraction   | 17 335.6                             | 706.0                       | 15 125.3                   | 14 505.0          | 9 739.3                                   | 8 938.3                           |
| 13                                      | Metal ore mining   |                                      |                             |                            |                   |   |                                   |
| 1311                                    | Iron ore mining  | 5 461.0                              | 410.0                       | 4 062.6                    | 3 888.5           | 2 826.0                                   | 2 458.9                           |
| 1313                                    | Copper ore mining  | 2 390.3                              | 215.5                       | 1 039.3                    | 984.4             | 343.6                                     | 256.1                             |
| 1314                                    | Gold ore mining  | 4 895.8                              | 566.4                       | 1 718.8                    | 1 411.7           | *160.3                                    | **42.6                            |
| 1315                                    | Mineral sand mining  | 880.5                                | 107.4                       | 399.5                      | 387.3             | 237.1                                     | 145.1                             |
| 1317                                    | Silver-lead-zinc ore mining                                      | 1 700.3                              | 249.5                       | 361.3                      | 250.9             | -308.3                                    | -466.9                            |
| 1312, 1316<br>and 1319                  | Bauxite mining, nickel ore mining<br>and metal ore mining n.e.c. | 2 406.7                              | 265.5                       | 1 145.5                    | 1 088.5           | -2 493.3                                  | -2 869.6                          |
|   | <i>Total metal ore mining</i>                                    | <i>17 734.5</i>                      | <i>1 814.3</i>              | <i>8 727.1</i>             | <i>8 011.3</i>    | <i>765.6</i>                              | <i>^-433.9</i>                    |
| 11-13                                   | <i>Total coal mining, oil and gas extraction</i>                 | <i>50 526.4</i>                      | <i>4 200.2</i>              | <i>31 639.3</i>            | <i>29 891.4</i>   | <i>14 837.5</i>                           | <i>12 446.8</i>                   |
| 14                                      | Other mining   | 3 366.4                              | 468.4                       | 1 693.5                    | 1 594.5           | 834.5                                     | 724.7                             |
| 15                                      | Services to mining   | 5 717.0                              | 1 427.7                     | 2 119.7                    | 1 789.2           | **104.6                                   | ** -21.3                          |
| <b>11-15</b>                            | <b>Total mining</b>  | <b>59 609.8</b>                      | <b>6 096.3</b>              | <b>35 452.5</b>            | <b>33 275.1</b>   | <b>15 776.6</b>                           | <b>13 150.2</b>                   |
| 2002-03                                 |  |                                      |                             |                            |                   |   |                                   |
| 11                                      | Coal mining  | 16 868.2                             | 1 929.1                     | 8 253.7                    | 7 726.0           | 4 022.0                                   | 3 660.8                           |
| 12                                      | Oil and gas extraction   | 17 225.0                             | 778.7                       | 15 263.3                   | 14 570.0          | 9 322.9                                   | 8 657.9                           |
| 13                                      | Metal ore mining   |                                      |                             |                            |                   |   |                                   |
| 1311                                    | Iron ore mining  | 5 306.5                              | 499.6                       | 3 778.9                    | 3 526.3           | 2 469.6                                   | 2 140.5                           |
| 1313                                    | Copper ore mining  | 2 223.2                              | 210.8                       | 824.6                      | 763.4             | 275.0                                     | 185.2                             |
| 1314                                    | Gold ore mining  | 5 931.9                              | 670.1                       | 2 717.9                    | 2 185.3           | ^ 753.4                                   | ^ 561.0                           |
| 1315                                    | Mineral sand mining  | 868.8                                | 108.1                       | 369.4                      | 343.5             | 141.3                                     | 96.0                              |
| 1317                                    | Silver-lead-zinc ore mining                                      | 1 774.9                              | 216.2                       | 678.7                      | 604.4             | 20.8                                      | -161.6                            |
| 1312, 1316<br>and 1319                  | Bauxite mining, nickel ore mining<br>and metal ore mining n.e.c. | 2 749.8                              | 239.7                       | 1 366.7                    | 1 308.1           | 1 069.2                                   | 926.4                             |
|   | <i>Total metal ore mining</i>                                    | <i>18 855.1</i>                      | <i>1 944.5</i>              | <i>9 736.2</i>             | <i>8 731.0</i>    | <i>4 729.2</i>                            | <i>3 747.5</i>                    |
| 11-13                                   | <i>Total coal mining, oil and gas extraction</i>                 | <i>52 948.3</i>                      | <i>4 652.3</i>              | <i>33 253.3</i>            | <i>31 027.0</i>   | <i>18 074.1</i>                           | <i>16 066.2</i>                   |
| 14                                      | Other mining   | 3 995.5                              | 479.4                       | 1 940.5                    | 1 819.8           | ^ 883.6                                   | ^ 751.6                           |
| 15                                      | Services to mining   | 6 529.5                              | 1 562.4                     | 2 450.7                    | ^ 1 890.2         | **37.1                                    | ** -81.6                          |
| <b>11-15</b>                            | <b>Total mining</b>  | <b>63 473.3</b>                      | <b>6 694.1</b>              | <b>37 644.4</b>            | <b>34 737.0</b>   | <b>18 994.8</b>                           | <b>16 736.2</b>                   |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Includes rent, leasing and hiring income.

(b) Excludes the drawings of working proprietors.

## 2.2 SUMMARY DETAILS, Financial position and fixed capital expenditure(a) .....

| INDUSTRY SUBDIVISION AND SELECTED CLASS |  | Assets           | Liabilities     | Net worth  | Acquisitions   | Net capital expenditure |
|---|--|------------------|-----------------|--|----------------|-------------------------|
| ANZSIC code                             | Description  | \$m              | \$m             | \$m  | \$m            | \$m                     |
| 2001-02                                 |  |                  |                 |  |                |                         |
| 11                                      | Coal mining  | 22 620.1         | 12 664.2        | 9 955.9  | 1 316.8        | 1 058.7                 |
| 12                                      | Oil and gas extraction   | 43 837.0         | 19 198.3        | 24 638.7   | 2 573.2        | 2 467.1                 |
| 13                                      | Metal ore mining   |                  |                 |  |                |                         |
| 1311                                    | Iron ore mining  | 10 003.1         | 3 372.8         | 6 630.3  | 238.2          | 178.0                   |
| 1313                                    | Copper ore mining  | 4 792.8          | 3 636.1         | 1 156.7  | 123.1          | 119.4                   |
| 1314                                    | Gold ore mining  | 10 920.5         | 6 053.5         | ^ 4 867.0  | 842.4          | ^ 349.1                 |
| 1315                                    | Mineral sand mining  | 2 313.1          | 1 673.2         | 639.8  | 93.8           | 83.9                    |
| 1317                                    | Silver-lead-zinc ore mining  | 3 319.2          | 3 380.3         | -61.1  | 294.3          | 248.2                   |
| 1312, 1316<br>and 1319                  | Bauxite mining, nickel ore mining<br>and metal ore mining n.e.c.                               | 5 063.6          | 7 211.1         | -2 147.4   | 175.5          | 165.6                   |
|   | <i>Total metal ore mining</i>  | 36 412.2         | 25 327.0        | 11 085.2   | 1 767.3        | 1 144.2                 |
| 11-13                                   | <i>Total coal mining, oil and gas extraction</i>   | 102 869.3        | 57 189.5        | 45 679.8   | 5 657.4        | 4 670.0                 |
| 14                                      | Other mining   | 6 707.9          | 3 802.4         | ^ 2 905.5  | ^ 199.9        | ^ 168.1                 |
| 15                                      | Services to mining   | 9 513.0          | ^ 5 965.7       | ^ 3 547.3  | 407.7          | 185.8                   |
| <b>11-15</b>                            | <b>Total mining</b>  | <b>119 090.1</b> | <b>66 957.6</b> | <b>52 132.5</b>  | <b>6 265.0</b> | <b>5 023.9</b>          |
| 2002-03                                 |  |                  |                 |  |                |                         |
| 11                                      | Coal mining  | 25 075.2         | 13 253.0        | 11 822.2   | 2 261.2        | 1 746.2                 |
| 12                                      | Oil and gas extraction   | 47 655.2         | 20 482.5        | 27 172.7   | 3 073.4        | 2 790.7                 |
| 13                                      | Metal ore mining   |                  |                 |  |                |                         |
| 1311                                    | Iron ore mining  | 10 877.4         | 3 923.9         | 6 953.4  | 1 848.1        | 1 829.2                 |
| 1313                                    | Copper ore mining  | 6 138.6          | 3 518.8         | 2 619.9  | 358.7          | 355.3                   |
| 1314                                    | Gold ore mining  | 10 907.1         | 5 157.3         | 5 749.8  | 1 015.3        | 971.4                   |
| 1315                                    | Mineral sand mining  | ^ 2 849.3        | ^ 2 189.6       | 659.7  | 80.7           | 74.3                    |
| 1317                                    | Silver-lead-zinc ore mining  | 3 496.5          | 2 643.9         | 852.6  | 218.8          | 216.7                   |
| 1312, 1316<br>and 1319                  | Bauxite mining, nickel ore mining<br>and metal ore mining n.e.c.                               | 4 459.9          | 4 216.6         | 243.3  | 294.5          | 281.5                   |
|   | <i>Total metal ore mining</i>  | 38 728.8         | 21 650.2        | 17 078.6   | 3 816.1        | 3 728.3                 |
| 11-13                                   | <i>Total coal mining, oil and gas extraction</i>   | 111 459.2        | 55 385.6        | 56 073.5   | 9 150.7        | 8 265.2                 |
| 14                                      | Other mining   | 6 852.1          | 4 227.8         | ^ 2 624.3  | ^ 221.7        | **96.7                  |
| 15                                      | Services to mining   | 7 992.3          | ^ 5 752.5       | *2 239.8   | 572.1          | ^ 276.6                 |
| <b>11-15</b>                            | <b>Total mining</b>  | <b>126 303.6</b> | <b>65 366.0</b> | <b>60 937.6</b>  | <b>9 944.5</b> | <b>8 638.5</b>          |
| ^                                       | estimate has a relative standard error of 10% to less than 25% and should be used with caution |                  | **              | estimate has a relative standard error greater than 50% and is considered too unreliable for general use |                |                         |
| *                                       | estimate has a relative standard error of 25% to 50% and should be used with caution           |                  | (a)             | Includes value of capital work done for own use – reported in tables 2.6-2.8.                            |                |                         |

## 2.3 FINANCIAL PERFORMANCE, Coal mining, and oil and gas extraction .....

|  | <i>Coal<br/>mining</i> | <i>Oil and gas<br/>extraction</i> |
|--|------------------------|-----------------------------------|
|  | \$m                    | \$m                               |
| .....  |                        |                                   |
| 2001-02  |                        |                                   |
| Sales and service income(a)                            | 15 456.3               | 17 335.6                          |
| Less   |                        |                                   |
| Purchases of goods and materials                       | ^ 2 359.9              | 700.8                             |
| Rent, leasing and hiring expenses                      | 175.8                  | 313.5                             |
| Freight and cartage expenses                           | 1 531.4                | 107.5                             |
| Motor vehicle running expenses                         | 18.9                   | 5.7                               |
| Repair and maintenance expenses                        | 788.3                  | 281.1                             |
| Contract mining expenses                               | 1 246.3                | 238.5                             |
| Other contract, subcontract<br>and commission expenses | 654.0                  | 68.1                              |
| Other selected expenses                                | 1 657.3                | 1 206.1                           |
| <i>Purchases and selected expenses</i>                 | 8 431.9                | 2 921.1                           |
| Plus   |                        |                                   |
| Opening inventories                                    | 784.8                  | 442.2                             |
| Less   |                        |                                   |
| Closing inventories                                    | 1 112.1                | 510.0                             |
| <i>Cost of sales</i>                                   | 8 104.6                | 2 853.2                           |
| Plus   |                        |                                   |
| Capitalised purchases                                  | 23.4                   | 22.7                              |
| <b>Trading profit</b>                                  | <b>7 375.1</b>         | <b>14 505.0</b>                   |
| Plus   |                        |                                   |
| Funding from government                                |                        |                                   |
| Diesel fuel rebate                                     | 194.8                  | 2.7                               |
| For other operational costs                            | ^ 4.5                  | 3.2                               |
| Interest income  | 97.0                   | 417.2                             |
| Other income   | 675.8                  | 308.8                             |
| Less   |                        |                                   |
| Wages and salaries(b)                                  | 1 679.9                | 706.0                             |
| Employer contributions into superannuation             | 137.4                  | 54.3                              |
| Workers' compensation premiums/costs                   | 79.7                   | 7.2                               |
| <i>Selected labour costs</i>                           | 1 896.9                | 767.6                             |
| Less   |                        |                                   |
| Depreciation and amortisation                          | 1 216.5                | 2 249.8                           |
| Insurance premiums                                     | 87.6                   | 57.0                              |
| Natural resource royalties expenses                    | 814.3                  | 2 444.9                           |
| Bad and doubtful debts                                 | 1.1                    | 4.2                               |
| Plus   |                        |                                   |
| Capitalised wages and salaries                         | 1.9                    | 26.0                              |
| <b>Earnings before interest and tax</b>                | <b>4 332.7</b>         | <b>9 739.3</b>                    |
| Less   |                        |                                   |
| Interest expenses                                      | 390.3                  | 800.9                             |
| <b>Operating profit before tax</b>                     | <b>3 942.4</b>         | <b>8 938.3</b>                    |

.....  
 ^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Includes rent, leasing and hiring income.

(b) Excludes the drawings of working proprietors.

## 2.3 FINANCIAL PERFORMANCE, Coal mining, and oil and gas extraction *continued* . . . .

|  | <i>Coal<br/>mining</i> | <i>Oil and gas<br/>extraction</i> |
|--|------------------------|-----------------------------------|
|  | \$m                    | \$m                               |
| 2002–03  |                        |                                   |
| Sales and service income(a)                            | 16 868.2               | 17 225.0                          |
| Less   |                        |                                   |
| Purchases of goods and materials                       | 2 389.2                | 497.4                             |
| Rent, leasing and hiring expenses                      | ^ 204.3                | 311.9                             |
| Freight and cartage expenses                           | 1 733.9                | 127.5                             |
| Motor vehicle running expenses                         | 22.7                   | 4.1                               |
| Repair and maintenance expenses                        | 932.8                  | 264.5                             |
| Contract mining expenses                               | 1 629.6                | 237.7                             |
| Other contract, subcontract<br>and commission expenses | 581.3                  | 113.9                             |
| Other selected expenses                                | 1 768.7                | 1 151.2                           |
| <i>Purchases and selected expenses</i>                 | 9 262.4                | 2 708.3                           |
| Plus   |                        |                                   |
| Opening inventories                                    | 1 151.4                | 480.7                             |
| Less   |                        |                                   |
| Closing inventories                                    | 1 197.9                | 506.7                             |
| <i>Cost of sales</i>                                   | 9 215.9                | 2 682.4                           |
| Plus   |                        |                                   |
| Capitalised purchases                                  | 73.7                   | 27.4                              |
| <b>Trading profit</b>                                  | <b>7 726.0</b>         | <b>14 570.0</b>                   |
| Plus   |                        |                                   |
| Funding from government                                |                        |                                   |
| Diesel fuel rebate                                     | 208.2                  | 10.8                              |
| For other operational costs                            | *1.3                   | 0.3                               |
| Interest income  | 77.7                   | 171.2                             |
| Other income   | 832.2                  | 392.7                             |
| Less   |                        |                                   |
| Wages and salaries(b)                                  | 1 929.1                | 778.7                             |
| Employer contributions into superannuation             | 145.9                  | 87.4                              |
| Workers' compensation premiums/costs                   | 114.6                  | 0.5                               |
| <i>Selected labour costs</i>                           | 2 189.6                | 866.6                             |
| Less   |                        |                                   |
| Depreciation and amortisation                          | ^ 1 539.3              | 2 205.8                           |
| Insurance premiums                                     | 144.0                  | 120.1                             |
| Natural resource royalties expenses                    | 1 025.9                | 2 651.2                           |
| Bad and doubtful debts                                 | 0.6                    | 1.8                               |
| Plus   |                        |                                   |
| Capitalised wages and salaries                         | 76.0                   | 23.4                              |
| <b>Earnings before interest and tax</b>                | <b>4 022.0</b>         | <b>9 322.9</b>                    |
| Less   |                        |                                   |
| Interest expenses                                      | 361.2                  | 664.9                             |
| <b>Operating profit before tax</b>                     | <b>3 660.8</b>         | <b>8 657.9</b>                    |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Includes rent, leasing and hiring income.

(b) Excludes the drawings of working proprietors.

## 2.4 FINANCIAL PERFORMANCE, Metal ore mining—industry class .....

|  | <i>Iron<br/>ore<br/>mining</i> | <i>Copper<br/>ore<br/>mining</i> | <i>Gold<br/>ore<br/>mining</i> | <i>Mineral<br/>sand<br/>mining</i> | <i>Silver-<br/>lead-zinc<br/>ore mining</i> | <i>Other(a)</i> | <i>Total<br/>metal ore<br/>mining</i> |
|--|--------------------------------|----------------------------------|--------------------------------|------------------------------------|---|-----------------|---------------------------------------|
|  | \$m                            | \$m                              | \$m                            | \$m                                | \$m   | \$m             | \$m                                   |
| 2001–02  |                                |                                  |                                |                                    |   |                 |                                       |
| Sales and service income(b)                            | 5 461.0                        | 2 390.3                          | 4 895.8                        | 880.5                              | 1 700.3                                     | 2 406.7         | 17 734.5                              |
| Less   |                                |                                  |                                |                                    |   |                 |                                       |
| Purchases of goods and materials                       | 524.6                          | 389.6                            | 1 076.0                        | 177.2                              | 526.0                                       | 496.2           | 3 189.6                               |
| Rent, leasing and hiring expenses                      | 51.0                           | 27.7                             | 62.2                           | 9.2                                | 17.7  | 27.4            | 195.1                                 |
| Freight and cartage expenses                           | 101.2                          | 132.4                            | 168.8                          | 35.3                               | 45.2  | 62.5            | 545.3                                 |
| Motor vehicle running expenses                         | 1.4                            | 1.2                              | 10.2                           | 1.8                                | 2.5   | 2.7             | 19.8                                  |
| Repair and maintenance expenses                        | 230.6                          | 178.4                            | 159.6                          | 20.9                               | 80.1  | 137.7           | 807.3                                 |
| Contract mining expenses                               | 402.2                          | 188.0                            | 888.7                          | 94.0                               | 99.2  | 298.4           | 1 970.4                               |
| Other contract, subcontract<br>and commission expenses | 157.9                          | 102.0                            | 243.6                          | 23.2                               | 67.7  | 124.9           | 719.2                                 |
| Other selected expenses                                | 230.1                          | 373.4                            | 995.8                          | 153.1                              | 645.8                                       | 233.6           | 2 631.7                               |
| <i>Purchases and selected expenses</i>                 | <i>1 698.8</i>                 | <i>1 392.7</i>                   | <i>3 604.9</i>                 | <i>514.6</i>                       | <i>1 484.1</i>                              | <i>1 383.3</i>  | <i>10 078.4</i>                       |
| Plus   |                                |                                  |                                |                                    |   |                 |                                       |
| Opening inventories                                    | 313.1                          | 351.7                            | ^ 543.8                        | 121.2                              | 123.1                                       | 346.7           | 1 799.6                               |
| Less   |                                |                                  |                                |                                    |   |                 |                                       |
| Closing inventories                                    | 433.8                          | 330.1                            | 546.1                          | 141.5                              | 140.1                                       | 400.9           | 1 992.5                               |
| <i>Cost of sales</i>                                   | <i>1 578.1</i>                 | <i>1 414.2</i>                   | <i>3 602.6</i>                 | <i>494.3</i>                       | <i>1 467.1</i>                              | <i>1 329.1</i>  | <i>9 885.4</i>                        |
| Plus   |                                |                                  |                                |                                    |   |                 |                                       |
| Capitalised purchases                                  | 5.7                            | 8.3                              | 118.5                          | 1.1                                | 17.8  | 10.9            | 162.2                                 |
| <b>Trading profit</b>                                  | <b>3 888.5</b>                 | <b>984.4</b>                     | <b>1 411.7</b>                 | <b>387.3</b>                       | <b>250.9</b>                                | <b>1 088.5</b>  | <b>8 011.3</b>                        |
| Plus   |                                |                                  |                                |                                    |   |                 |                                       |
| Funding from government                                |                                |                                  |                                |                                    |   |                 |                                       |
| Diesel fuel rebate                                     | 93.5                           | 26.8                             | 117.2                          | 2.9                                | 29.3  | 23.2            | 292.9                                 |
| For other operational costs                            | ^ 0.5                          | 3.4                              | *2.9                           | 0.6                                | —   | ^ 1.5           | ^ 8.8                                 |
| Interest income  | 163.3                          | 82.5                             | 40.2                           | 59.7                               | 14.4  | 199.9           | 560.0                                 |
| Other income   | -81.4                          | -55.9                            | 262.4                          | 13.5                               | -10.8                                       | -2 992.4        | -2 864.7                              |
| Less   |                                |                                  |                                |                                    |   |                 |                                       |
| Wages and salaries(c)                                  | 410.0                          | 215.5                            | 566.4                          | 107.4                              | 249.5                                       | 265.5           | 1 814.3                               |
| Employer contributions into superannuation             | 17.8                           | 20.5                             | 44.5                           | 14.1                               | 16.9  | 22.6            | 136.5                                 |
| Workers' compensation premiums/costs                   | 2.4                            | 3.4                              | ^ 14.6                         | 2.2                                | 35.9  | 3.0             | 61.5                                  |
| <i>Selected labour costs</i>                           | <i>430.2</i>                   | <i>239.5</i>                     | <i>625.5</i>                   | <i>123.7</i>                       | <i>302.3</i>                                | <i>291.2</i>    | <i>2 012.3</i>                        |
| Less   |                                |                                  |                                |                                    |   |                 |                                       |
| Depreciation and amortisation                          | 446.4                          | 386.2                            | 897.3                          | 77.4                               | 297.6                                       | 359.9           | 2 465.0                               |
| Insurance premiums                                     | 12.5                           | 13.5                             | 34.4                           | 5.7                                | 11.1  | 12.6            | 89.9                                  |
| Natural resource royalties expenses                    | 349.9                          | 61.0                             | 119.8                          | 20.4                               | 42.8  | 150.8           | 744.6                                 |
| Bad and doubtful debts                                 | 0.4                            | 0.1                              | **7.9                          | —                                  | 0.5   | 0.2             | **9.1                                 |
| Plus   |                                |                                  |                                |                                    |   |                 |                                       |
| Capitalised wages and salaries                         | 0.9                            | 2.9                              | **10.9                         | 0.4                                | 62.1  | 0.8             | 78.0                                  |
| <b>Earnings before interest and tax</b>                | <b>2 826.0</b>                 | <b>343.6</b>                     | <b>*160.3</b>                  | <b>237.1</b>                       | <b>-308.3</b>                               | <b>-2 493.3</b> | <b>765.6</b>                          |
| Less   |                                |                                  |                                |                                    |   |                 |                                       |
| Interest expenses                                      | 367.2                          | 87.5                             | 117.8                          | 92.0                               | 158.7                                       | 376.3           | 1 199.5                               |
| <b>Operating profit before tax</b>                     | <b>2 458.9</b>                 | <b>256.1</b>                     | <b>**42.6</b>                  | <b>145.1</b>                       | <b>-466.9</b>                               | <b>-2 869.6</b> | <b>^ -433.9</b>                       |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Comprises BAUXITE MINING, NICKEL ORE MINING and METAL ORE MINING N.E.C.

(b) Includes rent, leasing and hiring income.

(c) Excludes the drawings of working proprietors.

## 2.4 FINANCIAL PERFORMANCE, Metal ore mining—industry class *continued*

|  | Iron<br>ore<br>mining | Copper<br>ore<br>mining | Gold<br>ore<br>mining | Mineral<br>sand<br>mining | Silver-<br>lead-zinc<br>ore mining | Other(a)       | Total<br>metal ore<br>mining |
|--|-----------------------|-------------------------|-----------------------|---------------------------|------------------------------------|----------------|------------------------------|
|  | \$m                   | \$m                     | \$m                   | \$m                       | \$m                                | \$m            | \$m                          |
| 2002–03  |                       |                         |                       |                           |                                    |                |                              |
| Sales and service income(b)                            | 5 306.5               | 2 223.2                 | 5 931.9               | 868.8                     | 1 774.9                            | 2 749.8        | 18 855.1                     |
| Less   |                       |                         |                       |                           |                                    |                |                              |
| Purchases of goods and materials                       | 672.9                 | 607.4                   | 1 101.0               | 170.6                     | 481.6                              | 764.3          | 3 797.8                      |
| Rent, leasing and hiring expenses                      | 58.7                  | 35.0                    | 87.1                  | 12.7                      | 16.5                               | 17.7           | 227.7                        |
| Freight and cartage expenses                           | 114.5                 | 112.2                   | ^ 74.4                | 26.3                      | 86.2                               | 58.6           | 472.2                        |
| Motor vehicle running expenses                         | 18.4                  | 23.6                    | *22.2                 | 2.6                       | 0.3                                | 3.4            | 70.6                         |
| Repair and maintenance expenses                        | 109.6                 | 133.5                   | 172.5                 | 57.7                      | 48.9                               | 79.4           | 601.5                        |
| Contract mining expenses                               | 545.2                 | 209.9                   | 1 028.4               | 93.2                      | 110.9                              | 351.3          | 2 338.9                      |
| Other contract, subcontract<br>and commission expenses | 99.5                  | 126.1                   | 216.8                 | 30.4                      | 81.5                               | 141.6          | 695.9                        |
| Other selected expenses                                | 310.8                 | 218.0                   | 1 111.9               | 94.0                      | 333.6                              | 189.7          | 2 258.0                      |
| <i>Purchases and selected expenses</i>                 | <i>1 929.6</i>        | <i>1 465.8</i>          | <i>3 814.3</i>        | <i>487.4</i>              | <i>1 159.4</i>                     | <i>1 606.1</i> | <i>10 462.7</i>              |
| Plus   |                       |                         |                       |                           |                                    |                |                              |
| Opening inventories                                    | 469.7                 | 332.9                   | 498.1                 | 208.1                     | 137.4                              | 389.0          | 2 035.2                      |
| Less   |                       |                         |                       |                           |                                    |                |                              |
| Closing inventories                                    | 475.2                 | 326.7                   | 527.9                 | 163.0                     | 115.6                              | 406.6          | 2 015.0                      |
| <i>Cost of sales</i>                                   | <i>1 924.1</i>        | <i>1 472.0</i>          | <i>3 784.5</i>        | <i>532.5</i>              | <i>1 181.3</i>                     | <i>1 588.5</i> | <i>10 482.9</i>              |
| Plus   |                       |                         |                       |                           |                                    |                |                              |
| Capitalised purchases                                  | 143.9                 | 12.2                    | 37.9                  | 7.2                       | 10.7                               | 146.9          | 358.8                        |
| <b>Trading profit</b>                                  | <b>3 526.3</b>        | <b>763.4</b>            | <b>2 185.3</b>        | <b>343.5</b>              | <b>604.4</b>                       | <b>1 308.1</b> | <b>8 731.0</b>               |
| Plus   |                       |                         |                       |                           |                                    |                |                              |
| Funding from government                                |                       |                         |                       |                           |                                    |                |                              |
| Diesel fuel rebate                                     | 73.0                  | 30.7                    | ^ 161.4               | 5.0                       | 19.8                               | 20.8           | 310.7                        |
| For other operational costs                            | 8.5                   | **3.6                   | *49.9                 | 1.5                       | —                                  | 2.3            | ^ 65.7                       |
| Interest income  | 151.7                 | 97.5                    | 40.9                  | ^ 2.5                     | 20.0                               | 11.6           | 324.3                        |
| Other income   | -39.6                 | 92.8                    | ^ 284.4               | 34.2                      | 23.8                               | 453.1          | 848.6                        |
| Less   |                       |                         |                       |                           |                                    |                |                              |
| Wages and salaries(c)                                  | 499.6                 | 210.8                   | 670.1                 | 108.1                     | 216.2                              | 239.7          | 1 944.5                      |
| Employer contributions into superannuation             | 21.9                  | 20.8                    | 54.4                  | 13.7                      | 12.1                               | 22.8           | 145.7                        |
| Workers' compensation premiums/costs                   | 1.6                   | 6.1                     | 12.4                  | 2.7                       | 2.4                                | 3.3            | 28.4                         |
| <i>Selected labour costs</i>                           | <i>523.1</i>          | <i>237.6</i>            | <i>736.9</i>          | <i>124.5</i>              | <i>230.7</i>                       | <i>265.9</i>   | <i>2 118.6</i>               |
| Less   |                       |                         |                       |                           |                                    |                |                              |
| Depreciation and amortisation                          | 438.7                 | 392.1                   | 1 055.3               | 89.3                      | 397.3                              | 313.7          | 2 686.5                      |
| Insurance premiums                                     | 21.8                  | 35.7                    | 37.2                  | 4.6                       | 15.9                               | 20.2           | 135.3                        |
| Natural resource royalties expenses                    | 339.8                 | 50.4                    | 134.7                 | 27.4                      | 42.1                               | 127.3          | 721.5                        |
| Bad and doubtful debts                                 | 1.4                   | 0.4                     | 15.6                  | *0.2                      | —                                  | 0.2            | 17.8                         |
| Plus   |                       |                         |                       |                           |                                    |                |                              |
| Capitalised wages and salaries                         | 74.6                  | 3.1                     | *11.1                 | 0.5                       | 38.8                               | 0.5            | 128.5                        |
| <b>Earnings before interest and tax</b>                | <b>2 469.6</b>        | <b>275.0</b>            | <b>^ 753.4</b>        | <b>141.3</b>              | <b>20.8</b>                        | <b>1 069.2</b> | <b>4 729.2</b>               |
| Less   |                       |                         |                       |                           |                                    |                |                              |
| Interest expenses                                      | 329.1                 | 89.8                    | 192.4                 | 45.2                      | 182.5                              | 142.8          | 981.7                        |
| <b>Operating profit before tax</b>                     | <b>2 140.5</b>        | <b>185.2</b>            | <b>^ 561.0</b>        | <b>96.0</b>               | <b>-161.6</b>                      | <b>926.4</b>   | <b>3 747.5</b>               |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Comprises BAUXITE MINING, NICKEL ORE MINING and METAL ORE MINING N.E.C.

