

/ Manufacturing, Mining, and Energy

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INTRODUCTION

In this chapter, the contribution of manufacturing, mining and energy to Victoria's economy is described, along with the contribution of these Victorian industries to Australia's manufacturing, mining and energy sectors.

MANUFACTURING

Overview

Historically, manufacturing has been the most significant industry in terms of contribution to Victoria's Gross State Product (GSP) at factor cost.

Victoria in particular has suffered from the relative shift from goodsproducing industries to service-providing industries which has occurred in most States of Australia from 1980-81 onwards.

Manufacturing's share of Victoria's GSP at factor cost fell from 24 per cent in 1980-81 to 18 per cent in 1991-92 and is now equal to the contribution of public administration, defence and community services.

Over the period 1980-81 to 1991-92, growth in Victoria's GSP per head of mean population was the lowest of all States. This slower growth reflects the decline in Victoria's share of GSP at factor cost for mining and the high relative importance in Victoria of manufacturing.

TABLE 7.1 MANUFACTURING ESTABLISHMENTS (a), 1991-92p

	HO FORMING ESTAE	THOUMEN 12 (a	y, 1991-92p	
State or Territory	Establishments operating at 30 June	Employment (b)	Wages and salaries paid (c)	Turnove
	number	'000	\$m	\$m
New South Wales Victoria	14,116	309.1	9,759	57,809
Queensland	12,668	296.1	8,927	53,856
South Australia	6,573	122.4	3,195	22,837
Western Australia	3,161	86.8	2,482	15,548
Tasmania	3,645	62.5	1,785	12,903
Northern Territory	858	23.5	724	3,924
Australian Capital Territory	194	2.8	92	673
Toolianan Capital Territory	265	3.7	104	469
Australia (a) All manufacturino establishmente in coo	41,480	906.9	27.068	168,019

All manufacturing establishments in operation at 30 June, the predominant activity of which is manufacturing, including establishments with fewer than four employees.

At 30 June, including working proprietors.

Excludes drawings of working proprietors. (c)

During 1991-92, the contribution of all Victorian manufacturing establishments to the Australian total was slightly over 30 per cent for each of establishments, employment, wages and salaries paid, and turnover.

TABLE 7.2 MANUFACTURING ACTIVITY, VICTORIA, 1981-82 TO 1991-92

Year	Manufacturing establishments (a)	Employment (b)	Wages and salaries paid (c)	Turnover
	number	,000	\$m	\$m
1986-87	12,839	364.5	7,506	40,439
1987-88	13,783	376.1	8,394	46.149
1988-89	12,919	374.3	8.970	52,020
1989-90	13,362	352.7	9.380	55.103
1990-91	12,5 6 4	315.7	9.281	56,398
1991-92	12,668	296.1	8,927	53,856

⁽a) All establishments in operation at 30 June, the predominant activity of which is manufacturing, including establishments with fewer than four emproyees.

Although there has been an overall small decline in the number of manufacturing establishments in the 6 years to 1991-92, the actual numbers have fluctuated. All industry subdivisions have also experienced a fluctuation in the number of establishments.

TABLE 7.3 NUMBER OF MANUFACTURING ESTABLISHMENTS (a) BY INDUSTRY SUBDIVISION, VICTORIA

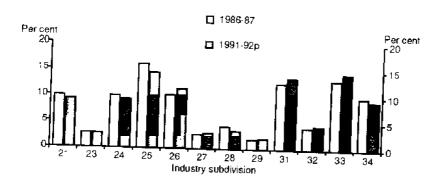
Industry subdivision	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92p
Food, beverages and tobacco	1,296	1,483	1,308	1,273	r1,158	1,198
Textiles	383	383	370	376	38 7	379
Clothing and footwear	1,302	1,393	1,292	1,279	1,144	1,205
Wood, wood products and furniture	2,087	2,169	1,957	2,063	1,920	1,856
Paper, paper products, printing						
and publishing	1,334	1,406	1,420	1,499	r1,456	1,471
Chemical, petroleum and coal						
products	371	383	387	379	r371	396
Non-metallic mineral products	572	606	500	550	462	464
Basic metal products	259	253	275	273	266	288
Fabricated metal products	1,643	1,830	1,758	1,920	1,813	1,749
Transport equipment	560	577	572	596	578	598
Other machinery and equipment	1,733	1,914	1,799	1,881	1,814	1,860
Miscellaneous manufacturing	1,299	1,386	1,281	1,273	r1,195	1,204
Total	12,839	13,783	12,919	13,362	12,564	12,668

⁽a) All manufacturing establishments in operation at 30 June, the predominant activity of which is manufacturing, including establishments with fewer than four employees.

