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ELECTRICITY, GAS, WATER AND SEWERAGE OPERATIONS

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CONTENTS

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Phillip Lui on Sydney (02) 9268 4269.

NOTES

ABOUT THIS PUBLICATION

This publication presents estimates for the electricity supply, gas supply, and water supply, sewerage and drainage services industries for 2005–06 from the Economic Activity Survey, together with data on a comparable basis from 2001–02 and intervening years. For convenience, these industries in total are referred to as the Electricity, Gas and Water Supply industry throughout this publication.

CHANGES TO THIS PUBLICATION

State and territory estimates for the electricity supply industry are no longer presented in this publication, due to data quality issues.

The data in this publication will be the last released on the basis of the 1993 edition of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)*. Commencing with 2006–07 data, results will be presented on the basis of a new (2006) edition of the ANZSIC.

The 2006–07 issue of this publication will also contain data for 2004–05 and 2005–06 on the basis of the 2006 ANZSIC, as an aid to analysis.

For further details see paragraph 3 of the Explanatory notes.

REVISIONS

Estimates for earlier years have been revised since the previous issue of this publication. The revisions are incorporated in this publication and in the extended data spreadsheets available free on-line.

The effect of these revisions on the 2004–05 national estimates of key variables for the electricity, gas and water supply industry has been a decrease of 1.3% (or $603m) in sales and service income, an increase of 0.1% ($6m) in wages and salaries paid, and an increase of 0.1% ($21m) in industry value added. The extent of revisions may be greater for individual industries and/or for other variables.

INFORMATION AVAILABLE ON-LINE

The text components of this publication are available free on-line. A PDF publication and extended data spreadsheets are also available free on-line. To access this information, go to the ABS website home page <http://abs.gov.au>.

Brian Pink
Australian Statistician

LIST OF TABLES

ABBREVIATIONS

'000	thousand
$b	billion (thousand million) dollars
$m	million dollars
ABN	Australian Business Number
ABR	Australian Business Register
ABS	Australian Bureau of Statistics
ABSBR	Australian Bureau of Statistics Business Register
ACT	Australian Capital Territory
ANZSIC	Australian and New Zealand Standard Industrial Classification
ATO	Australian Taxation Office
Aust.	Australia
BAS	Business Activity Statement
BIT	business income tax
cat. no.	Catalogue number
EAS	Economic Activity Survey
EBITDA	earnings before interest, tax, depreciation and amortisation
f.o.b.	free on board
FRC	full retail contestability
GST	goods and services tax
GWh	gigawatt hour
IVA	industry value added
n.e.c.	not elsewhere classified
no.	number
NEM	National Electricity Market
NSW	New South Wales
NT	Northern Territory
OPBT	operating profit before tax
Qld	Queensland
RSE	relative standard error
SA	South Australia
SISCA	Standard Institutional Sector Classification of Australia
Tas.	Tasmania
TAU	type of activity unit
TNTS	The New Tax System
UJV	unincorporated joint venture
Vic.	Victoria
WA	Western Australia

CHAPTER 1 OVERVIEW

INTRODUCTION

This publication presents estimates, from the annual Economic Activity Survey, of the economic and financial performance of the electricity supply, gas supply, and water supply, sewerage and drainage services industries.

These industries are specified in Division D ELECTRICITY, GAS AND WATER SUPPLY of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)*, 1993 edition. Please see paragraphs 1–4 of the Explanatory Notes for a full definition.

KEY DATA

Table 1.1 presents a time series for selected variables, from 2001–02 to 2005–06. All value data in this table are shown at current prices.

In all four aggregate measures presented, the ELECTRICITY, GAS AND WATER SUPPLY industry overall showed growth during 2005–06. Sales and service income increased by 6% ($2.8b) and industry value added (IVA) by 3% ($0.6b). As in 2004–05, growth in wages and salaries (18%, or $0.8b) outpaced that of employment (which increased by 7%, or 4,600 persons).

In 2005–06 the Electricity supply industry's share of these key aggregates ranged from 63% to 73%. These proportions are nearly identical to those of 2004–05. For IVA, the contribution of the electricity supply industry has increased from 67% in 2001–02 to 70% in 2005–06.

For information about survey methodology, see Technical Note 1.

The Glossary provides definitions for terms used.

GROSS VALUE ADDED

Table 1.2 illustrates the growth of Australian industries over time using chain volume measures of their gross value added. Chain volume measures provide estimates free of the direct effect of price change.

Of the seventeen industries shown in table 1.2, ELECTRICITY, GAS AND WATER SUPPLY ranked lowest in its average annual growth rate over the past 10 years and equal fifteenth over the past 25 years, with average annual increases of 1.1% and 2.4% respectively. By comparison, the highest growth rates were recorded by COMMUNICATION SERVICES, with annualised rates of 6.4% and 7.6% for the 10 year and 25 year periods.

TOTAL FACTOR INCOME

Table 1.3 shows the contribution of industries to the production (as measured by total factor income) of each state and territory, as well as Australia, in 2005–06. For the purposes of this table, the activity of general government and the ownership of dwellings are each treated as industries.

TOTAL FACTOR INCOME *continued*

Of the nineteen industries shown in the table, ELECTRICITY, GAS AND WATER SUPPLY ranked fifteenth (at 2.4%) in its contribution to Australian production for 2005–06. The largest share of production was attributable to PROPERTY AND BUSINESS SERVICES, at 12.6%. The contribution of ELECTRICITY, GAS AND WATER SUPPLY was greatest in Tasmania (at 4.8% of total factor income) and smallest in the Northern Territory (1.4%). In Tasmania, the ELECTRICITY, GAS AND WATER SUPPLY industry was the eleventh largest contributor to total production, its highest ranking for any state or territory.

1.1 KEY DATA, 2001–02 to 2005–06

	Employment at end of June	*Wages and salaries*(a)	*Sales and service income*(b)	*Industry value added*	*Wages and salaries per person employed*	*Wages and salaries to sales and service income*	*Sales and service income per person employed*	*Industry value added per person employed*
	'000	$m	$m	$m	$'000	no.	$'000	$'000
ELECTRICITY SUPPLY								
2001–02	35.5	2 452	29 230	12 075	69.0	0.08	823.1	340.0
2002–03	36.7	2 578	32 197	12 336	70.2	0.08	877.1	336.0
2003–04	36.8	2 655	31 687	12 862	72.2	0.08	861.3	349.6
2004–05	39.0	3 125	33 493	13 866	80.0	0.09	857.8	355.1
2005–06	42.4	3 844	36 023	14 463	90.7	0.11	850.4	341.4
GAS SUPPLY								
2001–02	2.4	113	5 737	1 138	47.6	0.02	2 426.1	481.4
2002–03	1.9	86	4 939	1 087	44.9	0.02	2 588.1	569.4
2003–04	1.9	81	5 298	986	42.7	0.02	2 780.2	517.3
2004–05	2.0	72	5 312	1 090	36.5	0.01	2 690.3	552.2
2005–06	2.2	90	5 536	1 243	40.2	0.02	2 464.5	553.5
WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES								
2001–02	21.8	1 071	7 250	4 883	49.1	0.15	332.2	223.8
2002–03	22.4	1 189	7 992	5 350	53.1	0.15	356.9	238.9
2003–04	21.1	1 236	7 679	5 051	58.6	0.16	364.3	239.7
2004–05	21.7	1 290	7 729	5 099	59.3	0.17	355.4	234.5
2005–06	22.8	1 380	7 774	4 998	60.7	0.18	341.6	219.6
ELECTRICITY, GAS AND WATER SUPPLY								
2001–02	59.7	3 636	42 217	18 097	60.9	0.09	707.2	303.1
2002–03	61.0	3 853	45 129	18 772	63.2	0.09	739.7	307.7
2003–04	59.8	3 972	44 665	18 899	66.5	0.09	747.2	316.2
2004–05	62.8	4 487	46 535	20 055	71.5	0.10	741.4	319.5
2005–06	67.4	5 314	49 333	20 704	78.9	0.11	732.3	307.3

(a) Excludes the drawings of working proprietors.

(b) Includes rent, leasing and hiring income.

1.2 PRODUCTION VOLUMES(a), Gross Value Added, 2004–05 and 2005–06

	CHAIN VOLUME MEASURES		*Change from 2004–05 to 2005–06*	AVERAGE ANNUAL CHANGE OVER LAST	
	2004–05	*2005–06*		*10 years*	*25 years*
	$m	$m	%	%	%
Agriculture, forestry and fishing	27 153	28 328	4.3	3.3	3.1
Mining	46 152	45 241	–2.0	1.7	4.1
Manufacturing	96 366	96 008	–0.4	1.5	1.4
Electricity, gas and water	***20 147***	***20 471***	***1.6***	***1.1***	***2.4***
Construction	56 940	62 405	9.6	6.0	3.4
Wholesale trade	43 625	45 049	3.3	3.8	3.0
Retail trade	52 720	53 245	1.0	4.0	3.2
Accommodation, cafes and restaurants	19 608	20 204	3.0	4.4	3.6
Transport and storage	40 966	41 886	2.2	3.9	3.6
Communication services	23 588	25 534	8.2	6.4	7.6
Finance and insurance	62 299	65 335	4.9	4.0	4.5
Property and business services	104 773	108 434	3.5	5.1	5.1
Government administration and defence	34 394	35 241	2.5	2.3	2.6
Education	37 891	38 556	1.8	2.0	2.4
Health and community services	53 197	55 455	4.2	4.1	4.1
Cultural and recreational services	13 132	13 619	3.7	4.0	3.6
Personal and other services	16 743	17 607	5.2	3.5	3.2
Total all industries	**749 694**	**772 618**	**3.1**	**3.5**	**3.3**

(a) Reference year for chain volume measures is 2004–05.

