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8401.0

# MINING, ELECTRICITY AND GAS OPERATIONS

AUSTRALIA  
PRELIMINARY

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## CONTENTS

	<i>page</i>
Notes.....	2
Summary of findings .....	3

### TABLES

#### MINING OPERATIONS, MANAGEMENT UNIT LEVEL

<b>1</b> Turnover and industry value added, by industry, 1997-98 and 1998-99 .....	9
<b>2</b> Profits, by industry, 1997-98 and 1998-99 .....	10
<b>3</b> Employment, by industry, 1997-98 and 1998-99 .....	11

#### ELECTRICITY AND GAS OPERATIONS, MANAGEMENT UNIT LEVEL

<b>4</b> Summary, 1997-98 and 1998-99 .....	11
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### ADDITIONAL INFORMATION

Explanatory notes .....	12
Glossary .....	16

- For further information about these and related statistics, contact Jeff Bulger on Adelaide 08 8237 7621, or Client Services in any ABS office as shown on the back cover of this publication.

## NOTES

### ABOUT THIS PUBLICATION

This publication presents preliminary results for 1998–99 from the Mining, Electricity and Gas Industries Collections. This issue of the publication differs in three main ways from issues for previous years. First, this issue presents statistics for management units in lieu of statistics for establishments (see the Explanatory Notes for definitions of these business units). Second, this issue includes data for ANZSIC Subdivision 14 (Other mining). Third, an expanded range of data are provided with items related to profits being added to the items previously included.

However, because data in this publication relate to mining, electricity and gas management units and because management units provide data which may cover operations in more than one State or Territory, it is not possible to provide State or Territory data in this publication. Preliminary establishment data, which will include State and Territory estimates for selected industries, will be available on request at the beginning of April 2000. These estimates will be provided free of charge to subscribers to this publication on request to the Mining National Project Centre on 08 8237 7621.

For some time now the ABS has been using Australian Tax Office information on Group Employer (GE) registrations to add new businesses to the ABS Business Register. After detailed investigation, it has now been decided to use GE information to delete from the Business Register those businesses who have ceased trading, or who are no longer employing staff.

The impact of the deletion of businesses on estimates for the mining, electricity and gas industries is negligible and no adjustments have been made to previous estimates.

Detailed industry statistics covering both management units and establishments will be provided in *Mining Industry, Australia, 1998–99* (Cat. no. 8414.0) and *Electricity, Gas, Water and Sewerage Operations, Australia 1998–99* (Cat. no. 8226.0) to be issued later this year.



### SYMBOLS AND OTHER USAGES

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
b	billion — thousand million
EBIT	earnings before interest and tax
IVA	industry value added
n.a.	not available
OPBT	operating profit before tax
RSE	relative standard error
SE	standard error
US	United States

T. J. Skinner  
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## SUMMARY OF FINDINGS

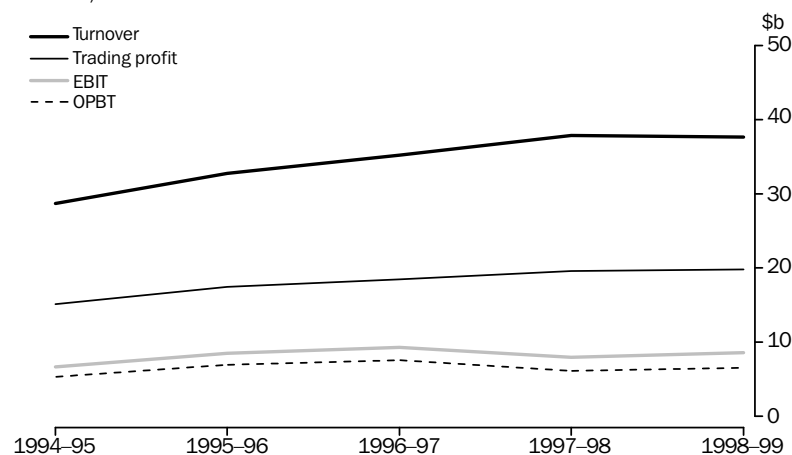
### MINING

The term 'mining industry' in the following commentary refers to the sum of Coal mining, Oil and gas extraction, and Metal ore mining. The relatively small Other mining industry has been excluded from the 'mining industry' due to a lack of a suitable time series of estimates.

