

# **Information Paper**

# **Availability of Statistics Related to Manufacturing**

**1997**

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Related to  
Manufacturing**

**1997**

**W. McLennan**  
**Australian Statistician**

AUSTRALIAN BUREAU OF STATISTICS

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Produced by the Australian Bureau of Statistics

## INQUIRIES

- For information about other ABS statistics and services, please refer to the back of this publication.
- For requests for manufacturing data, or for further information about statistics relating to manufacturing, contact Frank Orton on Sydney (02) 9268 4245.

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## PREFACE

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This publication extends and updates information contained in the previous issue which was released on 21 March 1996. The main focus of this publication is on describing information which the Australian Bureau of Statistics (ABS) has available from annual manufacturing industry collections for the years 1989–90 to 1995–96 (inclusive). It also previews the nature of the information which is expected to be available from the annual manufacturing industry collections through to 2001–02. The previous issue provides more details about data sources other than the annual collections which are of interest to users of information about manufacturing activity and industry.

Details are given for the wide range of data about Australian manufacturing which the ABS has available in either published or unpublished form. However, in presenting the information on available statistics, it has not been possible to list every combination of geographic level and industry level for which data may be available from a particular collection.

Readers are encouraged to either refer to the relevant publications (see pages 4 to 7) or to contact the ABS about their requirements and whether they can be met from published series. Where published series do not contain the particular data required, ABS staff can advise whether they can be produced from unpublished data sets, and the likely cost and delivery time for providing the data. Where finely classified data are sought, ABS staff can also advise on likely sample error or other data quality aspects.

W. McLennan  
Australian Statistician

# LIST OF ABBREVIATIONS AND SYMBOLS

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## ABBREVIATIONS

ABS	Australian Bureau of Statistics
ANZSCC	Australian and New Zealand Standard Commodity Classification
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASCC	Australian Standard Commodity Classification
ASGC	Australian Standard Geographical Classification
ASIC	Australian Standard Industrial Classification
IGP	Industry Gross Product
IRDB	Integrated Regional Data Base
LPG	Liquid Petroleum Gas
MPS	Monthly Population Survey
n.e.c.	not elsewhere classified

## SYMBOLS

E	Indicates that the data item is available at the establishment level.
E <sup>V</sup>	For the 1990–91 to 1992–93 (inclusive) reference years, environmental statistics were collected at the establishment level only.
L	Indicates that the data item is available at the location level (i.e. for sub-State statistics).
M	Indicates that the data item is available at the management unit level.
M <sup>S</sup>	Data for these items were collected from a relatively small sample of management units, in the years applicable. Consequently, data are available only at the industry subdivision level and for total manufacturing.
M <sup>V</sup>	Commencing with the 1993–94 reference year, environmental statistics were collected at the management unit level only.
T	Extra data at the establishment level were collected from the Textile, clothing and footwear industry (ASIC classes 2342 to 2460 and 3451 for the 1990–91 and 1991–92 years and ANZSIC classes 2211 to 2261 for 1993–94).
X	Indicates applicable in the year shown.
..	not applicable
†	Data are available at the establishment level based on the main sample of manufacturing establishments.
‡	Data are available at the establishment level based on a sub-sample of manufacturing establishments.
#	Data are available at the management unit level.

## BACKGROUND AND METHODOLOGY

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### A BRIEF HISTORY OF THE ANNUAL MANUFACTURING COLLECTION

The manufacturing industry collection (previously the manufacturing census and before that, the factory census) is one of the longest running Australian statistical collections. Though such censuses were first conducted in the 19th century, the relevant statistics were not collected on a definite and uniform basis prior to 1906.

A series of substantially uniform manufacturing industry statistics exists in published form from 1906 until 1967–68, when the framework for collecting manufacturing statistics was changed.

Commencing with the 1968–69 collection, the manufacturing collection has been conducted as a component of the ABS' integrated economic statistics system. This means that the manufacturing collection and other economic data collections are conducted on the basis of a common framework of reporting units and data concepts, and in accordance with a standard industrial classification. The results of the manufacturing collection are broadly comparable, not only over time but also with other ABS economic data collections.

Manufacturing, as specified in Division C of both the Australian Standard Industrial Classification (ASIC) and the Australian and New Zealand Standard Industrial Classification (ANZSIC), 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.

A manufacturing collection has been conducted in respect of every year since 1968–69, except for 1970–71 and 1985–86. All past collections have been conducted by means of mail-out/mail-back forms, as will those for the foreseeable future.

### SCOPE AND COVERAGE

The scope of the collection is all businesses and establishments in Australia which are classified to manufacturing on the ABS business register. Manufacturing establishments are included whether or not the owning business is classified to manufacturing. Commencing with the 1988–89 collection, single establishment businesses not employing staff at 30 June of the reference year (such as sole proprietorships or family partnerships) were excluded from the scope of the collection. Commencing with the 1993–94 collection, those single establishment businesses not employing staff at 30 June of the reference year which had registered as group employers with the Australian Taxation Office have been included in the scope of the collection.

For information on the methodology employed for years prior to 1994–95, see the previous issue of this publication *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (Cat. no. 8205.0).



### CLASSIFICATIONS

#### Industry classifications

Data from manufacturing collections from the 1968–69 to 1992–93 (inclusive) reference years were classified using ASIC. Commencing with the 1992–93 collection, ANZSIC has been used. However, manufacturing collections for the 1989–90 to 1991–92 (inclusive) reference years have been re-coded to ANZSIC and, therefore, all time series comparisons, at the industry class and higher levels, can be made on a consistent ANZSIC basis. ANZSIC-based data for years prior to 1989–90 are not available (except for constant prices data back to 1984–85). Similarly, ASIC-based data are not available from 1992–93.

For a list of the manufacturing ANZSIC codes and their descriptions, see the Appendix on page 37.

#### Commodity classifications

The Australian Standard Commodity Classification (ASCC) was used for the 1989–90 manufacturing census to code approximately 2,200 manufacturing commodity items. Commodity data were not collected for the 1990–91 to 1992–93 (inclusive) reference years. For the 1993–94 collection, commodity data were compiled from a sample of approximately 18,000 manufacturing establishments using the Australian and New Zealand Standard Commodity Classification (ANZSCC). From this sample, approximately 2,500 commodity items were coded.

For the 1994–95 collection, an experimental commodity classification (based on the ANZSCC) was used to code commodity data collected from a sample of approximately 7,500 manufacturing establishments. Due to the experimental nature of this classification, data for a significant number of commodities are not available for publication or dissemination. In addition, available commodity data are (in most cases) presented at a broader level of classification than for the 1993–94 collection.

The commodity classification used experimentally for the 1994–95 collection was modified for the 1995–96 collection. The classification (based on the ANZSCC) was used to code commodity data collected from a sample of approximately 5,900 manufacturing establishments. The classification covers the full range of manufacturing commodities produced but, due to the nature of the classification, data are (in most cases) presented at a broader level of classification than for the 1993–94 collection. Data are available for approximately 1,000 commodities. This classification is that now in use in the annual manufacturing collection.

#### Geographic classification

The Australian Standard Geographical Classification (ASGC) is the principal classification used by the ABS for the collection, compilation and publication of geographically classified statistics. These sub-State/Territory data are available in manufacturing census years only.