Note: The volume estimates contained in this table are derived from quarterly Business Surveys.

Source: Australian National Accounts: National Income and Expenditure and Product, March Quarter 2007 (cat. no. 5206.0), table 45.

1.3 INDUSTRY CONTRIBUTION TO TOTAL FACTOR INCOME, 2005–06

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	%	%	%	%	%	%	%	%	%
Agriculture, forestry and fishing	1.9	3.0	4.1	5.5	3.4	6.7	2.5	—	3.1
Mining	2.5	1.7	12.4	3.2	27.4	2.1	26.1	—	7.7
Manufacturing	11.1	13.9	9.0	15.3	7.8	14.5	5.9	2.0	11.0
Electricity, gas and water	***2.1***	***2.9***	***2.0***	***3.1***	***2.6***	***4.8***	***1.4***	***2.4***	***2.4***
Construction	6.9	6.5	8.0	6.0	8.0	5.5	6.9	7.7	7.1
Wholesale trade	5.4	6.0	4.6	4.3	3.7	3.7	2.0	1.8	4.9
Retail trade	6.0	6.1	7.2	6.2	4.8	7.5	4.4	4.8	6.1
Accommodation, cafes and restaurants	2.5	1.8	2.9	2.2	1.4	2.7	2.5	2.0	2.2
Transport and storage	4.2	4.2	4.6	4.3	4.1	4.2	3.6	2.3	4.2
Communication services	2.7	3.4	2.2	2.5	2.1	2.4	2.1	2.5	2.7
Finance and insurance	10.9	8.7	5.2	6.3	3.8	5.9	2.3	3.6	7.7
Property and business services	14.9	14.1	9.9	9.8	10.4	6.0	7.7	12.7	12.6
Government administration and defence	3.5	2.4	4.0	3.3	2.2	5.5	7.0	26.7	3.7
Education	4.5	5.2	4.3	5.3	2.9	5.5	3.9	5.7	4.5
Health and community services	6.4	7.0	6.3	8.2	5.4	9.7	5.7	6.3	6.6
Cultural and recreational services	1.6	1.7	1.1	1.4	1.0	1.4	1.6	2.6	1.4
Personal and other services	1.8	1.8	2.1	2.3	1.6	2.1	2.0	2.7	1.9
Ownership of dwellings	9.1	8.2	7.9	8.7	6.0	7.3	9.7	8.7	8.2
General government(a)	1.9	1.6	2.2	2.0	1.4	2.7	2.8	5.4	1.9

— nil or rounded to zero (including null cells)

(a) State details for general government gross operating surplus by industry are not available.

Source: Australian National Accounts: State Accounts, 2005–06 Reissue (cat. no. 5220.0), Analysis of results (page 7).

CHAPTER 2 ELECTRICITY SUPPLY INDUSTRY

INTRODUCTION

Statistics in this chapter relate to the electricity supply industry as defined by the *Australian and New Zealand Standard Industrial Classification (ANZSIC)*, 1993 edition. ANZSIC defines the electricity supply industry as consisting of those businesses mainly engaged in electricity generation and/or transmission and/or distribution. The data presented include all activities of the businesses, some of which may be activities other than electricity supply. (See Explanatory Notes paragraphs 5–20 for further details.) The commentary refers mainly to the tables in this chapter, preceded by some industry background material. The Glossary provides definitions for the more specific terms used.

INDUSTRY BACKGROUND

Since 1991, governments in Australia have been undertaking restructuring and reform of the electricity industry. State owned utilities have been disaggregated into separate generation, transmission, distribution and retail supply entities, corporatised and, in some jurisdictions, sold to the private sector. In 1994, the introduction of competitive wholesale and retail electricity markets resulted in trading across state borders. The central element of the reforms was the establishment in December 1998 of the National Electricity Market (NEM), which now links the Australian Capital Territory, New South Wales, Victoria, South Australia, Queensland and Tasmania. (Please see <http://www.nemmco.com.au>, the website of the National Electricity Market Management Company, for more details.) Western Australia has also experienced the effects of privatisation but is not part of the NEM, for reasons of geography. Partly as a result of these developments, the concept of state bounded entities continues to lose relevance.

Another continuing trend has been the diversification of energy businesses with the aim of providing their customers with a wider range of energy services. This has seen electricity businesses enter the gas market and, conversely, gas businesses enter the electricity market as opportunities expand within these markets. Because each business unit reporting in ABS surveys is classified to one industry, based on its predominant activity, such diversification can affect the statistics in this chapter and those in Chapter 3 Gas Supply Industry.

Deregulation has allowed new entities to come into the market and compete for customers. It has also resulted in a number of long established entities being dismantled or sold off. The effect of disaggregation on industry structure has been to change single entities wholly classified to the electricity supply industry into a number of smaller entities, some of which may be classified to industries other than electricity supply. Those entities classified to other industries do not contribute to the statistics for the electricity supply industry. Examples of activities formerly carried out by businesses classified to the electricity supply industry, but which are now largely carried out by specialist businesses classified to other industries, are network construction, repair and maintenance of electricity transmission towers, and power pole inspection.

Effect on these data

These changes to business structures have a direct impact on the data presented in this publication, but not all impacts are in the same direction. Where several smaller specialist business units wholly classified to the electricity supply industry have been created from one vertically integrated business, transactions between these businesses are recorded in the statistics (such as sales from the generating business to the distributing business). Previously, such transactions were internal to a single business and generally were not recorded in the statistics. This situation tends to increase sales and purchases values for the industry, but should have little direct effect on statistics for industry value added, operating profits or capital expenditure. On the other hand, the estimates of several data items (wages and salaries and capital expenditure in particular) for the electricity supply industry will be reduced if activities such as those mentioned in the previous paragraph are now carried out by businesses classified to other industries.

Generally, private sector businesses which are engaged in the electricity supply industry and conduct their own construction and maintenance operations tend to do so through separate business units (typically classified to ANZSIC Division E, CONSTRUCTION), which employ most of the staff engaged in those activities. Government owned businesses in this industry, by contrast, are more likely to employ these staff in a business unit which is classified to the electricity supply industry.

Ownership changes and restructuring in the electricity supply industry continued during 2005–06. In a partial reversal of the disaggregation that has characterised the industry since 1991, some privatised electricity businesses have been sold by their original purchasers to operators that are already involved in a different segment of the electricity supply industry in Australia.

The Australian Bureau of Agricultural and Resource Economics (ABARE) reports that electricity consumption in Australia increased by 1.2% (from 251,076 GWh in 2004–05 to 254,144 GWh in 2005–06). Consumption increased slightly in South Australia, Victoria and New South Wales but fell elsewhere, the Northern Territory having the biggest fall in percentage terms (6.4%). The *Consumer Price Index* relating to electricity (weighted average of eight capital cities) indicates that prices for household consumers were 2.7% higher in 2005–06 than in 2004–05.

SUMMARY

The major indicators for the Australian electricity supply industry of wages and salaries, sales and service income, industry value added and net capital expenditure all showed increases, in current price terms, from 2004–05 to 2005–06. Employment also increased.

INDUSTRY VALUE ADDED

The electricity supply industry's $14.5b of industry value added in 2005–06 represented an increase of $0.6b (or 4%) over the preceding year.

Although sales and service income increased by 8% (or $2.5b), the growth in IVA was not as high in percentage terms due to an increase in purchases of goods and materials of $2.1b (or 13%).

EMPLOYMENT

Employment in the electricity supply industry at the end of June 2006 was 42,400 persons. This represented an increase of 8% (3,400 persons) compared to June 2005, and was 19% (6,900 persons) higher than at the end of June 2002.

EMPLOYMENT *continued*

Increases in employment, and labour costs, are partly related to increased investment in capital expenditure projects over 2004–05 and 2005–06.

LABOUR COSTS

In percentage terms, the increase in wages and salaries paid by the electricity supply industry in 2005–06 exceeded its increase in employment. Wages and salaries rose by 23% ($719m) in 2005–06, following an 18% increase in the previous year. The broader measure of selected labour costs moved similarly (up 24% and 16% respectively).

Wages and salaries per person employed increased by 13%, from $80,000 to $90,700, during 2005–06.

Over the period from 2001–02 to 2005–06, the electricity supply industry's wages and salaries have increased in current price terms by 57%, and by 31% on a per person employed basis. Selected labour costs increased 58% and 33% respectively over the same period.

PROFITABILITY AND EARNINGS

Indicators of profitability showed divergent movements during the year. Increases in labour costs ($0.8b) and in purchases and selected expenses (up $2.3b, or 10%) exceeded the industry's increase in sales and service income. This depressed earnings before interest, tax, depreciation and amortisation (EBITDA), which fell by $624m (6%). On the other hand, the 30% increase (to $5.0b) in operating profit before tax (OPBT) largely reflects an increase of $1.8b (195%) in other income, which includes the effects of asset revaluations and sales. Compared to these movements, the 4% increase in IVA mentioned above was more subdued because neither labour costs nor other income contribute to IVA.