(b) Includes rent, leasing and hiring income.

(c) Excludes the drawings of working proprietors.

**2.5**

## FINANCIAL PERFORMANCE, Other, services to, and total mining .....

|  | <i>Total<br/>coal mining,<br/>oil and gas<br/>extraction and<br/>metal ore mining</i> | <i>Other<br/>mining</i> | <i>Services<br/>to<br/>mining</i> | <i>Total<br/>mining</i> |
|--|---|-------------------------|-----------------------------------|-------------------------|
|  | \$m   | \$m                     | \$m                               | \$m                     |
| .....  |   |                         |                                   |                         |
| 2001-02  |   |                         |                                   |                         |
| Sales and service income(a)                            | 50 526.4  | 3 366.4                 | 5 717.0                           | 59 609.8                |
| Less   |   |                         |                                   |                         |
| Purchases of goods and materials                       | 6 250.3   | 709.3                   | 1 398.9                           | 8 358.5                 |
| Rent, leasing and hiring expenses                      | 684.3   | 71.0                    | 297.8                             | 1 053.1                 |
| Freight and cartage expenses                           | 2 184.1   | 329.5                   | *122.9                            | 2 636.4                 |
| Motor vehicle running expenses                         | 44.4  | ^ 42.4                  | 76.1                              | 162.9                   |
| Repair and maintenance expenses                        | 1 876.6   | 195.6                   | 395.7                             | 2 467.9                 |
| Contract mining expenses                               | 3 455.3   | ^ 89.4                  | 185.4                             | 3 730.0                 |
| Other contract, subcontract<br>and commission expenses | 1 441.3   | ^ 83.0                  | 412.4                             | 1 936.7                 |
| Other selected expenses                                | 5 495.1   | 375.6                   | 1 045.5                           | 6 916.2                 |
| <i>Purchases and selected expenses</i>                 | <i>21 431.4</i>   | <i>1 895.9</i>          | <i>3 934.6</i>                    | <i>27 261.8</i>         |
| Plus   |   |                         |                                   |                         |
| Opening inventories                                    | 3 026.6   | 251.4                   | ^ 334.9                           | 3 612.8                 |
| Less   |   |                         |                                   |                         |
| Closing inventories                                    | 3 614.7   | 371.9                   | ^ 337.2                           | 4 323.7                 |
| <i>Cost of sales</i>                                   | <i>20 843.3</i>   | <i>1 775.3</i>          | <i>3 932.3</i>                    | <i>26 550.9</i>         |
| Plus   |   |                         |                                   |                         |
| Capitalised purchases                                  | 208.2   | *3.5                    | *4.5                              | 216.2                   |
| <b>Trading profit</b>                                  | <b>29 891.4</b>   | <b>1 594.5</b>          | <b>1 789.2</b>                    | <b>33 275.1</b>         |
| Plus   |   |                         |                                   |                         |
| Funding from government                                |   |                         |                                   |                         |
| Diesel fuel rebate                                     | 490.4   | 35.7                    | 90.7                              | 616.8                   |
| For other operational costs                            | 16.6  | 4.3                     | *11.2                             | ^ 32.1                  |
| Interest income  | 1 074.2   | 39.8                    | 71.7                              | 1 185.7                 |
| Other income   | -1 880.1  | ^ 105.6                 | *292.8                            | -1 481.8                |
| Less   |   |                         |                                   |                         |
| Wages and salaries(b)                                  | 4 200.2   | 468.4                   | 1 427.7                           | 6 096.3                 |
| Employer contributions into superannuation             | 328.2   | 40.4                    | 86.4                              | 455.0                   |
| Workers' compensation premiums/costs                   | 148.3   | ^ 14.8                  | 37.3                              | 200.4                   |
| <i>Selected labour costs</i>                           | <i>4 676.8</i>  | <i>523.6</i>            | <i>1 551.4</i>                    | <i>6 751.8</i>          |
| Less   |   |                         |                                   |                         |
| Depreciation and amortisation                          | 5 931.3   | 287.8                   | 486.2                             | 6 705.3                 |
| Insurance premiums                                     | 234.5   | 21.7                    | ^ 56.0                            | 312.1                   |
| Natural resource royalties expenses                    | 4 003.8   | 102.9                   | *31.0                             | 4 137.7                 |
| Bad and doubtful debts                                 | *14.4   | ^ 10.1                  | 31.4                              | ^ 55.9                  |
| Plus   |   |                         |                                   |                         |
| Capitalised wages and salaries                         | 105.9   | **0.6                   | **5.0                             | 111.5                   |
| <b>Earnings before interest and tax</b>                | <b>14 837.5</b>   | <b>834.5</b>            | <b>**104.6</b>                    | <b>15 776.6</b>         |
| Less   |   |                         |                                   |                         |
| Interest expenses                                      | 2 390.7   | 109.8                   | ^ 126.0                           | 2 626.4                 |
| <b>Operating profit before tax</b>                     | <b>12 446.8</b>   | <b>724.7</b>            | <b>** -21.3</b>                   | <b>13 150.2</b>         |

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\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Includes rent, leasing and hiring income.

(b) Excludes the drawings of working proprietors.

**2.5**FINANCIAL PERFORMANCE, Other, services to, and total mining *continued* .....

|  | <i>Total<br/>coal mining,<br/>oil and gas<br/>extraction and<br/>metal ore mining</i> | <i>Other<br/>mining</i> | <i>Services<br/>to<br/>mining</i> | <i>Total<br/>mining</i> |
|--|---|-------------------------|-----------------------------------|-------------------------|
|  | \$m   | \$m                     | \$m                               | \$m                     |
| .....  |   |                         |                                   |                         |
| 2002–03  |   |                         |                                   |                         |
| Sales and service income(a)                            | 52 948.3  | 3 995.5                 | 6 529.5                           | 63 473.3                |
| Less   |   |                         |                                   |                         |
| Purchases of goods and materials                       | 6 684.4   | 815.0                   | *1 540.8                          | 9 040.2                 |
| Rent, leasing and hiring expenses                      | 744.0   | 91.4                    | ^ 388.9                           | 1 224.2                 |
| Freight and cartage expenses                           | 2 333.5   | 254.5                   | **116.5                           | 2 704.5                 |
| Motor vehicle running expenses                         | 97.4  | ^ 35.6                  | ^ 59.8                            | 192.8                   |
| Repair and maintenance expenses                        | 1 798.9   | 186.8                   | ^ 405.5                           | 2 391.2                 |
| Contract mining expenses                               | 4 206.2   | ^ 88.7                  | *346.7                            | 4 641.7                 |
| Other contract, subcontract<br>and commission expenses | 1 391.1   | ^ 123.6                 | *284.0                            | 1 798.7                 |
| Other selected expenses                                | 5 177.9   | 608.0                   | 1 526.7                           | 7 312.5                 |
| <i>Purchases and selected expenses</i>                 | 22 433.4  | 2 203.6                 | ^ 4 668.9                         | 29 305.9                |
| Plus   |   |                         |                                   |                         |
| Opening inventories                                    | 3 667.3   | 377.8                   | 253.0                             | 4 298.1                 |
| Less   |   |                         |                                   |                         |
| Closing inventories                                    | 3 719.6   | 394.9                   | *255.3                            | 4 369.7                 |
| <i>Cost of sales</i>                                   | 22 381.2  | 2 186.6                 | ^ 4 666.6                         | 29 234.3                |
| Plus   |   |                         |                                   |                         |
| Capitalised purchases                                  | 459.9   | ^ 10.9                  | *27.3                             | 498.0                   |
| <b>Trading profit</b>                                  | <b>31 027.0</b>   | <b>1 819.8</b>          | <b>^ 1 890.2</b>                  | <b>34 737.0</b>         |
| Plus   |   |                         |                                   |                         |
| Funding from government                                |   |                         |                                   |                         |
| Diesel fuel rebate                                     | 529.7   | 41.1                    | ^ 127.1                           | 697.9                   |
| For other operational costs                            | ^ 67.3  | 3.9                     | **12.1                            | ^ 83.2                  |
| Interest income  | 573.2   | 24.5                    | 140.5                             | 738.3                   |
| Other income   | 2 073.5   | **90.7                  | ^ 217.1                           | 2 381.3                 |
| Less   |   |                         |                                   |                         |
| Wages and salaries(b)                                  | 4 652.3   | 479.4                   | 1 562.4                           | 6 694.1                 |
| Employer contributions into superannuation             | 379.1   | 46.7                    | 113.1                             | 538.9                   |
| Workers' compensation premiums/costs                   | 143.5   | 16.9                    | 48.2                              | 208.6                   |
| <i>Selected labour costs</i>                           | 5 174.9   | 543.0                   | 1 723.7                           | 7 441.6                 |
| Less   |   |                         |                                   |                         |
| Depreciation and amortisation                          | 6 431.6   | 392.2                   | ^ 582.0                           | 7 405.9                 |
| Insurance premiums                                     | 399.3   | 27.2                    | 49.6                              | 476.2                   |
| Natural resource royalties expenses                    | 4 398.6   | 136.7                   | ^ 10.6                            | 4 545.8                 |
| Bad and doubtful debts                                 | 20.2  | **-2.1                  | *12.7                             | 30.8                    |
| Plus   |   |                         |                                   |                         |
| Capitalised wages and salaries                         | 227.9   | *0.8                    | *28.7                             | 257.4                   |
| <b>Earnings before interest and tax</b>                | <b>18 074.1</b>   | <b>^ 883.6</b>          | <b>**37.1</b>                     | <b>18 994.8</b>         |
| Less   |   |                         |                                   |                         |
| Interest expenses                                      | 2 007.8   | 132.1                   | ^ 118.6                           | 2 258.5                 |
| <b>Operating profit before tax</b>                     | <b>16 066.2</b>   | <b>^ 751.6</b>          | <b>**–81.6</b>                    | <b>16 736.2</b>         |
| .....  |   |                         |                                   |                         |

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\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Includes rent, leasing and hiring income.

(b) Excludes the drawings of working proprietors.

## 2.6 INDUSTRY VALUE ADDED, Coal mining, and oil and gas extraction .....

|                               | <i>Coal<br/>mining</i> | <i>Oil and gas<br/>extraction</i> |
|-------------------------------|------------------------|-----------------------------------|
|                               | \$m                    | \$m                               |
| .....                         |                        |                                   |
| 2001-02                       |                        |                                   |
| Sales and service income(a)   | 15 456.3               | 17 335.6                          |
| Plus                          |                        |                                   |
| Funding from government       |                        |                                   |
| Diesel fuel rebate            | 194.8                  | 2.7                               |
| For other operational costs   | ^ 4.5                  | 3.2                               |
| Capital work done for own use | 25.3                   | 48.6                              |
| Change in inventories         | 327.3                  | 67.8                              |
| Less                          |                        |                                   |
| Intermediate input expenses   | 8 197.9                | 2 310.0                           |
| Capitalised purchases         | 23.4                   | 22.7                              |
| <b>Industry value added</b>   | <b>7 786.9</b>         | <b>15 125.3</b>                   |

|                               |                |                 |
|-------------------------------|----------------|-----------------|
| .....                         |                |                 |
| 2002-03                       |                |                 |
| Sales and service income(a)   | 16 868.2       | 17 225.0        |
| Plus                          |                |                 |
| Funding from government       |                |                 |
| Diesel fuel rebate            | 208.2          | 10.8            |
| For other operational costs   | *1.3           | 0.3             |
| Capital work done for own use | 149.7          | 50.8            |
| Change in inventories         | 46.5           | 26.0            |
| Less                          |                |                 |
| Intermediate input expenses   | 8 946.4        | 2 022.2         |
| Capitalised purchases         | 73.7           | 27.4            |
| <b>Industry value added</b>   | <b>8 253.7</b> | <b>15 263.3</b> |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Includes rent, leasing and hiring income.

## 2.7 INDUSTRY VALUE ADDED, Metal ore mining—industry class

|                               | <i>Iron<br/>ore<br/>mining</i> | <i>Copper<br/>ore<br/>mining</i> | <i>Gold<br/>ore<br/>mining</i> | <i>Mineral<br/>sand<br/>mining</i> | <i>Silver-<br/>lead-zinc<br/>ore mining</i> | <i>Other(a)</i> | <i>Total<br/>metal ore<br/>mining</i> |
|-------------------------------|--------------------------------|----------------------------------|--------------------------------|------------------------------------|---|-----------------|---------------------------------------|
|                               | \$m                            | \$m                              | \$m                            | \$m                                | \$m   | \$m             | \$m                                   |
| 2001–02                       |                                |                                  |                                |                                    |   |                 |                                       |
| Sales and service income(b)   | 5 461.0                        | 2 390.3                          | 4 895.8                        | 880.5                              | 1 700.3                                     | 2 406.7         | 17 734.5                              |
| Plus                          |                                |                                  |                                |                                    |   |                 |                                       |
| Funding from government       |                                |                                  |                                |                                    |   |                 |                                       |
| Diesel fuel rebate            | 93.5                           | 26.8                             | 117.2                          | 2.9                                | 29.3  | 23.2            | 292.9                                 |
| For other operational costs   | ^ 0.5                          | 3.4                              | *2.9                           | 0.6                                | —   | ^ 1.5           | ^ 8.8                                 |
| Capital work done for own use | 6.6                            | 11.2                             | 129.3                          | 1.5                                | 79.9  | 11.7            | 240.2                                 |
| Change in inventories         | 120.7                          | -21.6                            | 2.3                            | 20.3                               | 17.0  | 54.2            | 192.9                                 |
| Less                          |                                |                                  |                                |                                    |   |                 |                                       |
| Intermediate input expenses   | 1 614.0                        | 1 362.5                          | 3 310.2                        | 505.2                              | 1 447.3                                     | 1 340.9         | 9 580.1                               |
| Capitalised purchases         | 5.7                            | 8.3                              | 118.5                          | 1.1                                | 17.8  | 10.9            | 162.2                                 |
| <b>Industry value added</b>   | <b>4 062.6</b>                 | <b>1 039.3</b>                   | <b>1 718.8</b>                 | <b>399.5</b>                       | <b>361.3</b>                                | <b>1 145.5</b>  | <b>8 727.1</b>                        |
| 2002–03                       |                                |                                  |                                |                                    |   |                 |                                       |
| Sales and service income(b)   | 5 306.5                        | 2 223.2                          | 5 931.9                        | 868.8                              | 1 774.9                                     | 2 749.8         | 18 855.1                              |
| Plus                          |                                |                                  |                                |                                    |   |                 |                                       |
| Funding from government       |                                |                                  |                                |                                    |   |                 |                                       |
| Diesel fuel rebate            | 73.0                           | 30.7                             | ^ 161.4                        | 5.0                                | 19.8  | 20.8            | 310.7                                 |
| For other operational costs   | 8.5                            | **3.6                            | *49.9                          | 1.5                                | —   | 2.3             | ^ 65.7                                |
| Capital work done for own use | 218.5                          | 15.3                             | 49.0                           | 7.6                                | 49.6  | 147.4           | 487.3                                 |
| Change in inventories         | 5.5                            | -6.2                             | 29.8                           | -45.1                              | -21.8                                       | 17.6            | -20.2                                 |
| Less                          |                                |                                  |                                |                                    |   |                 |                                       |
| Intermediate input expenses   | 1 689.1                        | 1 429.8                          | 3 466.2                        | 461.2                              | 1 132.9                                     | 1 424.3         | 9 603.6                               |
| Capitalised purchases         | 143.9                          | 12.2                             | 37.9                           | 7.2                                | 10.7  | 146.9           | 358.8                                 |
| <b>Industry value added</b>   | <b>3 778.9</b>                 | <b>824.6</b>                     | <b>2 717.9</b>                 | <b>369.4</b>                       | <b>678.7</b>                                | <b>1 366.7</b>  | <b>9 736.2</b>                        |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Comprises BAUXITE MINING, NICKEL ORE MINING and METAL ORE MINING N.E.C.

(b) Includes rent, leasing and hiring income.

**2.8****INDUSTRY VALUE ADDED, Other, services to, and total mining** .....

|                               | <i>Total<br/>coal mining,<br/>oil and gas<br/>extraction and<br/>metal ore mining</i> | <i>Other<br/>mining</i> | <i>Services<br/>to<br/>mining</i> | <i>Total<br/>mining</i> |
|-------------------------------|---|-------------------------|-----------------------------------|-------------------------|
|                               | \$m   | \$m                     | \$m                               | \$m                     |
| .....                         |   |                         |                                   |                         |
| 2001-02                       |   |                         |                                   |                         |
| Sales and service income(a)   | 50 526.4  | 3 366.4                 | 5 717.0                           | 59 609.8                |
| Plus                          |   |                         |                                   |                         |
| Funding from government       |   |                         |                                   |                         |
| Diesel fuel rebate            | 490.4   | 35.7                    | 90.7                              | 616.8                   |
| For other operational costs   | 16.6  | 4.3                     | *11.2                             | ^ 32.1                  |
| Capital work done for own use | 314.1   | *4.1                    | *9.5                              | 327.7                   |
| Change in inventories         | 588.1   | 120.5                   | 2.3                               | 710.9                   |
| Less                          |   |                         |                                   |                         |
| Intermediate input expenses   | 20 088.0  | 1 834.0                 | 3 706.6                           | 25 628.6                |
| Capitalised purchases         | 208.2   | *3.5                    | *4.5                              | 216.2                   |
| <b>Industry value added</b>   | <b>31 639.3</b>   | <b>1 693.5</b>          | <b>2 119.7</b>                    | <b>35 452.5</b>         |
| .....                         |   |                         |                                   |                         |
| 2002-03                       |   |                         |                                   |                         |
| Sales and service income(a)   | 52 948.3  | 3 995.5                 | 6 529.5                           | 63 473.3                |
| Plus                          |   |                         |                                   |                         |
| Funding from government       |   |                         |                                   |                         |
| Diesel fuel rebate            | 529.7   | 41.1                    | ^ 127.1                           | 697.9                   |
| For other operational costs   | ^ 67.3  | 3.9                     | **12.1                            | ^ 83.2                  |
| Capital work done for own use | 687.8   | ^ 11.6                  | *56.0                             | 755.4                   |
| Change in inventories         | 52.3  | 17.1                    | 2.3                               | 71.6                    |
| Less                          |   |                         |                                   |                         |
| Intermediate input expenses   | 20 572.2  | 2 117.7                 | ^ 4 249.0                         | 26 938.9                |
| Capitalised purchases         | 459.9   | ^ 10.9                  | *27.3                             | 498.0                   |
| <b>Industry value added</b>   | <b>33 253.3</b>   | <b>1 940.5</b>          | <b>2 450.7</b>                    | <b>37 644.4</b>         |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Includes rent, leasing and hiring income.

**2.9** FINANCIAL POSITION, Coal mining, and oil and gas extraction .....

|                                   | <i>Coal<br/>mining</i> | <i>Oil and gas<br/>extraction</i> |
|-----------------------------------|------------------------|-----------------------------------|
|                                   | \$m                    | \$m                               |
| .....                             |                        |                                   |
| 2001-02                           |                        |                                   |
| Assets                            |                        |                                   |
| Current assets                    | 5 623.1                | 6 352.2                           |
| Non-current assets                | 16 997.0               | 37 484.8                          |
| <i>Total value of assets</i>      | <i>22 620.1</i>        | <i>43 837.0</i>                   |
| Liabilities                       |                        |                                   |
| Current liabilities               | 4 946.3                | 5 390.3                           |
| Non-current liabilities           | 7 717.9                | 13 808.0                          |
| <i>Total value of liabilities</i> | <i>12 664.2</i>        | <i>19 198.3</i>                   |
| <b>Net worth</b>                  | <b>9 955.9</b>         | <b>24 638.7</b>                   |
| .....                             |                        |                                   |
| 2002-03                           |                        |                                   |
| Assets                            |                        |                                   |
| Current assets                    | 5 702.8                | 6 672.9                           |
| Non-current assets                | 19 372.4               | 40 982.4                          |
| <i>Total value of assets</i>      | <i>25 075.2</i>        | <i>47 655.2</i>                   |
| Liabilities                       |                        |                                   |
| Current liabilities               | 5 822.1                | 5 271.9                           |
| Non-current liabilities           | 7 430.9                | 15 210.6                          |
| <i>Total value of liabilities</i> | <i>13 253.0</i>        | <i>20 482.5</i>                   |
| <b>Net worth</b>                  | <b>11 822.2</b>        | <b>27 172.7</b>                   |
| .....                             |                        |                                   |

## 2.10 FINANCIAL POSITION, Metal ore mining—industry class .....

|                                   | <i>Iron<br/>ore<br/>mining</i> | <i>Copper<br/>ore<br/>mining</i> | <i>Gold<br/>ore<br/>mining</i> | <i>Mineral<br/>sand<br/>mining</i> | <i>Silver-<br/>lead-zinc<br/>ore mining</i> | <i>Other(a)</i> | <i>Total<br/>metal ore<br/>mining</i> |
|-----------------------------------|--------------------------------|----------------------------------|--------------------------------|------------------------------------|---|-----------------|---------------------------------------|
|                                   | \$m                            | \$m                              | \$m                            | \$m                                | \$m   | \$m             | \$m                                   |
| 2001-02                           |                                |                                  |                                |                                    |   |                 |                                       |
| <b>Assets</b>                     |                                |                                  |                                |                                    |   |                 |                                       |
| Current assets                    | 3 393.8                        | 708.7                            | 2 250.3                        | 983.7                              | 521.1                                       | 1 156.1         | 9 013.6                               |
| Non-current assets                | 6 609.3                        | 4 084.1                          | 8 670.2                        | 1 329.4                            | 2 798.1                                     | 3 907.5         | 27 398.6                              |
| <i>Total value of assets</i>      | <i>10 003.1</i>                | <i>4 792.8</i>                   | <i>10 920.5</i>                | <i>2 313.1</i>                     | <i>3 319.2</i>                              | <i>5 063.6</i>  | <i>36 412.2</i>                       |
| <b>Liabilities</b>                |                                |                                  |                                |                                    |   |                 |                                       |
| Current liabilities               | 1 293.7                        | 1 521.3                          | 1 935.4                        | 900.4                              | 948.1                                       | 3 491.2         | 10 090.0                              |
| Non-current liabilities           | 2 079.1                        | 2 114.8                          | 4 118.1                        | 772.8                              | 2 432.3                                     | 3 719.9         | 15 237.0                              |
| <i>Total value of liabilities</i> | <i>3 372.8</i>                 | <i>3 636.1</i>                   | <i>6 053.5</i>                 | <i>1 673.2</i>                     | <i>3 380.3</i>                              | <i>7 211.1</i>  | <i>25 327.0</i>                       |
| <b>Net worth</b>                  | <b>6 630.3</b>                 | <b>1 156.7</b>                   | <b>^ 4 867.0</b>               | <b>639.8</b>                       | <b>-61.1</b>                                | <b>-2 147.4</b> | <b>11 085.2</b>                       |
| 2002-03                           |                                |                                  |                                |                                    |   |                 |                                       |
| <b>Assets</b>                     |                                |                                  |                                |                                    |   |                 |                                       |
| Current assets                    | 3 868.2                        | 794.8                            | 2 155.8                        | *965.3                             | 340.3                                       | 1 197.2         | 9 321.6                               |
| Non-current assets                | 7 009.2                        | 5 343.9                          | 8 751.3                        | 1 884.0                            | 3 156.2                                     | 3 262.8         | 29 407.2                              |
| <i>Total value of assets</i>      | <i>10 877.4</i>                | <i>6 138.6</i>                   | <i>10 907.1</i>                | <i>^ 2 849.3</i>                   | <i>3 496.5</i>                              | <i>4 459.9</i>  | <i>38 728.8</i>                       |
| <b>Liabilities</b>                |                                |                                  |                                |                                    |   |                 |                                       |
| Current liabilities               | 1 614.9                        | 1 465.9                          | 1 712.5                        | ^ 1 037.2                          | 1 520.6                                     | 1 941.2         | 9 292.3                               |
| Non-current liabilities           | 2 309.0                        | 2 052.9                          | 3 444.8                        | 1 152.4                            | 1 123.3                                     | 2 275.4         | 12 357.8                              |
| <i>Total value of liabilities</i> | <i>3 923.9</i>                 | <i>3 518.8</i>                   | <i>5 157.3</i>                 | <i>^ 2 189.6</i>                   | <i>2 643.9</i>                              | <i>4 216.6</i>  | <i>21 650.2</i>                       |
| <b>Net worth</b>                  | <b>6 953.4</b>                 | <b>2 619.9</b>                   | <b>5 749.8</b>                 | <b>659.7</b>                       | <b>852.6</b>                                | <b>243.3</b>    | <b>17 078.6</b>                       |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Comprises BAUXITE MINING, NICKEL ORE MINING and METAL ORE MINING N.E.C.

## 2.11 FINANCIAL POSITION, Other, services to, and total mining .....

|                                   | <i>Total<br/>coal mining,<br/>oil and gas<br/>extraction and<br/>metal ore mining</i> | <i>Other<br/>mining</i> | <i>Services<br/>to<br/>mining</i> | <i>Total<br/>mining</i> |
|-----------------------------------|---|-------------------------|-----------------------------------|-------------------------|
|                                   | \$m   | \$m                     | \$m                               | \$m                     |
| .....                             |   |                         |                                   |                         |
| 2001-02                           |   |                         |                                   |                         |
| Assets                            |   |                         |                                   |                         |
| Current assets                    | 20 988.9  | 2 061.1                 | 3 272.5                           | 26 322.4                |
| Non-current assets                | 81 880.4  | 4 646.8                 | ^ 6 240.5                         | 92 767.7                |
| <i>Total value of assets</i>      | 102 869.3   | 6 707.9                 | 9 513.0                           | 119 090.1               |
| Liabilities                       |   |                         |                                   |                         |
| Current liabilities               | 20 426.7  | 1 016.9                 | ^ 2 370.0                         | 23 813.6                |
| Non-current liabilities           | 36 762.8  | 2 785.5                 | ^ 3 595.6                         | 43 144.0                |
| <i>Total value of liabilities</i> | 57 189.5  | 3 802.4                 | ^ 5 965.7                         | 66 957.6                |
| <b>Net worth</b>                  | <b>45 679.8</b>   | <b>^ 2 905.5</b>        | <b>^ 3 547.3</b>                  | <b>52 132.5</b>         |
| .....                             |   |                         |                                   |                         |
| 2002-03                           |   |                         |                                   |                         |
| Assets                            |   |                         |                                   |                         |
| Current assets                    | 21 697.3  | 2 260.7                 | 2 555.8                           | 26 513.7                |
| Non-current assets                | 89 761.9  | 4 591.4                 | ^ 5 436.6                         | 99 789.9                |
| <i>Total value of assets</i>      | 111 459.2   | 6 852.1                 | 7 992.3                           | 126 303.6               |
| Liabilities                       |   |                         |                                   |                         |
| Current liabilities               | 20 386.3  | 1 315.2                 | 2 334.2                           | 24 035.6                |
| Non-current liabilities           | 34 999.4  | 2 912.7                 | ^ 3 418.3                         | 41 330.3                |
| <i>Total value of liabilities</i> | 55 385.6  | 4 227.8                 | ^ 5 752.5                         | 65 366.0                |
| <b>Net worth</b>                  | <b>56 073.5</b>   | <b>^ 2 624.3</b>        | <b>* 2 239.8</b>                  | <b>60 937.6</b>         |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

## 2.12 FIXED CAPITAL EXPENDITURE (a), Coal mining, and oil and gas extraction .....

|   | <i>Coal<br/>mining</i> | <i>Oil and gas<br/>extraction</i> |
|---|------------------------|-----------------------------------|
|   | \$m                    | \$m                               |
| .....                                     |                        |                                   |
| 2001-02                                   |                        |                                   |
| Capital expenditure on                    |                        |                                   |
| Land                                      | 31.7                   | 0.3                               |
| Dwellings, other buildings and structures | 162.9                  | 1 989.3                           |
| Plant, machinery and equipment            | 1 122.1                | 583.6                             |
| <i>Total acquisitions</i>                 | <i>1 316.8</i>         | <i>2 573.2</i>                    |
| Disposal of assets                        | 258.1                  | 106.1                             |
| <b>Net capital expenditure</b>            | <b>1 058.7</b>         | <b>2 467.1</b>                    |
| .....                                     |                        |                                   |
| 2002-03                                   |                        |                                   |
| Capital expenditure on                    |                        |                                   |
| Land                                      | ^ 46.9                 | 2.9                               |
| Dwellings, other buildings and structures | 615.6                  | 2 567.1                           |
| Plant, machinery and equipment            | 1 598.7                | 503.5                             |
| <i>Total acquisitions</i>                 | <i>2 261.2</i>         | <i>3 073.4</i>                    |
| Disposal of assets                        | 514.9                  | 282.8                             |
| <b>Net capital expenditure</b>            | <b>1 746.2</b>         | <b>2 790.7</b>                    |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Items listed include value of capital work done for own use – reported in table 2.6.