### DATA ADJUSTMENT

Investigations a few years ago showed that not all manufacturers falling within the scope of the collection had been recorded on the ABS business register at the time that the sample was selected.

Commencing with the release of the 1993–94 manufacturing publications (Cat. nos 8201.0, 8221.0 to 8221.6 and 8365.0), data have been adjusted to allow for lags in processing new businesses to the ABS business register, and the omission of some businesses from the business register. First, adjustments have been made to allow for new businesses which had commenced operations but for which details had not been processed to the ABS business register in time for inclusion in the manufacturing industry collection. Adjustments of this type will continue to be applied. Second, adjustments have been made for businesses which had been in existence for several years, but, for various reasons, were not previously added to the ABS business register. The ABS is remedying these omissions and all of the omitted businesses will be included in estimates from the 1996–97 census.

For the 1992–93 reference year, coverage factors were calculated at the ANZSIC class level to make the data comparable with future years' data. Coverage factors were also calculated for the 1989–90 to 1991–92 (inclusive) reference years at the ANZSIC subdivision level.

### COLLECTION AND OUTPUT STRATEGIES

For the collection and output strategies employed for years prior to 1994–95, see the previous issue of this publication *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (Cat. no. 8205.0).

In this information paper, a distinction has been drawn between data collected at the management unit level and data collected at the establishment level.

Management unit statistics relate to the operations of businesses. They cover sources of income and expenses leading to calculation of profits or losses, as well as information about assets, liabilities and investment in capital equipment.

Management unit statistics are available for Australia only, i.e. not for States or Territories. They will generally be available for total manufacturing, for industry subdivisions (industries with 2 digit codes on pages 37 and 38) and for industry groups (industries with 3 digit codes on pages 37 and 38). Management unit statistics may also be available for industry classes (industries with 4 digit codes on pages 37 and 38), but requests for data at this level have to be evaluated individually for sampling error.

Establishment statistics relate to the operations of factories. Generally, they focus on production activity, covering sources of income from production and related activities and expenses related to production and related activities. They also include information about commodities.

### COLLECTION AND OUTPUT STRATEGIES *continued*

As well as being available for Australia as a whole, establishment statistics are also available for States and Territories. In years in which there is a census, they may also be available for regions and other areas within States and Territories. The level of industry for which establishment data are available varies according to the geographic area and data items involved.

#### 1994–95 survey

A sample of approximately 20,000 manufacturing establishments was requested to provide data on employment, wages and salaries, turnover and the percentage of goods exported. A sub-sample of approximately 7,500 of these establishments was asked to provide additional data, such as: purchases, transfers in and selected expenses; opening and closing stocks; the acquisition and disposal of assets; and the value of sales for commodities produced. In addition, a sample of approximately 5,700 manufacturing management units was asked to provide the detailed information necessary to derive financial measures such as operating profit before tax, as well as expenditure on environmental protection.

Data for Statistical Divisions, Statistical Subdivisions and Statistical Local Areas (i.e. sub-State statistics) are not available for the 1994–95 reference year due to the sample nature of the collection.

Output from the 1994–95 collection includes:

- *Manufacturing Industry, Australia, Preliminary, 1994–95* (Cat. no. 8201.0)
- *Manufacturing Industry, Australia, 1994–95* (Cat. no. 8221.0)
- *Manufacturing Industry, [State], 1994–95* (Cat. nos 8221.1 to 8221.6)
- A variety of unpublished data, which are available for a charge.

The publication for New South Wales (Cat. no. 8221.1) also contains selected data for the Australian Capital Territory.

The publication *Manufacturing Production, Australia: Principal Commodities Produced* (Cat. no. 8365.0) was not compiled for 1994–95. However, 1994–95 commodity data available for publication will appear in *Manufacturing Production, Australia: Principal Commodities Produced, 1995–96* (Cat. no. 8365.0), to be released early in 1998.

#### 1995–96 survey

A large-scale survey, similar to the 1994–95 collection, was conducted. A sample of approximately 20,000 manufacturing establishments was requested to provide data on employment, wages and salaries, turnover, purchases and the percentage of goods exported.

This collection saw the introduction of the data item establishment Industry Gross Product (IGP), which replaced the data item establishment value added which had been only available every third year and which was last published for 1992–93.

### 1995–96 survey *continued*

A sub-sample of approximately 5,900 manufacturing establishments was asked to provide additional data, such as: selected expenses; opening and closing stocks; the acquisition and disposal of assets; and the value of sales for commodities produced. In addition, a sample of approximately 4,100 manufacturing management units was asked to provide the detailed information necessary to derive financial measures such as operating profit before tax. A separate sample of approximately 4,500 manufacturing management units was asked for information related to waste management and environmental protection.

Data for Statistical Divisions, Statistical Subdivisions and Statistical Local Areas (i.e. sub-State statistics) are not available for the 1995–96 reference year due to the sample nature of the collection.

Commencing with the 1995–96 collection, a new publication, *Manufacturing, Australia* (Cat. no. 8225.0), will be produced. It presents statistical information from the 1995–96 manufacturing collection and several ABS quarterly surveys as well as data and articles from non-ABS sources. Data will be presented by broad industry within manufacturing. It will cover such topics as industry performance, employment and output levels, export activity, cost structures and profits.

Output from the 1995–96 collection includes:

- *Manufacturing Industry, Australia, Preliminary, 1995–96* (Cat. no. 8201.0)
- *Manufacturing Industry, Australia, 1995–96* (Cat. no. 8221.0)
- *Manufacturing Industry, [State], 1995–96* (Cat. nos 8221.1 to 8221.6)
- *Manufacturing, Australia, 1997* (Cat. no. 8225.0)
- *Manufacturing Production, Australia: Principal Commodities Produced, 1995–96* (Cat. no. 8365.0)
- A variety of unpublished data, which are available for a charge.

The publication for New South Wales (Cat. no. 8221.1) also contains selected data for the Australian Capital Territory. The publication *Manufacturing Production, Australia: Principal Commodities Produced, 1995–96* (Cat. no. 8365.0) will include those 1994–95 commodity data available for publication.

### Collection strategy from 1996–97 onwards

Commencing with the 1996–97 collection, one collection in five will be conducted as a manufacturing census, with the other four annual collections conducted as a survey. The 1996–97 collection is a census, with the 1997–98 to 2000–01 (inclusive) collections planned to be surveys. The next manufacturing census is planned for the reference year 2001–02.

### Collection strategy from 1996–97 onwards *continued*

In line with this new collection strategy, the ABS has also adopted a new publication strategy. National manufacturing publications will continue to be produced for each year, but separate State publications will only be produced in a census year (i.e. one year in five). Data on employment, wages and salaries, turnover and IGP for States and Territories will be published each year, at the industry subdivision level, in *Manufacturing Industry, Australia* (Cat. no. 8221.0). All of these data will also be published in *Manufacturing Industry, Australia, Preliminary* (Cat. no. 8201.0). (In the case of IGP, release in the preliminary publication will commence with the 1997–98 collection.)