During 1998–99 the Australian mining industry experienced falling commodity prices. The falls were due to a combination of strong growth in the supply of a number of commodities combined with subdued economic activity in Asia. The effects of these factors were partially offset by the fall in the value of the Australian dollar relative to the US dollar (Minerals Council of Australia 1999).

The Australian mining industry responded to these factors by trimming costs and cutting employment in almost all sectors. Production levels were maintained or even increased, despite falling commodity prices, during the year which helped to maintain income levels.

#### MINING, Selected Indicators



Each of the selected indicators is discussed separately below. However analysis of the selected indicators over a five-year time period shows that, in current prices, turnover grew strongly during the mid-1990s but has slowed in recent years as a result of poor economic conditions in parts of Asia and weak commodity prices. Profits have been affected with both earnings before interest and tax as well as operating profit before tax both showing dips in 1997–98 before a slight rise in 1998–99, the latter situation having been brought about by concerted efforts on the part of mining companies to cut costs and maintain, or even increase, production.

#### Turnover

Total turnover for the Australian mining industry decreased by \$179m (less than 1%) to \$37,692m in 1998–99.

Turnover in the coal mining industry decreased by \$261m (2%) to \$11,716m. This is a reflection of the increased downward pressure on prices being received for coal from overseas buyers.

## SUMMARY OF FINDINGS *continued*

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### Turnover *continued*

Turnover in the oil and gas extraction industry decreased by \$54m (less than 1%) to \$9,541m in 1998–99 as a direct result of depressed world prices during the reporting period. Increased production from the North-West Shelf offset the diminished output from Bass Strait which resulted from the Longford refinery explosion in September 1998.

The gold ore mining industry reported a decrease in turnover of \$127m (2%) falling to \$5,411m in 1998–99. This is primarily attributable to flat gold prices during the reference period although Australian mines maintained production levels and brought several new mines on stream. A number of high cost mines were closed during the year.

Among the other industries, the iron ore mining and copper ore mining industries both reported increases in turnover, \$215m (5%) and \$209m (10%) respectively during 1998–99. Although iron ore prices were depressed the emergence of a new mine and increased production at a number of other sites lifted turnover. The increase in turnover for copper ore mining was a result of increased production at several mines sites and this more than compensated for lower commodity prices.

Turnover for Other mining (ANZSIC Subdivision 14) remained relatively stable rising \$6m to \$2,425m in 1998–99.

### Industry value added

Industry value added for the mining industry decreased by \$122m (1%) to \$20,870m in 1998–99. A significant contributor was the oil and gas extraction industry for which industry value added fell by \$219m (3%) to \$7,491m in 1998–99. A direct consequence of depressed commodity prices has been for the mining industry to cut costs in order to improve its competitiveness. This is reflected in increased industry value added data for several industries. In the gold ore mining industry, industry value added increased by \$253m (12%) to \$2,366m. ABARE noted in their June 1999 *Update* that 'overall cash costs had fallen by 8% in 1998' in the gold industry while other commentators indicated that operating costs in the gold industry seemed to be trending down.

Industry value added in the copper ore mining industry increased by \$122m (16%) to \$906m.

### Trading profit

Trading profit for the mining industry rose by \$245m (1%) to \$19,827m in 1998–99. Although faced with depressed prices the coal mining industry increased trading profit by \$76m (2%) as a result of reductions in operating costs at a number of mines. Trading profit for the gold ore mining industry rose by \$231m (14%) to \$1,869m in 1998–99. This result was also achieved through operation cost cuts at several mine sites.

Trading profit in the copper ore mining industry increased by \$118m (16%) to \$844m in 1998–99. Although mine expansions and depressed copper prices, along with losses related to asset disposals, combined to lift expenses these were offset by increased production at several key mines.

## SUMMARY OF FINDINGS *continued*

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### Earnings before interest and tax

Earnings before interest and tax (EBIT) in the mining industry increased by \$668m (8%) to \$8,657m during 1998–99. The coal mining industry reported the largest absolute increase rising \$689m (58%) to \$1,880m during the reference period. Oil and gas extraction contributed the greatest proportion of total mining EBIT, reporting \$3,561m during 1998–99, although this was down \$582m (14%) on the 1997–98 figure. Contributing factors were the low price being received for oil during the reporting period and the Longford refinery explosion which affected Bass Strait output.