⁽b) At 30 June, including working proprietors.

⁽c) Excludes drawings of working proprietors.

MANUFACTURING ESTABLISHMENTS: ESTABLISHMENTS AS A PERCENTAGE OF TOTAL ESTABLISHMENTS, BY INDUSTRY SUBDIVISION, VICTORIA, 1986-87 AND 1991-92 p



Employment

According to Labour Force statistics, in August 1993 the manufacturing sector accounted for 18 per cent of Victorian employment. This proportion has been slowly decreasing.

Manufacturing Census figures show that active employment in the Victorian manufacturing sector has also been declining to just under 300,000 persons in 1992.

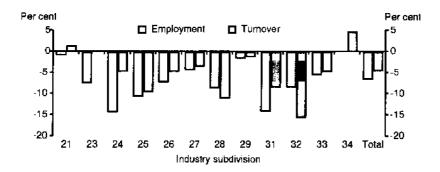
Between 1990-91 and 1991-92, employment decreased in all of the twelve industry subdivisions. The largest decreases in employment occurred in the clothing and footwear division (14 per cent) and in the fabricated metal products division (12 per cent).

TABLE 7.4 MANUFACTURING ESTABLISHMENTS (a), PERSONS EMPLOYED (b) BY INDUSTRY SUBDIVISION, VICTORIA

Industry subdivision	1986-87	1987-88	1 988-89	1989-90	1990-91	1991-920
Food, beverages and tobacco	49,259	52,253	52,802	49,781	48,175	47,797
Textiles	19,003	19,251	17,567	15,473	14,273	13,290
Clothing and footwear	42,042	40,782	38,756	35,151	26,783	23,423
Wood, wood products and						
furniture	22,889	23,609	23,335	22,578	19,506	17,643
Paper, paper products, printing						
and publishing	36,041	36,915	38,228	35,660	33,753	31,484
Chemical, petroleum and coal						
products	1 9 ,510	19,677	19,185	18,404	r18,086	17,326
Non-metallic mineral products	11,228	11,669	11,770	11,515	10,5 9 6	9,747
Basic metal products	13,548	14,839	13,110	12,285	10,843	10,667
Fabricated metal products	31,509	34,056	33,774	33,700	29,262	25,654
Transport equipment	50,290	51,050	52,545	51,015	42,525	39,247
Other machinery and equipment	44,896	46,385	46,399	42,454	38,481	36,469
Miscellaneous manufacturing	24,305	25,592	26,838	24,671	23,413	23,361
Total	364,520	376,078	374,309	352,687	r315,696	296,108

⁽a) All establishments in operation at 30 June, the predominant activity of which is manufacturing, including establishments with fewer than four employees.

MANUFACTURING ESTABLISHMENTS, PERCENTAGE CHANGE IN EMPLOYMENT AND TURNOVER BY INDUSTRY SUBDIVISION, VICTORIA, 1990-91 TO 1991-92



⁽b) Employment at 30 June including working proprietors.

Wages and salaries Between 1990-91 and 1991-92, wages and salaries decreased in all industries except for the food sector which increased by 7 per cent. The fabricated metal products subdivision recorded the largest decrease in wages and salaries of 12 per cent.

TABLE 7.5 MANUFACTURING ESTABLISHMENTS (a), WAGES AND SALARIES (b) BY INDUSTRY SUBDIVISION, VICTORIA

	(\$m)	,				
Industry subdivision	1986-87	1987-88	1988-69	1989-90	1990-91	1991-92p
Food, beverages and tobacco	1.025	1,199	1,200			
Textiles	368		•	1,230	r1,292	1,377
Clothing and footwear		418	402	391	383	375
Wood, wood products and furniture	660	685	717	687	600	553
Paper, paper products, printing	373	418	459	521	467	417
and publishing Chemical, petroleum and coal	792	914	996	1,032	r1,076	1,033
products	498	550	589	637	r665	658
Non-metallic mineral products	265	286	329	363	357	329
Basic metal products	363	409	391	414	r399	
Fabricated metal products	630	713	790	877	830	395
ransport equipment	1,130	1,180	1,313			734
Other machinery and equipment	917	1.063	-	1,425	1,307	1,212
Miscellaneous manufacturing			1,155	1,158	r1,196	1,136
	48 6	561	629	645	r710	708
Total	7,506	8,394	8,970	9,380	r9,281	8,927

⁽a) All establishments in operation at 30 June, the predominant activity of which is manufacturing, including establishments with fewer than four employees.