Manufacturing establishment data corresponding to that published nationally will be compiled and available for States for a nominal charge in survey years (i.e. four years in five). More detailed data for both Australia and States will continue to be available as a special data service, subject to reliability and confidentiality constraints. In census years, when State publications are to be released, the publication for New South Wales (Cat. no. 8221.1) will, in addition to detailed New South Wales data, contain selected data (at the industry class or group level) for the Australian Capital Territory.

Data for Statistical Divisions, Statistical Subdivisions and Statistical Local Areas (i.e. sub-State statistics) are only available in census years and, therefore, will now be available for one year in five instead of the current one year in three.

### 1996–97 census

A census of all manufacturing establishments is being conducted to collect data on employment, wages and salaries, turnover, purchases and the percentage of goods exported. Data on IGP will also be available from this collection. A sample of approximately 7,000 manufacturing establishments is being asked to provide additional data, such as: selected expenses; opening and closing stocks; the acquisition and disposal of assets; and the value of sales for commodities produced. In addition, a sample of approximately 5,300 manufacturing management units is being asked to provide the detailed information necessary to derive financial measures such as operating profit before tax. A separate sample of approximately 5,000 manufacturing management units is being asked for information related to waste management and environmental protection.

The census of manufacturing establishments and their locations will allow data on employment, wages and salaries, and turnover to be produced for Statistical Divisions, Statistical Subdivisions and Statistical Local Areas (i.e. sub-State statistics).

### 1996–97 census *continued*

Output from the 1996–97 collection is expected to include:

- *Manufacturing Industry, Australia, Preliminary, 1996–97* (Cat. no. 8201.0), to be released in March 1998
- *Manufacturing Industry, Australia, 1996–97* (Cat. no. 8221.0), to be released in mid-1998
- *Manufacturing Industry, [State], 1996–97* (Cat. nos 8221.1 to 8221.6), to be released in the third quarter of 1998
- *Manufacturing, Australia, 1998* (Cat. no. 8225.0), to be released towards the end of 1998
- *Manufacturing Production, Australia: Principal Commodities Produced, 1996–97* (Cat. no. 8365.0), to be released towards the end of 1998
- A variety of unpublished data, which are available for a charge.

### 1997–98 survey

A large-scale survey, similar to the 1995–96 collection, is planned. It is expected that manufacturing establishments will be requested to provide data on employment, wages and salaries, turnover, purchases and the percentage of goods exported. Data on IGP will also be calculated. A sub-sample of manufacturing establishments is expected to be asked to provide additional data, such as: selected expenses; opening and closing stocks; the acquisition and disposal of assets; and the value of sales for commodities produced. In addition, a smaller sample of manufacturing management units is expected to be asked to provide the detailed information necessary to derive financial measures such as operating profit before tax. The strategy for collection of data relating to waste management and environmental protection is currently under review.

Data for Statistical Divisions, Statistical Subdivisions and Statistical Local Areas (i.e. sub-State statistics) will not be available for the 1997–98 reference year due to the sample nature of the collection.

### STATISTICAL UNITS USED IN THE MANUFACTURING COLLECTION

The major units utilised for statistical reporting purposes, as contained on the ABS business register, are the 'enterprise group', the 'management unit', the 'establishment' and the 'location'.

#### 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*). These may be legal entities such as trusts and partnerships as well as companies. Majority ownership is not required for control to be exercised.

### Management unit

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

### Establishment

The establishment is the smallest accounting unit of a business, within a State or Territory, controlling its productive activities and maintaining a specified range of detailed data enabling value added to be calculated. In general, an establishment covers all operations at a physical location, but may consist of a group of locations provided they are within the same State or Territory. The majority of establishments operate at one location only.

### Location

A location is a physical unit of the establishment. It consists usually of an unbroken physical area or site, occupied by an establishment, at which, or from which, the establishment engages in productive activity on a relatively permanent basis. An establishment can consist of one or more locations. In specified circumstances, non-contiguous sites occupied by the same establishment can be combined to form a location.

## DATA ITEM DEFINITIONS

The definitions of the various data items presented for a particular reference year are available in the Glossary contained in the relevant issue of *Manufacturing Industry, Australia* (Cat. no. 8221.0), as well as the corresponding State publications (Cat. nos 8221.1 to 8221.6).

For further information, please contact Frank Orton on Sydney (02) 9268 4245.

## DATA AVAILABILITY

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### DATA SOURCES

A considerable volume of data is available from the annual manufacturing industry collection (as explained elsewhere in this information paper). Whilst printed publications are the primary form in which data are released, there are a number of other ABS products and publications that contain data obtained from the annual manufacturing collection. In addition, there is a large volume of data available that is unpublished.

The previous issue of this publication, *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (Cat. no. 8205.0), released on 21 March 1996, contains (in chapter 5, 'Data Availability') an outline of data available from the annual suite of manufacturing publications and a detailed list of other ABS products and publications that include data from the annual manufacturing collection. It also contains a list of the more important publications and products containing data about the manufacturing industry available from other ABS collections.

The list below gives a brief description of these products and publications. It also gives an update for manufacturing production statistics and price index data, both of which are now mainly quarterly collections (previously, they were monthly collections). For more information about data availability from the sources listed (except for manufacturing production and price indexes, which have been updated here), see chapter 5 of the previous issue of this publication.

### OTHER ABS PRODUCTS AND PUBLICATIONS WITH DATA FROM THE ANNUAL MANUFACTURING COLLECTION

#### PC AUSSTATS

This is an on-line electronic data service that enables clients to have access, at any time, to the ABS statistical database.

#### Integrated Regional Data Base (IRDB)

The IRDB is a CD-ROM product covering data from a wide range of ABS collections, as well as from other Commonwealth agencies.

#### Economic Activity Survey

This is an annual management unit based collection, covering most sectors of the Australian economy. Data are published in *Business Operations and Industry Performance, Australia* (Cat. no. 8140.0) at the industry division level classified by broad employment size.

#### 'Environment Protection Expenditure, Australia' (Cat. no. 4603.0)

This publication presents data on expenditure relating to waste management and environmental protection for a number of sectors of the Australian economy, including manufacturing. Income relating to waste management and environmental protection was also collected for the 1995–96 reference year. The publication (under the same catalogue number) was previously titled *Cost of Environment Protection, Australia, Selected Industries*.



### Special data services

More detailed data are available from the ABS than is included in publications. If a data item was included in the manufacturing collection, the ABS may be able to produce a special tabulation.

## MANUFACTURING INDUSTRY DATA AVAILABLE FROM OTHER ABS COLLECTIONS

### Manufacturing production statistics

The quarterly publication, *Manufacturing Production, Australia* (Cat. no. 8301.0) contains original, seasonally adjusted and trend production quantity data for 28 commodity items. Additional manufacturing production data (including foods, textiles, clothing, footwear, building materials, household appliances and energy products) are also collected by the ABS, through user funded surveys, and are available to users as a special data service. Some of these series are available monthly, whereas other series are only available annually.

### Indexes of Industrial Production

Estimates of gross product at constant prices for the industrial sector and for each of its component industries (including manufacturing) are published in the quarterly publication *Indexes of Industrial Production, Australia* (Cat. no. 8125.0). Indexes for manufacturing subdivisions are included. This publication contains original, seasonally adjusted and trend data.