The gold ore mining industry reported EBIT of \$638m, an increase of \$456m (251%) in 1998–99. A contributing factor was an increase in the value of other income which rose by \$567m in 1998–99. This was partially the result of large write downs in assets that occurred in 1997–98 only.

### Operating profit before tax

Operating profit before tax (OPBT) rose by \$445m (7%) to \$6,623m in 1998–99 for the mining industry. Reductions in operating costs such as wages and salaries, particularly in the coal mining industry, was a major factor. These reductions offset an increase in interest expenses of \$223m during 1998–99 for the mining industry.

The oil and gas extraction industry reported the largest OPBT with \$2,940m in 1998–99 although this was down \$780m (21%) on the previous year.

### Employment

Employment within the mining industry decreased by 4,282 persons (8%) to 50,532 persons in 1998–99. The coal mining industry reported the largest decrease shedding 2,727 persons (12%) to 19,783 persons as the industry took steps to reduce its operating costs. Several mines also closed during the reporting period. Despite this the industry continues to employ a large proportion of mining employees accounting for 39% of the total mining workforce.

All other industries reported decreases in their workforces. The iron ore mining industry reported a decrease of 466 persons (9%) to 5,023 persons as cuts were made following reductions in prices being received from overseas markets.

Several high cost mines were closed within the gold ore mining industry during the reporting period. However the number of employees only decreased by 128 persons (just under 2%) to 8,667 persons in 1998–99 because a number of new, low cost mines came on stream.

The copper ore mining industry recorded a decrease of 123 persons (3%) as several mines reduced their workforces although this was offset by the expansion of the Olympic Dam mine in South Australia.

## SUMMARY OF FINDINGS *continued*

### Wages and salaries

Total wages and salaries for the mining industry decreased by \$235m (5%) to \$4,322m in 1998–99.

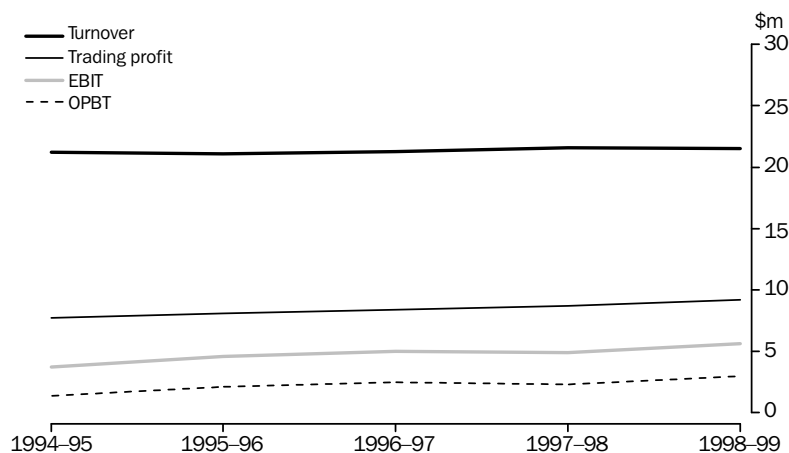
Reflecting the decrease in the number of employees, the wages and salaries in the coal mining industry decreased by \$249m (11%) to \$1,974m in 1998–99. Wages and salaries increased by \$23m (4%) in the oil and gas extraction industry with redundancy payments being a contributing factor.

Wages and salaries in the copper ore mining industry rose by \$19m (7%) to \$280m in 1998–99.

### ELECTRICITY

The 1997–98 ABS publication *Electricity, Gas, Water and Sewerage Industries, Australia* (Cat. no. 8208.0), released in September 1999, contains a special article on the reforms that have occurred in the electricity industry in recent times. These reforms have had a significant impact on the data presented for the industry. The formation of separate businesses responsible for generation, transmission and distribution has resulted in increases in values for data items such as purchases and sales as transactions take place between units that were previously part of vertically integrated operations.

#### ELECTRICITY, Selected Indicators



Despite the considerable changes in the electricity industry over the past five years the selected indicators have only shown slow growth in current price terms. Preliminary data for 1998–99 shows that turnover is barely more than the value reported in 1994–95. Similarly profit growth has been slow over this period. Much of this can be attributed to the reduction in both costs of production through organisational restructuring and outsourcing as well as reductions in prices received for electricity in a deregulated environment.