TABLE 7.6 MANUFACTURING ESTABLISHMENTS (a), TURNOVER (b) BY INDUSTRY SUBDIVISION, VICTORIA (\$m)

	(\$m)	ļ				
Industry subdivision	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Food, beverages and tobacco	7,784	8.958	9.747	10,098		
Textiles	1.731	1,932	2.119		r10,507	
Clothing and footwear	2,420	2,470		2,009	1,952	1,950
Wood, wood products and furniture	1,657	-	2,766	2,636	2,438	2,323
Paper, paper products, printing	1,007	1,877	2,062	2,139	1,977	1,788
and publishing Chemical, petroleum and coal	3,661	4,147	4,792	4,643	r4,923	4,693
products	3,414	3,831	4,402	6,777	r8.127	7,843
Non-metallic mineral products	1,437	1,656	1,970	2.087	1,890	1,679
Basic metal products	3,088	3,468	3.931	3.916	r4,001	3,949
Fabricated metal products	2,604	3,191	3,754	4.144	3.898	3,570
Transport equipment	5,840	6,880	7,527	7.935	7,556	6.374
Other machinery and equipment	4,308	4,872	5,608	5,367	r5,694	5,420
Miscellaneous manufacturing	2,497	2,868	3,342	3,353	r3,432	3,597
Total	40,439	46,149	52,020	55,103	r56,398	53.856

⁽a) All establishments in operation at 30 June, the predominant activity of which is manufacturing, including establishments with fewer than four employees.

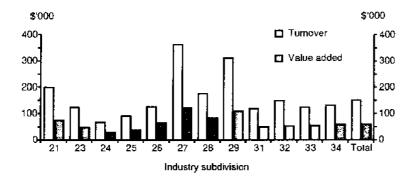
⁽b) Excludes the drawings of working proprietors. Value data are at prices current in the relevant years and therefore do not take into account the impact of price changes.

⁽b) Turnover includes sales of goods whether produced by an establishment or not, transfers out of goods to other establishments of the same management unit, bounties and subsidies on production plus all other operating revenue from outside the management unit. Value data are at prices current in the relevant years and therefore do not take into account the impact of changes in the CPI.

Turnover

Between 1990-91 and 1991-92, turnover at current prices decreased in all industry subdivisions except for the food and the miscellaneous manufacturing subdivisions. The transport equipment subdivision showed the largest decrease in turnover.

MANUFACTURING ESTABLISHMENTS, VICTORIA: TURNOVER AND VALUE ADDED PER PERSON EMPLOYED, 1989-90



Major manufacturing industries

In 1991-92, the food, beverages, and tobacco industry subdivision made the greatest contribution to Victorian manufacturing industry in terms of employment, providing 16 per cent of the total. This industry subdivision also made the largest contribution in terms of turnover, contributing 20 per cent of the total for Victorian manufacturing.

The second largest contributor to manufacturing turnover in Victoria in 1991-92 was the chemical, petroleum and coal products subdivision, which contributed 15 per cent of turnover, followed by the transport equipment subdivision with 12 per cent. These two subdivisions contributed 6 per cent and 13 per cent respectively to employment in Victorian manufacturing in 1991-92. The other machinery and equipment subdivision was the third largest contributor to Victorian manufacturing employment with 12 per cent.

TABLE 7.7 SELECTED ARTICLES MANUFACTURED, 1992-93

Article	Unit	Victoria		Victoria as a percentage
Meat (carcass weight) -		victoria	Australia	of Australia
Beef and year	'000 tonnes			
Mutton	'000 tonnes	321p	1,834p	17.5
Lamb	'000 tonnes	88p	372p	23.6
Pigmeat		111p	26 9 p	41.0
	'000 tonnes	80p	336p	23.7
Dairy products -				
Whole milk	ml. litres	4.456	7,327	00.0
Butter and butteroil	tonnes	106,887	126,462	60.8
Cheese	tonnes	127,788	208,952	84.6
lce cream	'000 litres	49,905	192,774	61.6
Yoghurt	tonnes	28,698	76,402	25.9
Wheat flour			70,402	37.6
(other than self-raising)	tonnes	271,883	1,282,025	21.2
'arns -				
Cotton	tonnes			
Wool		n.p.	26,344	n.a.
ular.	tonnes	13,915	18,181	76.5
Voven cloth -				
Cotton	'000 sq metres	n.p.	41.410	
Wool	'000 sq metres	5,053	8,343	п.а.
ars and station wagons	1000	·		60.6
	000	142	275	51.9
lastic and synthetic resins	'000 tonnes	713	1,019	70.0
uilding materials -			.1***	70.0
Clay bricks	million	20.4		
Terracotta and concrete	HIBIOT	304	1,722	11.7
roofing tiles	'000 sq. metres			
Ready mixed concrete	'000 sq. metres	n.p.	20,2 06	n.a.
	ooo cu, matres	2,927	14,337	20.4