### Foreign trade data

Statistics on foreign trade in manufactured goods are available from a range of publications.

### Price index data

Indexes of price movements in materials used in, and articles produced by, manufacturing industries are published each quarter in *Price Indexes of Materials Used in Manufacturing Industries, Australia* (Cat. no. 6411.0) and *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (Cat. no. 6412.0). For Cat. no. 6411.0, separate indexes (based on ANZSIC) are published for the manufacturing industry division, as well as for 17 manufacturing sectors (defined in terms of industry subdivisions, industry groups or combinations of industry groups). For Cat. no. 6412.0, separate indexes (based on ASIC) are published for the manufacturing industry division, as well as for 13 manufacturing sectors (mainly defined in terms of industry subdivisions, but with the Chemical, petroleum and coal products industry subdivision divided into two components).

### Manufacturing industry labour force

The Population Census is a major source of labour force data on the manufacturing industry every five years, with data from the 1996 Population Census now available. Standard output from the 1996 Population Census includes labour force data for the manufacturing industry classified by age, sex, occupation and hours worked. Data are also available for small geographic areas. Customised reports can also be produced, which classify industry of employment with other characteristics collected in the census.

The Monthly Population Survey (MPS) is a household-based survey, comprising the monthly labour force survey and supplementary surveys. The MPS produces estimates at the national, State and regional levels. Much of the data obtained can be classified by industry, which are available quarterly.

### 'Manufacturing Technology Statistics, Australia' (Cat. no. 8123.0)

Includes statistics on the use of microelectronic-based technologies (including robots) in manufacturing establishments. This publication provided statistics on technologies in use at 31 December 1991 and those expected to be acquired in following years.

### Labour market data and other statistics

Statistics on numerous aspects of the labour market for the manufacturing industry and statistics providing indicators of the financial performance and situation of manufacturing businesses are available from a wide range of publications.

### MORE INFORMATION

For more information about data availability from the sources listed above, see chapter 5 of *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (Cat. no. 8205.0) or please contact the Information Services area in any ABS office.

# DATA ITEM LIST 1994–95 COLLECTION

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## OVERVIEW

While all of the data items listed below are available as unpublished data, each request for data will be considered to determine what can be released, taking account of reliability and confidentiality. Data for many of the items listed have already been published.

## DATA ITEMS COLLECTED IN THE 1994–95 COLLECTION

Data on employment, wages and salaries, turnover and the percentage of goods exported were sought from the main sample of approximately 20,000 manufacturing establishments. This sample was designed to produce reliable estimates of data at the industry class level. These items are marked with the symbol '†'.

A sub-sample of approximately 7,500 manufacturing establishments was asked to provide additional data, such as: purchases, transfers in and selected expenses; opening and closing stocks; and the acquisition and disposal of assets. This sub-sample was designed to produce reliable estimates of industry data at the industry subdivision level for total Australia. These items are marked with the symbol '‡'. Data from this sub-sample will be made available at the industry group and class levels if reliability constraints allow. Data on the value of sales for commodities produced are also available from this sub-sample.

In addition, a sample of approximately 5,700 manufacturing management units was asked to provide the detailed information necessary to derive financial measures such as operating profit before tax, as well as expenditure on environmental protection. Data items collected at the management unit level are marked with the symbol '#'.

Data for Statistical Divisions, Statistical Subdivisions and Statistical Local Areas (i.e. sub-State statistics) are not available for the 1994–95 reference year due to the sample nature of the collection.

### General items

- ANZSIC — for a list of manufacturing ANZSIC codes and their descriptions, see the Appendix on page 37

### Income items

- Sales of goods produced by this establishment (or for it on commission) †
- Sales of goods not produced by this establishment †
- Sales of goods #
- Percentage of 'Sales of goods produced by this establishment (or for it on commission)' plus 'Transfers out of goods produced by this establishment to other establishments of this business for sale' which have been exported or will be exported (outside Australia) by this business or its agent †

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† Available at the establishment level based on the main sample of approximately 20,000 manufacturing establishments.

# Available at the management unit level.

Income items *continued*

- Total income from services † #
  - ◆ Income from work done on a commission basis ‡
  - ◆ Repair, maintenance and service income and fees ‡
  - ◆ Advertising income ‡
  - ◆ Other income (including sales and agency commissions) ‡
- Total income from rent, leasing and hiring † #
  - ◆ Land, buildings and other structures ‡
  - ◆ Other income from rent, leasing and hiring ‡
- Total government subsidies † #
  - ◆ Government subsidies for pollution abatement and control #
  - ◆ Other government subsidies #
- Interest income #
- Dividend income from related and unrelated businesses #
- Royalties income #
- Other income (includes net profit (loss): on the sale of fixed tangible assets; on foreign loans as a result of variations in foreign exchange rates/transactions; and on share trading) #
- Total income #
- Total transfers out of goods to other establishments of this business
  - ◆ Transfers out of goods produced by this establishment for sale †
  - ◆ Transfers out of goods produced by this establishment for further processing, assembly or installation †
  - ◆ Transfers out of goods bought in by this establishment †
- Total capital work done by own employees for own use or for rental or lease
  - ◆ Capitalised wages and salaries † #
  - ◆ Capitalised purchases of materials † #

Expense items

- Wages and salaries † #
- Employer contributions to superannuation funds #
- Workers' compensation costs #
- Fringe benefits tax #
- Payroll tax #
- Insurance premiums #
- Interest expenses #
- Other bank charges #
- Royalties expenses #
- Depreciation and amortisation #
- Bad debts written off (excluding provisions for doubtful debts) #

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† Available at the establishment level based on the main sample of approximately 20,000 manufacturing establishments.

‡ Available at the establishment level based on a sub-sample of approximately 7,500 manufacturing establishments. Data from this sub-sample of establishments is less likely to satisfy reliability constraints than data from the main establishment sample.