## SUMMARY OF FINDINGS *continued*

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### ELECTRICITY *continued*

Turnover in the electricity industry decreased by \$74m (less than 1%) to \$21,547m in 1998–99. Industry value added increased by \$375m (4%) to \$9,725m. Increases in 1997–98 were primarily due to the splitting up of existing electricity operations which resulted in the recording of external payments and receipts of transmission expenses and sales expenses, items which were previously recorded within the one organisation. This situation had stabilised somewhat during 1998–99 but can be expected to further impact upon the data as more privatisation occurs.

Earnings before interest and tax rose by \$672m (14%) to \$5,589m in 1998–99. This was achieved mainly through a reduction in the level of expenses being incurred.

Employment within the industry decreased by 1,536 persons (4%) to 33,392 persons as the industry continues to streamline and outsource its operations. At the same time wages and salaries decreased by \$119m (6%) to \$1,957m.

### GAS

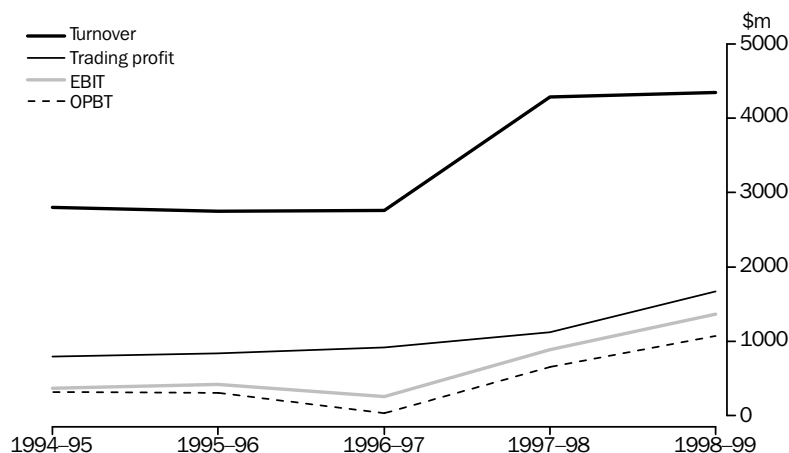
In recent years, the statistics for the gas industry have been affected by industry reform and business restructuring. The 1997–98 issue of *Electricity, Gas, Water and Sewerage Industries, Australia* (Cat. no. 8208.0) contains an article which describes these changes. Industry restructuring has continued during 1998–99 and has affected the statistics for that year as well and this should be borne in mind when comparing data for 1998–99 with corresponding data for earlier years.

Restructuring has seen both the formation of some vertically integrated units covering selling and distributing activities previously carried out by separate business units and conversely disaggregation of some vertically integrated units into more than one business unit. Where vertically integrated units have been formed from separate business units, transactions between those units cease to be recorded in the statistics. Conversely, when existing vertically integrated units have been broken down into a number of separate units, transactions between those units are recorded for the first time.

The effect of this type of restructuring is mostly reflected in the statistics for turnover and expenses. For items such as industry value added, trading profit, earnings before interest and tax and operating profit before tax, the effects on income and the effects on expenses tend to cancel each other out. The cancelling out effect is reduced where some of the new units fall outside the scope of the gas industry survey though this is not commonly the case.

Another type of restructuring which affects the statistics occurs when management units in the gas industry either gain or shed other activities such as retail sales or construction activities (see paragraph 14 of the Explanatory Notes). This type of restructuring has also occurred during 1998–99.

GAS, Selected Indicators



Recorded turnover for the gas industry rose by \$63m (1%) to \$4,348m in 1998-99. While industry value added has risen by \$544m (47%) to \$1,700m, most of this increase has been obtained through reductions in expenditure. Trading profit rose by \$545m (48%) to \$1,672m in 1998-99. OPBT rose by \$407m (62%) to \$1,067m in 1998-99.

Employment within the gas industry has risen by 483 persons (18%) to 3,221 persons in 1998-99 mainly due to the involvement of gas industry units in activities that were not previously considered part of the gas industry. Wages and salaries paid have increased by \$28m (19%) to \$180m.