## 2.13 FIXED CAPITAL EXPENDITURE(a), Metal ore mining—Industry class .....

|   | <i>Iron<br/>ore<br/>mining</i> | <i>Copper<br/>ore<br/>mining</i> | <i>Gold<br/>ore<br/>mining</i> | <i>Mineral<br/>sand<br/>mining</i> | <i>Silver-<br/>lead-zinc<br/>ore mining</i> | <i>Other(b)</i> | <i>Total<br/>metal ore<br/>mining</i> |
|---|--------------------------------|----------------------------------|--------------------------------|------------------------------------|---|-----------------|---------------------------------------|
|   | \$m                            | \$m                              | \$m                            | \$m                                | \$m   | \$m             | \$m                                   |
| 2001-02                                   |                                |                                  |                                |                                    |   |                 |                                       |
| Capital expenditure on                    |                                |                                  |                                |                                    |   |                 |                                       |
| Land                                      | 1.2                            | *0.3                             | 15.2                           | 7.4                                | —   | 3.5             | 27.6                                  |
| Dwellings, other buildings and structures | 85.0                           | 61.6                             | 217.3                          | 45.5                               | 164.3                                       | 69.2            | 643.0                                 |
| Plant, machinery and equipment            | 152.0                          | 61.2                             | ^ 609.9                        | 40.8                               | 130.0                                       | 102.8           | 1 096.7                               |
| <i>Total acquisitions</i>                 | 238.2                          | 123.1                            | 842.4                          | 93.8                               | 294.3                                       | 175.5           | 1 767.3                               |
| Disposal of assets                        | 60.2                           | 3.8                              | 493.4                          | 9.9                                | 46.0  | 9.9             | 623.2                                 |
| <b>Net capital expenditure</b>            | <b>178.0</b>                   | <b>119.4</b>                     | <b>^ 349.1</b>                 | <b>83.9</b>                        | <b>248.2</b>                                | <b>165.6</b>    | <b>1 144.2</b>                        |
| 2002-03                                   |                                |                                  |                                |                                    |   |                 |                                       |
| Capital expenditure on                    |                                |                                  |                                |                                    |   |                 |                                       |
| Land                                      | 3.0                            | —                                | 7.8                            | 3.5                                | —   | 3.1             | 17.3                                  |
| Dwellings, other buildings and structures | 63.2                           | 132.6                            | 718.2                          | 16.5                               | 154.4                                       | 147.4           | 1 232.4                               |
| Plant, machinery and equipment            | 1 781.9                        | 226.1                            | 289.3                          | 60.7                               | 64.3  | 144.0           | 2 566.4                               |
| <i>Total acquisitions</i>                 | 1 848.1                        | 358.7                            | 1 015.3                        | 80.7                               | 218.8                                       | 294.5           | 3 816.1                               |
| Disposal of assets                        | 18.9                           | 3.4                              | ^ 43.9                         | 6.4                                | 2.0   | 13.1            | 87.7                                  |
| <b>Net capital expenditure</b>            | <b>1 829.2</b>                 | <b>355.3</b>                     | <b>971.4</b>                   | <b>74.3</b>                        | <b>216.7</b>                                | <b>281.5</b>    | <b>3 728.3</b>                        |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

— nil or rounded to zero (including null cells)

(a) Items listed include value of capital work done for own use – reported in table 2.7.

(b) Comprises BAUXITE MINING, NICKEL ORE MINING and METAL ORE MINING N.E.C.

**2.14**

## FIXED CAPITAL EXPENDITURE (a), Other, services to, and total mining .....

|   | <i>Total<br/>coal mining,<br/>oil and gas<br/>extraction and<br/>metal ore mining</i> | <i>Other<br/>mining</i> | <i>Services<br/>to<br/>mining</i> | <i>Total<br/>mining</i> |
|---|---|-------------------------|-----------------------------------|-------------------------|
|   | \$m   | \$m                     | \$m                               | \$m                     |
| .....                                     |   |                         |                                   |                         |
| 2001-02                                   |   |                         |                                   |                         |
| Capital expenditure on                    |   |                         |                                   |                         |
| Land                                      | 59.7  | *23.0                   | **2.9                             | 85.5                    |
| Dwellings, other buildings and structures | 2 795.2   | 39.4                    | 6.2                               | 2 840.9                 |
| Plant, machinery and equipment            | 2 802.5   | 137.5                   | 398.6                             | 3 338.5                 |
| <i>Total acquisitions</i>                 | 5 657.4   | ^ 199.9                 | 407.7                             | 6 265.0                 |
| Disposal of assets                        | 987.4   | ^ 31.8                  | 221.9                             | 1 241.1                 |
| <b>Net capital expenditure</b>            | <b>4 670.0</b>  | <b>^ 168.1</b>          | <b>185.8</b>                      | <b>5 023.9</b>          |
| .....                                     |   |                         |                                   |                         |
| 2002-03                                   |   |                         |                                   |                         |
| Capital expenditure on                    |   |                         |                                   |                         |
| Land                                      | 67.1  | *8.1                    | 5.6                               | 80.9                    |
| Dwellings, other buildings and structures | 4 415.0   | ^ 24.6                  | **25.5                            | 4 465.2                 |
| Plant, machinery and equipment            | 4 668.5   | ^ 189.0                 | 541.0                             | 5 398.5                 |
| <i>Total acquisitions</i>                 | 9 150.7   | ^ 221.7                 | 572.1                             | 9 944.5                 |
| Disposal of assets                        | 885.4   | **125.0                 | ^ 295.6                           | 1 306.0                 |
| <b>Net capital expenditure</b>            | <b>8 265.2</b>  | <b>**96.7</b>           | <b>^ 276.6</b>                    | <b>8 638.5</b>          |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Items listed include value of capital work done for own use – reported in table 2.8.

**2.15** CONTRACT MINING EXPENSES

## INDUSTRY SUBDIVISION AND SELECTED CLASS

| ANZSIC code            | Description   | \$m            |
|------------------------|---|----------------|
| 2001-02                |   |                |
| 11                     | Coal mining   | 1 246.3        |
| 12                     | Oil and gas extraction  | 238.5          |
| 13                     | Metal ore mining  |                |
| 1311                   | Iron ore mining   | 402.2          |
| 1313                   | Copper ore mining   | 188.0          |
| 1314                   | Gold ore mining   | 888.7          |
| 1315                   | Mineral sand mining   | 94.0           |
| 1317                   | Silver-lead-zinc ore mining   | 99.2           |
| 1312, 1316<br>and 1319 | Bauxite mining, nickel ore mining<br>and metal ore mining n.e.c.          | 298.4          |
|                        | <i>Total metal ore mining</i>   | 1 970.4        |
| 11-13                  | <i>Total coal mining, oil and gas extraction<br/>and metal ore mining</i> | 3 455.3        |
| 14                     | Other mining  | ^ 89.4         |
| 15                     | Services to mining  | 185.4          |
| <b>11-15</b>           | <b>Total mining</b>   | <b>3 730.0</b> |
| 2002-03                |   |                |
| 11                     | Coal mining   | 1 629.6        |
| 12                     | Oil and gas extraction  | 237.7          |
| 13                     | Metal ore mining  |                |
| 1311                   | Iron ore mining   | 545.2          |
| 1313                   | Copper ore mining   | 209.9          |
| 1314                   | Gold ore mining   | 1 028.4        |
| 1315                   | Mineral sand mining   | 93.2           |
| 1317                   | Silver-lead-zinc ore mining   | 110.9          |
| 1312, 1316<br>and 1319 | Bauxite mining, nickel ore mining<br>and metal ore mining n.e.c.          | 351.3          |
|                        | <i>Total metal ore mining</i>   | 2 338.9        |
| 11-13                  | <i>Total coal mining, oil and gas extraction<br/>and metal ore mining</i> | 4 206.2        |
| 14                     | Other mining  | ^ 88.7         |
| 15                     | Services to mining  | *346.7         |
| <b>11-15</b>           | <b>Total mining</b>   | <b>4 641.7</b> |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

**2.16**

## KEY ITEMS, State and territory—selected mining(a) .....

|  | <i>Sales<br/>and<br/>service<br/>income(b)</i> | <i>Wages<br/>and<br/>salaries(c)</i> | <i>Industry<br/>value<br/>added</i> |
|--|--|--------------------------------------|-------------------------------------|
|  | \$m  | \$m                                  | \$m                                 |
| .....  |  |                                      |                                     |
| 2001–02  |  |                                      |                                     |
| New South Wales and Australian Capital Territory | 8 048.6  | 1 144.4                              | 3 542.3                             |
| Victoria   | 5 960.2  | ^ 254.9                              | 5 032.0                             |
| Queensland                                       | 12 771.7                                       | 1 168.7                              | 6 096.4                             |
| South Australia                                  | 1 744.9  | 193.5                                | 1 111.2                             |
| Western Australia                                | 21 721.0                                       | 1 638.5                              | 15 143.4                            |
| Tasmania   | ^ 587.7  | ^ 98.9                               | ** 71.1                             |
| Northern Territory                               | 3 058.8  | 169.5                                | 2 336.4                             |
| <b>Australia</b>                                 | <b>53 892.8</b>                                | <b>4 668.6</b>                       | <b>33 332.8</b>                     |
| .....  |  |                                      |                                     |
| 2002–03  |  |                                      |                                     |
| New South Wales and Australian Capital Territory | 8 944.6  | 1 244.4                              | 4 458.1                             |
| Victoria   | 4 871.4  | 298.0                                | 3 778.5                             |
| Queensland                                       | 13 910.7                                       | 1 344.7                              | ^ 6 525.0                           |
| South Australia                                  | 1 926.5  | 173.7                                | ^ 1 246.7                           |
| Western Australia                                | 24 574.0                                       | 1 883.8                              | 17 428.9                            |
| Tasmania   | 454.1  | 92.4                                 | ^ 97.2                              |
| Northern Territory                               | 2 262.5  | 94.6                                 | 1 659.4                             |
| <b>Australia</b>                                 | <b>56 943.8</b>                                | <b>5 131.7</b>                       | <b>35 193.7</b>                     |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Total mining excluding ANZSIC subdivision 15 SERVICES TO MINING.

(b) Includes rent, leasing and hiring income.

(c) Excludes the drawings of working proprietors.

INTRODUCTION

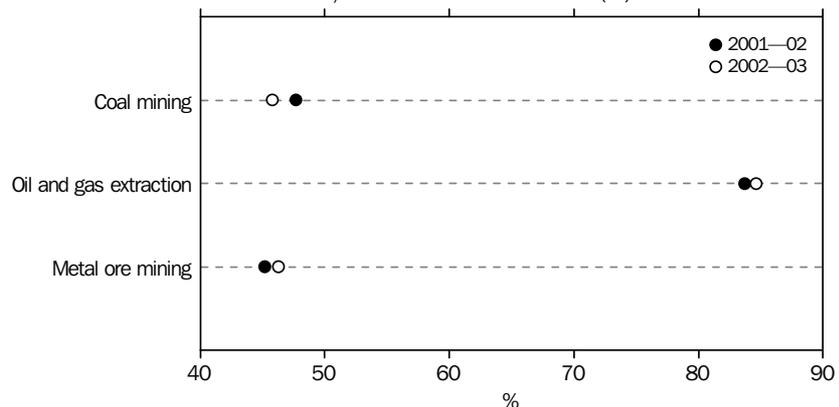
A range of performance measures, usually expressed as ratios, can be produced from the data available from businesses' statements of financial performance and position. A selection of these are presented in this Chapter for the various mining industries. Information about the uses and limitations of these measures can be found in Explanatory Notes paragraphs 24–30.

PERFORMANCE RATIOS

The following principal features of the mining industry's performance ratios for 2002–03 appear in detail in tables 3.1–3.3:

- For the total coal mining, oil and gas extraction, and metal ore mining industries, trading profit margin was steady at 59%, the ratio of IVA to selected labour costs was relatively unchanged at 6.4 times, and increases in the ratios relating to fixed capital expenditure reflect major outlays on assets associated with the commencement of several large projects.
- The oil and gas extraction industry recorded a decrease in the ratio of IVA to selected labour costs from 19.7 to 17.6 times, while the trading profit margin remained relatively unchanged at 85%.
- For the metal ore mining industries, the ratio of acquisitions to disposals of fixed assets increased from 2.8 to 43.5 times, reflecting the major outlays referred to above, while the trading profit margin remained relatively unchanged at 46%.
- Of all industries shown, the industry showing the highest values for ratios of trading profit and interest coverage was oil and gas extraction.

TRADING PROFIT MARGIN, selected industries(a)



(a) ANZSIC subdivisions 11–13.

### 3.1 SELECTED PERFORMANCE MEASURES, Coal mining, and oil and gas extraction ...

|   |       | Coal<br>mining | Oil and gas<br>extraction |
|---|-------|----------------|---------------------------|
| 2001–02                                       |       |                |                           |
| <b>Labour</b>                                 |       |                |                           |
| Industry value added to selected labour costs | times | ^ 4.1          | 19.7                      |
| <b>Income</b>                                 |       |                |                           |
| Sales and service income to assets            | times | ^ 0.7          | 0.4                       |
| <b>Profitability</b>                          |       |                |                           |
| Trading profit margin                         | %     | ^ 47.7         | 83.7                      |
| Return on funds                               | %     | *24.5          | 25.3                      |
| Return on assets                              | %     | ^ 17.4         | 20.4                      |
| <b>Liquidity</b>                              |       |                |                           |
| Liquidity ratio                               | times | *0.9           | 1.1                       |
| Current ratio                                 | times | ^ 1.1          | 1.2                       |
| <b>Debt</b>                                   |       |                |                           |
| Interest coverage                             | times | ^ 11.1         | 12.2                      |
| Debt to assets                                | %     | 56.0           | 43.8                      |
| <b>Fixed capital expenditure</b>              |       |                |                           |
| Acquisitions to disposals                     | times | 5.1            | 24.2                      |
| Net capital expenditure to assets             | %     | ^ 4.7          | 5.6                       |

|   |       |        |      |
|---|-------|--------|------|
| 2002–03                                       |       |        |      |
| <b>Labour</b>                                 |       |        |      |
| Industry value added to selected labour costs | times | ^ 3.8  | 17.6 |
| <b>Income</b>                                 |       |        |      |
| Sales and service income to assets            | times | ^ 0.7  | 0.4  |
| <b>Profitability</b>                          |       |        |      |
| Trading profit margin                         | %     | ^ 45.8 | 84.6 |
| Return on funds                               | %     | *20.9  | 22.0 |
| Return on assets                              | %     | ^ 14.6 | 18.2 |
| <b>Liquidity</b>                              |       |        |      |
| Liquidity ratio                               | times | *0.8   | 1.2  |
| Current ratio                                 | times | ^ 1.0  | 1.3  |
| <b>Debt</b>                                   |       |        |      |
| Interest coverage                             | times | ^ 11.1 | 14.0 |
| Debt to assets                                | %     | 52.9   | 43.0 |
| <b>Fixed capital expenditure</b>              |       |        |      |
| Acquisitions to disposals                     | times | 4.4    | 10.9 |
| Net capital expenditure to assets             | %     | ^ 7.0  | 5.9  |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

## 3.2 SELECTED PERFORMANCE MEASURES, Metal ore mining—industry class .....

|   |       | Iron<br>ore<br>mining | Copper<br>ore<br>mining | Gold<br>ore<br>mining | Mineral<br>sand<br>mining | Silver-<br>lead-zinc<br>ore mining | Other(a) | Total<br>metal ore<br>mining |
|---|-------|-----------------------|-------------------------|-----------------------|---------------------------|------------------------------------|----------|------------------------------|
| 2001–02                                       |       |                       |                         |                       |                           |                                    |          |                              |
| <b>Labour</b>                                 |       |                       |                         |                       |                           |                                    |          |                              |
| Industry value added to selected labour costs | times | 9.4                   | 4.3                     | ^ 2.7                 | 3.2                       | 1.2                                | 3.9      | 4.3                          |
| <b>Income</b>                                 |       |                       |                         |                       |                           |                                    |          |                              |
| Sales and service income to assets            | times | 0.5                   | 0.5                     | ^ 0.4                 | 0.4                       | 0.5                                | 0.5      | 0.5                          |
| <b>Profitability</b>                          |       |                       |                         |                       |                           |                                    |          |                              |
| Trading profit margin                         | %     | 71.2                  | 41.2                    | ^ 28.8                | 44.0                      | 14.8                               | 45.2     | 45.2                         |
| Return on funds                               | %     | 32.4                  | 10.5                    | **1.8                 | 16.8                      | -13.0                              | -158.6   | *2.9                         |
| Return on assets                              | %     | 24.6                  | 5.3                     | **0.4                 | 6.3                       | -14.1                              | -56.7    | ^-1.2                        |
| <b>Liquidity</b>                              |       |                       |                         |                       |                           |                                    |          |                              |
| Liquidity ratio                               | times | 2.3                   | 0.2                     | ^ 0.9                 | 0.9                       | 0.4                                | 0.2      | 0.7                          |
| Current ratio                                 | times | 2.6                   | 0.5                     | ^ 1.2                 | 1.1                       | 0.5                                | 0.3      | 0.9                          |
| <b>Debt</b>                                   |       |                       |                         |                       |                           |                                    |          |                              |
| Interest coverage                             | times | 7.7                   | 3.9                     | **1.4                 | 2.6                       | -1.9                               | -6.6     | *0.6                         |
| Debt to assets                                | %     | 33.7                  | 75.9                    | ^ 55.4                | 72.3                      | 101.8                              | 142.4    | 69.6                         |
| <b>Fixed capital expenditure</b>              |       |                       |                         |                       |                           |                                    |          |                              |
| Acquisitions to disposals                     | times | 4.0                   | 32.8                    | 1.7                   | 9.4                       | 6.4                                | 17.7     | 2.8                          |
| Net capital expenditure to assets             | %     | 1.8                   | 2.5                     | *3.2                  | 3.6                       | 7.5                                | 3.3      | 3.1                          |

### 2002–03

|   |       |      |       |        |      |       |      |       |
|---|-------|------|-------|--------|------|-------|------|-------|
| <b>Labour</b>                                 |       |      |       |        |      |       |      |       |
| Industry value added to selected labour costs | times | 7.2  | 3.5   | ^ 3.7  | 3.0  | 2.9   | 5.1  | 4.6   |
| <b>Income</b>                                 |       |      |       |        |      |       |      |       |
| Sales and service income to assets            | times | 0.5  | 0.4   | ^ 0.5  | 0.3  | 0.5   | 0.6  | 0.5   |
| <b>Profitability</b>                          |       |      |       |        |      |       |      |       |
| Trading profit margin                         | %     | 66.5 | 34.3  | ^ 36.8 | 39.5 | 34.1  | 47.6 | 46.3  |
| Return on funds                               | %     | 26.7 | 5.9   | **8.2  | 7.8  | 1.1   | 42.5 | *16.1 |
| Return on assets                              | %     | 19.7 | 3.0   | **5.1  | 3.4  | -4.6  | 20.8 | ^ 9.7 |
| <b>Liquidity</b>                              |       |      |       |        |      |       |      |       |
| Liquidity ratio                               | times | 2.1  | 0.3   | ^ 1.0  | 0.8  | 0.1   | 0.4  | 0.8   |
| Current ratio                                 | times | 2.4  | 0.5   | ^ 1.3  | 0.9  | 0.2   | 0.6  | 1.0   |
| <b>Debt</b>                                   |       |      |       |        |      |       |      |       |
| Interest coverage                             | times | 7.5  | 3.1   | **3.9  | 3.1  | 0.1   | 7.5  | *4.8  |
| Debt to assets                                | %     | 36.1 | 57.3  | ^ 47.3 | 76.8 | 75.6  | 94.5 | 55.9  |
| <b>Fixed capital expenditure</b>              |       |      |       |        |      |       |      |       |
| Acquisitions to disposals                     | times | 97.8 | 104.1 | 23.1   | 12.6 | 107.4 | 22.6 | 43.5  |
| Net capital expenditure to assets             | %     | 16.8 | 5.8   | *8.9   | 2.6  | 6.2   | 6.3  | 9.6   |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Comprises BAUXITE MINING, NICKEL ORE MINING and METAL ORE MINING N.E.C.

### 3.3 SELECTED PERFORMANCE MEASURES, Other, services to, and total mining .....

|   |       | Total<br>coal mining,<br>oil and gas<br>extraction and<br>metal ore mining | Other<br>mining | Services<br>to<br>mining | Total<br>mining |
|---|-------|--|-----------------|--------------------------|-----------------|
| .....   |       |  |                 |                          |                 |
| 2001-02                                       |       |  |                 |                          |                 |
| <b>Labour</b>                                 |       |  |                 |                          |                 |
| Industry value added to selected labour costs | times | 6.8  | ^ 3.2           | ^ 1.4                    | 5.3             |
| <b>Income</b>                                 |       |  |                 |                          |                 |
| Sales and service income to assets            | times | 0.5  | ^ 0.5           | ^ 0.6                    | 0.5             |
| <b>Profitability</b>                          |       |  |                 |                          |                 |
| Trading profit margin                         | %     | 59.2   | ^ 47.4          | ^ 31.3                   | 55.8            |
| Return on funds                               | %     | 18.0   | ^ 14.7          | **1.5                    | 16.6            |
| Return on assets                              | %     | 12.1   | ^ 10.8          | ** -0.2                  | 11.0            |
| <b>Liquidity</b>                              |       |  |                 |                          |                 |
| Liquidity ratio                               | times | 0.9  | **1.7           | **1.2                    | 0.9             |
| Current ratio                                 | times | 1.0  | *2.0            | *1.4                     | 1.1             |
| <b>Debt</b>                                   |       |  |                 |                          |                 |
| Interest coverage                             | times | 6.2  | ^ 7.6           | **0.8                    | 6.0             |
| Debt to assets                                | %     | 55.6   | ^ 56.7          | *62.7                    | 56.2            |
| <b>Fixed capital expenditure</b>              |       |  |                 |                          |                 |
| Acquisitions to disposals                     | times | 5.7  | *6.3            | ^ 1.8                    | 5.0             |
| Net capital expenditure to assets             | %     | 4.5  | *2.5            | ^ 2.0                    | 4.2             |
| .....   |       |  |                 |                          |                 |
| 2002-03                                       |       |  |                 |                          |                 |
| <b>Labour</b>                                 |       |  |                 |                          |                 |
| Industry value added to selected labour costs | times | 6.4  | ^ 3.6           | ^ 1.4                    | 5.1             |
| <b>Income</b>                                 |       |  |                 |                          |                 |
| Sales and service income to assets            | times | 0.5  | ^ 0.6           | ^ 0.8                    | 0.5             |
| <b>Profitability</b>                          |       |  |                 |                          |                 |
| Trading profit margin                         | %     | 58.6   | ^ 45.5          | ^ 28.9                   | 54.7            |
| Return on funds                               | %     | 19.8   | ^ 16.0          | **0.7                    | 18.6            |
| Return on assets                              | %     | 14.4   | ^ 11.0          | ** -1.0                  | 13.3            |
| <b>Liquidity</b>                              |       |  |                 |                          |                 |
| Liquidity ratio                               | times | 0.9  | **1.4           | **1.0                    | 0.9             |
| Current ratio                                 | times | 1.1  | *1.7            | *1.1                     | 1.1             |
| <b>Debt</b>                                   |       |  |                 |                          |                 |
| Interest coverage                             | times | 9.0  | ^ 6.7           | **0.3                    | 8.4             |
| Debt to assets                                | %     | 49.7   | ^ 61.7          | *72.0                    | 51.8            |
| <b>Fixed capital expenditure</b>              |       |  |                 |                          |                 |
| Acquisitions to disposals                     | times | 10.3   | *1.8            | ^ 1.9                    | 7.6             |
| Net capital expenditure to assets             | %     | 7.4  | *1.4            | ^ 3.5                    | 6.8             |

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

## INTRODUCTION

This Chapter presents information about mineral production in Australia compiled from data produced by the various state and Northern Territory departments as part of their administrative responsibilities. Minerals are tabulated in four major categories: metallic minerals; coal, oil and gas; construction materials; and other non-metallic minerals.

Readers should exercise caution when using these data, as:

- definitional requirements vary, as does the range of commodities upon which royalties are payable: the states and Northern Territory do not necessarily apply common definitions and standards when compiling the statistics;
- significant variations exist between states in the way in which value of production is attributed, particularly for metallic minerals. For example, New South Wales and South Australia estimate the value based on metallic content. Tasmania provides only a breakdown of the value of its mining production by major group, and so details about the value of each commodity are not available.
- the level of information available for construction materials and other non-metallic minerals varies considerably. For products such as crushed and broken stone, some states are unable to provide a breakup. It should be noted that the production of construction materials may be understated in several states because royalties are not always collected or the activity occurs on private land.

Footnotes have been provided to clarify the data, and highlight those areas where variations in treatment or data availability occur across the states and Northern Territory. Any offshore production is recorded for the state or territory which administers the particular offshore area on behalf of the Australian Government. No data are recorded in this chapter for the Australian Capital Territory.

For further information, see Explanatory Notes paragraphs 36–38. Paragraph 38 also includes website and publication details of the sources.

## SUMMARY

The recorded value of mineral production for Australia was \$51.7b for 2002–03 (noting the qualifications described above). Of the four mineral categories, coal, oil and gas was the most significant with a value of \$29.7b, its largest components being bituminous black coal (\$11.3b) and crude oil (\$7.9b). Metallic minerals was the second largest category, with a value of \$19.0b. The recorded value of other non-metallic minerals was \$1.6b and of construction materials, \$1.3b.

In 2002–03, the largest producer was again Western Australia (with 46.3% of the Australian total), followed by Queensland (with 23.6%), then New South Wales (with 13.1%).

SUMMARY *continued*

## MINERAL COMMODITIES PRODUCED (a)

|         | NSW     | Vic.    | Qld      | SA      | WA       | Tas.  | NT      | Aust.    |
|---------|---------|---------|----------|---------|----------|-------|---------|----------|
|         | \$m     | \$m     | \$m      | \$m     | \$m      | \$m   | \$m     | \$m      |
| 2001–02 | 7 861.7 | 4 565.6 | 12 453.6 | 1 694.1 | 22 037.1 | 471.1 | 2 687.9 | 51 771.1 |
| 2002–03 | 6 764.9 | 4 307.1 | 12 226.5 | 1 682.6 | 23 938.7 | 473.3 | 2 328.3 | 51 721.4 |

(a) Reported by state and Northern Territory departments with responsibility for mineral production statistics (see Explanatory Notes paragraphs 36–38). Values of some commodities are not available, and are not included in these data (see tables 4.2 and 4.8 for details).

*New South Wales*

New South Wales total production in 2002–03 was \$6.8b, of which 73.2% (\$5.0b) was generated by the coal mining industry. Production of coal decreased marginally (2.4%) but the value of production decreased by 19.6%, reflecting price decreases and the impact of the stronger Australian dollar. Despite decreases in production and lower prices, silver-lead-zinc production remained a major contributor to New South Wales production, accounting for \$416m during the year.

*Victoria*

In 2002–03, Victoria contributed 8.3% of Australia's value of minerals produced, with a recorded value of \$4.3b. Coal (brown), oil and gas accounted for 88.9% (\$3.8b) of Victorian production, the major contributors being crude oil (\$2,068m) and natural gas (\$696m).

*Queensland*

In 2002–03, Queensland was again second to Western Australia as the nation's largest mineral producer, contributing nearly a quarter (\$12.2b) of Australia's production. Over 60% (\$7.5b) of Queensland's production was of black coal, while copper contributed \$1.4b. Queensland's production of phosphate rock increased to 1.9 million tonnes in 2002–03, with a value of \$131m.