# Available at the management unit level.

Expense items *continued*

- Total purchases <sup>#</sup>
  - ◆ Materials and components for use in production (including consumables) <sup>‡</sup>
  - ◆ Containers and packaging materials <sup>‡</sup>
  - ◆ Water charges (including water rates and excess water charges) <sup>‡</sup>
  - ◆ Electricity <sup>‡</sup>
  - ◆ Gas for fuel <sup>‡</sup>
  - ◆ Petroleum fuel products <sup>‡</sup>
  - ◆ Coal for fuel <sup>‡</sup>
  - ◆ Other fuels <sup>‡</sup>
  - ◆ Goods for resale <sup>‡</sup>
- Total commission expenses <sup>#</sup>
  - ◆ Sales commission expenses <sup>‡</sup>
  - ◆ Commission expenses for work done on materials provided by this business <sup>‡</sup>
- Freight and cartage expenses <sup>‡ #</sup>
- Motor vehicle running expenses <sup>‡ #</sup>
- Rent, leasing and hiring expenses for motor vehicles <sup>#</sup>
- Rent, leasing and hiring expenses (other than for motor vehicles) <sup>#</sup>
- Rent, leasing and hiring expenses
  - ◆ Land, buildings and other structures <sup>‡</sup>
  - ◆ Plant, machinery and equipment (includes off-road vehicles e.g. forklifts, mobile plant and quarry dump trucks) <sup>‡</sup>
  - ◆ Motor vehicles <sup>‡</sup>
  - ◆ Other rent, leasing and hiring expenses <sup>‡</sup>
- Repair and maintenance expenses <sup>‡ #</sup>
- Other expenses
  - ◆ Audit and other accounting fees <sup>#</sup>
  - ◆ Advertising expenses
    - Paid to advertising agencies <sup>#</sup>
    - Paid directly to radio and television <sup>#</sup>
    - Paid directly to the press <sup>#</sup>
    - Other advertising expenses <sup>#</sup>
  - ◆ Cleaning services <sup>#</sup>
  - ◆ Payments for data processing services <sup>#</sup>
  - ◆ Legal expenses <sup>#</sup>
  - ◆ Paper, printing and stationery expenses (excluding advertising) <sup>#</sup>
  - ◆ Postal, mailing and courier services <sup>#</sup>
  - ◆ Payments for secretarial, word processing and copying services <sup>#</sup>
  - ◆ Payments for staff training services <sup>#</sup>
  - ◆ Telecommunication services <sup>#</sup>
  - ◆ Travelling, accommodation and entertainment expenses <sup>#</sup>
  - ◆ Other management and administrative services <sup>#</sup>
  - ◆ Land tax and land rates <sup>#</sup>
  - ◆ Other operating expenses <sup>#</sup>

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‡ Available at the establishment level based on a sub-sample of approximately 7,500 manufacturing establishments. Data from this sub-sample of establishments is less likely to satisfy reliability constraints than data from the main establishment sample.

# Available at the management unit level.

Expense items *continued*

- Total expenses <sup>#</sup>
- Total transfers in of goods from other establishments of this business
  - ◆ Transfers in of goods produced by other establishments for sale <sup>‡</sup>
  - ◆ Transfers in of goods produced by other establishments for further processing, assembly or installation <sup>‡</sup>
  - ◆ Transfers in of goods bought in by other establishments
    - Goods for resale <sup>‡</sup>
    - Materials, containers, fuels, etc. <sup>‡</sup>

Assets and liabilities

- Current assets — trading stocks
  - ◆ Opening stocks
    - Raw materials, fuels, containers, etc. <sup>‡</sup>
    - Work-in-progress <sup>‡</sup>
    - Finished goods (including stocks for resale) <sup>‡</sup>
    - Total trading stocks <sup>‡ #</sup>
  - ◆ Closing stocks
    - Raw materials, fuels, containers, etc. <sup>‡</sup>
    - Work-in-progress <sup>‡</sup>
    - Finished goods (including stocks for resale) <sup>‡</sup>
    - Total trading stocks <sup>‡ #</sup>
- Current assets — other than trading stocks <sup>#</sup>
- Non-current assets <sup>#</sup>
- Current liabilities <sup>#</sup>
- Non-current liabilities <sup>#</sup>
- Owners' equity <sup>#</sup>

Employment

- Employment at the end of June (includes working proprietors) <sup>† #</sup>

Commodity data

For the 1994–95 collection, an experimental commodity classification (based on the ANZSCC) was used to code commodities produced data. Due to the experimental nature of this classification, data for a significant number of commodities are not available for publication or dissemination.

Those commodity data available for publication from the 1994–95 collection, together with 1995–96 commodity data, will appear in *Manufacturing Production, Australia: Principal Commodities Produced, 1995–96* (Cat. no. 8365.0), to be released early in 1998.

- Value of sales and transfers out of goods produced by this establishment <sup>‡</sup>

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† Available at the establishment level based on the main sample of approximately 20,000 manufacturing establishments.

‡ Available at the establishment level based on a sub-sample of approximately 7,500 manufacturing establishments. Data from this sub-sample of establishments is less likely to satisfy reliability constraints than data from the main establishment sample.

# Available at the management unit level.

Capital expenditure and disposal of assets

- Capital expenditure on selected assets (including capital work done by own employees)
  - ◆ Total plant, machinery and equipment <sup>#</sup>
    - Industrial machinery and equipment <sup>‡</sup>
    - Road vehicles <sup>‡</sup>
    - Other transport equipment <sup>‡</sup>
    - Computers and peripherals (excluding computer software) <sup>‡</sup>
    - Communications equipment <sup>‡</sup>
    - Other plant, machinery and equipment <sup>‡</sup>
  - ◆ Land <sup>‡#</sup>
  - ◆ Dwellings <sup>‡#</sup>
  - ◆ Other buildings and structures
    - New <sup>‡#</sup>
    - Second hand <sup>‡#</sup>
  - ◆ Intangible assets (including goodwill) <sup>‡#</sup>
- Disposal of selected assets
  - ◆ Plant, machinery and equipment <sup>‡#</sup>
  - ◆ Land <sup>‡#</sup>
  - ◆ Dwellings <sup>‡#</sup>
  - ◆ Other buildings and structures <sup>‡#</sup>
  - ◆ Intangible assets (including goodwill) <sup>‡#</sup>

Expenditure relating to waste management and environmental protection

- Current expenditure on waste management and environmental protection
  - ◆ Government and council fees, charges and taxes relating to pollution abatement and control <sup>#</sup>
  - ◆ Other current expenditure on environmental protection <sup>#</sup>
- Capital expenditure on environmental protection
  - ◆ Capital expenditure for new plant, machinery or equipment designed to abate or control pollution (for all manufacturing industries)
    - End-of-line techniques <sup>#</sup>
    - Change-in-production processes <sup>#</sup>

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‡ Available at the establishment level based on a sub-sample of approximately 7,500 manufacturing establishments. Data from this sub-sample of establishments is less likely to satisfy reliability constraints than data from the main establishment sample.

# Available at the management unit level.

SELECTED DERIVED DATA ITEMS

For establishments

- Number of employees at the end of June †
- Persons employed per establishment at the end of June † — see footnote (c) on page 35
- Total sales of goods and transfers out †
- Value of exports (of goods produced) †
- Purchases and transfers in ‡
- Selected expenses ‡
- Purchases, transfers in and selected expenses ‡
- Change in stocks ‡
- Cost of goods sold (i.e. total purchases and transfers in plus total opening stocks minus total closing stocks) ‡
- Cost of inputs (i.e. purchases of materials, fuels, etc. plus transfers in of materials, fuels, etc. and of goods for further processing, plus opening stocks of raw materials minus closing stocks of raw materials) ‡
- Net capital expenditure (includes intangible assets) ‡
- Net fixed capital expenditure ‡
- Turnover †
- Turnover per person employed at the end of June †
- Turnover per establishment † — see footnote (c) on page 35
- Value added ‡ — see footnote (i) on page 35
- Value added to turnover ‡ — see footnote (i) on page 35
- Wages and salaries per employee at the end of June †
- Wages and salaries to value added ‡ — see footnote (i) on page 35
- Wages and salaries to turnover †

For management units

- Turnover
- Trading profit
- Earnings before interest and tax
- Change in stocks
- Value added
- Industry gross product
- Selected expenses
- Selected labour costs
- Major labour costs
- Cost of sales (i.e. total purchases and selected expenses plus total opening stocks minus total closing stocks)
- Stocks turnover

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† Available at the establishment level based on the main sample of approximately 20,000 manufacturing establishments.