# 1

## MINING OPERATIONS, Management Unit Level(a)—Turnover and Industry Value Added

INDUSTRY CLASS.....		TURNOVER.....		INDUSTRY VALUE ADDED.....	
		1997-98	1998-99	1997-98	1998-99
ANZSIC code	Industry	\$m	\$m	\$m	\$m
11	Coal mining	11 977.6	11 716.4	5 605.9	5 603.7
12	Oil and gas extraction	9 595.6	9 541.2	7 709.8	7 490.9
1311	Iron ore mining	4 189.7	4 404.9	2 650.0	2 673.9
1313	Copper ore mining	2 084.6	2 293.9	783.6	905.8
1314	Gold ore mining	5 538.0	5 410.9	2 113.0	2 365.5
1317	Silver-lead-zinc ore mining	1 205.0	1 180.7	671.1	624.9
	Other metal ore mining(b)	3 280.8	3 143.8	1 458.8	1 205.3
13	<i>Total metal ore mining</i>	<i>16 297.9</i>	<i>16 434.2</i>	<i>7 676.5</i>	<i>7 775.4</i>
	<b>Total coal mining, oil and gas extraction, and metal ore mining</b>	<b>37 871.1</b>	<b>37 691.8</b>	<b>20 992.2</b>	<b>20 870.0</b>
14	Other mining	2 419.0	2 424.9	986.1	1 188.9

(a) See Explanatory Notes, paragraphs 12–14.

(b) ANZSIC Classes 1312 (Bauxite mining), 1315 (Mineral sand mining), 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

# 2

## MINING OPERATIONS, Management Unit Level(a)—Profits

INDUSTRY CLASS.....		TRADING PROFIT.....		EARNINGS BEFORE INTEREST AND TAX.....		OPERATING PROFIT BEFORE TAX.....	
		1997-98	1998-99	1997-98	1998-99	1997-98	1998-99
ANZSIC code	Industry	\$m	\$m	\$m	\$m	\$m	\$m
11	Coal mining	5 233.4	5 309.7	1 191.8	1 880.4	868.3	1 572.9
12	Oil and gas extraction	7 574.0	7 624.7	4 143.6	3 561.4	3 720.1	2 940.4
1311	Iron ore mining	2 536.0	2 524.9	1 766.0	1 872.0	1 215.2	1 312.6
1313	Copper ore mining	726.2	844.0	252.4	222.0	194.4	124.1
1314	Gold ore mining	1 637.4	1 868.7	181.7	637.9	29.5	448.5
1317	Silver-lead-zinc ore mining	533.1	539.3	125.4	172.2	63.1	105.7
	Other metal ore mining(b)	1 342.8	1 116.1	328.6	311.2	88.5	119.1
13	<i>Total metal ore mining</i>	6 775.5	6 893.0	2 653.9	3 215.3	1 590.4	2 110.0
	<b>Total coal mining, oil and gas extraction, and metal ore mining</b>	<b>19 582.9</b>	<b>19 827.4</b>	<b>7 989.3</b>	<b>8 657.1</b>	<b>6 178.8</b>	<b>6 623.3</b>
14	Other mining	1 021.9	1 127.2	403.0	527.8	338.7	457.5

(a) See Explanatory Notes, paragraphs 12-14.

(b) ANZSIC Classes 1312 (Bauxite mining), 1315 (Mineral sand mining), 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

# 3

## MINING OPERATIONS, Management Unit Level(a)—Employment

INDUSTRY CLASS.....		EMPLOYMENT AT 30 JUNE.....		WAGES AND SALARIES.....	
		1997-98	1998-99	1997-98	1998-99
ANZSIC code	Industry	no.	no.	\$m	\$m
11	Coal mining	22 510	19 783	2 223.0	1 974.4
12	Oil and gas extraction	5 928	5 702	554.1	577.4
1311	Iron ore mining	5 489	5 023	430.1	434.1
1313	Copper ore mining	4 216	4 093	261.7	280.3
1314	Gold ore mining	8 795	8 667	541.8	551.1
1317	Silver-lead-zinc ore mining	2 717	2 531	200.8	190.3
	Other metal ore mining(b)	5 159	4 733	345.5	314.1
13	<i>Total metal ore mining</i>	<i>26 376</i>	<i>25 047</i>	<i>1780.0</i>	<i>1 769.9</i>
	<b>Total coal mining, oil and gas extraction, and metal ore mining</b>	<b>54 814</b>	<b>50 532</b>	<b>4 557.1</b>	<b>4 321.7</b>
14	Other mining	7 470	6 846	336.9	325.8

(a) See Explanatory Notes, paragraphs 12–14.