From 2004–05 to 2005–06 the estimated profit margin of the industry rose strongly, from 11.4% to 13.7%.

CAPITAL EXPENDITURE

Net capital expenditure for the electricity supply industry increased in 2005–06 by $1.7b (27%) to $8.1b, reflecting substantial investment in upgrading networks and improving reliability of supply. Some of this additional capital expenditure was in response to cyclone damage in Queensland.

Acquisition of plant, machinery and equipment by the electricity supply industry increased by 49%, or $1.7b, between 2004–05 and 2005–06. By contrast, a decrease of $0.8b (or 28%) occurred in expenditure on dwellings, other buildings and structures. Outlays on other assets more than trebled, to $0.9b.

2.1 FINANCIAL PERFORMANCE, 2001–02 to 2005–06

		2001–02	2002–03	2003–04	2004–05	2005–06
Income						
Sales and service income(a)	$m	29 230	32 197	31 687	33 493	36 023
Funding from government for operational costs	$m	400	418	462	609	719
Interest income	$m	257	419	540	535	462
Other income	$m	997	203	989	921	2 720
Total income	$m	*30 885*	*33 237*	*33 678*	*35 558*	*39 922*
Expenses						
Wages and salaries(b)	$m	2 452	2 578	2 655	3 125	3 844
Employer contributions to superannuation	$m	180	261	249	257	340
Workers compensation premiums	$m	33	34	44	31	39
Selected labour costs	$m	*2 665*	*2 874*	*2 947*	*3 412*	*4 222*
Purchases of goods and materials	$m	14 378	14 630	13 665	15 906	17 967
Rent, leasing and hiring expenses	$m	104	116	135	146	167
Freight and cartage expenses	$m	187	130	133	172	223
Motor vehicle running expenses	$m	83	86	83	109	137
Repair and maintenance expenses	$m	425	437	459	437	496
Contract, subcontract and commission expenses	$m	3 105	5 106	4 903	5 287	4 779
Other selected expenses	$m	1 564	1 974	1 899	2 148	2 750
Purchases and selected expenses	$m	*19 844*	*22 479*	*21 277*	*24 207*	*26 519*
Depreciation and amortisation	$m	3 090	3 305	3 385	3 454	3 548
Interest expenses	$m	3 430	4 060	3 857	4 010	3 880
Insurance premiums	$m	102	162	192	195	190
Natural resource royalties expenses	$m	27	24	24	26	19
Bad and doubtful debts	$m	70	101	90	72	195
Less						
Capitalised purchases	$m	1 577	1 339	1 159	2 710	2 529
Capitalised wages and salaries	$m	392	497	530	819	990
Total expenses	$m	*27 259*	*31 168*	*30 084*	*31 848*	*35 053*
Opening inventories	$m	680	772	831	823	948
Closing inventories	$m	732	837	827	928	1 031
Cost of sales	$m	18 215	21 074	20 121	21 393	23 907
Trading profit	$m	11 015	11 123	11 566	12 100	12 115
Earnings before interest, tax, depreciation and amortisation	$m	8 943	8 878	9 304	9 822	9 198
Operating profit before tax	$m	3 678	2 135	3 591	3 814	4 952
Industry ratios						
Profit margin	%	12.6	6.6	11.3	11.4	13.7
Interest coverage	times	2.6	2.2	2.4	2.4	2.4
Investment rate (value added)	%	46.6	47.2	40.9	47.7	56.8
Industry value added to selected labour costs	times	4.5	4.3	4.4	4.1	3.4
Selected labour costs per person employed	$'000	75.0	78.3	80.1	87.4	99.7

(a) Includes rent, leasing and hiring income.

(b) Excludes the drawings of working proprietors.

2.2 INDUSTRY VALUE ADDED, 2001–02 to 2005–06

	2001–02	*2002–03*	*2003–04*	*2004–05*	*2005–06*
	$m	$m	$m	$m	$m
Sales and service income(a)	29 230	32 197	31 687	33 493	36 023
Plus					
Funding from government for operational costs	400	418	462	609	719
Capital work done for own use	1 969	1 835	1 689	3 528	3 519
Change in inventories	52	66	**–4	104	83
Less					
Purchases of goods and materials	14 378	14 630	13 665	15 906	17 967
Other intermediate input expenses	5 199	7 550	7 308	7 962	7 913
Industry value added	**12 075**	**12 336**	**12 862**	**13 866**	**14 463**

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

(a) Includes rent, leasing and hiring income.

2.3 ACQUISITION AND DISPOSAL OF ASSETS, 2001–02 to 2005–06

	2001–02	*2002–03*	*2003–04*	*2004–05*	*2005–06*
	$m	$m	$m	$m	$m
Capital expenditure on(a)					
Plant, machinery and equipment	2 371	2 828	3 118	3 536	5 256
Dwellings, other buildings and structures	2 013	1 850	1 945	2 818	2 029
Other (including land and intangible assets)	1 244	1 146	195	260	932
Total	*5 629*	*5 824*	*5 258*	*6 614*	*8 218*
Disposal of assets	238	328	503	214	110
Net capital expenditure	**5 390**	**5 496**	**4 755**	**6 400**	**8 108**

(a) Items listed include value of capital work done for own use - reported in table 2.2.

CHAPTER 3 GAS SUPPLY INDUSTRY

INTRODUCTION

Statistics in this chapter relate to the gas supply industry as defined by the *Australian and New Zealand Standard Industrial Classification (ANZSIC)*, 1993 edition. The data presented include all activities of the businesses, some of which may be activities other than gas supply. (See Explanatory Notes paragraphs 5–20 for further details.) The commentary refers mainly to the tables in this chapter, and to the key data presented in table 1.1, preceded by some industry background material. The Glossary provides definitions for the more specific terms used.

INDUSTRY BACKGROUND

The current gas supply industry reflects the results of the restructuring which began in the early 1990s. The terms of the *1997 National Gas Pipelines Access Agreement* required that legal restrictions to full retail contestability (FRC) be removed in order to give all gas users their choice of supplier. FRC was legislated in Tasmania in December 2000, and introduced in NSW and the ACT in January 2002 and in Victoria in October 2002. Western Australia introduced market reforms to the retail gas market in May 2004. These reforms include the introduction of FRC and several new customer protection mechanisms. Natural gas was introduced into Tasmania by pipeline from Victoria by June 2004. South Australia implemented FRC in July 2004 and Queensland in July 2007. There are no immediate plans for introduction of FRC in the Northern Territory, given that there is no household distribution network and the low number of business customers.

As in the electricity supply industry, vertically integrated businesses have formed separate business units to undertake various stages of distribution and other activities. Increasingly, competition has been introduced along the various stages of the distribution chain with the entry of new businesses.

These changes to business structures have a direct impact on the data presented in this publication, but not all impacts are in the same direction. Where several smaller specialist business units wholly classified to the gas supply industry have been created from one vertically integrated business, transactions between these businesses are recorded in the statistics (such as sales from the distributing business to the retail business). Previously, such transactions were internal to a single business and generally were not recorded in the statistics.

Over time, as the market continues to develop, businesses have gradually rationalised and restructured their operations. This has resulted in several businesses widening their networks through corporate takeovers to include activities not previously undertaken by gas supply businesses. Conversely, some activities previously undertaken by gas supply businesses are now being undertaken by businesses classified to other industries, in particular, electricity supply and pipeline transport.

INDUSTRY BACKGROUND *continued*

Cold weather in many parts of Australia in autumn and early winter of 2006 increased demand for gas from domestic and commercial customers, whereas demand from larger industrial users was mainly stable. The volume of gas (natural and manufactured) available for issue through mains increased slightly, by 0.4% between 2004–05 and 2005–06, from 793 to 796 Petajoules. (*Manufacturing Production, Australia, June 2006* (ABS cat. no. 8301.0.55.001)). The *Consumer Price Index* relating to Gas and Other Household Fuels (weighted average of eight capital cities) indicates that prices for household consumers were 5.0% higher in 2005–06 than in 2004–05.

SUMMARY

Major indicators for the Australian gas supply industry showed increases, in current price terms, from 2004–05 to 2005–06. As in the electricity supply industry, wages and salaries increased by a much greater percentage than did sales and service income.

INDUSTRY VALUE ADDED

At $1.2b, gas supply industry value added in 2005–06 increased from its 2004–05 value by 14% (or $153m). A $224m (4%) increase in sales and service income outweighed the combined increase ($82m) in purchases of goods and materials and other intermediate input expenses.

EMPLOYMENT

The gas supply industry employed 2,200 persons at the end of June 2006.

LABOUR COSTS

Wages and salaries paid by the gas supply industry increased by 25% ($18m) to $90m in 2005–06. This followed a decline of 12% the previous year, largely related to corporate restructurings in that year which transferred some employee-related expenses to business units not engaged in gas supply. After three years of decline, selected labour costs per person employed increased in 2005–06 by 9%.

PROFITABILITY AND EARNINGS

Growth in total income of $276m (5%) exceeded the increase of $147m (3%) in total expenses, resulting in strong growth (14%, or $151m) in trading profit, which increased to $1.2b. Similarly, earnings before interest, tax, depreciation and amortisation (EBITDA) increased by 13% to $1.1b.

As measured by profit margin, profitability of this industry grew strongly in 2005–06 to 12.3%, by far its highest value for the past five years.