‡ Available at the establishment level based on a sub-sample of approximately 7,500 manufacturing establishments. Data from this sub-sample of establishments is less likely to satisfy reliability constraints than data from the main establishment sample.



For management units *continued*

- Operating profit before tax
- Operating profit margin
- Interest coverage
- Operating profit before tax per person employed at the end of June
- Selected labour costs per person employed at the end of June
- Major labour costs per person employed at the end of June
- Industry gross product per person employed at the end of June
- Trading profit margin
- Government subsidisation (i.e. government subsidies divided by total income)
- Current expenditure on environmental protection as a proportion of total turnover — see footnote M<sup>v</sup> on page 36
- Capital expenditure on environmental protection as a proportion of total capital expenditure — see footnote M<sup>v</sup> on page 36

# DATA ITEM LIST 1995–96 COLLECTION

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## OVERVIEW

While all of the data items listed below are available as unpublished data, each request for data will be considered to determine what can be released, taking account of reliability and confidentiality. Data for many of the items listed have already been published.

## DATA ITEMS COLLECTED IN THE 1995–96 COLLECTION

Data on employment, wages and salaries, turnover, purchases and the percentage of goods exported were sought from the main sample of approximately 20,000 manufacturing establishments. This sample was designed to produce reliable estimates of data at the industry class level. These items are marked with the symbol <sup>††</sup>.

A sub-sample of approximately 5,900 manufacturing establishments was asked to provide additional data, such as: selected expenses; opening and closing stocks; and the acquisition and disposal of assets. This sub-sample was designed to produce reliable estimates of industry data at the industry subdivision level for total Australia. These items are marked with the symbol <sup>†‡</sup>. Data from this sub-sample will be made available at the industry group and class levels if reliability constraints allow. Data on the value of sales for commodities produced are also available from this sub-sample.

In addition, a sample of approximately 4,100 manufacturing management units was asked to provide the detailed information necessary to derive financial measures such as operating profit before tax. A separate sample of approximately 4,500 manufacturing management units was asked for information related to waste management and environmental protection. Data items collected at the management unit level are marked with the symbol <sup>#†</sup>.

Data for Statistical Divisions, Statistical Subdivisions and Statistical Local Areas (i.e. sub-State statistics) are not available for the 1995–96 reference year due to the sample nature of the collection.

### General items

- ANZSIC — for a list of manufacturing ANZSIC codes and their descriptions, see the Appendix on page 37

### Income items

- Sales of goods produced by this establishment (or for it on commission) <sup>†</sup>
- Sales of goods not produced by this establishment <sup>†</sup>
- Sales of goods <sup>#</sup>
- Percentage of 'Sales of goods produced by this establishment (or for it on commission)' plus 'Transfers out of goods produced by this establishment to other establishments of this business for sale' which have been exported or will be exported (outside Australia) by this business or its agent <sup>†</sup>

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<sup>†</sup> Available at the establishment level based on the main sample of approximately 20,000 manufacturing establishments.

<sup>#</sup> Available at the management unit level.

Income items *continued*

- Total income from services † #
  - ◆ Income from work done on a commission basis ‡
  - ◆ Repair, maintenance and service income and fees ‡
  - ◆ Advertising income ‡
  - ◆ Other income (including sales and agency commissions) ‡
- Total income from rent, leasing and hiring † #
  - ◆ Land, buildings and other structures ‡
  - ◆ Other income from rent, leasing and hiring ‡
- Total government subsidies † #
- Interest income #
- Dividend income from related and unrelated businesses #
- Royalties income #
- Other income (includes net profit (loss): on the sale of fixed tangible assets; on foreign loans as a result of variations in foreign exchange rates/transactions; and on share trading) #
- Total income #
- Total transfers out of goods to other establishments of this business
  - ◆ Transfers out of goods produced by this establishment for sale †
  - ◆ Transfers out of goods produced by this establishment for further processing, assembly or installation †
  - ◆ Transfers out of goods bought in by this establishment †
- Total capital work done by own employees for own use or for rental or lease
  - ◆ Capitalised wages and salaries † #
  - ◆ Capitalised purchases of materials † #

Expense items

- Wages and salaries † #
- Provision expenses for employee entitlements #
- Employer contributions to superannuation funds #
- Workers' compensation costs #
- Fringe benefits tax #
- Payroll tax #
- Insurance premiums #
- Interest expenses #
- Bank charges other than interest #
- Depreciation and amortisation #
- Bad debts #
- Royalties expenses #
- Total purchases † #
  - ◆ Materials, components, containers, packaging materials, electricity, fuels and water ‡
  - ◆ Finished goods for resale ‡

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† Available at the establishment level based on the main sample of approximately 20,000 manufacturing establishments.

‡ Available at the establishment level based on a sub-sample of approximately 5,900 manufacturing establishments. A further sampling of these units was used to collect some of the data items. Data from these sub-samples of establishments are less likely to satisfy reliability constraints than data from the main establishment sample.

# Available at the management unit level.

Expense items *continued*

- Motor vehicle running expenses ‡#
- Freight and cartage expenses ‡#
- Repair and maintenance expenses ‡#
- Total rent, leasing and hiring expenses ‡#
  - ◆ Land, buildings and other structures ‡#
  - ◆ Motor vehicles ‡#
  - ◆ Transport containers ‡#
  - ◆ Plant, machinery and equipment (includes off-road vehicles e.g. forklifts, mobile plant and quarry dump trucks) ‡#
  - ◆ Plants and greenery ‡#
  - ◆ Office equipment ‡#
  - ◆ Other rent, leasing and hiring expenses ‡#
- Total commission expenses #
  - ◆ Sales commission expenses ‡
  - ◆ Commission expenses for work done on materials provided by this business ‡
  - ◆ Ex-house printing expenses for material published by this business ‡
- Other operating expenses #
  - ◆ Audit and other accounting fees #
  - ◆ Advertising expenses #
  - ◆ Cleaning services #
  - ◆ Payments for data processing services #
  - ◆ Legal expenses #
  - ◆ Paper, printing and stationery expenses (excluding printing expenses of material published by this business; advertising) #
  - ◆ Postal, mailing and courier services #
  - ◆ Payments for secretarial, word processing and copying services #
  - ◆ Payments for staff training services #
  - ◆ Telecommunication services #
  - ◆ Travelling, accommodation and entertainment expenses #
  - ◆ Other management and administrative services #
  - ◆ Land tax and land rates #
  - ◆ Other #
- Total expenses #
- Total transfers in of goods from other establishments of this business †
  - ◆ Transfers in of goods produced by other establishments for sale ‡
  - ◆ Transfers in of goods produced by other establishments for further processing, assembly or installation ‡
  - ◆ Transfers in of goods bought in by other establishments
    - Goods for resale ‡
    - Materials, containers, fuels, etc. ‡

† Available at the establishment level based on the main sample of approximately 20,000 manufacturing establishments.

‡ Available at the establishment level based on a sub-sample of approximately 5,900 manufacturing establishments. A further sampling of these units was used to collect some of the data items. Data from these sub-samples of establishments are less likely to satisfy reliability constraints than data from the main establishment sample.