(b) ANZSIC Classes 1312 (Bauxite mining), 1315 (Mineral sand mining), 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

# 4

## ELECTRICITY AND GAS OPERATIONS, Management Unit Level(a)—Summary

Items	ELECTRICITY OPERATIONS.....		GAS OPERATIONS.....	
	1997-98	1998-99	1997-98	1998-99
Turnover (\$m)	21 621.5	21 547.1	4 284.8	4 348.1
Industry value added (\$m)	9 350.3	9 724.9	1 155.9	1 699.5
Trading profit (\$m)	8 658.3	9 182.2	1 126.6	1 671.7
Earnings before interest and tax (\$m)	4 917.6	5 589.3	889.2	1 365.4
Operating profit before tax (\$m)	2 315.6	2 992.0	659.8	1 067.0
Employment at 30 June (no.)	34 928	33 392	2 738	3 221
Wages and salaries (\$m)	2 076.1	1 957.0	151.8	180.0

(a) See Explanatory Notes, paragraphs 12–14.

# EXPLANATORY NOTES

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## INTRODUCTION

**1** This publication presents preliminary statistics on management units compiled from the 1998–99 Mining Collection and the 1998–99 Electricity and Gas Industries Collection.

**2** The Mining, and Electricity and Gas Industries Collections are conducted as components of the Australian Bureau of Statistics (ABS) integrated economic statistics framework. Data from each industry sector conform to the same basic conceptual standards, allowing comparative analysis between and across different industry sectors. The collections aim to meet the demand of users who require annual financial statistics which can be related to other industry sectors in Australia on a consistent basis.

## REFERENCE PERIOD

**3** The period covered by these collections is in general the 12 months ended 30 June 1999. Where businesses are unable to supply information on this basis, the substitute accounting period is used for data other than that relating to employment.

## SCOPE

**4** Financial data presented incorporates all units in scope of the Mining, and Electricity and Gas Collections that were in production stage at any time during the year. It also includes any temporarily inactive units ('temporary nils'), i.e. those units which were in 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). Prior to 1997–98 these temporarily inactive units were excluded from the collections. Their inclusion, however, has minimal effect on the estimates of the financial and employment data.

**5** Employment data in this publication represents employment for all units operating as at 30 June.

**6** The 1993 edition of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (Cat. no. 1292.0) has been used to classify management units and establishments included in the collections.

**7** Mining broadly 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 dressing or beneficiating ores or other minerals by crushing, milling, screening, washing, flotation or other processes (including chemical beneficiation) or briquetting are included. This is 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.

**8** The annual Mining Collection now covers almost all of the ANZSIC classes in Division B. This preliminary publication provides data for coal mining, oil and gas extraction, metal ore mining and other mining, but does not include data for services to mining.

**9** It should be noted that companies engaged in providing contract mining services are not always collected within the scope of the annual collection. Under the principles set down within ANZSIC, contract mining organisations will only be included in ANZSIC Subdivisions 11 to 14 if they are responsible for all facets of the mining operation at a particular site.

### SCOPE *continued*

**10** Companies engaged in providing contract mining services (such as drilling or exploration) for part of the operations at the mine site are classified to 'Services to mining' (ANZSIC Subdivision 15) and are therefore not included in the statistics in this publication. In addition, other companies that are contracted to perform only some tasks at a mine site may be outside the scope of the annual Mining Collection e.g. mine site preparation and/or construction, and removal of overburden, would be classified to the Construction Industry, and would therefore also be outside the scope of the Mining Collection.

**11** The Electricity and Gas Industries Collection covers those management units mainly engaged in the generation, transmission or distribution of electricity (ANZSIC Class 3610); the manufacture of town gas from coal and/or petroleum; or the mains distribution of town gas, natural gas or liquefied petroleum gas (ANZSIC Class 3620). Note that management units mainly engaged in wholesaling petroleum or petroleum products or in retailing liquefied petroleum gas (in bulk or containers) are classified to ANZSIC Class 4521, Petroleum Product Wholesaling. The operation of pipelines for the transport of oil and gas is classified to ANZSIC Class 6501, Pipeline Transport. Neither of these classes are included in the Electricity and Gas Industries Collection.

### STATISTICAL UNITS

**12** The basic units for which statistics are reported in ABS integrated industry collections are the management unit and the establishment. This publication presents data for management units only. The final publication includes data at both the management unit and establishment levels.