CAPITAL EXPENDITURE

Net capital expenditure of $478m represented a 41% (or $330m) decrease from the very high value of 2004–05, but still maintained a level well above the preceding three years.

The decrease in net capital expenditure was due to a significant decline in other capital expenditure (including land and intangible assets) which fell by $373m (98%). This decline was offset partly by a $67m (44%) increase in the acquisition of plant, machinery and equipment.

Net capital expenditure by the gas supply industry amounted to 39% of its IVA, compared to 75% in 2004–05. In the three years preceding 2004–05, this ratio was less than 30%.

3.1 FINANCIAL PERFORMANCE, 2001–02 to 2005–06

		2001–02	2002–03	2003–04	2004–05	2005–06
Income						
Sales and service income(a)	$m	5 737	4 939	5 298	5 312	5 536
Funding from government for operational costs	$m	2	3	^ 3	9	11
Interest income	$m	15	11	*80	23	38
Other income	$m	25	30	83	15	51
Total income	$m	*5 780*	*4 984*	*5 465*	*5 360*	*5 636*
Expenses						
Wages and salaries(b)	$m	113	86	81	72	90
Employer contributions to superannuation	$m	9	7	8	8	9
Workers compensation premiums	$m	1	2	1	1	1
Selected labour costs	$m	*123*	*95*	*91*	*81*	*101*
Purchases of goods and materials	$m	2 317	2 282	2 768	2 634	2 576
Rent, leasing and hiring expenses	$m	20	17	18	13	12
Freight and cartage expenses	$m	35	37	40	690	736
Motor vehicle running expenses	$m	18	15	^ 22	15	16
Repair and maintenance expenses	$m	30	29	^ 47	4	2
Contract, subcontract and commission expenses	$m	1 670	1 202	^ 1 253	698	657
Other selected expenses	$m	531	294	^ 182	199	337
Purchases and selected expenses	$m	*4 621*	*3 876*	*4 330*	*4 254*	*4 336*
Depreciation and amortisation	$m	196	185	191	182	229
Interest expenses	$m	353	354	358	322	301
Insurance premiums	$m	6	6	^ 9	8	10
Bad and doubtful debts	$m	17	20	^ 10	5	6
Less						
Capitalised purchases	$m	2	4	10	18	2
Capitalised wages and salaries	$m	—	—	*1	—	—
Total expenses	$m	*5 314*	*4 531*	*4 979*	*4 833*	*4 980*
Opening inventories	$m	33	23	^ 24	22	18
Closing inventories	$m	36	28	^ 17	20	41
Cost of sales	$m	4 616	3 867	4 327	4 238	4 311
Trading profit	$m	1 121	1 073	971	1 074	1 225
Earnings before interest, tax, depreciation and amortisation	$m	978	956	865	990	1 120
Operating profit before tax	$m	470	458	480	525	678
Industry ratios						
Profit margin	%	8.2	9.3	9.1	9.9	12.3
Interest coverage	times	2.8	2.7	2.4	3.1	3.7
Investment rate (value added)	%	24.0	26.0	29.8	74.6	39.1
Industry value added to selected labour costs	times	9.3	11.5	10.9	13.5	12.4
Selected labour costs per person employed	$'000	52.0	49.5	47.6	40.9	44.8

^ 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

— nil or rounded to zero (including null cells)

(a) Includes rent, leasing and hiring income.

(b) Excludes the drawings of working proprietors.

3.2 INDUSTRY VALUE ADDED, 2001–02 to 2005–06

	2001–02	*2002–03*	*2003–04*	*2004–05*	*2005–06*
	$m	$m	$m	$m	$m
Sales and service income(a)	5 737	4 939	5 298	5 312	5 536
Plus					
Funding from government for operational costs	2	3	^ 3	9	11
Capital work done for own use	2	4	10	19	2
Change in inventories	4	5	*–6	–2	23
Less					
Purchases of goods and materials	2 317	2 282	2 768	2 634	2 576
Other intermediate input expenses	2 290	1 584	1 551	1 614	1 753
Industry value added	**1 138**	**1 087**	**986**	**1 090**	**1 243**

^ 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.

3.3 ACQUISITION AND DISPOSAL OF ASSETS, 2001–02 to 2005–06

	2001–02	*2002–03*	*2003–04*	*2004–05*	*2005–06*
	$m	$m	$m	$m	$m
Capital expenditure on(a)					
Plant, machinery and equipment	81	84	101	153	220
Dwellings, other buildings and structures	79	105	^ 147	280	258
Other (including land and intangible assets)	114	93	45	381	8
Total	*274*	*282*	*293*	*813*	*486*
Disposal of assets	12	4	7	6	7
Net capital expenditure	**262**	**279**	**286**	**808**	**478**

^ 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 3.2.

CHAPTER 4 WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES INDUSTRY

INTRODUCTION

This chapter presents statistics about the water supply, sewerage and drainage services industry as defined by the *Australian and New Zealand Standard Industrial Classification (ANZSIC)*, 1993 edition. The data presented include all activities of the businesses, some of which may be activities other than water supply, sewerage and drainage services. (See Explanatory Notes paragraphs 5–20 for further details.)

Both private and government units are included in the scope of the survey. In a manner similar to the electricity and gas supply industries, the water supply, sewerage and drainage services industry is also undergoing a process of reform. At the same time, changes in the structure of public sector units engaged in these activities have affected the statistics over time, by reclassifying such business units between this industry and ANZSIC Division M, Government Administration and Defence.

The commentary refers mainly to the table in this chapter, and to the key data presented in table 1.1, preceded by some industry background material.

INDUSTRY BACKGROUND

The National Water Commission was established in December 2004 as an independent statutory agency responsible for overseeing national water reform, by assisting to implement the *National Water Initiative* and investment in the *Australian Water Fund*.

The Water Services Association of Australia reports that the population serviced by Major Urban Water Utilities increased by 2.2% from 2004–05 to 2005–06, yet over the same period total urban water supplied decreased by 3.2%. Declining water use is mainly attributed to water restrictions and to adoption by consumers of water conservation measures.

The *Consumer Price Index* relating to water and sewerage (weighted average of eight capital cities) indicates that prices for household consumers were 5.5% higher in 2005–06 than in 2004–05.

EMPLOYMENT

The water supply, sewerage and drainage services industry employed 22,800 persons at the end of June 2006, 1,100 persons (or 5%) more than twelve months earlier and 4% (or 1,000 persons) greater than at the end of June 2002.

INDUSTRY PERFORMANCE

For the water supply, sewerage and drainage services industry, most major indicators of output showed little change in 2005–06. Major categories of expense, though, increased by 6-8%. The cost of maintaining existing water supplies, maximising extraction and searching for new water sources has increased more strongly than has sales and service income.

INDUSTRY PERFORMANCE *continued*

Wages and salaries paid by the water supply, sewerage and drainage services industry increased by 7%, to $1.4b, during 2005–06. On a per person employed basis, wages and salaries increased by 2% (from $59,300 to $60,700). Over the period from 2001–02 to 2005–06, the industry's wages and salaries costs have increased in current price terms by 29% (and by 24% per person employed).

The industry earned $7.8b in sales and service income in 2005–06, virtually identical to 2004–05. IVA declined marginally, to $5.0b. Earnings before interest, tax, depreciation and amortisation decreased by 5% to $3.3b and is now 4% less than its value in 2001–02.

CAPITAL EXPENDITURE

Net capital expenditure for the water supply, sewerage and drainage services industry increased by 27% in 2005–06, in contrast to the generally stable pattern of the preceding three years. Major capital expenditure programs included building desalination and wastewater plants, pipelines, dams and improvements to existing infrastructure for maximisation and/or improvement of supply.

4.1 FINANCIAL OPERATIONS, 2001–02 to 2005–06

	2001-02	*2002-03*	*2003-04*	*2004-05*	*2005-06*
	$m	$m	$m	$m	$m
Financial Performance					
Sales and service income(a)	7 250	7 992	7 679	7 729	7 774
Total income	8 929	9 688	9 147	9 457	9 963
Selected labour costs	1 296	1 399	1 340	1 437	1 517
Purchases and selected expenses	3 499	^ 3 790	3 805	4 126	4 457
Total expenses	6 452	6 876	6 711	7 067	7 473
Trading profit	4 068	4 454	4 163	4 018	3 784
Earnings before interest, tax, depreciation and amortisation	3 399	3 718	3 474	3 423	3 255
Operating profit before tax	2 477	2 816	2 436	2 416	2 463
Industry value added	4 883	5 350	5 051	5 099	4 998
Acquisition and disposal of assets					
Capital expenditure	2 165	2 064	2 138	2 141	2 734
Disposal of assets	138	131	60	71	104
Net capital expenditure	2 027	1 933	2 078	2 070	2 630

^ 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.

EXPLANATORY NOTES

INTRODUCTION

1 This publication, *Electricity, Gas, Water and Sewerage Operations, Australia, 2005–06* (cat. no. 8226.0), presents estimates of the economic and financial performance of these industries.