*South Australia*

South Australia contributed 3.3% of Australia's value of minerals produced in 2002–03, with a recorded value of \$1.7b. Copper production fell by 2.2% in quantity and 8.2% in value, to \$477m. Natural gas, mainly from the Cooper Basin, contributed \$346m to the total value of production for the state.

*Western Australia*

Western Australia, with a value of \$23.9b in 2002–03, continues to record the highest total value of production of the states and Northern Territory. The metallic minerals sector contributed \$12.0b. Higher prices due predominantly to increased demand in Asia, led to increases in the value of production of the major commodities. Iron ore (\$5.2b) and gold bullion (doré) (\$3.4b) were the main contributors. The value of production of nickel increased in 2002–03 to \$2.0b. Western Australia also has significant production of oil and gas. While production of crude oil decreased by 7.6% in 2002–03, higher world oil prices saw the value for crude oil production remain flat at \$4.3b. The value of production of liquefied natural gas increased 18.6% to \$3.1b. In 2002–03, Western Australian diamond production was valued at \$771m.

*Tasmania*

The value of mineral production in Tasmania was \$473m for 2002–03, representing just under 1% of Australia's total production. Over 85% of this consisted of metallic minerals, including iron ore pellets (\$104m) and gold bullion (doré) (\$99m).

*Northern Territory*

In the Northern Territory in 2002–03, 56.5% of the total value of production was attributable to oil and gas, and 41.4% to metallic minerals. The value of production of crude oil fell by 16% to \$1.3b, owing to production falls (27% decrease), increases in oil prices and the impact of a stronger Australian dollar. This, as well as a 51.5% decrease in zinc-lead concentrate (to \$106m), contributed to the 13.4% decrease in the total value of production in the Northern Territory to \$2.3b in 2002–03.

## 4.1 METALLIC MINERALS PRODUCED, Quantity

| Mineral   |        | NSW(a) | Vic.  | Qld(b) | SA       | WA(c)   | Tas.   | NT     |
|---|--------|--------|-------|--------|----------|---------|--------|--------|
| 2001-02   |        |        |       |        |          |         |        |        |
| <b>Bauxite</b>  |        |        |       |        |          |         |        |        |
| Bauxite (including calcined and beneficiated)         | '000 t | —      | —     | 11 276 | —        | na      | —      | 6 622  |
| <b>Copper</b>   |        |        |       |        |          |         |        |        |
| Copper concentrate                                    | '000 t | 122    | —     | 1 501  | 185      | na      | 115    | —      |
| Copper precipitate                                    | '000 t | —      | —     | 51     | —        | —       | —      | —      |
| <b>Gold</b>   |        |        |       |        |          |         |        |        |
| Gold bullion (doré)                                   | kg     | 18 810 | 3 492 | 34 666 | 2 875    | 184 998 | 6 844  | 20 239 |
| <b>Iron ore</b>                                       |        |        |       |        |          |         |        |        |
| Iron ore and concentrate                              | '000 t | 4      | —     | —      | (d)2 739 | 159 787 | 28     | —      |
| Iron oxide  |        |        |       |        |          |         |        |        |
| For coal washing (magnetite)                          | t      | 52 504 | —     | —      | —        | —       | 57 280 | —      |
| For other purposes (eg paint manufacture)             | t      | —      | —     | —      | —        | —       | —      | —      |
| Iron ore pellets (gross weight)                       | '000 t | —      | —     | —      | (d)na    | —       | 2 152  | —      |
| <b>Mineral sands</b>                                  |        |        |       |        |          |         |        |        |
| Synthetic rutile/beneficiated ilmenite                | '000 t | —      | —     | —      | —        | 586     | —      | —      |
| Ilmenite concentrate                                  | '000 t | 2      | 31    | 94     | —        | 801     | —      | —      |
| Leucoxene concentrate                                 | '000 t | —      | —     | —      | —        | 40      | —      | —      |
| Rutile concentrate                                    | '000 t | 5      | 21    | 61     | —        | 123     | —      | —      |
| Zircon concentrate                                    | '000 t | 5      | 4     | —      | —        | 318     | —      | —      |
| <b>Nickel</b>   |        |        |       |        |          |         |        |        |
| Nickel concentrate                                    | '000 t | —      | —     | —      | —        | 1 115   | —      | —      |
| <b>Silver-lead-zinc</b>                               |        |        |       |        |          |         |        |        |
| Lead concentrate                                      | '000 t | 115    | —     | 677    | —        | 114     | 36     | —      |
| Zinc concentrate                                      | '000 t | 236    | —     | 1 332  | —        | 441     | 139    | —      |
| Zinc ore  | '000 t | —      | —     | —      | 31       | —       | —      | —      |
| Silver concentrate                                    | t      | 113    | —     | —      | 24       | —       | (e)90  | 2      |
| Zinc-lead concentrate                                 | '000 t | —      | —     | —      | —        | —       | —      | 365    |
| <b>Tin-tantalum-lithium</b>                           |        |        |       |        |          |         |        |        |
| Tin concentrate                                       | t      | 424    | —     | 2      | —        | —       | 12 379 | —      |
| Tantalite-columbite concentrate                       | t      | —      | —     | —      | —        | 905     | —      | —      |
| Lithium ores (petalite, amblygonite, spodumene)       | '000 t | —      | —     | —      | —        | 90      | —      | —      |
| <b>Metallic minerals n.e.c.</b>                       |        |        |       |        |          |         |        |        |
| Antimony concentrate                                  | t      | 1 604  | —     | —      | —        | —       | —      | —      |
| Chromite ore (Cr <sub>2</sub> O <sub>3</sub> content) | t      | —      | —     | —      | —        | 14 690  | —      | —      |
| Manganese ore/manganese fines                         | '000 t | —      | —     | —      | —        | —       | —      | 1 440  |
| Metallurgical grade greater than 48% manganese        | '000 t | —      | —     | —      | —        | 474     | —      | —      |
| Uranium concentrate (U <sub>3</sub> O <sub>8</sub> )  | t      | —      | —     | —      | 4 005    | —       | —      | 3 872  |
| Other metallic minerals                               | t      | —      | —     | —      | —        | na      | —      | —      |

— nil or rounded to zero (including null cells)

na not available

(a) Named metal content of doré or concentrate except for iron ore and concentrate, iron oxide for coal washing, ilmenite concentrate, rutile concentrate (contained titanium dioxide), and zircon concentrate (contained zircon).

(b) Named metal content of doré or concentrate.

(c) Quantity is sales quantity.

(d) Iron ore and concentrate includes iron ore pellets and fines.

(e) Assayed silver content from lead and zinc concentrates, also copper concentrate and gold bullion (doré).

Source: See Explanatory Notes paragraph 38.

## 4.1 METALLIC MINERALS PRODUCED, Quantity *continued*

| Mineral   |        | NSW(a) | Vic.  | Qld(b) | SA       | WA(c)   | Tas.   | NT     |
|---|--------|--------|-------|--------|----------|---------|--------|--------|
| 2002-03   |        |        |       |        |          |         |        |        |
| <b>Bauxite</b>  |        |        |       |        |          |         |        |        |
| Bauxite (including calcined and beneficiated)         | '000 t | —      | —     | 11 251 | —        | na      | —      | 6 060  |
| <b>Copper</b>   |        |        |       |        |          |         |        |        |
| Copper concentrate                                    | '000 t | 144    | —     | 1 242  | 181      | 144     | 108    | —      |
| Copper precipitate                                    | '000 t | —      | —     | 45     | —        | —       | —      | —      |
| <b>Gold</b>   |        |        |       |        |          |         |        |        |
| Gold bullion (doré)                                   | kg     | 26 490 | 3 345 | 38 154 | 2 342    | 187 235 | 8 034  | 20 293 |
| <b>Iron ore</b>                                       |        |        |       |        |          |         |        |        |
| Iron ore and concentrate                              | '000 t | —      | —     | —      | (d)2 891 | 188 224 | 65     | —      |
| Iron oxide  |        |        |       |        |          |         |        |        |
| For coal washing (magnetite)                          | t      | 34 564 | —     | —      | —        | —       | 62 248 | —      |
| For other purposes (eg paint manufacture)             | t      | —      | —     | —      | 10       | —       | —      | —      |
| Iron ore pellets (gross weight)                       | '000 t | —      | —     | —      | (d)na    | —       | 2 142  | —      |
| <b>Mineral sands</b>                                  |        |        |       |        |          |         |        |        |
| Synthetic rutile/beneficiated ilmenite                | '000 t | —      | —     | —      | —        | 597     | —      | —      |
| Ilmenite concentrate                                  | '000 t | 2      | 51    | 120    | —        | 960     | —      | —      |
| Leucoxene concentrate                                 | '000 t | —      | —     | —      | —        | 38      | —      | —      |
| Rutile concentrate                                    | '000 t | 6      | 28    | 45     | —        | 114     | —      | —      |
| Zircon concentrate                                    | '000 t | 5      | 11    | —      | —        | 411     | —      | —      |
| <b>Nickel</b>   |        |        |       |        |          |         |        |        |
| Nickel concentrate                                    | '000 t | —      | —     | —      | —        | 1 355   | —      | —      |
| <b>Silver-lead-zinc</b>                               |        |        |       |        |          |         |        |        |
| Lead concentrate                                      | '000 t | 107    | —     | 680    | —        | 107     | 42     | —      |
| Zinc concentrate                                      | '000 t | 238    | —     | 1 389  | —        | 404     | 142    | —      |
| Zinc ore  | '000 t | —      | —     | —      | 3        | —       | —      | —      |
| Silver concentrate                                    | t      | 88     | —     | —      | 20       | —       | (e)74  | 2      |
| Zinc-lead concentrate                                 | '000 t | —      | —     | —      | —        | —       | —      | 289    |
| <b>Tin-tantalum-lithium</b>                           |        |        |       |        |          |         |        |        |
| Tin concentrate                                       | t      | 920    | —     | 4      | —        | —       | 8 515  | —      |
| Tantalite-columbite concentrate                       | t      | —      | —     | —      | —        | 1 006   | —      | —      |
| Lithium ores (petalite, amblygonite, spodumene)       | '000 t | —      | —     | —      | —        | 103     | —      | —      |
| <b>Metallic minerals n.e.c.</b>                       |        |        |       |        |          |         |        |        |
| Antimony concentrate                                  | t      | —      | —     | —      | —        | —       | —      | —      |
| Chromite ore (Cr <sub>2</sub> O <sub>3</sub> content) | t      | —      | —     | —      | —        | 77 680  | —      | —      |
| Manganese ore/manganese fines                         | '000 t | —      | —     | —      | —        | —       | —      | 1 852  |
| Metallurgical grade greater than 48% manganese        | '000 t | —      | —     | —      | —        | 620     | —      | —      |
| Uranium concentrate (U <sub>3</sub> O <sub>8</sub> )  | t      | —      | —     | —      | 3 837    | —       | —      | 4 386  |
| Other metallic minerals                               | t      | —      | —     | —      | —        | na      | —      | —      |

— nil or rounded to zero (including null cells)

na not available

(a) Named metal content of doré or concentrate except for iron ore and concentrate, iron oxide for coal washing, ilmenite concentrate, rutile concentrate (contained titanium dioxide), and zircon concentrate (contained zircon).

(b) Named metal content of doré or concentrate.

(c) Quantity is sales quantity.

(d) Iron ore and concentrate includes iron ore pellets and fines.

(e) Assayed silver content from lead and zinc concentrates, also copper concentrate and gold bullion (doré).

Source: See Explanatory Notes paragraph 38.

## 4.2 METALLIC MINERALS PRODUCED, Value .....

| <i>Mineral</i>  | <i>NSW(a)</i>  | <i>Vic.</i>    | <i>Qld</i>     | <i>SA</i>    | <i>WA(b)</i>       | <i>Tas.</i>  | <i>NT(c)</i>   |
|---|----------------|----------------|----------------|--------------|--------------------|--------------|----------------|
|   | \$m            | \$m            | \$m            | \$m          | \$m                | \$m          | \$m            |
| 2001–02   |                |                |                |              |                    |              |                |
| <b>Bauxite</b>  |                |                |                |              |                    |              |                |
| Bauxite (including calcined and beneficiated)         | —              | —              | 279.7          | —            | na                 | —            | 155.5          |
| <b>Copper</b>   |                |                |                |              |                    |              |                |
| Copper concentrate                                    | (d)350.7       | —              | 993.9          | 519.0        | 42.4               | (e)80.6      | —              |
| Copper precipitate                                    | —              | —              | 141.3          | —            | —                  | —            | —              |
| <b>Gold</b>   |                |                |                |              |                    |              |                |
| Gold bullion (doré)                                   | 332.0          | 64.0           | 316.6          | 50.8         | (b)3 279.5         | (e)100.5     | 341.1          |
| <b>Iron ore</b>                                       |                |                |                |              |                    |              |                |
| Iron ore and concentrate                              | 0.1            | —              | —              | (f)24.6      | 5 099.0            | 2.1          | —              |
| Iron oxide  |                |                |                |              |                    |              |                |
| For coal washing (magnetite)                          | 7.2            | —              | —              | —            | —                  | 6.6          | —              |
| For other purposes (eg paint manufacture)             | —              | —              | —              | —            | —                  | —            | —              |
| Iron ore pellets (gross weight)                       | —              | —              | —              | (f)na        | —                  | 89.9         | —              |
| <b>Mineral sands</b>                                  |                |                |                |              |                    |              |                |
| Synthetic rutile/beneficiated ilmenite                | —              | —              | —              | —            | 374.2              | —            | —              |
| Ilmenite concentrate                                  | —              | na             | na             | —            | 128.8              | —            | —              |
| Leucoxene concentrate                                 | —              | —              | —              | —            | 19.4               | —            | —              |
| Rutile concentrate                                    | 4.5            | na             | na             | —            | 106.7              | —            | —              |
| Zircon concentrate                                    | 3.9            | na             | —              | —            | 218.8              | —            | —              |
| <i>Total mineral sands</i>                            | 8.4            | na             | 95.8           | —            | 848.0              | —            | —              |
| <b>Nickel</b>   |                |                |                |              |                    |              |                |
| Nickel concentrate                                    | —              | —              | —              | —            | (b)1 623.9         | —            | —              |
| <b>Silver-lead-zinc</b>                               |                |                |                |              |                    |              |                |
| Lead concentrate                                      | 104.0          | —              | 533.5          | —            | 36.7               | (e)21.5      | —              |
| Zinc concentrate                                      | 356.0          | —              | 647.0          | —            | 173.8              | (e)47.8      | —              |
| Zinc ore  | —              | —              | —              | 8.3          | —                  | —            | —              |
| Silver concentrate                                    | 31.0           | —              | —              | 6.4          | —                  | (e)—         | 0.6            |
| Zinc-lead concentrate                                 | —              | —              | —              | —            | —                  | —            | 218.0          |
| <b>Tin-tantalum-lithium</b>                           |                |                |                |              |                    |              |                |
| Tin concentrate                                       | 3.1            | —              | —              | —            | —                  | 53.7         | —              |
| Tantalite-columbite concentrate                       | —              | —              | —              | —            | (g)225.8           | —            | —              |
| Lithium ores (petalite, amblygonite, spodumene)       | —              | —              | —              | —            | (g)na              | —            | —              |
| <b>Metallic minerals n.e.c.</b>                       |                |                |                |              |                    |              |                |
| Antimony concentrate                                  | 2.9            | —              | —              | —            | —                  | —            | —              |
| Chromite ore (Cr <sub>2</sub> O <sub>3</sub> content) | —              | —              | —              | —            | 0.5                | —            | —              |
| Manganese ore/manganese fines                         | —              | —              | —              | —            | —                  | —            | 198.5          |
| Metallurgical grade greater than 48% manganese        | —              | —              | —              | —            | 68.6               | —            | —              |
| Uranium concentrate (U <sub>3</sub> O <sub>8</sub> )  | —              | —              | —              | 161.7        | —                  | —            | 171.6          |
| Other metallic minerals                               | —              | —              | —              | —            | 27.1               | —            | —              |
| <b>Total metallic minerals</b>                        | <b>1 195.3</b> | <b>(h)64.0</b> | <b>3 007.7</b> | <b>770.9</b> | <b>(i)11 425.3</b> | <b>402.7</b> | <b>1 085.4</b> |

— nil or rounded to zero (including null cells)

na not available

(a) Value of production is at average annual market prices except for iron ore and concentrate, iron oxide for coal washing, ilmenite concentrate, rutile concentrate, and zircon concentrate.

(b) Estimated f.o.b. value except for gold bullion (doré) (based on London PM Gold Fix price as supplied by WA Treasury Corporation) and nickel concentrate (estimated f.o.b. value based on the current price of nickel-containing products).

(c) Values of production are estimates based on sales figures provided by mining companies.

(d) Includes the value of cathode copper.

(e) Lead and zinc (also copper and gold) include value of silver.

(f) Iron ore and concentrate includes iron ore pellets and fines.

(g) Tantalite-columbite concentrate includes lithium ore (spodumene).

(h) Excludes the value of mineral sands.

(i) Excludes the value of bauxite.

Source: See Explanatory Notes paragraph 38.

## 4.2 METALLIC MINERALS PRODUCED, Value *continued*

| Mineral   | NSW(a)         | Vic.           | Qld            | SA           | WA(b)              | Tas.         | NT(c)        |
|---|----------------|----------------|----------------|--------------|--------------------|--------------|--------------|
|   | \$m            | \$m            | \$m            | \$m          | \$m                | \$m          | \$m          |
| 2002–03   |                |                |                |              |                    |              |              |
| <b>Bauxite</b>  |                |                |                |              |                    |              |              |
| Bauxite (including calcined and beneficiated)         | —              | —              | 211.7          | —            | na                 | —            | 151.5        |
| <b>Copper</b>   |                |                |                |              |                    |              |              |
| Copper concentrate                                    | (d)389.3       | —              | 1 246.1        | 476.6        | 65.8               | (e)90.8      | —            |
| Copper precipitate                                    | —              | —              | 120.1          | —            | —                  | —            | —            |
| <b>Gold</b>   |                |                |                |              |                    |              |              |
| Gold bullion (doré)                                   | 482.0          | 61.3           | 294.4          | 65.1         | (b)3 444.0         | (e)98.9      | 352.1        |
| <b>Iron ore</b>                                       |                |                |                |              |                    |              |              |
| Iron ore and concentrate                              | —              | —              | —              | (f)26.0      | 5 193.5            | 3.3          | —            |
| Iron oxide  |                |                |                |              |                    |              |              |
| For coal washing (magnetite)                          | 4.8            | —              | —              | —            | —                  | 6.6          | —            |
| For other purposes (eg paint manufacture)             | —              | —              | —              | —            | —                  | —            | —            |
| Iron ore pellets (gross weight)                       | —              | —              | —              | (f)na        | —                  | 104.1        | —            |
| <b>Mineral sands</b>                                  |                |                |                |              |                    |              |              |
| Synthetic rutile/beneficiated ilmenite                | —              | —              | —              | —            | 353.1              | —            | —            |
| Ilmenite concentrate                                  | —              | na             | na             | —            | 136.5              | —            | —            |
| Leucoxene concentrate                                 | —              | —              | —              | —            | 15.9               | —            | —            |
| Rutile concentrate                                    | 4.7            | na             | na             | —            | 82.5               | —            | —            |
| Zircon concentrate                                    | 3.5            | na             | —              | —            | 258.8              | —            | —            |
| Total mineral sands                                   | 8.3            | na             | 68.8           | —            | 846.9              | —            | —            |
| <b>Nickel</b>   |                |                |                |              |                    |              |              |
| Nickel concentrate                                    | —              | —              | —              | —            | (b)1 972.2         | —            | —            |
| <b>Silver-lead-zinc</b>                               |                |                |                |              |                    |              |              |
| Lead concentrate                                      | 81.0           | —              | 772.4          | —            | 31.0               | (e)21.2      | —            |
| Zinc concentrate                                      | 313.0          | —              | 825.7          | —            | 173.2              | (e)49.9      | —            |
| Zinc ore  | —              | —              | —              | 0.2          | —                  | —            | —            |
| Silver concentrate                                    | 22.0           | —              | —              | 4.8          | —                  | (e)—         | 0.5          |
| Zinc-lead concentrate                                 | —              | —              | —              | —            | —                  | —            | 105.7        |
| <b>Tin-tantalum-lithium</b>                           |                |                |                |              |                    |              |              |
| Tin concentrate                                       | 6.0            | —              | —              | —            | —                  | 30.2         | —            |
| Tantalite-columbite concentrate                       | —              | —              | —              | —            | (g)216.4           | —            | —            |
| Lithium ores (petalite, amblygonite, spodumene)       | —              | —              | —              | —            | (g)na              | —            | —            |
| <b>Metallic minerals n.e.c.</b>                       |                |                |                |              |                    |              |              |
| Antimony concentrate                                  | —              | —              | —              | —            | —                  | —            | —            |
| Chromite ore (Cr <sub>2</sub> O <sub>3</sub> content) | —              | —              | —              | —            | 6.3                | —            | —            |
| Manganese ore/manganese fines                         | —              | —              | —              | —            | —                  | —            | 199.4        |
| Metallurgical grade greater than 48% manganese        | —              | —              | —              | —            | 75.4               | —            | —            |
| Uranium concentrate (U <sub>3</sub> O <sub>8</sub> )  | —              | —              | —              | 153.4        | —                  | —            | 154.1        |
| Other metallic minerals                               | —              | —              | —              | —            | 16.9               | —            | —            |
| <b>Total metallic minerals</b>                        | <b>1 306.5</b> | <b>(h)61.3</b> | <b>3 539.2</b> | <b>726.3</b> | <b>(i)12 041.6</b> | <b>404.8</b> | <b>963.4</b> |

— nil or rounded to zero (including null cells)

na not available

(a) Value of production is at average annual market prices except for iron ore and concentrate, iron oxide for coal washing, ilmenite concentrate, rutile concentrate, and zircon concentrate.

(b) Estimated f.o.b. value except for gold bullion (doré) (based on London PM Gold Fix price as supplied by WA Treasury Corporation) and nickel concentrate (estimated f.o.b. value based on the current price of nickel-containing products).

(c) Values of production are estimates based on sales figures provided by mining companies.

(d) Includes the value of cathode copper.

(e) Lead and zinc (also copper and gold) include value of silver.

(f) Iron ore and concentrate includes iron ore pellets and fines.

(g) Tantalite-columbite concentrate includes lithium ore (spodumene).

(h) Excludes the value of mineral sands.

(i) Excludes the value of bauxite.

Source: See Explanatory Notes paragraph 38.

## 4.3 COAL, OIL AND GAS PRODUCED, Quantity

| Mineral                                    |        | NSW     | Vic.     | Qld      | SA    | WA(a)  | Tas. | NT    |
|--|--------|---------|----------|----------|-------|--------|------|-------|
| 2001-02                                    |        |         |          |          |       |        |      |       |
| <b>Black coal</b>                          |        |         |          |          |       |        |      |       |
| Saleable – type                            |        |         |          |          |       |        |      |       |
| Bituminous                                 | '000 t | 114 294 | —        | 122 553  | —     | —      | 387  | —     |
| Semi-anthracite                            | '000 t | —       | —        | 7 229    | —     | —      | —    | —     |
| Sub-bituminous                             | '000 t | —       | —        | 18 580   | 3 033 | 6 164  | —    | —     |
| Saleable – source                          |        |         |          |          |       |        |      |       |
| Underground                                | '000 t | 44 845  | —        | 31 134   | —     | —      | 387  | —     |
| Open cut                                   | '000 t | 69 449  | —        | 117 229  | 3 033 | 6 164  | —    | —     |
| Washery rejects                            | '000 t | 30 934  | —        | 40 799   | na    | na     | 161  | —     |
| <b>Brown coal</b>                          |        |         |          |          |       |        |      |       |
| Brown coal (lignite)                       | '000 t | —       | 66 661   | —        | —     | —      | —    | —     |
| Peat                                       | t      | —       | —        | 1 905    | —     | —      | 35   | —     |
| <b>Crude petroleum (incl. natural gas)</b> |        |         |          |          |       |        |      |       |
| Crude oil                                  | ML     | —       | (b)9 061 | 523      | 384   | 15 087 | —    | 5 850 |
| Natural gas                                | GL     | —       | 6 491    | (c)5 523 | 3 500 | 7 534  | —    | 468   |
| Natural gas condensate                     | ML     | —       | (b)na    | 309      | 339   | 6 326  | —    | —     |
| Other derivatives – ethane                 | '000 t | —       | —        | —        | 20    | —      | —    | —     |
| Liquefied petroleum gas (LPG)              |        |         |          |          |       |        |      |       |
| Propane                                    | ML     | —       | na       | 112      | 285   | 734    | —    | —     |
| Butane                                     | ML     | —       | na       | 199      | 142   | 829    | —    | —     |
| Total LPG                                  | ML     | —       | 1 802    | 312      | 427   | 1 563  | —    | —     |
| Methane gas                                | PJ     | na      | —        | (c)na    | —     | —      | —    | —     |
| Liquefied natural gas (LNG)                | Mt     | —       | —        | —        | —     | 8 449  | —    | —     |
| 2002-03                                    |        |         |          |          |       |        |      |       |
| <b>Black coal</b>                          |        |         |          |          |       |        |      |       |
| Saleable – type                            |        |         |          |          |       |        |      |       |
| Bituminous                                 | '000 t | 111 533 | —        | 126 470  | —     | —      | 360  | —     |
| Semi-anthracite                            | '000 t | —       | —        | 7 956    | —     | —      | —    | —     |
| Sub-bituminous                             | '000 t | —       | —        | 19 176   | 2 997 | 6 323  | —    | —     |
| Saleable – source                          |        |         |          |          |       |        |      |       |
| Underground                                | '000 t | 40 150  | —        | 27 250   | —     | —      | 360  | —     |
| Open cut                                   | '000 t | 71 380  | —        | 126 352  | 2 997 | 6 323  | —    | —     |
| Washery rejects                            | '000 t | 31 533  | —        | 41 692   | na    | na     | 186  | —     |
| <b>Brown coal</b>                          |        |         |          |          |       |        |      |       |
| Brown coal (lignite)                       | '000 t | —       | 66 809   | —        | —     | —      | —    | —     |
| Peat                                       | t      | —       | —        | 2 378    | —     | —      | —    | —     |
| <b>Crude petroleum (incl. natural gas)</b> |        |         |          |          |       |        |      |       |
| Crude oil                                  | ML     | —       | (b)7 703 | 387      | 473   | 13 946 | —    | 4 276 |
| Natural gas                                | GL     | —       | 6 570    | (c)5 411 | 3 157 | 8 274  | —    | 473   |
| Natural gas condensate                     | ML     | —       | (b)na    | 327      | 266   | 6 934  | —    | —     |
| Other derivatives – ethane                 | '000 t | —       | —        | —        | 18    | —      | —    | —     |
| Liquefied petroleum gas (LPG)              |        |         |          |          |       |        |      |       |
| Propane                                    | ML     | —       | na       | 191      | 283   | 679    | —    | —     |
| Butane                                     | ML     | —       | na       | 127      | 136   | 792    | —    | —     |
| Total LPG                                  | ML     | —       | 1 971    | 318      | 419   | 1 471  | —    | —     |
| Methane gas                                | PJ     | na      | —        | (c)na    | —     | —      | —    | —     |
| Liquefied natural gas (LNG)                | Mt     | —       | —        | —        | —     | 7 811  | —    | —     |

— nil or rounded to zero (including null cells)

(c) Natural gas includes coal seam methane.

na not available

Source: See Explanatory Notes paragraph 38.

(a) Includes production in offshore areas administered by WA on behalf of the Australian Government.

(b) Crude oil includes natural gas condensate.