**13** Each management unit is classified to a single industry irrespective of any diversity of activities undertaken. The industry allocated is the one which provides the main source of income for the management unit. This means, for example, that a management unit which derives most of its income from mining activities would have all operations included in the aggregates and ratios for the mining industry group, even if significant secondary activities (e.g. manufacturing, construction) were undertaken. Likewise, a management unit which derives most of its income from electricity generation activities would have all operations included in the aggregates and ratios for the electricity industry, even if significant secondary activities (e.g. water supply, coal mining, retailing) were undertaken. For example, the electricity data collected for the Australian Capital Territory and the Northern Territory includes their major water supply companies, since at the management unit level they are classified as part of the electricity industry.

### MANAGEMENT UNIT

**14** The management unit is the highest-level unit within a business, having regard to industry homogeneity requirements, for which accounts are maintained; in nearly all cases it coincides with the legal entity owning the business (i.e. company, partnership, trust, sole operator, etc.). In the case of large diversified businesses, however, there may be more than one management unit, each coinciding with a 'division' or 'line of business'. A division or line of business is recognised where separate and comprehensive accounts are compiled for it.

### RELIABILITY OF ESTIMATES

**15** Data presented in this publication for Other mining (ANZSIC Class 14) are partly based on information collected from a sample of businesses and are, therefore, 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 businesses in the population. One measure of the likely difference is given by the standard error (SE), 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 SE from the figure that would have been obtained if the data had been produced from all units, and about 19 chances in 20 that the difference will be less than two SEs.

**16** The SE can also be expressed as a percentage of the estimate, and is known as the relative standard error (RSE). Estimates highlighted with an asterisk (\*) indicate they are subject to sampling variability between 25% and 50%. Those estimates highlighted with \*\* are subject to sampling variability greater than 50%. Detailed estimates of RSEs can be made available upon request.

**17** The size of the RSE may be a misleading indicator of the reliability of some of the estimates for trading profit, operating profit before tax (OPBT), earnings before interest and tax (EBIT) and IVA. This situation may occur where an estimate may legitimately include positive and negative values reflecting the financial positions of different businesses. In these cases the aggregate estimate can be small relative to the contribution of individual businesses resulting in an SE which is large relative to the estimate.

**18** The imprecision due to sampling variability, which is measured by the SE, 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 from providers, errors made in collection such as 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 census or a sample. Every effort is made to reduce non-sampling error to a minimum by careful design of questionnaires, editing processes, and efficient operating procedures.

### ACKNOWLEDGMENT

**19** 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

**20** For details of other related ABS publications to be issued, refer to the *Catalogue of Publications and Products* (Cat. no. 1101.0). The ABS also issues on Tuesdays and Fridays a *Release Advice* (Cat. no. 1105.0) which lists publications to be released in the next few days. The Catalogue and the Release Advice are available from any ABS office.

## EXPLANATORY NOTES *continued*

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### RELATED PUBLICATIONS *continued*

**21** Mining and related statistics are contained in a number of other publications produced by the ABS, the Australian Bureau of Agricultural and Resource Economics (ABARE), the Australian Geological Survey Organisation (AGSO) and the former Bureau of Resource Sciences (BRS). The Petroleum Resources and Minerals and Energy Branch of the former Bureau of Resource Sciences was moved in late 1998 to AGSO. Data covering the public supply of electricity is available from the Electricity Supply Association, while the Australian Gas Association provides data covering the distribution of reticulated natural gas. Users are also referred to the annual reports of the State Mines Departments, which contain mineral statistics.

**22** A list of ABS, BRS and ABARE publications may be found in the ABS publication *Australian Mining Industry, 1996–97* (Cat. no. 8414.0).

### UNPUBLISHED STATISTICS

**23** The statistics presented in this publication are only part of the information which is available from the Mining Industry and Electricity and Gas Industries Collections. Unpublished information is generally made available on request, subject to it satisfying quality and confidentiality guidelines associated with the release of such data. The charges for these services vary according to the time required to extract, tabulate and evaluate the data.