2 These industries, as specified in Division D ELECTRICITY, GAS AND WATER SUPPLY of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (cat. no. 1292.0), 1993 edition, comprise:

- ELECTRICITY SUPPLY (ANZSIC Group 361), which relates to the generation, transmission or distribution of electricity
- GAS SUPPLY (ANZSIC Group 362), which relates to the manufacture of town gas from coal and/or petroleum, or the mains distribution of town gas, natural gas or liquefied petroleum gas
- WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES (ANZSIC Group 370), which relates to the storage, purification or supply of water, or the operation of sewerage or drainage systems, including sewage treatment plants.

3 From 2006–07 reference year the Economic Activity Survey (EAS) results will be compiled using the 2006 edition of ANZSIC (an updated version of the industry classification) and new methodologies. As a result, a new series of these estimates will commence from 2006–07. When 2006–07 data are released, they will be accompanied by data for 2004–05 and 2005–06 on a comparable basis.

4 The electricity, gas and water supply industry collection is conducted annually as a component of the ABS's Economic Activity Survey (EAS):

- A sample of 422 electricity, gas and water supply industry businesses were asked by the ABS to provide employment details and data obtained from their financial statements, mainly via mail out questionnaires. (The sample comprised all businesses classified to the electricity and gas supply industries and which were above certain cutoffs (see Technical Note 1); and a sample of businesses classified to the water supply, sewerage and drainage services industry.)
- Key financial data for 1,101 electricity, gas and water supply industry 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. Section 16(4)(ga) of the *Income Tax Assessment Act 1936* provides for the ATO to pass information to the Australian Statistician for the purposes of the *Census and Statistics Act 1905*.

STATISTICAL UNITS USED

5 Statistical units are those entities from which statistics are collected, or about which statistics are compiled. In ABS economic statistics, the statistical unit is generally the business. All businesses in the EAS are recorded on the ABS Business Register (ABSBR).

6 The ABS uses an economic statistics units model on the 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 USED
continued

7 This units model allocates businesses to one of two sub-populations:

- Most businesses and organisations in Australia need to obtain an Australian Business Number (ABN). The vast majority of these businesses are simple in structure and are allocated to the population which is maintained by the ATO. These are termed (by the ABS) ABN units.
- The remaining businesses are in the ABS maintained population, and are termed type of activity units, or TAUs.

8 Together these two sub-populations (of ABN units and TAUs) make up the ABSBR population, from which the EAS samples are taken.

9 For details about the ABSBR and how ABN units and TAUs contribute to the industry statistics in this publication, see Technical Note 1.

SCOPE AND COVERAGE

10 The scope of the 2005–06 electricity, gas and water supply industry collection comprises all businesses (including non-employing businesses) on the ABSBR at time of selection, whose industry is classified to ANZSIC Division D ELECTRICITY, GAS AND WATER SUPPLY. This division comprises the following subdivisions and their component groups and classes:

36 Electricity and Gas Supply
361 Electricity Supply
3610 Electricity Supply
362 Gas Supply
3620 Gas Supply
37 Water Supply, Sewerage and Drainage Services
370 Water Supply, Sewerage and Drainage Services
3701 Water Supply
3702 Sewerage and Drainage Services

11 Statistics in this publication are presented by chapter for each of ANZSIC Groups 361 ELECTRICITY SUPPLY, 362 GAS SUPPLY, and 370 WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES.

12 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 relates to those activities that provide the main source of income. For example, a business which derives most of its income from electricity generation activities would have all operations included in the aggregates and ratios for ELECTRICITY SUPPLY, even if significant secondary activities (such as water supply, coal mining, or retailing) were also undertaken. However, where a business makes a significant economic contribution to different ANZSIC industries, 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.

13 Some electricity is generated by businesses mainly engaged in other activities (e.g. manufacturing) solely, or in part, to provide power for those activities. Such electricity generation is not treated as part of the electricity supply industry and, therefore, does not contribute to these statistics.

14 Businesses mainly engaged in the distribution of liquefied petroleum gas in bulk or in containers are not treated as part of the gas supply industry, as they are classified to ANZSIC Division F WHOLESALE TRADE.

SCOPE AND COVERAGE *continued*

15 The ABS maintained population of the ABSBR includes all organisations classified to the general government sector according to the *Standard Institutional Sector Classification of Australia (SISCA)*. Where a general government authority operates a number of business units, each coinciding with a 'division' or 'line of business' with separate and comprehensive accounts, then each of these business units is recorded as a separate TAU on the ABSBR. Each TAU is then classified by industry according to its predominant activity. Such TAUs classified to the WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES subdivision are then in scope of the electricity, gas and water supply industry collections. For example, a local government council might be recorded on the ABSBR as comprising four separate TAUs covering its general services, electricity supply, water supply, and sewerage operations. The water and sewerage TAUs are in scope of the collection, but the other TAUs are not.

16 Prior to recent industry reforms, the electricity supply industry was largely vertically integrated, i.e. the activities of generation, transmission and distribution of electricity were conducted within a single business. After restructuring following the industry reforms, these activities are now more often conducted by separate businesses. This has resulted in increases to some data items, e.g. the sale of electricity may be recorded by both the generator and the distributor. The gas supply industry has undergone similar reform and restructuring.

17 Unincorporated joint ventures (UJVs) within the electricity, gas and water supply industries are arrangements which allow the sharing of expertise, resources and risk associated with specific projects. This occurs through the participation of a number of organisations (by investment) in a specific operation (e.g. a power station). Some of these organisations may not otherwise be involved in that industry.

18 The electricity, gas and water supply industry collection includes such businesses which are operators and/or participants in any UJVs. Generally, each participant supplies data of its share of income, while the operator reports all expenses and employment.

19 The ABS attempts to maintain a current understanding of the structure of the large, complex and diverse business groups that form the ABS maintained population on the ABSBR, through direct contact with those businesses. Resultant changes in their structures on the ABSBR can affect:

- the availability of such businesses (or units within them) for inclusion in the annual economic collections
- the delineation of the units, within those groups, for which data are to be reported.

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 each 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. Such businesses make a substantial contribution to some of the estimates presented in this publication. As a result, the estimates can reflect trading conditions that prevailed in periods outside the twelve months ended June in the relevant year.

22 It should be noted that, although financial data estimates relate to the full twelve months, employment estimates relate to the last pay period ending in June of the given year. As such, estimates of wages and salaries per person employed will be affected by any fluctuations in employment during the reference period.

23 Financial data presented incorporate all units in scope of the particular electricity, gas and water supply industry collection that were in operation 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

REFERENCE PERIOD *continued*

assets and liabilities and/or incurred some non-operating expenses (e.g. depreciation, administration costs).

RELIABILITY OF ESTIMATES

24 For information about this subject, see Technical Note 2.

INDUSTRY PERFORMANCE MEASURES

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

26 Differences in accounting policy and practices across businesses and industries can lead to some inconsistencies in the data input to the statistics. Although much of the accounting process is subject to standards, there is still a great deal of flexibility left to individual managers and accountants in the accounting policies and practices that they adopt. For example, the way profit is measured is affected by management policy about such issues as depreciation rates, bad debt provisions and write off, and goodwill write off. The varying degree to which businesses consolidate their accounts may also affect any industry performance measures calculated.

27 A range of performance measures, usually expressed as ratios, can be produced from the data available from businesses' financial statements. Others, relating to labour inputs, can be derived by expressing financial or economic variables on a per person employed basis. The performance measures presented in this publication comprise:

- profitability ratios, which measure the rate of profit on sales
- debt ratios, which indicate the ability of businesses to meet the cost of debt financing
- labour measures, which relate output, labour costs and employment
- capital expenditure ratios, which indicate the extent of business investment in capital assets.

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

29 Those ratios compiled from a combination of flow (whole period) and level (beginning or end of period) items need to be treated with additional caution. 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.

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.

INTERNATIONAL FINANCIAL REPORTING STANDARDS

31 The new Australian equivalents to International Financial Reporting Standards (AIFRS) began to be progressively implemented in Australia from 1 January 2005. As a result, a number of items in the financial accounts of Australian businesses have been affected by changed definitions, which have in turn affected both Income Statements and Balance Sheets. A range of ABS economic collections source data from financial accounts of businesses, and use those data to derive economic statistics. There have been no changes in the associated economic definitions.

32 After monitoring data items since March quarter 2005 it has been concluded that most affected published data series have been affected by data breaks, but that the magnitude of such breaks cannot be determined without imposing disproportionate load upon data providers to ABS surveys and other administratively collected data. ABS will continue to monitor developments and report any significant identified impacts or changes in methodology as a result of AIFRS.

STATE AND TERRITORY ESTIMATES

33 State and territory estimates for the electricity supply industry are no longer presented in this publication, due to data quality issues.

NEW BUSINESSES

34 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 ELECTRICITY SUPPLY, an increase of 0.2%
- for GAS SUPPLY, an increase of 0.1%
- for WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES, an increase of 0.2%.

ACKNOWLEDGMENT

35 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued co-operation 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

36 The ABS produces industry estimates for a range of selected industries (including utilities) and these results are to be available in *Australian Industry, 2005–06* (cat. no. 8155.0) expected to be released on 7 December 2007. National estimates of income, expenditure and associated ratios will be available at the ANZSIC division level (with a greater range of data available via the ABS web site in spreadsheet form). Some 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), and wages and salaries, at the ANZSIC class level, and state/territory estimates of these items at the ANZSIC division level.