## 4.4 COAL, OIL AND GAS PRODUCED, Value

|  | NSW            | Vic.               | Qld            | SA           | WA(a)          | Tas.          | NT(b)          |
|--|----------------|--------------------|----------------|--------------|----------------|---------------|----------------|
| <i>Mineral</i>                             | \$m            | \$m                | \$m            | \$m          | \$m            | \$m           | \$m            |
| 2001-02                                    |                |                    |                |              |                |               |                |
| <b>Black coal</b>                          |                |                    |                |              |                |               |                |
| Saleable – type                            |                |                    |                |              |                |               |                |
| Bituminous                                 | (c) 6 158.0    | —                  | 7 054.0        | —            | —              | na            | —              |
| Semi-anthracite                            | —              | —                  | 400.8          | —            | —              | —             | —              |
| Sub-bituminous                             | —              | —                  | 607.1          | 47.5         | 258.1          | —             | —              |
| Saleable – source                          |                |                    |                |              |                |               |                |
| Underground                                | na             | —                  | na             | —            | —              | na            | —              |
| Open cut                                   | na             | —                  | na             | na           | na             | —             | —              |
| Washery rejects                            | ..             | ..                 | ..             | ..           | ..             | ..            | ..             |
| <b>Brown coal</b>                          |                |                    |                |              |                |               |                |
| Brown coal (lignite)                       | —              | 533.3              | —              | —            | —              | —             | —              |
| Peat                                       | —              | —                  | —              | —            | —              | na            | —              |
| <b>Crude petroleum (incl. natural gas)</b> |                |                    |                |              |                |               |                |
| Crude oil                                  | —              | (d) 2 375.0        | 125.4          | 104.4        | 4 206.2        | —             | 1 518.2        |
| Natural gas                                | —              | (c) 756.8          | (e) 402.6      | 365.3        | 643.3          | —             | 42.3           |
| Natural gas condensate                     | —              | (d) na             | 92.2           | 96.0         | 1 680.0        | —             | —              |
| Other derivatives – ethane                 | —              | —                  | —              | 2.8          | —              | —             | —              |
| Liquefied petroleum gas (LPG)              |                |                    |                |              |                |               |                |
| Propane                                    | —              | na                 | 29.1           | 71.1         | 167.9          | —             | —              |
| Butane                                     | —              | na                 | 51.3           | 32.2         | 193.7          | —             | —              |
| Total LPG                                  | —              | (c) 481.1          | 80.3           | 103.3        | 361.6          | —             | —              |
| Methane gas                                | 1.1            | —                  | (e) na         | —            | —              | —             | —              |
| Liquefied natural gas (LNG)                | —              | —                  | —              | —            | 2 640.6        | —             | —              |
| <b>Total coal, oil and gas</b>             | <b>6 159.1</b> | <b>(f) 4 146.2</b> | <b>8 762.5</b> | <b>719.3</b> | <b>9 789.8</b> | <b>(g) na</b> | <b>1 560.6</b> |

.. not applicable

— nil or rounded to zero (including null cells)

na not available

(a) Delivered/shipped value except for sub-bituminous coal (estimated ex-mine value). Includes production in offshore areas administered by WA on behalf of the Australian Government.

(b) Values of production are estimates based on sales figures provided by mining companies.

(c) Value of production is at average market prices for the year.

(d) Crude oil includes natural gas condensate. Value of production is at average market prices for the year.

(e) Natural gas includes coal seam methane.

(f) Includes value of production for crude petroleum products shown, at average market prices for the year.

(g) Included in value of production for other non-metallic minerals (table 4.8).

Source: See Explanatory Notes paragraph 38.

**4.4****COAL, OIL AND GAS PRODUCED, Value** *continued*

|  | NSW            | Vic.               | Qld            | SA           | WA(a)           | Tas.   | NT(b)          |
|--|----------------|--------------------|----------------|--------------|-----------------|--------|----------------|
| <i>Mineral</i>                             | \$m            | \$m                | \$m            | \$m          | \$m             | \$m    | \$m            |
| 2002-03                                    |                |                    |                |              |                 |        |                |
| <b>Black coal</b>                          |                |                    |                |              |                 |        |                |
| Saleable – type                            |                |                    |                |              |                 |        |                |
| Bituminous                                 | (c) 4 953.0    | —                  | 6 352.0        | —            | —               | na     | —              |
| Semi-anthracite                            | —              | —                  | 553.6          | —            | —               | —      | —              |
| Sub-bituminous                             | —              | —                  | 546.4          | 45.5         | 272.9           | —      | —              |
| Saleable – source                          |                |                    |                |              |                 |        |                |
| Underground                                | na             | —                  | na             | —            | —               | na     | —              |
| Open cut                                   | na             | —                  | na             | na           | na              | —      | —              |
| Washery rejects                            | ..             | ..                 | ..             | ..           | ..              | ..     | ..             |
| <b>Brown coal</b>                          |                |                    |                |              |                 |        |                |
| Brown coal (lignite)                       | —              | 534.5              | —              | —            | —               | —      | —              |
| Peat                                       | —              | —                  | 0.1            | —            | —               | —      | —              |
| <b>Crude petroleum (incl. natural gas)</b> |                |                    |                |              |                 |        |                |
| Crude oil                                  | —              | (d) 2 068.3        | 79.4           | 144.7        | 4 296.4         | —      | 1 272.0        |
| Natural gas                                | —              | (c) 696.0          | (e) 380.9      | 346.0        | 667.3           | —      | 44.8           |
| Natural gas condensate                     | —              | (d) na             | 72.2           | 88.1         | 2 052.0         | —      | —              |
| Other derivatives – ethane                 | —              | —                  | —              | 2.5          | —               | —      | —              |
| Liquefied petroleum gas (LPG)              |                |                    |                |              |                 |        |                |
| Propane                                    | —              | na                 | 35.6           | 78.4         | 172.4           | —      | —              |
| Butane                                     | —              | na                 | 23.8           | 37.5         | 221.5           | —      | —              |
| Total LPG                                  | —              | (c) 529.2          | 59.4           | 115.9        | 393.9           | —      | —              |
| Methane gas                                | 2.2            | —                  | (e) na         | —            | —               | —      | —              |
| Liquefied natural gas (LNG)                | —              | —                  | —              | —            | 3 132.4         | —      | —              |
| <b>Total coal, oil and gas</b>             | <b>4 955.2</b> | <b>(f) 3 827.9</b> | <b>8 043.8</b> | <b>742.9</b> | <b>10 814.8</b> | (g) na | <b>1 316.8</b> |

.. not applicable

— nil or rounded to zero (including null cells)

na not available

(a) Delivered/shipped value except for sub-bituminous coal (estimated ex-mine value). Includes production in offshore areas administered by WA on behalf of the Australian Government.

(b) Values of production are estimates based on sales figures provided by mining companies.

(c) Value of production is at average market prices for the year.

(d) Crude oil includes natural gas condensate. Value of production is at average market prices for the year.

(e) Natural gas includes coal seam methane.

(f) Includes value of production for crude petroleum products shown, at average market prices for the year.

(g) Included in value of production for other non-metallic minerals (table 4.8).

Source: See Explanatory Notes paragraph 38.

## 4.5 CONSTRUCTION MATERIALS PRODUCED, Quantity

| Mineral  |        | NSW(a)   | Vic.     | Qld    | SA     | WA(a)(b) | Tas.  | NT    |
|--|--------|----------|----------|--------|--------|----------|-------|-------|
| 2001-02  |        |          |          |        |        |          |       |       |
| <b>Sand and gravel</b>   |        |          |          |        |        |          |       |       |
| Sand   |        |          |          |        |        |          |       |       |
| For concrete   | '000 t | na       | 5 098    | 2 722  | 1 458  | na       | 153   | na    |
| For other purposes   | '000 t | na       | 1 807    | 2 312  | 1 935  | na       | 228   | na    |
| <i>Total sand</i>  | '000 t | 8 262    | 6 905    | 5 034  | 3 392  | 1 523    | 382   | 196   |
| Gravel   | '000 t | (c)3 087 | 3 404    | 1 072  | 89     | 351      | 25    | 270   |
| <b>Crushed and broken stone</b>                                      |        |          |          |        |        |          |       |       |
| Basalt   | '000 t | na       | 13 475   | na     | 319    | na       | 724   | na    |
| Dacite, rhyodacite, rhyolite and toscanite                           | '000 t | na       | 937      | na     | —      | na       | —     | na    |
| Dolerite   | '000 t | na       | 495      | na     | —      | na       | 891   | na    |
| Dolomite   | '000 t | na       | —        | na     | —      | na       | 6     | na    |
| Gneiss   | '000 t | na       | 13       | na     | 1      | na       | —     | na    |
| Granite  | '000 t | na       | 3 397    | na     | 208    | na       | —     | na    |
| Hornfels   | '000 t | na       | 3 148    | na     | —      | na       | —     | na    |
| Limestone  | '000 t | na       | 724      | na     | —      | na       | 49    | na    |
| Quartzite  | '000 t | na       | 58       | na     | —      | na       | —     | na    |
| Sandstone  | t      | na       | —        | na     | —      | na       | 26    | na    |
| Other crushed and broken stone                                       | '000 t | na       | (d)1 630 | na     | 3 673  | na       | 203   | na    |
| <i>Total crushed and broken stone</i>                                | '000 t | 15 110   | 23 876   | 22 431 | 4 200  | (e)900   | 1 874 | 1 548 |
| <b>Dimension stone</b>   |        |          |          |        |        |          |       |       |
| Basalt   | t      | —        | 18 803   | —      | —      | —        | —     | na    |
| Granite  | t      | 25 625   | 1 058    | —      | 8 957  | 802      | —     | na    |
| Limestone  | t      | —        | —        | —      | 14 217 | —        | —     | na    |
| Sandstone  | t      | 22 064   | 415      | 36 259 | 5 297  | —        | 1 054 | na    |
| Other dimension stone (incl. slate)                                  | t      | —        | (f)613   | 2 800  | 7 698  | (g)95    | 3 466 | na    |
| <i>Total dimension stone</i>   | t      | 47 689   | 20 889   | 39 059 | 36 169 | 897      | 4 520 | 1 568 |
| <b>Other construction materials (decomposed rock, etc.)</b>          |        |          |          |        |        |          |       |       |
| Earth and soil   | '000 t | na       | 21       | 138    | —      | na       | na    | 33    |
| Filling  | '000 t | na       | —        | na     | 669    | na       | na    | —     |
| Scoria   | '000 t | na       | 828      | na     | —      | na       | na    | —     |
| Shale  | '000 t | na       | —        | na     | 669    | na       | na    | —     |
| Tuff   | '000 t | na       | 462      | na     | —      | na       | na    | —     |
| Construction materials n.e.c. (incl. shell grit and decomposed rock) | '000 t | na       | —        | na     | 5 239  | na       | na    | —     |
| <i>Total other construction materials</i>                            | '000 t | 6 932    | 1 310    | 2 655  | 6 577  | (e)na    | 1 587 | 33    |

— nil or rounded to zero (including null cells)

na not available

(a) Limestone is included in tables 4.7 and 4.8 (Other non-metallic minerals produced).

(b) Quantity is sales quantity.

(c) Includes decorative aggregate.

(d) Includes sedimentary rock.

(e) Crushed and broken stone includes other construction materials (decomposed rock, etc.).

(f) Slate only.

(g) Includes marble and slate (including flagstone).

Source: See Explanatory Notes paragraph 38.

## 4.5 CONSTRUCTION MATERIALS PRODUCED, Quantity *continued*

| Mineral  |        | NSW(a)    | Vic.      | Qld    | SA     | WA(a)(b) | Tas.  | NT    |
|--|--------|-----------|-----------|--------|--------|----------|-------|-------|
| 2002-03  |        |           |           |        |        |          |       |       |
| <b>Sand and gravel</b>   |        |           |           |        |        |          |       |       |
| Sand   |        |           |           |        |        |          |       |       |
| For concrete   | '000 t | na        | 5 181     | 3 148  | 1 536  | na       | 188   | na    |
| For other purposes   | '000 t | na        | 1 911     | 2 412  | 2 310  | na       | 195   | na    |
| <i>Total sand</i>  | '000 t | 9 642     | 7 092     | 5 560  | 3 846  | 1 433    | 383   | 194   |
| Gravel   | '000 t | (c) 4 265 | 3 802     | 1 141  | 114    | 154      | 27    | 608   |
| <b>Crushed and broken stone</b>                                      |        |           |           |        |        |          |       |       |
| Basalt   | '000 t | na        | 12 864    | na     | 234    | na       | 702   | na    |
| Dacite, rhyodacite, rhyolite and toscanite                           | '000 t | na        | 1 123     | na     | —      | na       | —     | na    |
| Dolerite   | '000 t | na        | 529       | na     | —      | na       | 826   | na    |
| Dolomite   | '000 t | na        | —         | na     | —      | na       | 9     | na    |
| Gneiss   | '000 t | na        | 18        | na     | —      | na       | —     | na    |
| Granite  | '000 t | na        | 2 533     | na     | 302    | na       | —     | na    |
| Hornfels   | '000 t | na        | 3 798     | na     | —      | na       | —     | na    |
| Limestone  | '000 t | na        | 594       | na     | —      | na       | 48    | na    |
| Quartzite  | '000 t | na        | 130       | na     | —      | na       | —     | na    |
| Sandstone  | t      | na        | —         | na     | —      | na       | 66    | na    |
| Other crushed and broken stone                                       | '000 t | na        | (d) 1 363 | na     | 3 398  | na       | 86    | na    |
| <i>Total crushed and broken stone</i>                                | '000 t | 13 864    | 22 952    | 22 986 | 3 934  | (e) 829  | 1 671 | 1 651 |
| <b>Dimension stone</b>   |        |           |           |        |        |          |       |       |
| Basalt   | t      | —         | 12 200    | —      | —      | —        | —     | na    |
| Granite  | t      | 2 555     | 2 212     | 60     | 15 168 | 769      | —     | na    |
| Limestone  | t      | —         | —         | —      | 13 244 | —        | —     | na    |
| Sandstone  | t      | 27 089    | 185       | 39 715 | 2 919  | —        | 1 088 | na    |
| Other dimension stone (incl. slate)                                  | t      | 2 400     | (f) 617   | 3 712  | 10 186 | 534      | 1 651 | na    |
| <i>Total dimension stone</i>   | t      | 32 044    | 15 214    | 43 487 | 41 517 | 1 303    | 2 739 | 4 319 |
| <b>Other construction materials (decomposed rock, etc.)</b>          |        |           |           |        |        |          |       |       |
| Earth and soil   | '000 t | na        | 25        | 202    | —      | na       | na    | 33    |
| Filling  | '000 t | na        | —         | na     | 726    | na       | na    | —     |
| Scoria   | '000 t | na        | 784       | na     | —      | na       | na    | —     |
| Shale  | '000 t | na        | —         | na     | 407    | na       | na    | —     |
| Tuff   | '000 t | na        | 527       | na     | —      | na       | na    | —     |
| Construction materials n.e.c. (incl. shell grit and decomposed rock) | '000 t | na        | —         | na     | 5 297  | na       | na    | —     |
| <i>Total other construction materials</i>                            | '000 t | 5 181     | 1 336     | 2 548  | 6 430  | (e) na   | 1 862 | 33    |

— nil or rounded to zero (including null cells)

na not available

(a) Limestone is included in tables 4.7 and 4.8 (Other non-metallic minerals produced).

(b) Quantity is sales quantity.

(c) Includes decorative aggregate.

(d) Includes sedimentary rock.

(e) Crushed and broken stone includes other construction materials (decomposed rock, etc.).

(f) Slate only.

Source: See Explanatory Notes paragraph 38.

## 4.6 CONSTRUCTION MATERIALS PRODUCED, Value

|   | NSW(a)       | Vic.         | Qld          | SA           | WA(b)       | Tas.        | NT(c)       |
|---|--------------|--------------|--------------|--------------|-------------|-------------|-------------|
| <i>Mineral</i>  | \$m          | \$m          | \$m          | \$m          | \$m         | \$m         | \$m         |
| 2001–02   |              |              |              |              |             |             |             |
| <b>Sand and gravel</b>  |              |              |              |              |             |             |             |
| Sand  |              |              |              |              |             |             |             |
| For concrete  | na           | 58.4         | na           | 12.2         | na          | 1.0         | na          |
| For other purposes  | na           | 13.4         | na           | 13.7         | na          | 1.5         | na          |
| <i>Total sand</i>   | 86.9         | 71.8         | na           | 25.9         | 6.9         | 2.5         | 1.8         |
| Gravel  | 55.5         | 22.9         | na           | 0.5          | 1.3         | 0.2         | 1.3         |
| <b>Crushed and broken stone</b>   |              |              |              |              |             |             |             |
| Basalt  | na           | (d) 129.9    | na           | 3.2          | na          | 5.6         | na          |
| Dacite, rhyodacite, rhyolite<br>and toscanite                           | na           | 12.5         | na           | —            | na          | —           | na          |
| Dolerite  | na           | 6.1          | na           | —            | na          | 9.4         | na          |
| Dolomite  | na           | —            | na           | —            | na          | 0.2         | na          |
| Gneiss  | na           | 0.1          | na           | —            | na          | —           | na          |
| Granite   | na           | (d) 39.2     | na           | 2.1          | na          | —           | na          |
| Hornfels  | na           | 30.2         | na           | —            | na          | —           | na          |
| Limestone   | na           | 7.2          | na           | —            | na          | 0.3         | na          |
| Quartzite   | na           | 0.6          | na           | —            | na          | —           | na          |
| Sandstone   | na           | —            | na           | —            | na          | —           | na          |
| Other crushed and broken stone  | na           | (d) 8.0      | na           | 28.4         | na          | 2.1         | na          |
| <i>Total crushed and broken stone</i>                                   | 203.2        | (e) 233.7    | na           | 33.7         | (f) 7.3     | 17.6        | 19.8        |
| <b>Dimension stone</b>  |              |              |              |              |             |             |             |
| Basalt  | —            | (d) na       | —            | —            | —           | —           | na          |
| Granite   | 6.9          | (d) na       | —            | 0.9          | 0.2         | —           | na          |
| Limestone   | —            | —            | —            | 0.5          | —           | —           | na          |
| Sandstone   | 3.2          | (d) na       | 5.1          | 0.2          | —           | 0.1         | na          |
| Other dimension stone (incl. slate)                                     | —            | 0.2          | 0.7          | 2.2          | —           | 0.1         | na          |
| <i>Total dimension stone</i>  | 10.0         | 0.8          | 5.8          | 3.8          | 0.2         | 0.2         | 0.1         |
| <b>Other construction materials<br/>(decomposed rock, etc.)</b>         |              |              |              |              |             |             |             |
| Earth and soil  | na           | 0.1          | na           | —            | na          | na          | 0.2         |
| Filling   | na           | —            | na           | 5.3          | na          | na          | —           |
| Scoria  | na           | 8.5          | na           | —            | na          | na          | —           |
| Shale   | na           | —            | na           | 2.3          | na          | na          | —           |
| Tuff  | na           | 2.4          | na           | —            | na          | na          | —           |
| Construction materials n.e.c. (incl.<br>shell grit and decomposed rock) | na           | —            | na           | 39.6         | na          | na          | —           |
| <i>Total other construction materials</i>                               | 39.1         | 11.1         | na           | 47.2         | (f) na      | 4.4         | 0.2         |
| <b>Total construction materials</b>                                     | <b>394.7</b> | <b>340.2</b> | <b>330.1</b> | <b>111.0</b> | <b>15.6</b> | <b>24.9</b> | <b>23.3</b> |

— nil or rounded to zero (including null cells)

na not available

(a) Values are estimates using 1994–95 unit values.

Limestone is included in tables 4.7 and 4.8 (Other non-metallic minerals produced).

(b) Value at works. Limestone is included in tables 4.7 and 4.8 (Other non-metallic minerals produced).

(c) Values of production are estimates based on sales figures provided by mining companies.

(d) Each of crushed and broken basalt and granite includes similar dimension stone. Other crushed and broken stone includes dimension sandstone.

(e) Excludes dimension stone (which is included in components as indicated).

(f) Crushed and broken stone includes other construction materials (decomposed rock, etc.).

Source: See Explanatory Notes paragraph 38.

## 4.6 CONSTRUCTION MATERIALS PRODUCED, Value *continued*

|   | NSW(a)       | Vic.         | Qld          | SA           | WA(b)       | Tas.        | NT(c)       |
|---|--------------|--------------|--------------|--------------|-------------|-------------|-------------|
| <i>Mineral</i>  | \$m          | \$m          | \$m          | \$m          | \$m         | \$m         | \$m         |
| 2002–03   |              |              |              |              |             |             |             |
| <b>Sand and gravel</b>  |              |              |              |              |             |             |             |
| Sand  |              |              |              |              |             |             |             |
| For concrete  | na           | 67.2         | na           | 13.3         | na          | 1.5         | na          |
| For other purposes  | na           | 15.5         | na           | 14.8         | na          | 1.5         | na          |
| Total sand  | 101.4        | 82.7         | na           | 28.2         | 7.3         | 3.0         | 2.3         |
| Gravel  | 76.7         | 31.9         | na           | 0.5          | 1.1         | 0.2         | 3.9         |
| <b>Crushed and broken stone</b>   |              |              |              |              |             |             |             |
| Basalt  | na           | (d)151.8     | na           | 3.4          | na          | 7.6         | na          |
| Dacite, rhyodacite, rhyolite<br>and toscanite                           | na           | 16.5         | na           | —            | na          | —           | na          |
| Dolerite  | na           | 4.7          | na           | —            | na          | 9.5         | na          |
| Dolomite  | na           | —            | na           | —            | na          | 0.3         | na          |
| Gneiss  | na           | 0.1          | na           | —            | na          | —           | na          |
| Granite   | na           | (d)33.2      | na           | 3.8          | na          | —           | na          |
| Hornfels  | na           | 45.2         | na           | —            | na          | —           | na          |
| Limestone   | na           | 5.2          | na           | —            | na          | 0.4         | na          |
| Quartzite   | na           | 1.1          | na           | —            | na          | —           | na          |
| Sandstone   | na           | —            | na           | —            | na          | —           | na          |
| Other crushed and broken stone  | na           | (d)8.4       | na           | 29.4         | na          | 1.0         | na          |
| Total crushed and broken stone  | 186.4        | (e)266.2     | na           | 36.6         | (f)7.9      | 18.8        | 21.6        |
| <b>Dimension stone</b>  |              |              |              |              |             |             |             |
| Basalt  | —            | (d)na        | —            | —            | —           | —           | na          |
| Granite   | 0.7          | (d)na        | —            | 1.2          | 0.2         | —           | na          |
| Limestone   | —            | —            | —            | 0.3          | —           | —           | na          |
| Sandstone   | 3.9          | (d)na        | 9.1          | 0.1          | —           | 0.1         | na          |
| Other dimension stone (incl. slate)                                     | —            | 0.2          | 0.6          | 2.9          | 0.2         | —           | na          |
| Total dimension stone   | 4.6          | 1.2          | 9.7          | 4.5          | 0.4         | 0.1         | 0.1         |
| <b>Other construction materials<br/>(decomposed rock, etc.)</b>         |              |              |              |              |             |             |             |
| Earth and soil  | na           | 0.2          | na           | —            | na          | na          | 0.5         |
| Filling   | na           | —            | na           | 6.3          | na          | na          | —           |
| Scoria  | na           | 8.3          | na           | —            | na          | na          | —           |
| Shale   | na           | —            | na           | 1.1          | na          | na          | —           |
| Tuff  | na           | 2.5          | na           | —            | na          | na          | —           |
| Construction materials n.e.c. (incl.<br>shell grit and decomposed rock) | na           | —            | na           | 44.3         | na          | na          | —           |
| Total other construction materials                                      | 29.4         | 11.0         | na           | 51.7         | (f)na       | 5.1         | 0.5         |
| <b>Total construction materials</b>                                     | <b>398.5</b> | <b>393.0</b> | <b>360.3</b> | <b>121.5</b> | <b>16.6</b> | <b>27.1</b> | <b>28.4</b> |

— nil or rounded to zero (including null cells)

na not available

(a) Values are estimates using 1994–95 unit values.

Limestone is included in tables 4.7 and 4.8 (Other non-metallic minerals produced).

(b) Value at works. Limestone is included in tables 4.7 and 4.8 (Other non-metallic minerals produced).

(c) Values of production are estimates based on sales figures provided by mining companies.

(d) Each of crushed and broken basalt and granite includes similar dimension stone. Other crushed and broken stone includes dimension sandstone.

(e) Excludes dimension stone (which is included in components as indicated).

(f) Crushed and broken stone includes other construction materials (decomposed rock, etc.).

Source: See Explanatory Notes paragraph 38.

## 4.7 OTHER NON-METALLIC MINERALS PRODUCED, Quantity

| Mineral  |         | NSW      | Vic.   | Qld   | SA     | WA(a)   | Tas.   | NT    |
|--|---------|----------|--------|-------|--------|---------|--------|-------|
| 2001-02  |         |          |        |       |        |         |        |       |
| <b>Limestone (incl. shell and coral) for</b>             |         |          |        |       |        |         |        |       |
| Agriculture  | '000 t  | na       | 280    | 95    | 80     | na      | 136    | na    |
| Burning  | '000 t  | na       | —      | —     | —      | na      | 51     | na    |
| Cement   | '000 t  | na       | 687    | 2 013 | 1 209  | na      | 1 665  | na    |
| Chemicals  | '000 t  | na       | —      | —     | 748    | na      | 2      | na    |
| Flux (incl. in metal industries)                         | t       | na       | —      | 107   | —      | na      | 65 178 | na    |
| Other purposes(b)  | '000 t  | na       | 25     | 562   | 127    | na      | 15     | na    |
| <b>Total limestone</b>                                   | '000 t  | (c)4 077 | 992    | 2 670 | 2 164  | 2 892   | 1 934  | 76    |
| <b>Clays</b>   |         |          |        |       |        |         |        |       |
| Bentonite  | '000 t  | 22       | —      | 89    | —      | —       | —      | —     |
| Brick clay and shale                                     | '000 t  | (d)2 141 | 1 209  | 1 037 | 278    | —       | 19     | —     |
| Cement clay and shale                                    | '000 t  | —        | —      | 328   | 9      | —       | 80     | —     |
| Fireclay n.e.c.  | t       | —        | 20 900 | —     | 92 082 | 9 999   | —      | —     |
| Kaolin (incl. ball clay)                                 | '000 t  | (e)21    | 202    | 18    | 2      | —       | 7      | —     |
| Pipe and tile clay (incl. terra cotta for roofing tiles) | '000 t  | (d)na    | 44     | 2     | —      | —       | —      | —     |
| Pottery clay (incl. moulder's clay)                      | '000 t  | —        | —      | —     | 111    | —       | —      | —     |
| Stoneware clay   | '000 t  | —        | —      | —     | —      | —       | —      | —     |
| Other clays  | '000 t  | —        | 10     | 92    | (f)670 | 27      | 11     | —     |
| <b>Gems (precious stones)</b>                            |         |          |        |       |        |         |        |       |
| Chrysoprase  | kg      | —        | —      | na    | —      | —       | —      | na    |
| Diamonds   | '000 ct | —        | —      | —     | —      | 25 690  | —      | 90    |
| Opal   | ..      | ..       | ..     | ..    | ..     | ..      | ..     | ..    |
| Rhodonite  | ..      | ..       | ..     | ..    | ..     | ..      | ..     | ..    |
| Sapphire   | ..      | ..       | ..     | ..    | ..     | ..      | ..     | ..    |
| Zircon   | ..      | ..       | ..     | ..    | ..     | ..      | ..     | ..    |
| Gems n.e.c.(g)   | kg      | —        | —      | na    | 35     | 435 280 | na     | na    |
| <b>Other non-metallic minerals</b>                       |         |          |        |       |        |         |        |       |
| Barite   | t       | —        | —      | —     | 14 261 | —       | —      | 2 782 |
| Diatomite (diatomaceous earth)                           | t       | 11 224   | —      | 6 757 | —      | —       | —      | —     |
| Dolomite   | '000 t  | 11       | —      | 29    | 677    | 17      | —      | —     |
| Feldspar (incl. cornish stone)                           | t       | 5 098    | 56 757 | —     | 2 643  | 36 027  | —      | —     |
| Garnet concentrate                                       | t       | 7        | —      | —     | —      | 102 276 | —      | —     |
| Gypsum   | '000 t  | 285      | 781    | 79    | 1 777  | 1 344   | —      | —     |
| Magnesite, crude   | '000 t  | 35       | —      | 579   | 1      | —       | —      | —     |
| Mica   | t       | —        | —      | —     | 868    | —       | —      | —     |
| Perlite  | t       | —        | —      | 8 300 | —      | —       | —      | —     |
| Phosphate rock   | '000 t  | —        | —      | 1 711 | 2      | —       | —      | —     |
| Pyrophyllite   | t       | 868      | —      | —     | —      | —       | —      | —     |
| Salt (incl. solar salt)                                  | '000 t  | —        | —      | 160   | 597    | 8 642   | —      | —     |
| <b>Silica for industrial purposes</b>                    |         |          |        |       |        |         |        |       |
| Glass  | '000 t  | na       | 452    | 1 740 | na     | na      | 19     | —     |
| Flux   | '000 t  | —        | —      | —     | na     | na      | —      | —     |
| Foundries  | '000 t  | na       | 35     | 485   | 55     | na      | —      | —     |
| Other purposes   | '000 t  | 163      | 43     | 262   | na     | na      | 144    | —     |
| <b>Total silica for industrial purposes</b>              | '000 t  | 441      | 531    | 2 488 | 241    | 653     | 163    | —     |
| Sillimanite  | t       | —        | —      | —     | 234    | —       | —      | —     |
| Talc (incl. steatite)                                    | t       | —        | —      | —     | 8 372  | 152 369 | —      | —     |
| Vermiculite  | t       | —        | —      | —     | —      | —       | —      | 6 696 |
| Non-metallic minerals n.e.c.                             | t       | 84 886   | —      | 2 690 | —      | 13 141  | —      | —     |

.. not applicable

— nil or rounded to zero (including null cells)

na not available

(a) Quantity is sales quantity. Limestone includes that for construction purposes.

(b) For Vic.: includes limestone for lime. For Qld: includes limestone for lime, for industrial fillers and other or unspecified purposes.

For SA: includes limestone for fines, whiting and limesand.

(c) Includes limestone for construction purposes.

(d) Brick clay and shale includes pipe and tile clay.