**24** Inquiries should be made to the officer named on the front cover of this publication.

## GLOSSARY

*As the data presented in this publication have been compiled from the standard financial accounts of businesses, the definition of each reported item aligns closely with that adopted in standard business accounting practice. In those instances where more than one standard or definition is available, the following paragraphs indicate which one has been chosen.*

*A complete glossary of available data items is presented in both Mining Operations, Australia, 1997–98 (Cat. no. 8415.0) and Electricity, Gas, Water and Sewerage Industries, Australia, 1997–98 (Cat. no. 8208.0).*

<b>Capitalised purchases</b>	Goods drawn from inventories for use as fixed tangible assets in capital work done for own use.
<b>Capital work done for own use</b>	Work that is done by the employees or proprietors of the business for its own use or for rental or lease to other businesses. This value includes the wages of the employees as well as materials withdrawn from inventories.
<b>Earnings before interest and tax (EBIT)</b>	A measure of profit prior to the deduction of interest expenses and income tax.
<b>Employment</b>	Includes working proprietors, working partners, permanent, part-time, temporary and casual employees, employees on paid leave and managerial and executive employees working for a business during the last pay period ending in June.
<b>Industry value added (IVA)</b>	<p>Commencing with estimates for 1997–98, following the introduction of new international standards for measuring economic variables, industry gross product was replaced by the variable 'industry value added' (IVA) for the purpose of measuring industry contribution to gross domestic product (GDP).</p> <p>IVA represents the value added by an industry to the intermediate inputs used by the industry. Intermediate inputs consist of materials (including any inventories) and certain services which are used up in the production process.</p> <p>The derivation of IVA is as follows:</p> <p>Turnover</p> <p><i>Plus</i> Closing inventories</p> <p><i>Less</i> Opening inventories</p> <p><i>Less</i> Capitalised purchases</p> <p><i>Less</i> Intermediate input expenses</p> <p><i>Equals</i> IVA</p> <p>However, it should be noted that IVA is not a measure of operating profits before tax. Wages, salaries 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.</p>



<b>Intermediate input expenses</b>	<p>Includes two categories of operating expenses</p> <ul style="list-style-type: none"> <li>– purchases of materials, components and services used in production</li> <li>– expenses related to the sale of goods and administrative expenses.</li> </ul> <p>Purchase of materials, components and services used in production includes:</p> <ul style="list-style-type: none"> <li>▪ Purchases of materials, components, explosives, containers and packaging materials, electricity, fuels and water.</li> <li>▪ Purchases of minerals or other goods for resale without processing or assembly.</li> <li>▪ Motor vehicle running expenses, freight and cartage expenses, repair and maintenance expenses.</li> <li>▪ Rent leasing and hiring expenses (except for finance leases).</li> <li>▪ Contract, subcontract and commission expenses.</li> </ul> <p>Expenses related to the sale of goods and administrative expenses.</p> <p>The main expenses in this second group are advertising expenses, audit and accounting expenses, bank fees and charges (except interest), cleaning expenses, environmental protection expenses, intellectual property royalty expenses, legal fees, management fees, paper, printing and stationery expenses, postal and telecommunication expenses, staff training expenses and travelling, accommodation and entertainment expenses.</p>
<b>Inventories—Opening/Closing</b>	<p>The value of all inventories of finished goods, work-in-progress, raw materials, fuels, containers, etc. at the beginning and end of the financial year, respectively.</p>
<b>Management unit level</b>	<p>Refer to Explanatory Notes, paragraphs 12–14.</p>
<b>Operating profit before tax (OPBT)</b>	<p>A measure of profit before extraordinary items are brought to account and prior to the deduction of income tax and appropriations to owners (e.g. dividends paid).</p>
<b>Sales of goods and services</b>	<p>Includes revenue from the sale of minerals (net of coal export levy and petroleum production excise duty) and other goods (e.g. minerals bought for resale, waste materials), service income (e.g. repair and service income, contract, subcontract and commission income, installation charges) and rent, leasing and hiring income.</p>
<b>Trading profit</b>	<p>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 of goods and services.</p>
<b>Turnover</b>	<p>Includes all proceeds from operating revenue (i.e. sales, service income, rent, leasing and hiring income, and government subsidies) plus the value of capital work done for own use, or for rental or lease.</p>
<b>Wages and salaries</b>	<p>Refers to payments made to all permanent, part-time and temporary employees on the payroll during the financial year. Such payments include severance, termination and redundancy payments, overtime earnings, penalty payments and shift allowances, all paid leave, leave loadings and bonuses. Also includes capitalised wages.</p>





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