37 The following publications and electronic releases also contain information about the electricity, gas and water supply industries:

Counts of Businesses, including Entries and Exits, June 2003 to June 2006, cat. no. 8165.0, released on 28 February 2007 – Irregular publication

Australian Industry, 2004–05, cat. no. 8155.0, released on 21 December 2006 – 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, 2005–06 Reissue, cat. no. 5220.0, released on 13 November 2006 – Annual publication

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

Energy Statistics, Australia, 2001–02, cat. no. 4649.0.55.001, released on 19 December 2003 – Irregular publication

Household Expenditure Survey, Australia: Summary of Results, 2003–04, cat. no. 6530.0, released on 11 August 2005 – Quinquennial 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

Manufacturing Production, Australia, cat. no. 8301.0.55.001 – Quarterly electronic publication

Mining Operations, Australia, 2004–05, cat. no. 8415.0, released on 27 October 2006 – Annual publication

Private New Capital Expenditure and Expected Expenditure, Australia, cat. no. 5625.0 – Quarterly publication

Research and Experimental Development, Businesses, Australia, 2005–06, cat. no. 8104.0, released on 21 August 2007 – Annual publication

Water Account, Australia, 2004–05, cat. no. 4610.0, released on 28 November 2006

RELATED PUBLICATIONS *continued*

– Irregular publication

Water Use on Australian Farms, 2005–06, cat. no. 4618.0, released on 14 August 2007

– Irregular publication

Year Book Australia, 2007, cat. no. 1301.0, released on 24 January 2007

– Annual publication.

38 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

39 There are a number of external organisations that collect and present data about these industries. Users requiring further information should contact:

Energy Supply Association of Australia Ltd., Melbourne (03) 9670 0188
website <http://www.esaa.com.au>
(for key data, see the ESAA's annual publication Electricity Gas Australia)

Australian Water Association Ltd., Sydney 1300 361 426
website <http://www.awa.asn.au>

Water Services Association of Australia, Melbourne (03) 9606 0678
website <http://www.wsaa.asn.au>
(for key data, see the WSAA's annual publication
Australia's Urban Water Industry: WSAA Facts)

Productivity Commission, Melbourne (03) 9653 2100 and Canberra (02) 6240 3200
website <http://www.pc.gov.au>

Australian Bureau of Agricultural and Resource Economics (ABARE)
Canberra, (02) 6272 2000
website <http://www.abareconomics.com>.

ABS DATA AVAILABLE ON REQUEST

40 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

41 Where figures have been rounded, discrepancies may occur between totals and the sums of the component items. Due to data being adjusted for lags in processing new businesses to the ABS Business Register (see paragraph 34), this 'rounding rule' also applies to employment estimates.

42 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.

TECHNICAL NOTE 1 METHODOLOGY

INTRODUCTION

1 The industry estimates in this publication are produced using a combination of ABS directly collected data and Business Income Tax (BIT) data sourced from the Australian Taxation Office (ATO).

2 The directly collected data have been reported by a sample of electricity, gas and water supply businesses, as recorded on the ABS Business Register (ABSBR). The ABS uses an economic statistics units model on the 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

3 The current economic statistics units model was introduced in mid 2002, to better use the information available as a result of The New Tax System (TNTS). This 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.

ATO MAINTAINED POPULATION

4 Most businesses and organisations in Australia need to obtain an Australian Business Number (ABN). They 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

5 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 statistical units model described below caters for 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: 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).

ABS MAINTAINED POPULATION *continued*

Type of activity unit (TAU): The TAU comprises 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.

6 For more information about the effects of the introduction of this economic statistics units model, refer to *Information Paper: Improvements in ABS Economic Statistics [Arising from The New Tax System]* (cat. no. 1372.0). The ABN and TAU statistical units were introduced from 2001–02.

CONTRIBUTION OF THE STATISTICAL UNITS TO THE ESTIMATES

7 The following paragraphs outline the way in which these categories of statistical units contribute to the estimates of financial and economic variables presented in this publication. Estimates of employment are derived in a different manner; see paragraph 14 below.

TAUs

8 All units in the ABS maintained population (i.e. TAUs) classified to the electricity, gas and water supply industries were eligible to be selected for direct collection. Direct collection of data from 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.

ABN units

9 The balance of units on the ABSBR classified to these industries were ABN units, from the ATO maintained population. Cut-offs were established 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

10 Cut-offs for ABN units were originally established for the 2001–02 collection year, which was the first to incorporate BIT data from the ATO. These are reviewed annually, with the result that the cut-off for ANZSIC Subdivision 36 was altered with effect from the 2005–06 collection year. More information about how the initial cut-offs were set is shown in Appendix 1: Survey Changes in the 2001–02 and 2002–03 issue of this publication.

11 The current cut-offs are:

- $1,900,000 for ANZSIC Subdivision 36
- $1,000,000 for ANZSIC Subdivision 37.

PRODUCING INDUSTRY ESTIMATES

12 Therefore, the 2005–06 electricity, gas and water supply industries estimates have been derived as follows:

- A mail-out survey (which included a sample component for businesses classified to Water supply, sewerage and drainage services) was used to estimate the contribution of:

PRODUCING INDUSTRY ESTIMATES *continued*

- all businesses in the ABS maintained population
- those businesses at or above the cut-offs in the ATO maintained population
- 'tax exempt' businesses, that are not required to complete business income tax returns (and so would otherwise not contribute to the statistics).

- 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. The derivation of employment estimates is discussed below.

Income contribution by unit type

13 An indication of the importance of these populations to the data can be gained from their contribution to the national estimate of sales and service income. The following table shows their proportional contributions to this estimate for each of these industries.

CONTRIBUTION TO SALES AND SERVICE INCOME(a)

	ELECTRICITY SUPPLY UNITS USING			GAS SUPPLY UNITS USING			WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES UNITS USING		
	ATO BIT data	*Directly collected data*	*Total*	*ATO BIT data*	*Directly collected data*	*Total*	*ATO BIT data*	*Directly collected data*	*Total*
Population	%	%	%	%	%	%	%	%	%
ABN unit	0.3	4.3	4.6	0.8	7.7	8.5	1.6	6.8	8.4
TAU	—	95.4	95.4	—	91.5	91.5	—	91.6	91.6
Total	**0.3**	**99.7**	**100.0**	**0.8**	**99.2**	**100.0**	**1.6**	**98.4**	**100.0**

— nil or rounded to zero (including null cells)

(a) Includes rent, leasing and hiring income.

EMPLOYMENT ESTIMATES

14 One implication of the use of BIT data in these statistics is that no direct measure of employment is available for those units which contribute to the estimates through the BIT source. This is because the ATO does not collect information about employment numbers. Unlike financial variables, which have a direct relationship to the data available from the BIT files, employment data are not amenable to being modelled using the same techniques. Hence a different methodology is used in order to estimate employment for those units whose data are sourced from the BIT files. For each business, an estimate of employee numbers is derived from its value of wages and salaries (if any) using industry averages. For unincorporated businesses, these employee numbers are then added to an estimate of its number of working proprietors or partners, to produce an estimate of the total employment of the business. These estimates are then aggregated to the directly collected data to produce the estimates in this publication.

TECHNICAL NOTE 2 DATA RELIABILITY

ABS SURVEY DATA

1 For 2005–06, the electricity, gas and water supply industries collection was a sample survey designed primarily to deliver national estimates at the industry group level.

SAMPLING ERROR

2 The majority of data in this publication have been obtained from a sample of electricity, gas and water supply 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 electricity, gas and water supply 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). RSEs at the industry group level for selected data items representing the full range of data contained in this publication are shown in the table below. Detailed RSEs can be made available on request.

RELATIVE STANDARD ERRORS

	Employment at end of June	*Sales and service income*(a)	*Wages and salaries*(b)	*Industry value added*
	%	%	%	%
361 Electricity supply	0.1	1.2	0.1	1.1
362 Gas supply	0.3	0.1	0.4	0.2
370 Water supply, sewerage and drainage services	2.2	1.4	2.2	2.2

(a) Includes rent, leasing and hiring income.
(b) Excludes the drawings of working proprietors.

4 To illustrate the above, the estimate of sales and service income for the Australian Water supply, sewerage and drainage services industry in 2005–06 was $7,774m. The RSE of the estimate is shown as 1.4%, giving a standard error of approximately $109m (rounded). This implies that there are two chances in three that, if all units had been included in the survey, an estimate in the range of $7,665m to $7,883m would have been obtained. Similarly, it implies that there are 19 chances in 20 (i.e., a confidence interval of 95%) that the estimate would have been within the range of $7,556m to $7,992m.

5 Note that RSEs for ANZSIC Groups 361 ELECTRICITY SUPPLY and 362 GAS SUPPLY are generally very small: this is because the only sampled contribution to these estimates has been from BIT data. See Technical Note 1 paragraphs 12 and 13 for details.

6 The size of the RSE may be a misleading indicator of the reliability of some of the estimates for trading profit, OPBT, EBITDA and IVA. Estimates of these variables 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

SAMPLING ERROR *continued*

contribution of individual businesses, resulting in a standard error which is large relative to the estimate.

NON-SAMPLING ERROR

7 All data presented in this publication are subject to non-sampling error.

8 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 may occur in any enumeration, whether a full census or a sample.