(e) Includes flint clay, ball clay and other clays.

(f) Comprises attapulgitic clay and clay shale.

(g) Includes unspecified gems and semi-precious stones.

Source: See Explanatory Notes paragraph 38.

## 4.7 OTHER NON-METALLIC MINERALS PRODUCED, Quantity *continued*

| Mineral  |         | NSW       | Vic.   | Qld   | SA      | WA(a)   | Tas.   | NT     |
|--|---------|-----------|--------|-------|---------|---------|--------|--------|
| 2002-03  |         |           |        |       |         |         |        |        |
| <b>Limestone (incl. shell and coral) for</b>             |         |           |        |       |         |         |        |        |
| Agriculture  | '000 t  | na        | 383    | 26    | 73      | na      | 138    | na     |
| Burning  | '000 t  | na        | —      | —     | —       | na      | 53     | na     |
| Cement   | '000 t  | na        | 746    | 1 847 | 1 817   | na      | 1 685  | na     |
| Chemicals  | '000 t  | na        | —      | —     | 849     | na      | 3      | na     |
| Flux (incl. in metal industries)                         | t       | na        | —      | 156   | —       | na      | 70 506 | na     |
| Other purposes(b)  | '000 t  | na        | 98     | 763   | 113     | na      | 11     | na     |
| <b>Total limestone</b>                                   | '000 t  | (c) 4 534 | 1 228  | 2 635 | 2 852   | 4 250   | 1 961  | 84     |
| <b>Clays</b>   |         |           |        |       |         |         |        |        |
| Bentonite  | '000 t  | 27        | —      | 117   | —       | —       | —      | —      |
| Brick clay and shale                                     | '000 t  | (d) 2 894 | 931    | 1 268 | 280     | —       | 28     | —      |
| Cement clay and shale                                    | '000 t  | —         | —      | 289   | 10      | —       | 73     | —      |
| Fireclay n.e.c.  | t       | —         | 308    | —     | 73 108  | —       | —      | —      |
| Kaolin (incl. ball clay)                                 | '000 t  | (e) 20    | 249    | 18    | 2       | 2       | 9      | —      |
| Pipe and tile clay (incl. terra cotta for roofing tiles) | '000 t  | (d) na    | 20     | —     | —       | —       | —      | —      |
| Pottery clay (incl. moulder's clay)                      | '000 t  | —         | —      | —     | 131     | —       | —      | —      |
| Stoneware clay   | '000 t  | —         | 3      | —     | —       | —       | —      | —      |
| Other clays  | '000 t  | —         | 137    | 5     | (f) 521 | 31      | —      | —      |
| <b>Gems (precious stones)</b>                            |         |           |        |       |         |         |        |        |
| Chrysoprase  | kg      | —         | —      | —     | —       | —       | —      | na     |
| Diamonds   | '000 ct | —         | —      | —     | —       | 38 892  | —      | 105    |
| Opal   | ..      | ..        | ..     | ..    | ..      | ..      | ..     | ..     |
| Rhodonite  | ..      | ..        | ..     | ..    | ..      | ..      | ..     | ..     |
| Sapphire   | ..      | ..        | ..     | ..    | ..      | ..      | ..     | ..     |
| Zircon   | ..      | ..        | ..     | ..    | ..      | ..      | ..     | ..     |
| Gems n.e.c.(g)   | kg      | —         | —      | na    | 55      | 169 844 | na     | na     |
| <b>Other non-metallic minerals</b>                       |         |           |        |       |         |         |        |        |
| Barite   | t       | —         | —      | —     | 16 316  | —       | —      | 7 434  |
| Diatomite (diatomaceous earth)                           | t       | 15 863    | —      | 3 741 | —       | —       | —      | —      |
| Dolomite   | '000 t  | 14        | —      | 31    | 756     | 7       | —      | —      |
| Feldspar (incl. cornish stone)                           | t       | 3 860     | 68 198 | —     | 2 305   | 43 144  | —      | —      |
| Garnet concentrate                                       | t       | 1         | —      | —     | —       | 107 079 | —      | —      |
| Gypsum   | '000 t  | 183       | 546    | 55    | 1 820   | 1 185   | —      | —      |
| Magnesite, crude   | '000 t  | 26        | —      | 456   | 1       | —       | —      | —      |
| Mica   | t       | —         | —      | —     | 673     | —       | —      | —      |
| Perlite  | t       | —         | —      | 9 440 | —       | —       | —      | —      |
| Phosphate rock   | '000 t  | —         | —      | 1 909 | 2       | —       | —      | —      |
| Pyrophyllite   | t       | —         | —      | —     | —       | —       | —      | —      |
| Salt (incl. solar salt)                                  | '000 t  | —         | —      | 273   | 558     | 9 607   | —      | —      |
| <b>Silica for industrial purposes</b>                    |         |           |        |       |         |         |        |        |
| Glass  | '000 t  | na        | —      | 1 698 | na      | na      | 22     | —      |
| Flux   | '000 t  | na        | —      | —     | na      | na      | —      | —      |
| Foundries  | '000 t  | na        | 16     | 432   | 51      | na      | —      | —      |
| Other purposes   | '000 t  | 153       | 4      | 276   | na      | na      | 107    | —      |
| <b>Total silica for industrial purposes</b>              | '000 t  | 492       | 20     | 2 406 | 200     | 753     | 129    | —      |
| Sillimanite  | t       | —         | —      | —     | 136     | —       | —      | —      |
| Talc (incl. steatite)                                    | t       | —         | —      | —     | 8 616   | 157 364 | —      | —      |
| Vermiculite  | t       | —         | —      | —     | —       | —       | —      | 13 436 |
| Non-metallic minerals n.e.c.                             | t       | 101 529   | —      | 2 202 | —       | 12 154  | —      | —      |

.. not applicable

— nil or rounded to zero (including null cells)

na not available

(a) Quantity is sales quantity. Limestone includes that for construction purposes.

(b) For Vic.: includes limestone for lime. For Qld: includes limestone for lime, for industrial fillers and other or unspecified purposes. For SA: includes limestone for fines, whiting and limesand.

(c) Includes limestone for construction purposes.

(d) Brick clay and shale includes pipe and tile clay.

(e) Includes flint clay, ball clay and other clays.

(f) Comprises attapulgitic clay and clay shale.

(g) Includes unspecified gems and semi-precious stones.

Source: See Explanatory Notes paragraph 38.

## 4.8 OTHER NON-METALLIC MINERALS PRODUCED, Value

|  | NSW      | Vic. | Qld   | SA   | WA(a)    | Tas. | NT(b) |
|--|----------|------|-------|------|----------|------|-------|
| <i>Mineral</i>   | \$m      | \$m  | \$m   | \$m  | \$m      | \$m  | \$m   |
| 2001-02  |          |      |       |      |          |      |       |
| <b>Limestone (incl. shell and coral) for</b>             |          |      |       |      |          |      |       |
| Agriculture  | na       | 4.5  | na    | 1.6  | na       | na   | na    |
| Burning  | na       | —    | —     | —    | na       | na   | na    |
| Cement   | na       | 1.6  | na    | 15.4 | na       | na   | na    |
| Chemicals  | na       | —    | —     | 12.9 | na       | na   | na    |
| Flux (incl. in metal industries)                         | na       | —    | na    | —    | na       | na   | na    |
| Other purposes   | na       | 0.2  | na    | 1.0  | na       | na   | na    |
| <i>Total limestone</i>                                   | (c) 29.0 | 6.3  | 26.3  | 31.0 | (c) 14.4 | na   | na    |
| <b>Clays</b>   |          |      |       |      |          |      |       |
| Bentonite  | 1.7      | —    | 7.5   | —    | —        | —    | —     |
| Brick clay and shale                                     | (d) 9.6  | 4.0  | 2.8   | 1.4  | —        | 0.1  | —     |
| Cement clay and shale                                    | —        | —    | 0.3   | 0.1  | —        | 0.4  | —     |
| Fireclay n.e.c.  | —        | —    | —     | 0.7  | 0.1      | —    | —     |
| Kaolin (incl. ball clay)                                 | 1.2      | na   | 1.0   | 0.2  | —        | —    | —     |
| Pipe and tile clay (incl. terra cotta for roofing tiles) | (d) na   | 0.2  | —     | —    | —        | —    | —     |
| Pottery clay (incl. moulder's clay)                      | —        | —    | —     | 0.6  | —        | —    | —     |
| Stoneware clay   | —        | —    | —     | —    | —        | —    | —     |
| Other clays  | —        | na   | 0.2   | 0.4  | 1.5      | —    | —     |
| <b>Gems (precious stones)</b>                            |          |      |       |      |          |      |       |
| Chrysoprase  | —        | —    | 0.4   | —    | —        | —    | na    |
| Diamonds   | —        | —    | —     | —    | 488.5    | —    | 16.4  |
| Opal   | 48.0     | —    | 1.3   | 35.5 | —        | —    | na    |
| Rhodonite  | —        | —    | —     | —    | —        | —    | na    |
| Sapphire   | 3.0      | —    | 2.5   | —    | —        | —    | na    |
| Zircon   | —        | —    | —     | —    | —        | —    | na    |
| Gems n.e.c.(e)   | —        | —    | —     | —    | 0.4      | 0.1  | na    |
| <b>Other non-metallic minerals</b>                       |          |      |       |      |          |      |       |
| Barite   | —        | —    | —     | 0.7  | —        | —    | 0.6   |
| Diatomite (diatomaceous earth)                           | 2.0      | —    | 1.2   | —    | —        | —    | —     |
| Dolomite   | 0.6      | —    | 1.2   | 8.1  | 0.3      | —    | —     |
| Feldspar (incl. cornish stone)                           | 0.3      | na   | —     | 0.1  | 1.7      | —    | —     |
| Garnet concentrate                                       | —        | —    | —     | —    | na       | —    | —     |
| Gypsum   | 1.2      | na   | 1.7   | 5.0  | 25.7     | —    | —     |
| Magnesite, crude   | 1.5      | —    | 17.4  | —    | —        | —    | —     |
| Mica   | —        | —    | —     | 0.1  | —        | —    | —     |
| Perlite  | —        | —    | 1.1   | —    | —        | —    | —     |
| Phosphate rock   | —        | —    | 240.5 | —    | —        | —    | —     |
| Pyrophyllite   | 0.1      | —    | —     | —    | —        | —    | —     |
| Salt (incl. solar salt)                                  | —        | —    | 15.2  | 6.4  | 250.9    | —    | —     |
| <b>Silica for industrial purposes</b>                    |          |      |       |      |          |      |       |
| Glass  | na       | 4.4  | na    | na   | na       | 1.2  | —     |
| Flux   | —        | —    | —     | na   | na       | —    | —     |
| Foundries  | na       | 0.1  | na    | 0.7  | na       | —    | —     |
| Other purposes   | 2.1      | 0.2  | na    | na   | na       | 1.2  | —     |
| <i>Total silica for industrial purposes</i>              | 13.2     | 4.7  | 32.5  | 2.4  | 7.4      | 2.4  | —     |

— nil or rounded to zero (including null cells)

na not available

(a) Estimated f.o.b. value except for limestone, kaolin and dolomite (all valued at works), feldspar (estimated free on rail value), and talc (ex-mine value).

(b) Values of production are estimates based on sales figures provided by mining companies.

(c) Includes limestone for construction purposes.

(d) Brick clay and shale includes pipe and tile clay.

(e) Includes unspecified gems and semi-precious stones.

Source: See Explanatory Notes paragraph 38.

## 4.8 OTHER NON-METALLIC MINERALS PRODUCED, Value *continued* .....

|   | NSW          | Vic.            | Qld          | SA          | WA(a)            | Tas.            | NT(b)           |
|---|--------------|-----------------|--------------|-------------|------------------|-----------------|-----------------|
| <i>Mineral</i>                                  | \$m          | \$m             | \$m          | \$m         | \$m              | \$m             | \$m             |
| 2001-02 <i>cont.</i>                            |              |                 |              |             |                  |                 |                 |
| <b>Other non-metallic minerals <i>cont.</i></b> |              |                 |              |             |                  |                 |                 |
| Sillimanite                                     | —            | —               | —            | —           | —                | —               | —               |
| Talc (incl. steatite)                           | —            | —               | —            | 0.3         | 13.7             | —               | —               |
| Vermiculite                                     | —            | —               | —            | —           | —                | —               | 1.7             |
| Non-metallic minerals n.e.c.                    | 1.3          | —               | —            | —           | 1.7              | —               | —               |
| <b>Total other non-metallic minerals</b>        | <b>112.7</b> | <b>(c) 15.2</b> | <b>353.3</b> | <b>92.9</b> | <b>(d) 806.3</b> | <b>(e) 43.4</b> | <b>(f) 18.7</b> |

— nil or rounded to zero (including null cells)

(a) Estimated f.o.b. value except for limestone, kaolin and dolomite (all valued at works), feldspar (estimated free on rail value), and talc (ex-mine value).

(b) Values of production are estimates based on sales figures provided by mining companies.

(c) Excludes kaolin, other clays, feldspar and gypsum.

(d) Excludes garnet concentrate.

(e) Includes value of production for coal, oil and gas (table 4.4).

(f) Excludes limestone, and gems other than diamonds.

Source: See Explanatory Notes paragraph 38.

## 4.8 OTHER NON-METALLIC MINERALS PRODUCED, Value *continued*

|  | NSW      | Vic. | Qld   | SA   | WA(a)    | Tas. | NT(b) |
|--|----------|------|-------|------|----------|------|-------|
| <i>Mineral</i>   | \$m      | \$m  | \$m   | \$m  | \$m      | \$m  | \$m   |
| 2002-03  |          |      |       |      |          |      |       |
| <b>Limestone (incl. shell and coral) for</b>             |          |      |       |      |          |      |       |
| Agriculture  | na       | 8.5  | na    | 1.1  | na       | na   | na    |
| Burning  | na       | —    | —     | —    | na       | na   | na    |
| Cement   | na       | 4.2  | na    | 14.3 | na       | na   | na    |
| Chemicals  | na       | —    | —     | 13.4 | na       | na   | na    |
| Flux (incl. in metal industries)                         | na       | —    | na    | —    | na       | na   | na    |
| Other purposes   | na       | 8.0  | na    | 0.7  | na       | na   | na    |
| <i>Total limestone</i>                                   | (c) 32.3 | 20.7 | 58.0  | 29.5 | (c) 17.7 | na   | na    |
| <b>Clays</b>   |          |      |       |      |          |      |       |
| Bentonite  | 2.0      | —    | 11.0  | —    | —        | —    | —     |
| Brick clay and shale                                     | (d) 12.9 | 3.4  | 2.8   | 1.3  | —        | 0.1  | —     |
| Cement clay and shale                                    | —        | —    | 1.3   | 0.1  | —        | 0.3  | —     |
| Fireclay n.e.c.  | —        | —    | —     | 0.5  | —        | —    | —     |
| Kaolin (incl. ball clay)                                 | 1.1      | na   | 0.9   | 0.1  | 0.1      | —    | —     |
| Pipe and tile clay (incl. terra cotta for roofing tiles) | (d) na   | 0.2  | —     | —    | —        | —    | —     |
| Pottery clay (incl. moulder's clay)                      | —        | —    | —     | 0.8  | —        | —    | —     |
| Stoneware clay   | —        | —    | —     | —    | —        | —    | —     |
| Other clays  | —        | na   | —     | 1.1  | 1.4      | —    | —     |
| <b>Gems (precious stones)</b>                            |          |      |       |      |          |      |       |
| Chrysoprase  | —        | —    | —     | —    | —        | —    | na    |
| Diamonds   | —        | —    | —     | —    | 770.9    | —    | 14.3  |
| Opal   | 35.0     | —    | 0.5   | 35.9 | —        | —    | na    |
| Rhodonite  | —        | —    | —     | —    | —        | —    | na    |
| Sapphire   | 1.9      | —    | 1.1   | —    | —        | —    | na    |
| Zircon   | —        | —    | —     | —    | —        | —    | na    |
| Gems n.e.c.(e)   | —        | —    | 0.1   | —    | 0.2      | 0.1  | na    |
| <b>Other non-metallic minerals</b>                       |          |      |       |      |          |      |       |
| Barite   | —        | —    | —     | 0.8  | —        | —    | 0.4   |
| Diatomite (diatomaceous earth)                           | 2.9      | —    | 1.2   | —    | —        | —    | —     |
| Dolomite   | 0.8      | —    | 1.3   | 8.7  | 0.1      | —    | —     |
| Feldspar (incl. cornish stone)                           | —        | na   | —     | —    | 2.2      | —    | —     |
| Garnet concentrate                                       | —        | —    | —     | —    | na       | —    | —     |
| Gypsum   | 2.4      | na   | 1.9   | 5.2  | 20.2     | —    | —     |
| Magnesite, crude   | 1.0      | —    | 16.7  | —    | —        | —    | —     |
| Mica   | —        | —    | —     | —    | —        | —    | —     |
| Perlite  | —        | —    | 1.8   | —    | —        | —    | —     |
| Phosphate rock   | —        | —    | 130.6 | —    | —        | —    | —     |
| Pyrophyllite   | —        | —    | —     | —    | —        | —    | —     |
| Salt (incl. solar salt)                                  | —        | —    | 26.6  | 5.6  | 227.9    | —    | —     |
| Silica for industrial purposes                           |          |      |       |      |          |      |       |
| Glass  | na       | —    | na    | na   | na       | 1.7  | —     |
| Flux   | na       | —    | —     | na   | na       | —    | —     |
| Foundries  | na       | 0.3  | na    | 1.0  | na       | —    | —     |
| Other purposes   | 1.9      | 0.1  | na    | na   | na       | 1.1  | —     |
| <i>Total silica for industrial purposes</i>              | 10.5     | 0.4  | 27.3  | 2.2  | 8.0      | 2.8  | —     |

— nil or rounded to zero (including null cells)

na not available

(a) Estimated f.o.b. value except for limestone, kaolin and dolomite (all valued at works), feldspar (estimated free on rail value), and talc (ex-mine value).

(b) Values of production are estimates based on sales figures provided by mining companies.

(c) Includes limestone for construction purposes.

(d) Brick clay and shale includes pipe and tile clay.

(e) Includes unspecified gems and semi-precious stones.

Source: See Explanatory Notes paragraph 38.

## 4.8 OTHER NON-METALLIC MINERALS PRODUCED, Value *continued* .....

|   | NSW          | Vic.            | Qld          | SA          | WA(a)              | Tas.            | NT(b)           |
|---|--------------|-----------------|--------------|-------------|--------------------|-----------------|-----------------|
| <i>Mineral</i>                                  | \$m          | \$m             | \$m          | \$m         | \$m                | \$m             | \$m             |
| 2002-03 <i>cont.</i>                            |              |                 |              |             |                    |                 |                 |
| <b>Other non-metallic minerals <i>cont.</i></b> |              |                 |              |             |                    |                 |                 |
| Sillimanite                                     | —            | —               | —            | —           | —                  | —               | —               |
| Talc (incl. steatite)                           | —            | —               | —            | 0.1         | 15.0               | —               | —               |
| Vermiculite                                     | —            | —               | —            | —           | —                  | —               | 5.0             |
| Non-metallic minerals n.e.c.                    | 1.9          | —               | —            | —           | 1.7                | —               | —               |
| <b>Total other non-metallic minerals</b>        | <b>104.7</b> | <b>(c) 24.9</b> | <b>283.2</b> | <b>91.9</b> | <b>(d) 1 065.6</b> | <b>(e) 41.4</b> | <b>(f) 19.7</b> |

— nil or rounded to zero (including null cells)

(a) Estimated f.o.b. value except for limestone, kaolin and dolomite (all valued at works), feldspar (estimated free on rail value), and talc (ex-mine value).

(b) Values of production are estimates based on sales figures provided by mining companies.

(c) Excludes kaolin, other clays, feldspar and gypsum.

(d) Excludes garnet concentrate.

(e) Includes value of production for coal, oil and gas (table 4.4).

(f) Excludes limestone, and gems other than diamonds.

Source: See Explanatory Notes paragraph 38.

## EXPLANATORY NOTES .....

### INTRODUCTION

**1** This publication, *Mining Operations, Australia, 2001–02 and 2002–03* (cat. no. 8415.0), is the first to present mining industry data compiled from the 2001–02 and 2002–03 collections, together with some revised and comparative statistics for 2000–01. This is also the first issue where the Australian Business Number (ABN) is the primary basis for the statistical units used to collect the data. (As a consequence, the scope of the collection has been expanded to include non-employers, although this has not had a significant effect upon the statistics presented.) For the last published survey (2000–01), the employing ABS 'management unit' was the sole statistical unit used to collect data. For more information about these changes to the annual mining collection and how they affect data outputs, see Appendices 1 and 2.

**2** Mining, as specified in Division B of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (cat. no. 1292.0), relates to the extraction of minerals occurring naturally as solids such as coal and ores, liquids such as crude petroleum, or gases such as natural gas, by such processes as underground mining, open-cut extraction methods, quarrying, operation of wells or evaporation pans, dredging or recovering from ore dumps or tailings. Activities such as briquetting, or dressing/beneficiating ores or other minerals (by crushing, milling, screening, washing, flotation, chemical beneficiation, etc.) are included, because they are generally carried out at or near mine sites as an integral part of mining operations. Natural gas absorption and purifying plants are also included. The division also includes exploration for minerals, the provision of a wide variety of services to mining and mineral exploration, as well as mining units under development.

**3** The mining collection is conducted on an annual basis as a component of the Economic Activity Survey (EAS):

- A sample of mining businesses (approximately, 800 for 2001–02 and 750 for 2002–03) were asked to provide employment details and data obtained from statements of financial performance and position, mainly by mail out questionnaires. Businesses were asked to supply key details of their operations by state and territory, enabling the production of the state/territory estimates contained in table 2.16.
- For each year, key financial data for nearly 2,450 mining businesses, which had been supplied by them to the Australian Taxation Office (ATO) on business income tax returns (BIT data), were then used to supplement the ABS's directly collected information.  
For details, see Appendix 1 paragraphs 5–12.

**4** Mineral production data, as published in Chapter 4, are not collected as part of the annual mining collection (see Explanatory Notes paragraphs 36–38 for further detail).

### STATISTICAL UNITS DEFINED ON THE ABS BUSINESS REGISTER

**5** The ABS uses an economic statistics units model on the ABS Business Register (ABSBR) to describe the characteristics of businesses, and the structural relationships between related businesses. Within large and diverse business groups, the units model is used also to define reporting units that can provide data to the ABS at suitable levels of detail.

STATISTICAL UNITS DEFINED  
ON THE ABS BUSINESS  
REGISTER *continued*

*ATO maintained population*

**6** In mid 2002, to better use the information available as a result of *The New Tax System* (TNTS), the ABS changed its economic statistics units model. The new units model allocates businesses to one of two sub-populations. The vast majority of businesses are in what is called the ATO maintained population, while the remaining businesses are in the ABS maintained population. Together, these two sub-populations make up the ABSBR population.

**7** Most businesses and organisations in Australia need to obtain an Australian Business Number (ABN), and are then included on the whole-of-government register of businesses, the Australian Business Register (ABR), which is maintained by the ATO. Most of these businesses have simple structures; therefore, the unit registered for an ABN will satisfy ABS statistical requirements. For these businesses, the ABS has aligned its statistical units structure with the ABN unit. The businesses with simple structures constitute the ATO maintained population, and the ABN unit is used as the statistical unit for all ABS economic collections.

*ABS maintained population*

**8** For the population of businesses where the ABN unit is not suitable for ABS statistical requirements, the ABS maintains its own units structure through direct contact with the business. These businesses constitute the ABS maintained population. This population consists typically of large, complex and diverse businesses. The new statistical units model described below has been introduced to cover such businesses.

*Enterprise group:* This is a unit covering all the operations in Australia of one or more legal entities under common ownership and/or control. It covers all the operations in Australia of legal entities which are related in terms of the current Corporations Law (as amended by the *Corporations Legislation Amendment Act 1991*), including legal entities such as companies, trusts and partnerships. Majority ownership is not required for control to be exercised.

*Enterprise:* The enterprise is an institutional unit comprising:

- (i) a single legal entity or business entity, or
- (ii) more than one legal entity or business entity within the same enterprise group and in the same institutional sub-sector (i.e. they are all classified to a single Standard Institutional Sector Classification of Australia (SISCA) sub-sector).

*Type of activity unit (TAU):* The TAU is comprised of one or more business entities, sub-entities or branches of a business entity within an enterprise group that can report production and employment data for similar economic activities. When a minimum set of data items are available, a TAU is created which covers all the operations within an industry subdivision (and the TAU is classified to the relevant subdivision of the ANZSIC). Where a business cannot supply adequate data for each industry, a TAU is formed which contains activity in more than one industry subdivision.

**9** For more information about the effects of the introduction of the new economic statistics units model, refer to *Information Paper: Improvements in ABS Economic Statistics [Arising from The New Tax System]* (cat. no. 1372.0).

*Comparison over time*

**10** For the 2000–01 year, the mining collection used the management unit as the statistical unit. For 2001–02 and later years, the statistical unit is the ABN unit for businesses with simple structures, and the TAU for businesses with complex structures. In most cases, ABN units / TAUs will concord with the management units used prior to the 2001–02 year.

## SCOPE AND COVERAGE

**11** The scope of the 2001–02 and 2002–03 mining collections comprises all businesses (including non-employed businesses) on the ABSBR at time of selection, whose industry is classified to ANZSIC Division B MINING. This division comprises the following subdivisions and their component groups and classes:

- 11 Coal mining
  - 110 Coal mining
    - 1101 Black coal mining
    - 1102 Brown coal mining
- 12 Oil and gas extraction
  - 120 Oil and gas extraction
    - 1200 Oil and gas extraction
- 13 Metal ore mining
  - 131 Metal ore mining
    - 1311 Iron ore mining
    - 1312 Bauxite mining
    - 1313 Copper ore mining
    - 1314 Gold ore mining
    - 1315 Mineral sand mining
    - 1316 Nickel ore mining
    - 1317 Silver–lead–zinc ore mining
    - 1319 Metal ore mining n.e.c.
- 14 Other mining
  - 141 Construction material mining
    - 1411 Gravel and sand quarrying
    - 1419 Construction material mining n.e.c.
  - 142 Mining n.e.c.
    - 1420 Mining n.e.c.
- 15 Services to mining
  - 151 Exploration
    - 1511 Petroleum exploration (own account)
    - 1512 Petroleum exploration services
    - 1513 Mineral exploration (own account)
    - 1514 Mineral exploration services
  - 152 Other mining services
    - 1520 Other mining services

**12** Industry statistics in Chapters 1–3 of this publication are presented at the subdivision level for all subdivisions except ANZSIC Subdivision 13 METAL ORE MINING, which is presented at the class level.

**13** The ANZSIC-based industry statistics presented in this publication are compiled differently from activity statistics. Each ABN unit or TAU on the ABSBR has been classified (by the ATO and the ABS respectively) to a single industry irrespective of any diversity of activities undertaken. The industry class allocated is the one which provides the main source of income. A mining business is one predominantly engaged in mining activities, but the data collected for it cover all activities of the business (including non-mining activities). Conversely, there are some businesses predominantly engaged in non-mining activities which also undertake limited mining activities; these are excluded from the collection.

**14** Businesses mainly engaged in refining or smelting of minerals or ores (other than preliminary smelting of gold), or in the manufacturing of such products of mineral origin as coke, cement and fertilisers, are excluded, as they are engaged in activities classified to ANZSIC Division C MANUFACTURING.

## SCOPE AND COVERAGE

*continued*

**15** Businesses engaged in providing contract mining services are not always within the scope of the annual mining collection. Under ANZSIC principles, only contract mining organisations responsible for all facets of the mining operation are classified to MINING. Businesses which contract to provide selected services are classified on the basis of the (predominant) activity they are performing, rather than to the industry they are serving. For example, businesses that are contracted to perform tasks such as mine site preparation (and/or construction), and removal of overburden, are classified to ANZSIC Division E CONSTRUCTION and are, therefore, outside the scope of the mining collection.

**16** Some mining businesses engage, in a significant way, in activities which are normally carried out by different industries. For example, a predominantly mining business may also undertake significant amounts of manufacturing. Similarly, a mining business may produce significant volumes of goods which are normally produced in different mining industries. Where a business makes a significant economic contribution to industries classified to different ANZSIC subdivisions, the ABS includes the business in the ABS maintained population, and 'splits' the TAU's reported data between the industries involved. Significance is determined using total income.

**17** A TAU's reported data will be split if the inclusion of data relating to the secondary activity in the statistics for the industry of the primary activity distorts (by overstating or understating) either the primary or secondary industry statistics at the ANZSIC subdivision level by:

- 3% or more, where the industries of the primary and secondary activities are in the same ANZSIC division
- 2% or more, where the industries of the primary and secondary activities are in different ANZSIC divisions.

**18** Unincorporated joint ventures (UJVs) within the mining industry are arrangements which allow the sharing of expertise, resources and risk associated with the development of mineral deposits. This occurs through the participation of a number of organisations (by investment) in a mining operation. Some of these organisations may not otherwise be involved in the mining industry.