Exports

According to ABS Foreign Trade Australia figures, between 1990-91 and 1992-93 the value of Victorian manufactured goods exported increased by 25 per cent at current prices, which is similar to the increase for Australia as a whole.

Food, beverages and tobacco and basic metal products between them accounted for over 50 per cent of all exports of Victorian manufactured goods, recording the largest increases since 1990-91. The transport equipment subdivision was the only subdivision to record a decrease in this period.

TABLE 7.8 FOREIGN TRADE OF MANUFACTURED GOODS: EXPORTS OF MANUFACTURED GOODS BY INDUSTRY SUBDIVISION, VICTORIA

	199	90-91	198	1991-92		2-93p
Industry subdivision	\$m	Per cent	\$m	Per cent	\$m	Per cent
Food, beverages and tobacco	1,878.0	26.8	1,928.0	25.0	2,262.4	25.8
Textiles	332.6	4.8	421.2	5.5	508.9	5.8
Clothing and footwear	61.0	0.9	73.5	1.0	93.4	1.1
Wood, wood products and furniture	16.3	0.2	20.3	0.3	41.8	0.5
Paper, paper products, printing						
and publishing	124.0	1.8	119.4	1.5	171.1	1.9
Chemical, petroleum and						
coal products	702.6	10.0	809.4	10.5	994.1	11.3
Non-metallic mineral products	51.0	0.7	62.7	0.8	60.9	0.7
Basic metal products	1,836.0	26.2	2,228.9	28.9	2,399.6	27.3
Fabricated metal products	109.2	1.6	130.8	1.7	132.1	1.5
Transport equipment	920.9	13.2	803.3	10.4	781.4	8.9
Other machinery and equipment	805.8	11.5	895.4	11.6	1,079.3	12.3
Miscellaneous manufacturing	162.3	2.3	212.4	2.8	252.4	2.9
Total Victoria	6,999.8	100.0	7,705.4	100.0	8,777.6	100.0
Victoria as per cent						
of Australia	-	28.6	-	24.8	-	28.6
Total Australia	24,477.7	-	31,076.2	-	30,730.4	_

MINING

Overview

In 1991-92, the Victorian mining industry contributed 21 per cent of the Australian mining component of GDP at factor cost. In 1990-91, the mining industry accounted for 3.9 per cent of Victoria's GSP at factor cost, down from a peak of around 6 per cent in 1984-85.

The mining component of GDP includes the extraction of minerals occurring naturally as solids, such as coals and ores, liquids such as crude petroleum, and gases such as natural gas.

TABLE 7.9 MINING ACTIVITY (a), VICTORIA

Year	ments at men	Employ- ment	Wages and salaries	Stock		icks	Purchases, transfers in and selected	Value added
	30 June	(b)	(c)	Tumaver	Opening	Closing	expenses	(d)
.=== =	number	number	\$m	\$m	\$m	\$m	\$m	\$m
1986-87	208	5,783	182,1	2,525.6	65.9	72.3	293.0	•
1987-88	208	5,901	204.9	2.923.5	75.2	85.2		2,239.0
1988-89 <i>(e)</i>	12	1.507	73.3	1.616.1	46.1	49.5	327.9	2,605.5
1989-90	163	3,286	155.8				140.1	1,479.3
1990-91 <i>(e)</i>	r 9			3,504.6	103,6	93.2	343.7	3,150.5
		r1,517	r100.4	r4,037.9	r35.2	r33.2	r130.6	r3.905.3
1991-92ρ <i>(e)</i> (a) ASIC Subdivisions r	13	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.

⁽a) ASIC Subdivisions not available for separate publication.

Oil and gas production

The rise in Bass Strait oil prices resulting from the Gulf War contributed around half of the growth in GSP at factor cost in 1990-91.