9 For the purpose of compiling the estimates in this publication, businesses in the ATO maintained population (see Technical Note 1) are coded to ANZSIC industry classes on the basis of the activity reported to the ATO when they registered for an ABN. There are a number of reasons why a business classified to any given ANZSIC industry on the ABS Business Register may not have been mainly engaged in activities associated with that industry during the 2005–06 reference year. This may be because of inaccurate or incomplete information at the time the business was registered or it may be because the business has changed activity, either temporarily or permanently.

10 Although 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.

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, as used in this publication, are also included.

ABN unit The statistical unit used by the ABS 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).

Acquisitions See the various capital expenditure entries.

Bad and doubtful debts Represents the amount of bad and doubtful debts written-off, net of bad and doubtful debts previously written-off but recovered.

Business A business is generally considered to be a person, partnership, or corporation engaged in business or commerce; for example, an electricity generating business.

In this publication, the term represents the ABN unit or type of activity unit (TAU), which are the two standard statistical units for the 2005–06 electricity, gas and water supply industries collection (these two units are explained under separate entries). For details, see Explanatory Notes paragraphs 5–9.

Business Activity Statement (BAS) total sales Represented by the form item G1 *Total sales* 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.

Capital expenditure on dwellings, other buildings and structures Capital expenditure incurred acquiring dwellings, other buildings and structures, including roads, warehouses, offices, transmission lines, pipelines, mine development, pumping stations, dams and bridges. Represents expenditure before deduction of trade-in allowances, and includes expenses (except capitalised interest) incurred during the year in acquiring such assets.

Capital expenditure on other assets (including land and intangible assets) Capital expenditure incurred acquiring other assets (including land and intangible assets). Intangible asset purchases may include items such as patents, licences and goodwill. Also included is computer software capitalised, including capitalised computer software licence fees, installation costs, the purchase or development of large databases, software developed in-house (but excluded is software maintenance expenditure), and capitalised payments to contractors and consultants for software development. Note that if the cost of software and hardware cannot be separated, the total cost is included in acquisition of plant, machinery and equipment.

Capital expenditure on plant, machinery and equipment Capital expenditure incurred acquiring plant, machinery and other equipment, including motor vehicles. Includes expenses (except capitalised interest) incurred during the year in acquiring such assets.

Capital work done for own use 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.

Capitalised purchases Goods drawn from inventories for use as fixed tangible assets in capital work done by the employees or proprietors of a business for use by the business or for rental or lease.

Capitalised wages and salaries Capitalised payments for work done by employees of a business in manufacturing, constructing, installing or repairing assets, in mineral and petroleum exploration activities, and in the in-house development of computer software, for use by the business or for rental or lease.

Chain volume measures Annually-reweighted chain Laspeyres volume indexes referenced to the current price values in a chosen reference year (i.e. the year when the quarterly chain volume measures sum to the current price annual values). Chain Laspeyres volume measures are compiled by linking together (compounding) movements in volumes, calculated using the average prices of the previous financial year, and applying the compounded movements to the current price estimates of the reference year. Quarterly chain volume estimates are benchmarked to annual chain volume estimates, so that the quarterly estimates for a financial year sum to the corresponding annual estimate.

Generally, chain volume measures are not additive. In other words, component chain volume measures do not sum to a total in the way original current price components do. In order to minimize the impact of this property, the ABS uses the latest base year as the reference year. A change in reference year changes levels but not growth rates, although some revision to recent growth rates can be expected because of the introduction of a more recent base year (and revisions to the current price estimates underlying the chain volume measures).

For details, see *Australian National Accounts: National Income, Expenditure and Product* (cat. no. 5206.0).

Change in inventories The value of total closing inventories less total opening inventories.

Closing inventories The value of all inventories of finished goods (including mineral ores), work-in-progress (less progress payments billed), raw materials, fuels and containers, at the end of the reporting period.

Contract, subcontract and commission expenses 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. For the electricity supply industry, includes transmission fees, distribution fees, network charges and grid fees. (Pipeline charges are included in freight and cartage expenses.)

Cost of sales The sum of purchases, selected expenses and opening inventories less closing inventories. Any capitalised purchases are excluded.

Current prices Estimates at current prices are valued at the prices of the period to which the observation relates. For example, estimates for 2005–06 are valued using 2005–06 prices. This contrasts to chain volume measures, where the prices used in valuation refer to the prices of a previous period.

Depreciation and amortisation Depreciation/amortisation allowed on tangible and intangible assets. Includes, for lessees only, depreciation/amortisation in respect of finance leases.

Disposal of assets Proceeds from the sale of tangible assets (plant, machinery, equipment, land, dwellings, other buildings and structures), and intangible assets (such as patents, licences and goodwill). Includes the disposal of motor vehicles.

Earnings before interest, tax, depreciation and amortisation(EBITDA)

Profit prior to the deduction of net interest (interest income minus interest expenses), income tax, depreciation and amortisation. Items classifiable to other income are also excluded.

Electricity, gas and water supply

Businesses classified to ANZSIC Division D ELECTRICITY, GAS AND WATER SUPPLY. This industry comprises three industry groups: 361 ELECTRICITY SUPPLY, 362 GAS SUPPLY and 370 WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES. See Explanatory Notes paragraphs 5–20 for details.

Electricity supply industry

Comprises businesses classified to ANZSIC Group 361 ELECTRICITY SUPPLY. This group consists of units mainly engaged in the generation, transmission or distribution of electricity. It excludes units mainly engaged in the construction, repair or maintenance of electricity transmission towers or lines, power station buildings or water storage dams; included in Division E CONSTRUCTION.

Employer contributions into superannuation

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.

Employment at end of June

Number of persons working for electricity, gas and water supply businesses during the last pay period ending in June of the given year. Includes working proprietors and partners, employees absent on paid or prepaid leave, employees on workers' compensation who continue to be paid through the payroll, and contract miners paid through the payroll. Excludes persons paid by commission only, non-salaried directors, and self-employed persons such as consultants and contractors.

For details of how employment estimates have been derived, see Technical Note 1 paragraph 14.

Enterprise

An institutional unit comprising:
- a single legal entity or business entity, or
- 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).

Enterprise group

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.

Freight and cartage expenses

Includes pipeline charges, and handling charges and payments to owner/drivers for delivery of minerals. Excludes the cost of delivery by own vehicles and employees, overseas freight and cartage on goods exported, and payments to couriers.

Funding from government for operational costs

Funding from federal, state and/or local government for operational costs (e.g. wages and salaries, rent, food). Includes bounties, subsidies, export grants, apprenticeship and traineeship schemes, community service obligation, and amounts reimbursed under the Australian Government's Energy Grants (Credits) Scheme.

Funding from government for specific capital items

Includes capital grants, and low interest or interest free loans made by government to businesses to encourage expenditure on specific equipment (e.g. environmental protection equipment).

Gas supply industry

Comprises businesses classified to ANZSIC Group 362 GAS SUPPLY. This group consists of units mainly engaged in the manufacture of town gas from coal and/or petroleum or in the distribution of manufactured town gas, natural gas or liquefied petroleum gas through a system of mains, including pipelines operated on own account.

It excludes units mainly engaged in:
- treating natural gas to produce purified natural gas or liquefied hydrocarbon gases, or operating natural gas absorption or separation plants; included in Division B MINING

Gas supply industry *continued*

- manufacturing liquefied petroleum gases in conjunction with petroleum refining; included in Division C MANUFACTURING
- construction, repair or maintenance of gas mains; included in Division E CONSTRUCTION
- wholesaling or retailing liquefied petroleum gas in bottles or bulk (except through a mains system); included in Division F WHOLESALE TRADE
- operating pipelines for the transport of gas on a contract or fee basis; included in Division I TRANSPORT AND STORAGE.

Gross value added

The value of output at basic prices minus the value of intermediate consumption at purchasers' prices. The term is used to describe gross product by industry and by institutional sector. Basic prices valuation of output removes the distortion caused by variations in the incidence of commodity taxes and subsidies across the output of individual industries. For details, please refer to *Australian National Accounts: National Income, Expenditure and Product* (cat. no. 5206.0).

Industry value added (IVA)

IVA represents the value added by an industry to the intermediate inputs used by the industry. IVA is the measure of the contribution by electricity, gas and water supply businesses to gross domestic product.

The derivation of IVA is as follows:

	Sales and service income
plus	Funding from federal, state and/or local government for operational costs
plus	Capital work done for own use
plus	Closing inventories
less	Opening inventories
less	Purchases of goods and materials
less	Other intermediate input expenses (for details, see the entry for total expenses)
equals	IVA

However, it should be noted that IVA is a measure of economic activity and is not equivalent to 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 total expenses for further detail). On the income side, OPBT includes total income whereas IVA only includes sales and service income.

The industry value added variable is related to, but different from, the national accounting variable gross value added immediately above.

For national accounts purposes, gross value added is calculated by adjusting industry value added to include General Government units and to also account for some other effects.

Industry value added per person employed

IVA of electricity, gas and water supply businesses which operated during the given year ended 30 June divided by the number of persons employed by electricity, gas and water supply businesses during the last pay period ending in June of that same year.

Industry value added to selected labour costs

IVA of electricity, gas and water supply businesses which operated during the given year ended 30 June divided by their selected labour costs,
i.e. industry value added / selected labour costs.

Insurance premiums

Premiums for fire, general, accident, public liability, optional third-party and comprehensive motor vehicle insurance, professional indemnity insurance, and common law liability. Excludes workers' compensation insurance premiums/costs (included in labour costs), compulsory third party motor vehicle insurance premiums (included in motor vehicle running expenses), and reinsurance premiums paid.