**19** The mining collection includes mining businesses which are operators and/or participants in UJVs. Generally, each participant supplies data on their share of income and assets, while the operator reports all expenses and employment.

**20** The ABS attempts to obtain data for those businesses which ceased operation during the year, but it is not possible to obtain data for all of them.

## REFERENCE PERIOD

**21** The period covered by the collection is, in general, the 12 months ended 30 June. Where businesses are unable to supply information on this basis, an accounting period for which data can be provided is used for data other than that relating to employment.

**22** Financial data presented incorporate all units in scope of the mining collection that were in production stage at any time during the year. They also include any temporarily inactive units, i.e. those units which were in the development stage or which were not in production, but which still existed and held assets and liabilities and/or incurred some non-operating expenses (e.g. depreciation, administration costs).

## RELIABILITY OF ESTIMATES

**23** For information on this subject, see Technical Notes 1 and 2.

## INDUSTRY PERFORMANCE MEASURES

**24** This publication presents a wide range of data that can be used to analyse business and industry performance.

**25** Differences in accounting policy and practices across businesses and industries can lead to some inconsistencies in the data input to the statistics. While much of the accounting process is subject to standards, there is still a great deal of flexibility left to managers and accountants in the accounting policy and practices they adopt. For

## INDUSTRY PERFORMANCE

MEASURES *continued*

example, acceptable methods of asset valuation include historical cost, replacement cost and current market value. The timing of asset revaluations also varies considerably across businesses. The way profit is measured is affected by management policy on such issues as depreciation rates, bad debt provisions and write off, and goodwill write off.

**26** A range of performance measures, usually expressed as ratios, can be produced from the data available from businesses' statements of financial performance and position. The ratios presented in this publication comprise:

- income ratios, which indicate the efficiency of selling activities (including the sale of services as well as goods)
- profitability ratios, which measure rates of profit on sales, funds and assets
- liquidity ratios, which measure the ability of businesses to meet short-term financial obligations, i.e. how quickly selected assets can be converted into cash
- debt ratios, which indicate the extent to which debt is used as an alternative to financing through equity and the ability of businesses to meet the cost of such financing
- labour ratios, which measure the relative profitability and costs of labour
- capital expenditure ratios, which indicate the capacity for and extent of business investment in capital assets.

**27** A further explanation of each ratio can be found in the Glossary.

**28** Those ratios compiled from a combination of flow and level items need to be treated with additional caution. The information contained in statements of financial position indicate the level of assets and liabilities at a point in time. Information contained in statements of financial performance summarise the flows (or transactions) which have taken place during the past financial year. Ratios which include both level and flow items in their derivation may be volatile due to the timing differences involved. It may, therefore, be preferable to base any analysis on a range of data presented rather than focusing on one variable.

**29** The varying degree to which businesses consolidate their accounts may also affect the ratios calculated.

**30** The above limitations are not meant to imply that analysis based on these data should be avoided, only that they should be borne in mind when interpreting the data presented in this publication.

STATE AND TERRITORY  
ESTIMATES

**31** State and territory summary estimates for selected mining (i.e. Total mining excluding ANZSIC Subdivision 15 SERVICES TO MINING) are presented in table 2.16. To enable the production of these estimates, businesses which received the mail out questionnaire were asked to report data for employment, wages and salaries, and sales of goods and services for each state and/or territory in which they operated, if more than one. The relevant data for all other businesses, including those whose contribution was sourced from BIT data, were allocated to their state/territory of operations as recorded on the ABSBR. Further statistical modelling enabled the production of state and territory estimates for industry value added.

**32** State and Northern Territory mineral production statistics are presented in Chapter 4 (see Explanatory Notes paragraphs 36–38 for details).

## DATA ADJUSTED

**33** Data in this publication have been adjusted to allow for lags in processing new businesses to the ABSBR. The effects of these adjustments on Australian estimates of sales and service income are:

- for 2001–02, an increase of 1.4%
- for 2002–03, an increase of 0.6%.

**34** Most states and territories and most industries were affected to a similar degree.

## EMPLOYMENT DATA

**35** Employment estimates (and related ratios) have been excluded from this issue, due to reliability problems with the modelling of ATO BIT data intended to provide employment estimates for non-sampled ABN units. When these problems are resolved, estimates will be made available.

## MINERAL PRODUCTION DATA

**36** Chapter 4 of this publication presents details of the quantity and value of minerals produced during the years ended 30 June 2002 and 30 June 2003.

**37** These data are sourced from annual publications and other information supplied by the various state and Northern Territory departments responsible for the collection of these statistics. The tables presented cover production of metallic minerals, coal, oil and gas, construction materials, and other non-metallic minerals. The presentation of these data is designed to give users an overview of the level of mining activity within each state and the Northern Territory. The tables have been footnoted to provide an indication of conceptual differences. As the footnotes relate to specified commodity definitions and valuation methodologies, they should not be considered as an exhaustive list of these differences. For further information, users should consult the data sources indicated in the following paragraph.

**38** Users requiring detailed information about the level and type of commodities produced in each state and the Northern Territory are encouraged to refer to the respective departments' web sites and publications:

New South Wales: Department of Mineral Resources,  
<<http://www.minerals.nsw.gov.au>>

*Quantity and value of major mining products in New South Wales*

Victoria: Department of Primary Industries, <<http://www.dpi.vic.gov.au>>

*Minerals and Petroleum Victoria, Statistical Review*

Queensland: Department of Natural Resources and Mines,

<<http://www.nrm.qld.gov.au>>

*Queensland Minerals and Energy Review*

South Australia: Department of Primary Industries and Resources,

<<http://www.pir.sa.gov.au>>

*Resource Production Statistics*, biannual

Western Australia: Department of Industry and Resources,

<<http://www.doir.wa.gov.au>>

*Western Australian Statistics Digest, Mineral and Petroleum Production*

Tasmania: Department of Infrastructure, Energy and Resources,

<<http://www.dier.tas.gov.au>>

*Mineral Resources Tasmania, Annual Review*

Northern Territory: Department of Business, Industry and Resource Development,

<<http://www.dbird.nt.gov.au>>

*Annual Production Report*

## ACKNOWLEDGMENT

**39** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

## RELATED PUBLICATIONS

**40** The ABS produces industry estimates for a range of selected industries (including Mining) and these results are to be available in *Australian Industry, 2001–02 and 2002–03* (cat. no. 8155.0) to be released on 20 December 2004. National estimates of income, expenditure, assets and liabilities and associated ratios will be available at the ANZSIC division level. Data presenting greater detail are considered experimental at this stage, while the methodology used to produce them is reviewed and improved. These consist of national estimates of income, expenses, operating profit before tax (OPBT),

## RELATED PUBLICATIONS

*continued*

and wages and salaries, at the ANZSIC group level, and state/territory estimates of these items at the ANZSIC division level.

**41** Users may also wish to refer to the following publications:

*Australian Industry, 2000–01*, cat. no. 8155.0, released on 27 August 2003

– Annual publication

*Australian Labour Market Statistics*, cat. no. 6105.0 – Quarterly publication

*Australian National Accounts: National Income, Expenditure and Product*,

cat. no. 5206.0 – Quarterly publication

*Australian National Accounts: State Accounts, 2002–03*, cat. no. 5220.0,

released on 12 November 2003 – Annual publication

*Australian System of National Accounts: Concepts, Sources and Methods, 2000*,

cat. no. 5216.0, released on 21 December 2000 – Irregular publication

*Business Indicators, Australia*, cat. no. 5676.0 – Quarterly publication

*Business Operations and Industry Performance, Australia, 2000–01*,

cat. no. 8140.0, released on 6 December 2002 – Final issue

*Directory of Mining Statistics*, cat. no. 8416.0, released on 29 October 1999

– Irregular publication

*Electricity, Gas, Water and Sewerage Operations, Australia, 2001–02 and 2002–03*,

cat. no. 8226.0, released on 4 November 2004 – Annual publication

*Environment Protection, Mining and Manufacturing Industries, Australia,*

*2000–2001*, cat. no. 4603.0, released on 4 September 2002 – Irregular publication

*Information Paper: ABS Statistics and The New Tax System, 2000*, cat. no. 1358.0,

released on 26 April 2000 – Irregular publication

*Information Paper: Improvements in ABS Economic Statistics [Arising from The*

*New Tax System]*, cat. no. 1372.0, released on 6 May 2002 – Irregular publication

*International Merchandise Trade, Australia, March quarter 2003*, cat. no. 5422.0

– Final publication

*International Trade in Goods and Services, Australia*, cat. no. 5368.0

– Monthly publication

*International Trade Price Indexes, Australia*, cat. no. 6457.0

– Quarterly publication

*Job Vacancies, Australia*, cat. no. 6354.0 – Quarterly publication

*Labour Costs, Australia, 2002–03*, cat. no. 6348.0.55.001, released on 11 June 2004

– Irregular electronic publication

*Labour Price Index, Australia*, cat. no. 6345.0 – Quarterly publication (renamed

from *Wage Cost Index, Australia*)

*Mineral and Petroleum Exploration, Australia*, cat. no. 8412.0

– Quarterly publication

*Private New Capital Expenditure and Expected Expenditure, Australia*,

cat. no. 5625.0 – Quarterly publication

*Producer Price Indexes, Australia*, cat. no. 6427.0 – Quarterly publication

*Research and Experimental Development, Businesses, Australia, 2002–03*,

cat. no. 8104.0, released on 6 September 2004 – Annual publication

*Wage Cost Index, Australia*, cat. no. 6345.0 – renamed, from September Quarter

2004 issue. See *Labour Price Index, Australia*

*Year Book Australia, 2004*, cat. no. 1301.0, released on 27 February 2004

– Annual publication

**42** Current publications and other products released by the ABS are listed in the *Catalogue of Publications and Products* (cat. no. 1101.0). The Catalogue is available from any ABS office or the ABS web site <<http://www.abs.gov.au>>. The ABS also issues a daily Release Advice on the web site which details products to be released in the week ahead.

*Non-ABS data*

**43** The following organisations also publish mining and related statistics for Australia:

ABARE, web site <<http://www.abareconomics.com>>

*Australian Commodities* (forecasts and issues)

*Australian Commodity Statistics*

*Australian Mineral Statistics*

Geoscience Australia, web site <<http://www.ga.gov.au>>

*Australia's Identified Mineral Resources*

*Oil and Gas Resources of Australia*

Minerals Council of Australia, web site <<http://www.minerals.org.au>>

*Minerals Industry Survey Report, 2003*

United States Department of the Interior, US Geological Survey,

web site <<http://www.geology.usgs.gov>>

*Mineral Commodity Summaries*

*The Mineral Industry of Australia*

ABS DATA AVAILABLE ON  
REQUEST

**44** As well as the statistics included in this and related publications, the ABS may have other relevant data available on request and for a charge. Inquiries should be made to the National Information and Referral Service on 1300 135 070.

ROUNDING

**45** Where figures have been rounded, discrepancies may occur between totals and the sums of the component items.

**46** Proportions, ratios and other calculated figures shown in this publication have been calculated using unrounded estimates and may be different from, but are more accurate than, calculations based on the rounded estimates.

## ABBREVIATIONS

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|        |   |
|--------|---|
| '000   | thousand  |
| \$b    | billion (thousand million) dollars                            |
| \$m    | million dollars   |
| ABARE  | Australian Bureau of Agricultural and Resource Economics      |
| ABN    | Australian Business Number                                    |
| ABR    | Australian Business Register                                  |
| ABS    | Australian Bureau of Statistics                               |
| ABSBR  | Australian Bureau of Statistics Business Register             |
| ANZSIC | Australian and New Zealand Standard Industrial Classification |
| ATO    | Australian Taxation Office                                    |
| BAS    | Business Activity Statement                                   |
| BIT    | business income tax   |
| ct     | carat (metric)  |
| EAS    | Economic Activity Survey                                      |
| EBIT   | earnings before interest and tax                              |
| f.o.b. | free on board   |
| GL     | gigalitre   |
| GST    | Goods and Services Tax  |
| IVA    | industry value added  |
| kg     | kilogram  |
| LNG    | liquefied natural gas   |
| LPG    | liquefied petroleum gas                                       |
| ML     | megalitre   |
| Mt     | megatonne   |
| MU     | management unit   |
| n.e.c. | not elsewhere classified                                      |
| NSW    | New South Wales   |
| NT     | Northern Territory  |
| OPBT   | operating profit before tax                                   |
| PJ     | petajoule   |
| Qld    | Queensland  |
| RSE    | relative standard error                                       |
| SA     | South Australia   |
| SISCA  | Standard Institutional Sector Classification of Australia     |
| t      | tonne   |
| Tas.   | Tasmania  |
| TAU    | type of activity unit   |
| TNTS   | The New Tax System  |
| UJV    | unincorporated joint venture                                  |
| Vic.   | Victoria  |
| WA     | Western Australia   |

## APPENDIX 1

## SURVEY CHANGES

### CHANGES TO ABS BUSINESS REGISTER

- 1** The introduction of The New Tax System (TNTS) has had a number of significant implications for ABS business statistics. These were initially discussed in *Information Paper: ABS Statistics And The New Tax System* (cat. no. 1358.0) which was released on 26 April 2000. The paper foreshadowed changes in the statistical infrastructure used by the ABS to support compilation of ABS economic series.
- 2** *Information Paper: Improvements in ABS Economic Statistics [Arising from The New Tax System]* (cat. no. 1372.0) released on 6 May 2002 provided further information about these changes and their treatment in statistical series.
- 3** Most of these changes directly affected the ABS Business Register (ABSBR), which contains a list of businesses from which samples are selected to collect data for ABS economic series (including the annual mining collection). The series have been affected by the changes in the following ways:
  - the population of businesses that are considered to be employing based on taxation information has changed as a result of TNTS
  - the statistical units model, that is, the way in which business structures are represented on the ABSBR, is being more closely aligned with taxation reporting requirements
  - the Australian Taxation Office (ATO), which maintains the Australian Business Register used as a source for ABSBR ABN units, has classified some businesses differently from the ABS, for example to different industries
  - different measures of business size are available.
- 4** For more information about the ABSBR, see Explanatory Notes paragraphs 5–8.

### 2001–02 SURVEY CHANGES

- 5** For each of the 2001–02 and 2002–03 mining collections, the ABSBR allocated businesses to one of two sub-populations, comprising respectively ABN units and TAUs (Type of activity units). For unit definitions, see Explanatory Notes paragraphs 7–10. These units replaced the management unit, which was the basis for the 2000–01 collection. In addition, the ABS made further changes, notably, expanding its register to encompass all units on the ATO maintained Australian Business Register, including non-employers. (These non-employers have now been included in the scope of the mining collection.) In most other cases, ABN units / TAUs concurred with the management units used for 2000–01.

### CHANGES TO DATA ESTIMATES

- 6** For a number of years, the ABS has been expanding the range of data sources it uses, in order to decrease the statistical reporting load placed on providers while maintaining or increasing the range of information available. A major alternate source of data is the ATO, which collects key financial data for business income tax and other taxation related purposes. Section 68 of the *Taxation Administration Act 1953* provides for the ATO to pass information to the Australian Statistician for the purposes of the *Census and Statistics Act 1905*. For the first time, the estimates in this publication have been sourced from a combination of data from the Economic Activity Survey (EAS) conducted by the ABS and key financial data from business income tax files (BIT data) provided by the ATO.

*ABS maintained population*

**7** All units in the ABS maintained population (i.e. TAUs) classified to MINING were eligible to be selected for direct collection. Since the ABS maintained population mainly accounts for large and complex businesses, direct collection of data by the ABS for these units is necessary because:

- many large and complex employing businesses have more than one legal entity, making it difficult to identify all legal entities for that business in the BIT data
- BIT data do not include all of the detailed information that the ABS requires from large and complex businesses
- 'tax exempt' businesses that are not required to complete business income tax returns would otherwise not contribute to the statistics.

*ATO maintained population*

**8** The balance of units on the ABSBR classified to MINING were ABN units, from the ATO maintained population. Cut-offs were established (see Appendix 1 paragraphs 9–11) which determined the way in which each ABN unit contributed to the statistics:

- First, ABN units with annualised Business Activity Statement (BAS) total sales (used in lieu of EAS total income) at or greater than the cut-offs set for individual ANZSIC categories were eligible to be selected for direct collection of data by the ABS. If selected, they were sent the same mail out questionnaire for completion that was sent to selections from the ABS maintained population.
- Second, ABN units with annualised BAS total sales below the cut-offs were excluded from direct collection. For these units, BIT data were obtained and added to the directly collected estimates to produce the statistics in this publication.

*Cut-offs for ABN units*

**9** For each of the 2001–02 and 2002–03 collections, estimates for six key data items from the 2000–01 EAS collection were used to determine the cut-offs at or above which an ABN unit was available for direct collection, and below which its contribution was sourced from BIT data. The key data items used were employment, wages and salaries, sales and service income, industry value added, total income and total expenses.

**10** Cut-offs were set separately for each of fourteen ANZSIC categories: Subdivisions 11 and 12, Groups 141, 142, 151 and 152, and Classes 1311, 1312, 1313, 1314, 1315, 1316, 1317 and 1319.

**11** The cut-offs were initially set such that the aggregated contribution of those ABN units sourced from BIT data to the six key estimates was expected to be less than 5% (and preferably closer to 2%). Once determined, the non-employment cut-offs were adjusted so that none was greater than \$1 million.

*Mining industry estimates*

**12** Therefore, 2001–02 and 2002–03 mining industry estimates were each derived as follows:

- For all businesses in the ABS maintained population and those businesses at or above the cut-offs in the ATO maintained population, a sample survey was used to estimate their contribution
- For the balance of businesses (i.e. in the ATO maintained population below the cut-offs for their ANZSIC category), their contribution was sourced from BIT data, with some more detailed breakdowns produced using proportional relationships derived from the sample survey.

*Income contribution by unit type*

**13** The following table shows proportional contributions to sales and service income by the business groupings described in the previous paragraphs of this Appendix.

Income contribution by unit  
type continued

CONTRIBUTION TO SALES AND SERVICE INCOME (a)

| ABSBR<br>unit | ATO<br>BIT<br>data<br>% | Directly<br>collected<br>data<br>% | Total<br>%   |
|---------------|-------------------------|------------------------------------|--------------|
| 2001-02       |                         |                                    |              |
| ABN units     | 0.8                     | 9.1                                | 9.9          |
| TAUs          | —                       | 90.1                               | 90.1         |
| <b>Total</b>  | <b>0.8</b>              | <b>99.2</b>                        | <b>100.0</b> |
| 2002-03       |                         |                                    |              |
| ABN units     | 1.1                     | 10.7                               | 11.9         |
| TAUs          | —                       | 88.1                               | 88.1         |
| <b>Total</b>  | <b>1.1</b>              | <b>98.9</b>                        | <b>100.0</b> |

(a) Includes rent, leasing and hiring income.

## INTRODUCTION

**1** For the 2000–01 year, the mining collection used the management unit (MU) as the statistical unit. The management unit was defined as the highest-level accounting unit within a business, having regard to industry homogeneity, for which accounts were maintained. In nearly all cases, it coincided with the legal entity owning the business (i.e. company, partnership, trust, sole operator, etc.).

**2** For 2001–02 and later years, the statistical unit has been changed to the ABN unit for businesses with simple structures and the TAU for businesses with complex structures. (For details of the new economic statistics units model, see Explanatory Notes paragraphs 5–10.) In most cases, ABN units / TAUs concurred with the management units used for the 2000–01 year.

BRIDGING ABN UNITS / TAUS  
AND MANAGEMENT UNITS

**3** Management unit data for 2000–01 have been updated to take account of revisions to the data since they were published in the previous issue of this publication. These revised data have then been adjusted to incorporate differences imputed from analysis of the 2001–02 and 2002–03 ABN unit / TAU data. These include the addition of non-employers to the collection, the impact of splitting (see Explanatory Notes paragraphs 16–17), differences between industry codes allocated (to some businesses) by the ATO and those assigned by the ABS, and the addition and use of BIT data sourced from the ATO (see Appendix 1 paragraphs 8–12).

**4** The following two tables show 2000–01 mining industry estimates for, respectively, management units and ABN units / TAUs (which reflect all of the changes described in the previous paragraph) for the data items: sales and service income, wages and salaries, and industry value added. The third table shows the percentage difference between these estimates.

BRIDGING ABN UNITS / TAUS  
AND MANAGEMENT UNITS

continued

## MANAGEMENT UNIT ESTIMATES (a), 2000–01

| INDUSTRY SUBDIVISION AND SELECTED CLASS |   | Sales and<br>service<br>income(b) | Wages and<br>salaries(c) | Industry<br>value<br>added |
|---|---|-----------------------------------|--------------------------|----------------------------|
| ANZSIC code                             | Description   | \$m                               | \$m                      | \$m                        |
| 11                                      | Coal mining   | 11 610.5                          | 1 690.0                  | 5 452.7                    |
| 12                                      | Oil and gas extraction  | 18 486.8                          | 662.9                    | 16 403.2                   |
| 13                                      | Metal ore mining  |                                   |                          |                            |
| 1311                                    | Iron ore mining   | 4 791.4                           | 412.2                    | 3 072.7                    |
| 1313                                    | Copper ore mining   | 3 356.4                           | 294.1                    | 1 556.2                    |
| 1314                                    | Gold ore mining   | 4 653.7                           | 491.1                    | 1 761.9                    |
| 1315                                    | Mineral sand mining   | 693.0                             | 77.4                     | 343.9                      |
| 1317                                    | Silver-lead-zinc ore mining   | 2 144.0                           | 215.7                    | 911.8                      |
| 1316 and 1319                           | Nickel ore mining<br>and metal ore mining n.e.c. (d)                      | 2 906.1                           | 222.3                    | 1 494.0                    |
|   | <i>Total metal ore mining</i>   | <i>18 544.6</i>                   | <i>1 712.8</i>           | <i>9 140.5</i>             |
| 11–13                                   | <i>Total coal mining, oil and gas extraction<br/>and metal ore mining</i> | <i>48 641.9</i>                   | <i>4 065.7</i>           | <i>30 996.4</i>            |
| 14                                      | Other mining  | 1 920.2                           | 306.8                    | 909.3                      |
| 15                                      | Services to mining  | 3 070.1                           | 961.8                    | 1 060.4                    |
| <b>11–15</b>                            | <b>Total mining</b>   | <b>53 632.2</b>                   | <b>5 334.3</b>           | <b>32 966.1</b>            |

(a) See Appendix 2 paragraph 3.

(b) Includes rent, leasing and hiring income.

(c) Excludes the drawings of working proprietors.

(d) Data for ANZSIC Class 1312 BAUXITE MINING were recorded as nil for 2000–01 as no management units were classified to this class.

## ABN UNIT / TAU ESTIMATES (a), 2000–01

| INDUSTRY SUBDIVISION AND SELECTED CLASS |  | Sales and<br>service<br>income(b) | Wages and<br>salaries(c) | Industry<br>value<br>added |
|---|--|-----------------------------------|--------------------------|----------------------------|
| ANZSIC code                             | Description  | \$m                               | \$m                      | \$m                        |
| 11                                      | Coal mining  | 11 945.5                          | 1 582.5                  | 5 560.5                    |
| 12                                      | Oil and gas extraction   | 19 094.7                          | 715.2                    | 16 655.3                   |
| 13                                      | Metal ore mining   |                                   |                          |                            |
| 1311                                    | Iron ore mining  | 4 865.8                           | 410.9                    | 3 075.5                    |
| 1313                                    | Copper ore mining  | 2 522.3                           | 207.1                    | 1 202.1                    |
| 1314                                    | Gold ore mining  | 4 396.6                           | 471.4                    | 1 332.2                    |
| 1315                                    | Mineral sand mining  | 829.8                             | 88.0                     | 421.1                      |
| 1317                                    | Silver-lead-zinc ore mining                                      | 2 147.6                           | 216.5                    | 913.6                      |
| 1312, 1316<br>and 1319                  | Bauxite mining, nickel ore mining<br>and metal ore mining n.e.c. | 2 759.5                           | 274.6                    | 1 281.2                    |
|   | <i>Total metal ore mining</i>                                    | <i>17 521.7</i>                   | <i>1 668.6</i>           | <i>8 225.8</i>             |
| 11–13                                   | <i>Total coal mining, oil and gas extraction</i>                 | <i>48 561.8</i>                   | <i>3 966.3</i>           | <i>30 441.6</i>            |
| 14                                      | Other mining   | 2 671.0                           | 408.2                    | 1 190.9                    |
| 15                                      | Services to mining   | 4 720.8                           | 1 245.3                  | 1 041.1                    |
| <b>11–15</b>                            | <b>Total mining</b>  | <b>55 953.7</b>                   | <b>5 619.8</b>           | <b>32 673.6</b>            |

(a) See Appendix 2 paragraph 3. Also, relative standard errors are not available for these data.

(b) Includes rent, leasing and hiring income.

(c) Excludes the drawings of working proprietors.

BRIDGING ABN UNITS / TAUS AND MANAGEMENT UNITS

*continued*

PERCENTAGE DIFFERENCE (a)

DIFFERENCE BETWEEN ABN UNIT / TAU AND MANAGEMENT UNIT ESTIMATES OF

| INDUSTRY SUBDIVISION AND SELECTED CLASS |   | <i>Sales and service income</i> (b) | <i>Wages and salaries</i> (c) | <i>Industry value added</i> |
|---|---|-------------------------------------|-------------------------------|-----------------------------|
| <i>ANZSIC code</i>                      | <i>Description</i>  | %                                   | %                             | %                           |
| 11                                      | Coal mining   | 2.9                                 | -6.4                          | 2.0                         |
| 12                                      | Oil and gas extraction  | 3.3                                 | 7.9                           | 1.5                         |
| 13                                      | Metal ore mining  |                                     |                               |                             |
| 1311                                    | Iron ore mining   | 1.6                                 | -0.3                          | 0.1                         |
| 1313                                    | Copper ore mining   | -24.9                               | -29.6                         | -22.8                       |
| 1314                                    | Gold ore mining   | -5.5                                | -4.0                          | -24.4                       |
| 1315                                    | Mineral sand mining   | 19.7                                | 13.7                          | 22.5                        |
| 1317                                    | Silver-lead-zinc ore mining   | 0.2                                 | 0.4                           | 0.2                         |
| 1312, 1316 and 1319                     | Bauxite mining, nickel ore mining and metal ore mining n.e.c.         | -5.0                                | 23.5                          | -14.2                       |
|   | <i>Total metal ore mining</i>   | -5.5                                | -2.6                          | -10.0                       |
| 11-13                                   | <i>Total coal mining, oil and gas extraction and metal ore mining</i> | -0.2                                | -2.4                          | -1.8                        |
| 14                                      | Other mining  | 39.1                                | 33.1                          | 31.0                        |
| 15                                      | Services to mining  | 53.8                                | 29.5                          | -1.8                        |
| <b>11-15</b>                            | <b>Total mining</b>   | <b>4.3</b>                          | <b>5.4</b>                    | <b>-0.9</b>                 |

(a) See Appendix 2 paragraph 3. Also, relative standard errors are not available for these data.

(b) Includes rent, leasing and hiring income.

(c) Excludes the drawings of working proprietors.

TECHNICAL NOTE 1      **DATA RELIABILITY** .....

SAMPLE ERROR

**1** For each of 2001–02 and 2002–03, the mining survey was, in part, a sample survey designed primarily to deliver industry subdivision and selected class estimates for Australia. Industry division estimates (excluding Subdivision 15 SERVICES TO MINING) for states and territories for sales and service income, wages and salaries, and IVA are also produced.

**2** The majority of data contained in Chapters 1 to 3 of this publication have been obtained from a sample of mining businesses. As such, these data are subject to sampling variability; that is, they may differ from the figures that would have been produced if the data had been obtained from all mining businesses in the population. The measure of the likely difference as used by the ABS is given by the standard error, which indicates the extent to which an estimate might have varied by chance because the data were obtained from only a sample of units. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if the data had been obtained from all units, and about 19 chances in 20 that the difference will be less than two standard errors.

**3** The standard error can also be expressed as a percentage of the estimate, and this is known as the relative standard error (RSE). The relative standard errors for the 2001–02 and 2002–03 sales and service income, wages and salaries, and IVA Australian data presented in this publication are mainly less than 6% for industry subdivisions (see Technical Note 2) and most are less than 3% for industry classes (in Subdivision 13 METAL ORE MINING). The relative standard errors for the selected estimates for the states and territories are mainly 6% or less.

**4** Relative standard errors at the industry subdivision and selected class level for Australia for selected data items representing the full range of data contained in this publication are shown in Technical Note 2. Detailed relative standard errors can be made available on request.

**5** The size of the RSE may be a misleading indicator of the reliability of some of the estimates for trading profit, OPBT, EBIT and IVA. This situation may occur where an estimate may legitimately include positive and negative values, reflecting the financial performance of individual businesses. In these cases, the aggregated estimate can be small relative to the contribution of individual businesses resulting in a standard error which is large relative to the estimate.