# Available at the management unit level.

Assets and liabilities

- Current assets — trading stocks
  - ◆ Opening stocks
    - Raw materials, fuels, containers, etc. ‡
    - Work-in-progress ‡
    - Finished goods (including stocks for resale) ‡
    - Total trading stocks ‡ #
  - ◆ Closing stocks
    - Raw materials, fuels, containers, etc. ‡
    - Work-in-progress ‡
    - Finished goods (including stocks for resale) ‡
    - Total trading stocks ‡ #
- Current assets — other than trading stocks #
- Non-current assets #
- Current liabilities
  - ◆ Provisions for employee entitlements
    - Beginning of reporting period #
    - End of reporting period #
  - ◆ Other current liabilities #
- Non-current liabilities
  - ◆ Provisions for employee entitlements
    - Beginning of reporting period #
    - End of reporting period #
  - ◆ Other non-current liabilities #
- Owners' equity #

Employment

- Employment at the end of June (includes working proprietors) † #

Commodity data

The commodity classification used experimentally for the 1994–95 collection was modified for the 1995–96 collection.

The classification (based on the ANZSCC) covers the full range of manufacturing commodities produced. Data are available for approximately 1,000 commodities.

As well as the 1995–96 commodity data, those 1994–95 commodity data available for publication will appear in *Manufacturing Production, Australia: Principal Commodities Produced, 1995–96* (Cat. no. 8365.0), to be released early in 1998.

- Value of sales and transfers out of goods produced by this establishment ‡

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† Available at the establishment level based on the main sample of approximately 20,000 manufacturing establishments.

‡ Available at the establishment level based on a sub-sample of approximately 5,900 manufacturing establishments. A further sampling of these units was used to collect some of the data items. Data from these sub-samples of establishments are less likely to satisfy reliability constraints than data from the main establishment sample.

# Available at the management unit level.

Capital expenditure and disposal of assets

- Capital expenditure on selected assets (including capital work done by own employees)
  - ◆ Plant, machinery and equipment ‡ #
  - ◆ Land ‡ #
  - ◆ Dwellings, other buildings and structures ‡ #
  - ◆ Intangible assets (including goodwill) ‡ #
- Total disposal of plant, machinery, equipment, land, dwellings, other buildings and structures and intangible assets ‡ #

Expenditure and income relating to waste management and environmental protection

- Current expenditure on waste management and environmental protection
  - ◆ Environmental taxes, levies, fines and licences #
  - ◆ Payments to government agencies for waste management and environmental protection services #
  - ◆ Payments to private contractors/other businesses for waste management and environmental protection services #
  - ◆ Research and development expenditure on waste management and environmental protection
    - Carried out by this business #
    - Carried out by another business #
  - ◆ Total current expenditure on waste management and environmental protection #
  - ◆ Total current expenditure on waste management and environmental protection, classified by the following categories
    - Protection of ambient air and climate #
    - Waste water management/water pollution #
    - Non-hazardous solid waste management #
    - Hazardous solid waste management #
    - Noise and vibration abatement #
    - Other environmental protection activities #
  - ◆ Expenses relating to waste management and environmental protection activities carried out by own employees #
- Capital expenditure on waste management and environmental protection
  - ◆ Capital expenditure for plant, machinery, equipment, construction or land for the purpose of waste management or environmental protection
    - Capital work done by own employees for own use for waste management or environmental protection #
    - Other capital expenditure for waste management and environmental protection #
    - Total capital expenditure on waste management and environmental protection #

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‡ Available at the establishment level based on a sub-sample of approximately 5,900 manufacturing establishments. A further sampling of these units was used to collect some of the data items. Data from these sub-samples of establishments are less likely to satisfy reliability constraints than data from the main establishment sample.

# Available at the management unit level.

Expenditure and income relating to waste management and environmental protection *continued*

- ◆ Total capital expenditure on waste management and environmental protection, classified by the following categories
  - End-of-line techniques <sup>#</sup>
    - Protection of ambient air and climate <sup>#</sup>
    - Waste water management/water pollution <sup>#</sup>
    - Non-hazardous solid waste management <sup>#</sup>
    - Hazardous solid waste management <sup>#</sup>
    - Noise and vibration abatement <sup>#</sup>
    - Other environmental protection activities <sup>#</sup>
  - Change-in-production/integrated technology/cleaner production processes <sup>#</sup>
    - Protection of ambient air and climate <sup>#</sup>
    - Waste water management/water pollution <sup>#</sup>
    - Non-hazardous solid waste management <sup>#</sup>
    - Hazardous solid waste management <sup>#</sup>
    - Noise and vibration abatement <sup>#</sup>
    - Other environmental protection activities <sup>#</sup>
  - Number of businesses with capital expenditure (for commercial purposes) on change-in-production/integrated technology/cleaner production processes <sup>#</sup>
  - Income relating to waste management and environmental protection
    - ◆ Government subsidies for waste management and environmental protection <sup>#</sup>
    - ◆ Capital grants for waste management and environmental protection <sup>#</sup>
    - ◆ Income from waste management and environmental protection services <sup>#</sup>
    - ◆ Income from sale of by-products resulting from waste management and environmental protection activities carried out by own employees <sup>#</sup>

SELECTED DERIVED DATA ITEMS

For establishments

- Number of employees at the end of June <sup>†</sup>
- Persons employed per establishment at the end of June <sup>†</sup> — see footnote (c) on page 35
- Total sales of goods and transfers out <sup>†</sup>
- Value of exports (of goods produced) <sup>†</sup>
- Purchases and transfers in <sup>†</sup>
- Selected expenses <sup>‡</sup>
- Purchases, transfers in and selected expenses <sup>‡</sup>
- Change in stocks <sup>‡</sup>
- Cost of goods sold (i.e. total purchases and transfers in plus total opening stocks minus total closing stocks) <sup>‡</sup>

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<sup>†</sup> Available at the establishment level based on the main sample of approximately 20,000 manufacturing establishments.

<sup>‡</sup> Available at the establishment level based on a sub-sample of approximately 5,900 manufacturing establishments. A further sampling of these units was used to collect some of the data items. Data from these sub-samples of establishments are less likely to satisfy reliability constraints than data from the main establishment sample.

<sup>#</sup> Available at the management unit level.

For establishments *continued*

- Cost of inputs (i.e. purchases of materials, fuels, etc. plus transfers in of materials, fuels, etc. and of goods for further processing, plus opening stocks of raw materials minus closing stocks of raw materials) ‡
- Net capital expenditure (includes intangible assets) ‡
- Turnover †
- Turnover per person employed at the end of June †
- Turnover per establishment † — see footnote (c) on page 35
- Value added ‡ — see footnote (i) on page 35
- Value added to turnover ‡ — see footnote (i) on page 35
- Industry gross product †
- Industry gross product per person employed at the end of June †
- Wages and salaries per employee at the end of June †
- Wages and salaries to value added ‡ — see footnote (i) on page 35
- Wages and salaries to turnover †
- Wages and salaries to industry gross product †

For management units

- Turnover
- Trading profit
- Earnings before interest and tax
- Change in stocks
- Value added
- Industry gross product
- Selected expenses
- Selected labour costs
- Major labour costs
- Cost of sales (i.e. total purchases and selected expenses plus total opening stocks minus total closing stocks)
- Total value of assets
- Total value of liabilities
- Net worth
- Funds
- Total capital expenditure
- Total disposal of assets
- Net capital expenditure (includes intangible assets)
- Stocks turnover
- Assets turnover
- Operating profit before tax
- Operating profit margin
- Return on owners' equity
- Return on assets
- Return on net worth
- Liquidity ratio
- Current ratio

† Available at the establishment level based on the main sample of approximately 20,000 manufacturing establishments.