Interest coverage The number of times that businesses can meet their interest expenses from their earnings before net interest, tax, depreciation and amortisation (EBITDA) i.e. earnings before interest, tax, depreciation and amortisation / interest expenses. In previous editions of this publication, earnings before interest and tax (rather than EBITDA) was the numerator.

Interest expenses Includes interest paid on loans from banks, finance companies, partners, and related or unrelated businesses, and in respect of finance leases. Also includes interest equivalents such as hedging costs, and expenses associated with discounted bills. Excludes bank charges other than interest, and capital repayments.

Interest income Includes interest received from deposits in banks and non-bank financial institutions, loans, advances, finance leases and earnings on discounted bills. Excludes capital payments received, and charges between companies in the same TAU.

Intermediate input expenses For details, see the entry for total expenses.

Intermediate inputs Intermediate inputs consist of materials and certain services which are used up in the production process.

The calculation is:

	Intermediate input expenses (for details, see the entry for total expenses)
plus	Opening inventories
less	Closing inventories
equals	Intermediate inputs

Inventories – opening/closing The value of all inventories of finished goods (including mineral ores), work-in-progress (less progress payments billed), raw materials, fuels and containers at the beginning and end of the reporting period respectively.

Investment rate (value added) The proportion of industry value added (IVA) used to acquire capital, i.e. (capital expenditure / IVA) x 100.

Motor vehicle running expenses 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. fork lifts, mobile plant), and lease payments, optional third party and comprehensive motor vehicle insurance premiums, and depreciation.

Natural resource royalties expenses Includes payments under mineral lease arrangements, and resource rent taxes and royalties. Excludes payments for royalties from intellectual property (e.g. patents and copyrights) and expensed computer software licence fees (both of which are included under other operating expenses), and capitalised computer software licence fees (included under capital expenditure). See the entry for total expenses for the definition of other operating expenses.

Net capital expenditure The value of total capital expenditure less proceeds received from the disposal of assets.

Opening inventories The value of all inventories of finished goods (including mineral ores), work-in-progress (less progress payments billed), raw materials, fuels and containers, at the beginning of the reporting period.

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), i.e. total income – total expenses + change in inventories.

Other income 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.

Other intermediate input expenses

Comprises intermediate input expenses less current purchases of goods, materials and services used in production (i.e. excludes any capitalised purchases). Further detail is included in the entry for total expenses.

Other selected expenses

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 and copyrights), payments to employment agencies for staff, payroll tax, fringe benefits tax, land tax, land rates, and computer software expenses not capitalised. Some of these expense items are treated as intermediate input expenses in the calculation of industry value added. For details, see the entry for total expenses.

Production volumes

See the entry for chain volume measures.

Profit margin

The percentage of sales and service income available as operating profit before tax (OPBT), i.e. (OPBT / sales and service income) x 100.

Purchases and selected expenses

Purchases of goods and materials, rent, leasing and hiring expenses, freight and cartage expenses, motor vehicle running expenses, repair and maintenance expenses, contract, subcontract and commission expenses, and other selected expenses.

Purchases of goods and materials

Purchases of materials, components, explosives, containers, packaging materials, fuels, electricity and water, and purchases of other goods for resale (including water for distribution). Also includes capitalised purchases. Excludes purchases of parts and fuels for motor vehicles, but includes fuels for off-road vehicles, such as forklifts and mobile plant.

Reference period

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 2005–06 collection, a business may have reported data for the year ended 31 December 2005.

Rent, leasing and hiring expenses

Payments for the rent, leasing and hiring of land, dwellings, other buildings and structures, motor vehicles, plant, machinery and other equipment (including telecommunication equipment). Includes operating lease payments; excludes finance lease payments.

Rent, leasing and hiring income

For details, see the entry for sales and service income.

Repair and maintenance expenses

Includes computer and communication 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.

Sales and service income

Includes:

Sales of goods

- 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, sales of assets, 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).
- includes income from 'specific' rates (e.g. water, sewerage, irrigation and drainage rates).

Sales and service income *continued*

Income from services

- 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 property (e.g. patents and copyrights). For the electricity supply and gas supply industries, also includes transmission and distribution income. Excludes natural resource royalties income, interest income, and delivery charges not separately invoiced to customers. Under current international standards, rent, leasing and hiring income (except from finance leases) is also classified as service income.

Rent, leasing and hiring income

- derived from the ownership of land, dwellings, buildings and other structures, motor vehicles, plant, machinery and other equipment. 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.
- These are valued net of discounts given and exclusive of goods and services tax (GST). Extraordinary items are also excluded.

Sales and service income per person employed

The value of sales and service income of electricity, gas and water supply businesses which operated during the given year ended 30 June divided by the number of persons employed by electricity, gas and water supply businesses during the last pay period ending in June of that same year.

Selected expenses

See the entry for purchases and selected expenses.

Selected labour costs

See the entry for total expenses.

Selected labour costs per person employed

The value of selected labour costs paid by electricity, gas and water supply businesses which operated during the given year ended 30 June divided by the number of persons employed by electricity, gas and water supply businesses during the last pay period ending in June of that same year.

Standard Institutional Sector Classification of Australia (SISCA)

The SISCA is 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, please refer to *Standard Economic Sector Classifications of Australia (SESCA)* (cat. no. 1218.0).

Superannuation

See the entry for employer contributions into superannuation.

Total expenses

For the purposes of calculating economic and accounting variables for industries, expenses incurred by businesses are divided into several categories. However, some expenses are excluded entirely from all such calculations: excluded are capital repayments, costs associated with the transfer of real estate, dividends, donations, export freight charges, extraordinary losses, foreign exchange losses, goods and services tax (GST), excise and duties payable to governments, income tax and other direct taxes, losses on asset sales, and unrealised gains/losses from revaluations of assets.

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

Total expenses *continued*

- purchases of goods, including electricity, gas and water for distribution, for resale
- 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 and copyrights)
- payments to employment agencies for staff.

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/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).

For the ELECTRICITY SUPPLY and GAS SUPPLY industries, these expense items are included in tables 2.1 and 3.1 as:

individually listed items:

- depreciation and amortisation
- interest expenses
- insurance premiums (except workers' compensation and compulsory third party motor vehicle insurance premiums)
- natural resource royalties expenses
- bad and doubtful debts

part of *other selected expenses*:

- computer software expenses not capitalised by businesses
- land tax and land rates
- mineral/petroleum exploration expenses not capitalised by businesses
- other expenses not capitalised by businesses
- payroll tax and fringe benefits tax.

For the WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES industry, these items are included in table 4.1 as:

part of *purchases and selected expenses*:

- computer software expenses not capitalised by businesses
- land tax and land rates
- mineral/petroleum exploration expenses not capitalised by businesses
- other expenses not capitalised by businesses
- payroll tax and fringe benefits tax

part of *total expenses*:
- depreciation and amortisation
- interest expenses
- insurance premiums (except workers' compensation and compulsory third party motor vehicle insurance premiums)
- natural resource royalties expenses
- bad and doubtful debts.

Total factor income That part of the cost of producing the gross domestic product which consists of gross payments to factors of production (labour and capital). It represents the value added by these factors in the process of production and is equivalent to gross domestic product less taxes plus subsidies on production and imports. For details, please refer to *Australian National Accounts: State Accounts, 2005–06* (cat. no. 5220.0).

Total income Comprises sales and service income, interest income, funding from government for operational costs, and other income (for details, see the entries for these items).

Trading profit 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.

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.

Type of activity unit (TAU) The TAU is the statistical unit used by the ABS to represent businesses, and for which statistics are reported, in cases where the ABN unit is not suitable for ABS statistical needs.

The TAU comprises 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.

Wages and salaries 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 are also excluded.

Wages and salaries per person employed The value of wages and salaries paid by electricity, gas and water supply businesses which operated during the given year ended 30 June divided by the number of persons employed by electricity, gas and water supply businesses during the last pay period ending in June of the same year.

Wages and salaries to sales and service income ratio The wages and salaries paid by electricity, gas and water supply businesses which operated during the year ended 30 June as a proportion of the sales and service income of electricity, gas and water supply businesses which operated during the same year.

Water supply, sewerage and drainage services industry Comprises businesses classified to ANZSIC Group 370 WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES. This group comprises two classes:

Water supply, sewerage and drainage services industry *continued*

- 3701 WATER SUPPLY
  This class consists of units mainly engaged in the storage, purification or distribution of water, by pipeline or carrier. It includes the operation of irrigation systems concerned with the supply of water to farms, and the supply of steam or hot water. This class excludes units mainly engaged in:
  - operating irrigation systems concerned with the distribution of water on farms; included in Division A AGRICULTURE, FORESTRY AND FISHING
  - the construction or repair of water storage dams, mains or pumping stations; included in Division E CONSTRUCTION.
- 3702 SEWERAGE AND DRAINAGE SERVICES
  This class consists of units mainly engaged in operating sewerage or drainage systems or sewerage treatment plants. It excludes units mainly engaged in the construction or repair of sewerage or storm water drainage systems; included in Division E CONSTRUCTION.

Workers' compensation premiums/costs

Workers' compensation is a compulsory insurance cover to be taken out by all employers, except for self–insured workers, according to legislative schemes to cover employees suffering injury or disease in the course of or arising out of employment.

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