As at 31 December 1990, the Gippsland Basin was estimated to contain 13 per cent of Australia's natural gas reserves.

In 1990-91, Victoria produced 14,782 megalitres (51 per cent) of Australia's crude oil, and 6,352 gigalitres (41 per cent) of Australia's natural gas.

TABLE 7.10 OIL AND GAS PRODUCED, VICTORIA AND AUSTRALIA, 1990-91

ltem	Units	VICTORIA AND AUSTRA	
Crude oil-stabilised		Victoria	Australia
(incl. condensate)	megalitres	14,782	29,189
Natural gas <i>(a)</i> Ethane	gigalitres	6,352	15,589
Liquefied petroleum gases (b) -	gigalitres	155	175
Propane	megalitres	1,313	2.013
Butane (a) Includes field and plant usage.	megalitres	1,185	1,504

⁽b)(c) See footnotes to Table 7.2.

⁽d) Value added is calculated by adding to turnover the increase (or deducting the decrease) in value of stock and deducting the value of purchase and selected items of expense. All components needed to calculate value added are only collected triennially.

⁽e) The 1988-89, 1990-91 and 1991-92 (truncated) censuses differ from previous mining censuses in that the construction materials and other non-metallic minerals industries have been excluded.

⁽b) Excludes refinery production.

TABLE 7.11 ESTIMATED HYDROCARBON RESERVES, VICTORIA

		At 30 June				
Item	Units	1990	1991	1992		
Crude oil and condensate	gigalitres	152	135	120		
Natural gas	giga cubic metres	163	158	151		
LPG	gigalitres	45	43	40		

Source: Department of Manufacturing and Industry Development, Victoria: Annual Report.

Brown coal

Most of Australia's measured resources of brown coal are located in Victoria's Latrobe Valley, with 52,000 megatonnes considered to be economically viable. Brown coal is by far Victoria's most valuable solid mineral commodity, with production in 1990-91 valued at \$367.1m. Of this production, 1,802,000 tonnes was of coal saleable for briquettes, 46,367,000 tonnes was of coal saleable for other purposes, and 715,000 tonnes was of briquettes.

Metallic minerals

Victorian gold production increased dramatically from a low base of 41kg in 1979-80, largely as a result of the Wonga open cut mine at Stawell coming on stream. By 1990-91, Victorian production was 4,862 kilograms of gold bullion (doré) and 1 tonne of gold concentrate, and was valued at \$70.9m.

The only other metallic mineral produced in any quantity in Victoria in 1990-91 was bauxite, of which 8,000 tonnes were produced, valued at \$159,000.

TABLE 7.12 MINERAL PRODUCTION, VICTORIA

Year	Fuel minerals Brown coal			Non-metallic minerals			
		Metallic minerals		Diatomite (refined and		Kaolin (refined and	
		Bauxite	Gold	unrefined)	Gypsum	unrefined)	
	'000 tonnes	tonnes	kg	tonnes	'000 tonnes	'000 tonnes	
1985-86	36,319	4,584	1,272	nil	13 9	36	
1986-87	41,799	7,882	1,179	nil	188	41	
1987-88	44,288	7,345	1,719	8.000	203	101	
1988-89	48,663	6,211	2.512	2,137	241	117	
1989-90	45,960	2,466	3,515	396	302	169	
1990-91	49,389	7,925	4,863	3.000	49	146	

Source: Department of Manufacturing and Industry Development, Victoria: Annual Report,

ENERGY

Overview

In 1991-92, Victoria contributed 30 per cent of the electricity, gas, and water component of Australia's Gross Domestic Product (GDP) at factor cost. The electricity, gas, and water industries represented 4 per cent of Victoria's GSP at factor cost in 1991-92.

The electricity, gas, and water component of GDP includes the transmission and distribution of gas through reticulation systems. It does not include the extraction of crude petroleum or natural gas.

Electricity generated

The State Electricity Commission of Victoria (SEC) is Australia's largest electricity supply authority and individual coal producer, and is one of the largest public sector organisations in Australia, employing almost 12,000 persons as at June 1993. It has the principal responsibility for the generating or purchasing of electricity for supply throughout Victoria.

At 30 June 1993, the SEC distributed electricity directly to 1,655,000 customers and indirectly to a further 292,000 through 11 metropolitan councils which buy power in bulk for retail distribution under franchises granted by the Victorian Government before the SEC's establishment.