NON-SAMPLE ERROR

**6** The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of inadequacies in available sources from which the population frame was compiled, imperfections in reporting by providers, errors made in collection such as in recording and coding data, and errors made in processing data. Inaccuracies of this kind are referred to collectively as non-sampling error and they may occur in any enumeration, whether it be a full census or a sample.

**7** While it is not possible to quantify non-sampling error, every effort is made to reduce it to a minimum. Collection forms are designed to be easy to complete and assist businesses to report accurately. Efficient and effective operating procedures and systems are used to compile the statistics. The ABS compares data from different ABS (and non-ABS) sources relating to the one industry, to ensure consistency and coherence.

NON-SAMPLE ERROR *continued*

**8** There are also non-sampling errors associated with the BIT data sourced from the ATO. For example, the ATO treats any non-response by either bringing forward the previous year's data for a non-responding business, or imputing the data as zero if there are no previous data to use.

TECHNICAL NOTE 2      **RELATIVE STANDARD ERRORS** .....

SELECTED DATA ITEMS

| INDUSTRY SUBDIVISION AND SELECTED CLASS |   | Sales and service income(a) | Wages and salaries(b) | Industry value added |
|---|---|-----------------------------|-----------------------|----------------------|
| ANZSIC code                             | Description   | %                           | %                     | %                    |
| 2001-02                                 |   |                             |                       |                      |
| 11                                      | Coal mining   | 2.2                         | 1.4                   | 0.8                  |
| 12                                      | Oil and gas extraction  | 0.1                         | 0.2                   | 0.1                  |
| 13                                      | Metal ore mining  |                             |                       |                      |
| 1311                                    | Iron ore mining   | 0.1                         | —                     | 0.1                  |
| 1313                                    | Copper ore mining   | 0.1                         | 0.1                   | 0.1                  |
| 1314                                    | Gold ore mining   | 2.4                         | 2.1                   | 3.9                  |
| 1315                                    | Mineral sand mining   | 0.3                         | 0.2                   | 0.1                  |
| 1317                                    | Silver-lead-zinc ore mining                                   | —                           | —                     | 0.1                  |
| 1312, 1316 and 1319                     | Bauxite mining, nickel ore mining and metal ore mining n.e.c. | 0.4                         | 0.5                   | 0.3                  |
|   | <i>Total metal ore mining</i>                                 | 0.7                         | 0.7                   | 0.8                  |
| 11-13                                   | <i>Total coal mining, oil and gas extraction</i>              | 0.7                         | 0.6                   | 0.3                  |
| 14                                      | Other mining  | 4.9                         | 6.8                   | 4.6                  |
| 15                                      | Services to mining  | 5.8                         | 5.8                   | 8.2                  |
| <b>11-15</b>                            | <b>Total mining</b>   | <b>0.7</b>                  | <b>1.2</b>            | <b>0.5</b>           |
| 2002-03                                 |   |                             |                       |                      |
| 11                                      | Coal mining   | 2.1                         | 2.6                   | 1.1                  |
| 12                                      | Oil and gas extraction  | —                           | —                     | —                    |
| 13                                      | Metal ore mining  |                             |                       |                      |
| 1311                                    | Iron ore mining   | —                           | —                     | —                    |
| 1313                                    | Copper ore mining   | 1.1                         | 2.9                   | 4.0                  |
| 1314                                    | Gold ore mining   | 2.7                         | 2.7                   | 3.1                  |
| 1315                                    | Mineral sand mining   | 1.8                         | 1.8                   | 1.6                  |
| 1317                                    | Silver-lead-zinc ore mining                                   | —                           | —                     | —                    |
| 1312, 1316 and 1319                     | Bauxite mining, nickel ore mining and metal ore mining n.e.c. | —                           | —                     | —                    |
|   | <i>Total metal ore mining</i>                                 | 0.9                         | 1.0                   | 0.9                  |
| 11-13                                   | <i>Total coal mining, oil and gas extraction</i>              | 0.7                         | 1.1                   | 0.4                  |
| 14                                      | Other mining  | 3.3                         | 3.8                   | 2.8                  |
| 15                                      | Services to mining  | 9.3                         | 7.3                   | 9.8                  |
| <b>11-15</b>                            | <b>Total mining</b>   | <b>0.9</b>                  | <b>1.5</b>            | <b>0.6</b>           |

— nil or rounded to zero (including null cells)

(a) Includes rent, leasing and hiring income.

(b) Excludes the drawings of working proprietors.

## GLOSSARY

Data presented in this publication have been compiled from the standard financial accounts of businesses; therefore, the definition of each reported item aligns closely with that adopted in standard business accounting practice. Definitions of particular terms used by the ABS are also included. Terms for employment at end of June and derivative items are not included, but will be included with the later release of these data.

|   |   |
|---|---|
| <b>ABN unit</b>   | The statistical unit used to represent businesses, and for which statistics are reported, in most cases. The ABN unit is the business unit which has registered for an ABN, and thus appears on the ATO administered Australian Business Register. In most cases, the ABN unit represents the legal entity. This unit is suitable for ABS statistical needs when the business is simple in structure. For more significant and diverse businesses where the ABN unit is not suitable for ABS statistical needs, the statistical unit used is the type of activity unit (TAU). |
| <b>Acquisitions</b>   | See the entry for fixed capital expenditure.  |
| <b>Acquisitions to disposals</b>  | The number of times that the value of assets acquired exceeds the value of disposal of assets, i.e. acquisitions / disposal of assets.  |
| <b>Assets</b>   | The reported total book value of assets as at the end of the reporting period. Comprises current assets (such as inventories and trade debtors) and non-current assets (such as property, plant and machinery needed for normal operations, capitalised interest, patents, licences and goodwill).  |
| <b>Bad and doubtful debts</b>   | Represents the amount of bad and doubtful debts written-off, net of bad and doubtful debts previously written-off but recovered.  |
| <b>Bridging data</b>  | Data produced taking into account the quantification of differences in the scope of (usually) consecutive survey population characteristics, thus enabling serial analysis of selected data items. See Appendix 2 for details.  |
| <b>Business</b>   | Represents the ABN unit or type of activity unit (TAU), which are the two standard units for each of the 2001–02 and 2002–03 mining collections. For details, see Explanatory Notes paragraphs 5–10.  |
| <b>Business Activity Statement (BAS) total sales</b>                    | Represented by the form item G1 <i>Total sales</i> on businesses' Business Activity Statements, supplied by them to the ATO. This item comprises all payments and other consideration (including GST) received during the nominated tax period for supplies made in the course of business.   |
| <b>Capital expenditure on dwellings, other buildings and structures</b> | Capital expenditure incurred acquiring dwellings, other buildings and structures, including roads, factories, warehouses, offices, bridges, mine development, and oil and gas platforms.  |
| <b>Capital expenditure on land</b>                                      | Capital expenditure incurred acquiring land.  |
| <b>Capital expenditure on plant, machinery and equipment</b>            | Capital expenditure incurred acquiring plant, machinery and other equipment. Note that this category includes the acquisition of motor vehicles.  |
| <b>Capitalised purchases</b>  | Goods drawn from inventories for use as fixed tangible assets in capital work done by own employees for own use or for rental or lease.   |

|   |   |
|---|---|
| <b>Capital work done for own use</b>              | Capitalised work done by the employees or proprietors of a business in manufacturing, constructing, installing or repairing assets, in mineral and petroleum exploration activities, and the in-house development of computer software, for use by the business or for rental or lease. This work is valued at the capitalised costs of the materials and the wages and salaries involved.  |
| <b>Capitalised wages and salaries</b>             | Capitalised payments for work done by own employees in manufacturing, constructing or installing assets, mineral and petroleum exploration activities or in developing computer software in-house for use by the business or for rental or lease.   |
| <b>Change in inventories</b>                      | The value of total closing inventories less total opening inventories.  |
| <b>Closing inventories</b>                        | The value of all inventories of finished goods (including mineral ores), work-in-progress, raw materials, fuels, containers and packaging materials at the end of the reporting period.   |
| <b>Contract mining expenses</b>                   | Contract payments for mining services. Includes amounts paid/payable to mining contractors (and associated freight charges) for materials brought in by the contractor.   |
| <b>Cost of sales</b>                              | The sum of purchases, selected expenses and opening inventories less closing inventories.   |
| <b>Current assets</b>                             | The value of closing trading inventories (i.e. at the end of the reporting period) plus the value of other current assets such as cash, short-term deposits, prepayments and short-term loans to employees.   |
| <b>Current liabilities</b>                        | The book value of current liabilities at the end of the reporting period. This includes provisions for taxation, leave, claims, trade creditors and other accounts payable, and bank overdrafts.  |
| <b>Current ratio</b>                              | The number of times current assets exceed current liabilities, i.e. current assets / current liabilities.   |
| <b>Debt to assets</b>                             | The percentage of assets financed by debt instead of equity, i.e. (liabilities / assets) x 100.   |
| <b>Depreciation and amortisation</b>              | Depreciation/amortisation allowed on buildings and other fixed tangible assets. Includes, for lessees only, depreciation/amortisation in respect of finance leases.   |
| <b>Diesel fuel rebate</b>                         | See the entry for funding from government: diesel fuel rebate.  |
| <b>Disposal of assets</b>                         | Proceeds from the sale of selected tangible assets: land, dwellings, other buildings and structures, plant, machinery and equipment. Includes the disposal of motor vehicles. Excludes intangible assets, such as patents, licences and goodwill.   |
| <b>Earnings before interest and tax (EBIT)</b>    | Profit prior to the deduction of interest expenses and income tax.  |
| <b>Employer contributions into superannuation</b> | Includes salary sacrifice. Also includes all employer contributions to superannuation funds (including the employer productivity contribution) and provisions for employer contributions to superannuation funds. Employee contributions are excluded.  |
| <b>Enterprise</b>                                 | The enterprise is an institutional unit comprising: <ul style="list-style-type: none"> <li>■ a single legal entity or business entity; or</li> <li>■ more than one legal entity or business entity within the same enterprise group and in the same institutional sub-sector (i.e. they are all classified to a single Standard Institutional Sector Classification of Australia (SISCA) sub-sector).</li> </ul>  |
| <b>Enterprise group</b>                           | A unit covering all the operations in Australia of one or more legal entities under common ownership and/or control. It covers all the operations in Australia of legal entities which are related in terms of the current Corporations Law (as amended by the <i>Corporations Legislation Amendment Act 1991</i> ), including legal entities such as companies, trusts and partnerships. Majority ownership is not required for control to be exercised. |



|   |  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
|---|--|--|--------------------------|-------------|---|-------------|-------------------------------|-------------|---------------------|-------------|---------------------|-------------|--|-------------|-----------------------|---------------|-----|
| <b>Fixed capital expenditure</b>                            | Total expenditure on acquiring fixed tangible assets, before deduction of trade-in allowances, and including expenses (except capitalised interest) incurred during the year. Fixed tangible assets include land, dwellings, other buildings and structures, plant, machinery and equipment. Intangible assets such as capitalised exploration expenditure, patents, licences and goodwill are excluded. For further details, see capital expenditure entries.   |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <b>Freight and cartage expenses</b>                         | Excludes the cost of delivery by own vehicles and employees, as well as overseas freight and cartage on goods exported.  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <b>Funding from government: diesel fuel rebate</b>          | Amount reimbursed under the Australian Government's Diesel Fuel Rebate Scheme.   |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <b>Funding from government: for other operational costs</b> | Funding from federal, state and/or local government for operational costs (e.g. wages and salaries, rent, food) apart from diesel fuel rebate (which is separately published). Includes bounties, subsidies, export grants, and apprenticeship and traineeship schemes.  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <b>Funding from government: for specific capital items</b>  | As reported by providers.  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <b>Industry value added (IVA)</b>                           | <p>IVA represents the value added by an industry to the intermediate inputs used by the industry. IVA is the measure of the contribution by mining businesses to gross domestic product.</p> <p>The derivation of IVA is as follows:</p> <table border="0" style="margin-left: 20px;"> <tr> <td></td> <td>Sales and service income</td> </tr> <tr> <td><i>plus</i></td> <td>Funding from federal, state and/or local government for operational costs</td> </tr> <tr> <td><i>plus</i></td> <td>Capital work done for own use</td> </tr> <tr> <td><i>plus</i></td> <td>Closing inventories</td> </tr> <tr> <td><i>less</i></td> <td>Opening inventories</td> </tr> <tr> <td><i>less</i></td> <td>Intermediate input expenses<br/>(for details, see the entry for operating expenses)</td> </tr> <tr> <td><i>less</i></td> <td>Capitalised purchases</td> </tr> <tr> <td><i>equals</i></td> <td>IVA</td> </tr> </table> <p>However, it should be noted that IVA is not a measure of operating profit before tax (OPBT). Wage and salary expenses and most other labour costs are not taken into account in its calculation and nor are most insurance premiums, interest expenses or depreciation and a number of lesser expenses (see the entry for operating expenses for further detail).</p> |  | Sales and service income | <i>plus</i> | Funding from federal, state and/or local government for operational costs | <i>plus</i> | Capital work done for own use | <i>plus</i> | Closing inventories | <i>less</i> | Opening inventories | <i>less</i> | Intermediate input expenses<br>(for details, see the entry for operating expenses) | <i>less</i> | Capitalised purchases | <i>equals</i> | IVA |
|   | Sales and service income   |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <i>plus</i>   | Funding from federal, state and/or local government for operational costs  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <i>plus</i>   | Capital work done for own use  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <i>plus</i>   | Closing inventories  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <i>less</i>   | Opening inventories  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <i>less</i>   | Intermediate input expenses<br>(for details, see the entry for operating expenses)   |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <i>less</i>   | Capitalised purchases  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <i>equals</i>   | IVA  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <b>Industry value added to selected labour costs</b>        | IVA of mining businesses which operated during the given year ended 30 June divided by selected labour costs, i.e. industry value added / selected labour costs.   |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <b>Insurance premiums</b>                                   | Premiums for fire, general, accident, public liability, optional third-party and comprehensive motor vehicle insurance, professional indemnity insurance and common law liability.   |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <b>Interest coverage</b>                                    | The number of times that businesses can meet their interest expenses from their earnings before interest and tax, i.e. earnings before interest and tax / interest expenses.   |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <b>Interest expenses</b>                                    | Includes interest paid on loans from banks, finance companies, insurance companies and related or unrelated businesses, and in respect of finance leases.  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <b>Interest income</b>                                      | Includes interest received from bank accounts, loans and finance leases and earnings on discounted bills. Excludes charges between companies in the same TAU.  |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |
| <b>Intermediate input expenses</b>                          | For details, see the entry for operating expenses.   |  |                          |             |   |             |                               |             |                     |             |                     |             |  |             |                       |               |     |



|  |   |  |                             |  |   |             |                     |             |                     |               |                     |
|--|---|--|-----------------------------|--|---|-------------|---------------------|-------------|---------------------|---------------|---------------------|
| <b>Intermediate inputs</b>                 | <p>Intermediate inputs consist of materials and certain services which are used up in the production process.</p> <p>The calculation is:</p> <table border="0" style="margin-left: 40px;"> <tr> <td></td> <td>Intermediate input expenses</td> </tr> <tr> <td></td> <td>(for details, see the entry for operating expenses)</td> </tr> <tr> <td><i>plus</i></td> <td>Opening inventories</td> </tr> <tr> <td><i>less</i></td> <td>Closing inventories</td> </tr> <tr> <td><i>equals</i></td> <td>Intermediate inputs</td> </tr> </table>  |  | Intermediate input expenses |  | (for details, see the entry for operating expenses) | <i>plus</i> | Opening inventories | <i>less</i> | Closing inventories | <i>equals</i> | Intermediate inputs |
|  | Intermediate input expenses   |  |                             |  |   |             |                     |             |                     |               |                     |
|  | (for details, see the entry for operating expenses)   |  |                             |  |   |             |                     |             |                     |               |                     |
| <i>plus</i>                                | Opening inventories   |  |                             |  |   |             |                     |             |                     |               |                     |
| <i>less</i>                                | Closing inventories   |  |                             |  |   |             |                     |             |                     |               |                     |
| <i>equals</i>                              | Intermediate inputs   |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Inventories – opening/closing</b>       | The value of all inventories of finished goods (including mineral ores), work-in-progress, raw materials, fuels, containers, etc. at the beginning and end of the reporting period, respectively.   |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Liabilities</b>                         | <p>The reported total book value of liabilities as at the end of the reporting period. Comprises current liabilities (such as trade creditors and provisions for employee entitlements) and non-current liabilities (such as provisions for employee entitlements, bank loans, debentures and unsecured notes). Provisions for employee entitlements include annual leave, leave bonuses, long service leave, and severance, termination and redundancy payments, but exclude fringe benefits and payroll tax, employer contributions to superannuation funds, and workers' compensation costs.</p> |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Liquidity ratio</b>                     | The number of times current assets other than inventories exceed current liabilities, i.e. (current assets – closing inventories) / current liabilities.  |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Management unit</b>                     | For collections prior to 2001–02, the management unit was the highest-level accounting unit within a business, having regard to industry homogeneity, for which accounts were maintained. In nearly all cases, it coincided with the legal entity owning the business (i.e. company, partnership, trust, sole operator, etc.).  |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Motor vehicle running expenses</b>      | Includes expenditure on registration fees, compulsory third-party insurance premiums, fuel and repair and maintenance expenses. Excludes expenses for off-road motor vehicles (e.g. mobile plant, quarry dump trucks).  |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Natural resource royalties expenses</b> | Includes payments under mineral lease arrangements, and resource rent taxes and royalties. Excludes payments for royalties from intellectual property (e.g. patents, copyrights, etc.), which are included under other operating expenses. Gold tax payments are also excluded.   |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Net capital expenditure</b>             | The value of total capital expenditure less proceeds received from the disposal of fixed tangible assets.   |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Net capital expenditure to assets</b>   | The percentage of the total book value of assets spent on net capital expenditure, i.e. (net capital expenditure / assets) x 100.   |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Net worth</b>                           | Total assets minus total liabilities, and is equal to the interest of shareholders or other owners in the assets of the business. Also called 'owner's equity'.   |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Non-current assets</b>                  | The book value of non-current assets at the end of the reporting period. This includes plant and machinery needed for normal operations, capitalised interest, property and goodwill.   |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Non-current liabilities</b>             | The book value of non-current liabilities at the end of the reporting period. This includes provisions for employee entitlements, bank loans, debentures and unsecured notes.   |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Opening inventories</b>                 | The value of all inventories of finished goods (including mineral ores), work-in-progress, raw materials, fuels, containers and packaging materials at the beginning of the reporting period.   |  |                             |  |   |             |                     |             |                     |               |                     |
| <b>Operating expenses</b>                  | For the purposes of calculating economic and accounting variables for mining industries, operating expenses incurred by businesses are divided into several categories. However, some expenses are excluded entirely from all such calculations: excluded are extraordinary expenses, capitalised expenses, income tax and other direct taxes, goods  |  |                             |  |   |             |                     |             |                     |               |                     |

**Operating expenses *continued*** and services tax (GST) and excise payable to governments, capital repayments or losses on asset sales, dividends, donations and foreign exchange losses.

Those expenses used for calculations are categorised as follows:

*Intermediate input expenses*

This category covers the major expenses incurred by businesses in producing and distributing goods and services (except labour costs), and comprises two sub-categories of operating expenses:

Purchases of goods, materials and services used in production, which include:

- purchases of materials, components, explosives, containers and packaging materials, electricity, fuels and water
- purchases of minerals and other goods for resale (without any further processing or assembly)
- motor vehicle running expenses
- freight and cartage expenses
- repair and maintenance expenses
- rent, leasing and hiring expenses (excluding finance lease payments)
- contract, subcontract and commission expenses.

Expenses related to the sale of goods and administrative expenses, which include:

- management fees/charges paid to related and unrelated businesses
- bank charges other than interest
- audit and other accounting expenses
- legal fees
- advertising expenses
- postal and telecommunication expenses
- office supplies and printing expenses
- travelling, accommodation and entertainment expenses
- staff training
- payments for royalties from intellectual property (e.g. patents, copyrights, etc.).

Excluded from intermediate input expenses are selected labour costs and other operating expenses as detailed below:

*Selected labour costs*

- wages and salaries (including provisions for employee entitlements)
- employer contributions into superannuation including salary sacrifice
- workers' compensation premiums and other costs.

*Other operating expenses*

Some expenses are excluded from the calculation of intermediate input expenses and selected labour costs, but are included in the calculation of the accounting variable operating profit before tax (OPBT). These expenses include:

- bad and doubtful debts
- computer software expenses not capitalised by businesses
- depreciation and amortisation
- insurance premiums (except workers' compensation and compulsory third party motor vehicle insurance premiums)
- interest expenses
- land tax and land rates
- mineral/petroleum exploration expenses not capitalised by businesses
- natural resource royalties expenses
- payroll tax and fringe benefits tax.

**Operating profit before tax (OPBT)** Profit before extraordinary items are brought to account and prior to the deduction of income tax and appropriations to owners (e.g. dividends paid).

|  |   |
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| <b>Other contract, subcontract and commission expenses</b> | Payments to other businesses and self-employed persons for work done or sales made on a contract or commission basis. Payments to persons paid by commission without a retainer are also included. Excludes contract mining expenses, published separately.   |
| <b>Other income</b>  | Includes natural resource royalties income, dividend income and other income such as net profit (or loss) on the sale of fixed tangible assets, net profit (or loss) resulting from variations in foreign exchange rates/transactions, and funding from federal, state and/or local government for specific capital items. It excludes extraordinary profits or losses, i.e. those not associated with the normal operations of the business and of a non-recurring nature.   |
| <b>Other selected expenses</b>                             | Includes expenditure on management fees/charges paid to related and unrelated businesses, bank charges other than interest, audit and other accounting expenses, legal fees, advertising expenses, postal and telecommunication expenses, office supplies and printing expenses, travelling, accommodation and entertainment expenses, staff training, payments for royalties from intellectual property (e.g. patents, copyrights, etc.), payroll tax, fringe benefits tax, land tax and land rates, and computer software expenses not capitalised. |
| <b>Purchases and selected expenses</b>                     | Purchases of goods and materials, rent, leasing and hiring expenses, freight and cartage expenses, motor vehicle running expenses, repair and maintenance expenses, contract mining and other contract, subcontract and commission expenses, and other selected expenses.   |
| <b>Purchases of goods and materials</b>                    | Purchases of materials, components, explosives, containers, packaging materials, fuels, electricity and water, and purchases of other goods for resale. Also includes capitalised purchases. Excludes purchases of parts and fuels for motor vehicles, apart from fuels for off-road vehicles, such as mobile plant and quarry dump trucks, which are included.   |
| <b>Reference period</b>                                    | For each collection year, businesses are asked to report data for the financial year ended 30 June. However, if a business has a different financial year, it is asked to report (apart from employment) for the 12 month period which ends between 1 October of the previous year and 30 September of the current year. This period is then used as a substitute for the financial year ended 30 June. For example, for the 2002–03 collection, a business may have reported data for the year ended 31 December 2002.                               |
| <b>Rent, leasing and hiring expenses</b>                   | Operating lease payments for land, dwellings, other buildings and structures, motor vehicles, plant, machinery and other equipment. Finance lease payments are excluded.  |
| <b>Rent, leasing and hiring income</b>                     | For details, see the entry for sales and service income.  |
| <b>Repair and maintenance expenses</b>                     | Includes computer software and hardware maintenance, and repair and maintenance of off-road motor vehicles. Excludes wages and salaries of own employees and the repair and maintenance costs of on-road motor vehicles.  |
| <b>Return on assets</b>                                    | Operating profit before tax as a percentage of the total book value of assets, i.e. (operating profit before tax / assets) x 100.   |
| <b>Return on funds</b>                                     | Earnings before interest and tax (EBIT) as a percentage of the sum of shareholders' funds and non-current liabilities, i.e. EBIT / (net worth + non-current liabilities) x 100.   |

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| <b>Sales and service income</b>                                  | <p>Includes:</p> <p><i>Sales of minerals and other goods</i></p> <ul style="list-style-type: none"> <li>■ whether or not produced by the business (including goods produced for the business on a commission basis). Includes sales or transfers to related businesses or to overseas branches of the business, progress payments relating to long term contracts if they are billed in the period, delivery charges not separately invoiced to customers, and sales of goods produced by the business from crude materials purchased. Excludes excise and duties received on behalf of the Government (e.g. the coal export levy and petroleum production excise duty), sales of fixed tangible assets, natural resource royalties income, interest income, and delivery charges separately invoiced to customers. Exports are valued free on board (f.o.b.) (i.e. export freight charges are excluded).</li> </ul> <p><i>Income from services</i></p> <ul style="list-style-type: none"> <li>■ includes income from consulting services, repair, maintenance and service income and fees, contract, subcontract and commission income, management fees/charges from related and unrelated businesses, installation charges, delivery charges separately invoiced to customers and royalties from intellectual properties (e.g. patents, copyrights, etc.). Excludes natural resource royalties income, interest income, and delivery charges not separately invoiced to customers.</li> </ul> <p><i>Rent, leasing and hiring income</i></p> <ul style="list-style-type: none"> <li>■ derived from the ownership of land, dwellings, buildings and other structures, motor vehicles, plant, machinery and other equipment. Royalties from intellectual property are also included. Excludes royalties from mineral leases, income from finance leases and payments received under hire purchase arrangements. This item is included in sales and service income, but is not separately published. (Under the current international standards, rent, leasing and hiring income (except from finance leases) is classified as service income.)</li> </ul> <p>These are valued net of discounts given and exclusive of goods and services tax (GST). Extraordinary items are also excluded.</p> <p>In order to produce data by state and territory, businesses which received mail out questionnaires were also asked to provide sales of goods and services (as well as employment and wages and salaries) for each state and/or territory in which they operated. For details, see Explanatory Notes paragraph 31.</p> |
| <b>Sales and service income to assets</b>                        | The number of times the value of sales and service income exceeds the value of assets, i.e. sales and service income / assets.   |
| <b>Selected labour costs</b>                                     | See the entry for operating expenses.  |
| <b>Selected mining (table 2.16)</b>                              | Comprises all classes in ANZSIC Division B MINING except Subdivision 15 SERVICES TO MINING.  |
| <b>Standard Institutional Sector Classification of Australia</b> | The SISCAs are the central classification among ABS Standard Economic Sector Classifications. It is based on the System of National Accounts 1993 (SNA93) institutional sector classification, and includes the sectors: non-financial corporations, financial corporations, general government, households, non-profit institutions serving households, and rest of the world (which includes only non-resident units, these being excluded from all other sectors). For more information, users should refer to <i>Standard Economic Sector Classifications of Australia (SESCA)</i> (cat. no. 1218.0).  |
| <b>Superannuation</b>  | See the entry for employer contributions into superannuation.  |
| <b>Total mining</b>  | Comprises all classes in ANZSIC Division B MINING (i.e. Subdivisions 11–15).   |
| <b>Trading profit</b>  | A measure of profit directly attributable to trading in goods and services. It is derived by subtracting the cost of sales from the value of sales and service income plus the value of capitalised purchases.   |

|   |  |
|---|--|
| <b>Trading profit <i>continued</i></b>                      | It should not be inferred that all of this profit is available as surplus, as other expenses such as selected labour costs, depreciation, insurance premiums, royalties, bad debts and interest have not been taken into account. Also, other income items such as funding from government and interest income have not been included.   |
| <b>Trading profit margin</b>                                | Trading profit as a percentage of sales and service income, i.e. (trading profit / sales and service income) x 100.  |
| <b>Type of activity unit (TAU)</b>                          | <p>The TAU is comprised of one or more business entities, sub-entities or branches of a business entity within an enterprise group that can report production and employment data for similar economic activities. When a minimum set of data items are available, a TAU is created which covers all the operations within an industry subdivision (and the TAU is classified to the relevant subdivision of the ANZSIC). Where a business cannot supply adequate data for each industry, a TAU is formed which contains activity in more than one industry subdivision.</p> <p>In most cases, TAUs concurred with the management units used prior to the 2001–02 year.</p>  |
| <b>Wages and salaries</b>                                   | <p>The gross wages and salaries (including capitalised wages and salaries) of all employees of the business. The item includes severance, termination and redundancy payments, salaries and fees of directors and executives, retainers and commissions of persons who received a retainer, bonuses, and annual and other types of leave. Provision expenses for employee entitlements (e.g. provisions for annual leave and leave bonus, long service leave, sick leave, and severance, termination and redundancy payments) are also included. Payments related to salary sacrifice and payments to self-employed persons such as consultants, contractors and persons paid solely by commission without a retainer are excluded. The drawings of working proprietors and partners are also excluded.</p> <p>In order to produce data by state and territory, businesses which received mail out questionnaires were also asked to provide wages and salaries (as well as employment and sales of goods and services) for each state and/or territory in which they operated. For details, see Explanatory Notes paragraph 31.</p> |
| <b>Wages and salaries to sales and service income ratio</b> | The wages and salaries paid by mining businesses which operated during the year ended 30 June as a proportion of the sales and service income of mining businesses which operated during the same year.  |
| <b>Workers' compensation premiums/costs</b>                 | As reported by providers.  |





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