TABLE 7.13 POWER STATIONS: LOCATIONS, RATING, AND PRODUCTION, VICTORIA

Station	Maximum output a	Electricity generated (GWh)		
	1991-92	1992-93	1991-92	1992-83
Brown coal thermal stations -				1,332-60
Loy Yang A Loy Yang B	2,067	2,043	13,842	12.848
Yallourn W	-	505	· -	126
Hazelwood	1,478	1,485	9,567	9,805
Morwell	1,619	1,456	9,347	8,819
Morwell	99	93	562	422
Total			33,318	32,020
Other thermal stations -			•	,
Newport D	509	F00		
Jeeralang	486	529	1,682	2,339
Tatal	400	499	832	496
Total	h.i		2,514	2,835
lydro stations -			_,-,	2,000
Kiewa	203	194	379	397
Eildon-Rubicon (incl. Cairn Curran)	132	149	355	316
Dartmouth	0	0	0.00	
Total		Ū	U	0
	••		734	713
tations operated by other bodies	1,672	1,793	2,535	3,516
Total input to system ource: State Electricity Commission of Victoria: Appre	<u></u>	.,	39,101	39,084

Source: State Electricity Commission of Victoria: Annual Report 1992-93.

All the major brown coal fired generating plants in the system are located in the LaTrobe Valley. These plants generate 85 per cent of the State's electricity requirement.

In December 1992, the SEC sold 51 per cent of Loy Yang B Power Station to the Mission Energy Company of the United States. Other thermal stations owned by the SEC include a gas turbine station in the LaTrobe Valley and a gas fired station in Melbourne. There are hydroclectric power stations in north-eastern Victoria. The State is also entitled to about 30 per cent of the output of the Snowy Mountains hydro-electric scheme, and half of the output of the Hume hydro-electric station near Albury.

TABLE 7.14 REFINING CAPACITY, VICTORIA, AT 31 DECEMBER 1991

Refinery	Location in Victoria and year refinery came on stream	Primary processing capacity (a)
Shell Refining (Australia)	Corio near Geelong, 1954	115,100 BSD
Pty Ltd		(5,343,000 tonnes/year)
Shell Lubricating oil plant	Corio near Geelong, 1954	3,000 BSD
- '	-	(145,000 tonnes/year)
Petroleum Refineries	Altona near Melbourne, 1949	108,000 BSD
(Australia) Pty Ltd		(5,013,000 tonnes/year)

(a) 850: barrels per stream day.

Source: Australian Institute of Petroleum Ltd: Oil and Australia.

Gas reticulation

The Gas and Fuel Corporation of Victoria is a public authority. It is the sole reticulator of gas in Victoria, and is Victoria's largest supplier of liquefied petroleum gas (LPG).

Commercial reserves of natural gas were discovered in the off-shore Gippsland Basin in 1965 by Esso-BHP from which the Corporation purchases, under agreement, the State's natural gas requirements. Supply is drawn from the Marlin, Barracouta, and Snapper fields in Bass Strait, and transported by pipeline to an onshore treatment plant at Longford, near Sale.

The Corporation reticulates gas, 99 per cent of which is natural gas, through a 23,400 kilometre network of underground transmission pipelines and mains to more than 1.24 million industrial, commercial, and domestic consumers.

REFERENCES

Data sources

The majority of the information on manufacturing in this chapter comes from the Manufacturing Census. The Manufacturing Census is an annual collection. A full-scale census is conducted triennially, with small-scale censuses being conducted in each of the intervening years. The last full-scale census for which data are released is 1989-90. For small-scale censuses, businesses are requested to provide only data on employment, wages and salaries paid and turnover. For full-scale censuses, additional data are requested on stocks, purchases, value added, capital expenditure, fuels used, materials used and commodities produced.

Manufacturing statistics collected since 1968-69 are classified by industry according to Division C of the Australian Standard Industrial Classification (ASIC). This classification has recently been replaced by the Australian and New Zealand Standard Industrial Classification (ANZSIC), where manufacturing is also Division C. Division C broadly relates to the physical or chemical transformation of materials or components into new products, whether the work is performed by power driven machines or by hand.

ABS publications

Australian National Accounts, State Accounts 1991-92 (5220.0)

Foreign Trade, Australia (5450.0)

Census of Manufacturing Establishments: Summary of Operations by Industry Subdivision, Australia, Preliminary (8201.0)

Manufacturing Establishments: Summary of Operations by Industry Class, Australia (8202.0)

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