‡ Available at the establishment level based on a sub-sample of approximately 5,900 manufacturing establishments. A further sampling of these units was used to collect some of the data items. Data from these sub-samples of establishments are less likely to satisfy reliability constraints than data from the main establishment sample.



For management units *continued*

- Interest coverage
- Debt to assets
- Short-term debt to equity
- Long-term debt to equity
- Operating profit before tax per person employed at the end of June
- Selected labour costs per person employed at the end of June
- Major labour costs per person employed at the end of June
- Assets per person employed at the end of June
- Industry gross product per person employed at the end of June
- Acquisitions of assets to disposals of assets
- Net capital expenditure (including intangible assets) to assets
- Net capital expenditure (including intangible assets) to profit
- Debt coverage
- Trading profit margin
- Government subsidisation (i.e. government subsidies divided by total income)
- Current expenditure on environmental protection as a proportion of total turnover — see footnote M<sup>v</sup> on page 36
- Capital expenditure on environmental protection as a proportion of total capital expenditure — see footnote M<sup>v</sup> on page 36

# 1

## TABLE OF DATA ITEMS for the 1989–90 to 1995–96 collections

Description	1989–90(a)	1990–91	1991–92	1992–93	1993–94	1994–95(a)	1995–96(a)
<b>Collection description</b>							
Long or short form collection(b)	Long Census	Short Census	Short Census	Long Survey	Short Census	Long Survey	Long Survey
Census or survey(c)							
<b>Classifications</b>							
Australian Standard Industrial Classification (ASIC)	X	X	X	..	..	..	..
Australian and New Zealand Standard Industrial Classification (ANZSIC)(d)	(e)	(e)	(e)	X	X	X	X
Australian Standard Geographical Classification (ASGC) — availability of sub-State data	X	X	X	..	X	..	..
Australian Standard Commodity Classification (ASCC)	X	..	..	..	..	..	..
Australian and New Zealand Standard Commodity Classification (ANZSCC)	..	..	..	..	X	..	..
Commodity Classification (based on ANZSCC)	..	..	..	..	..	(f)X	(g)X
<b>General items</b>							
Number of establishments(h)	E	E	E	E	E	E	E
Number of locations	L	L	L	..	L	..	..
<b>Employment</b>							
Employment during the last pay period of each month — includes working proprietors and partners	E	..	..	E	..	..	..
Employees during the last pay period of each month — excludes working proprietors and partners	E	..	..	E	..	..	..
Total employment at the end of June	(i)ELM	ELM <sup>s</sup>	ELM <sup>s</sup>	EM	ELM <sup>s</sup>	EM	EM
Number of working proprietors and working partners	(i)EM	..	..	..	..	..	..
Number of employees	(i)EM	..	..	..	..	..	..
<b>Income items</b>							
Sales of goods and services	EM	EM <sup>s</sup>	EM <sup>s</sup>	EM	EM <sup>s</sup>	EM	EM
Sales of goods	E	..	..	EM	EM <sup>s</sup>	EM	EM
Sales of goods produced by this establishment (or for it on commission)	E	..	..	E	..	E	E
Sales of goods not produced by this establishment	E	..	..	E	..	E	E

E Indicates that the data item is available at the establishment level.

L Indicates that the data item is available at the location level (i.e. for sub-State statistics).

M Indicates that the data item is available at the management unit level.

M<sup>s</sup> Data for these items were collected from a relatively small sample of management units, in the years applicable. Consequently, data are available only at the industry subdivision level and for total manufacturing.

X Indicates applicable in the year shown.

(a) The 1989–90 collection was in two streams. The main stream collected long form data as described in footnote (b). The second stream, consisting of single establishment businesses with less than four persons employed, collected short form data as described in footnote (b). The 1994–95 and 1995–96 collections were based on a major sample for short form data items, plus a sub-sample for long form data items and commodity data. See Collection and output strategies on page 3.

(b) In long form collection years, detailed data (such as: purchases, transfers in and selected expenses; opening and closing stocks; the acquisition and disposal of assets; etc.) were sought for all manufacturing industries. In short form collection years, generally data on employment, wages and salaries, and turnover only were sought for all manufacturing industries. However, additional data were sought for the Textiles, clothing and footwear industry in short form collection years.

(c) Censuses support finer classifications of data such as data for small areas and provide greater potential for data manipulation, such as industry concentration statistics or data for narrow size groupings, while surveys generally do not support these types of data.

(d) For a list of manufacturing ANZSIC codes and their descriptions, see the Appendix on page 37.

(e) Limited data backcast to 1989–90 under ANZSIC. Generally, the data items employment, wages and salaries, and turnover only.

(f) Limited commodity data available for dissemination.

(g) Commodity data to be available early in 1998.

(h) The ABS cautions against the use of 'numbers of establishments', or ratios which use them, as an analytical indicator of industry performance. Primarily, this is because the 'establishment' is a statistical data collection unit and does not necessarily represent a single physical location. In recent years, year-to-year movements in establishment numbers have borne little relationship to changes in economic performance of the industries involved. The ABS ceased publication of the 'number of manufacturing establishments' from the 1994–95 suite of publications. However, the data can be made available on request, with an explanation of their limitations.

(i) Male and female employment data are available at the establishment level.

# 1

## TABLE OF DATA ITEMS for the 1989–90 to 1995–96 collections *continued*

Description	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96
<b>Income items</b> <i>continued</i>							
Sales of goods and services <i>continued</i>							
Income from services	EM	..	..	EM	EM <sup>S</sup>	EM	EM
Income from work done on a commission basis	E	..	..	..	..	E	E
Repair, maintenance and service income and fees	E	..	..	..	..	E	E
Advertising income	E	..	..	..	..	E	E
Other income (including sales and agency commissions)	E	..	..	..	..	E	E
Total transfers out of goods to other establishments of this business	E	E	E	E	E	E	E
Transfers out of goods produced by this establishment for sale	E	..	..	E	(a)E	E	E
Transfers out of goods produced by this establishment for further processing, assembly or installation	E	..	..	E	(a)E	E	E
Transfers out of goods bought in by this establishment	E	..	..	E	..	E	E
Percentage of 'sales/transfers out of goods produced by this establishment or for it on commission' which are exported (outside Australia) by this business or its agent	..	..	..	E	..	E	E
Whether any other business exports goods produced by this establishment; if so, type of business (classified by wholesaler, manufacturer and other)	..	..	..	E	..	..	..
Interest income	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Dividend income	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Royalties income	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Total government subsidies	EM	EM <sup>S</sup>	EM <sup>S</sup>	EM	EM <sup>S</sup>	EM	EM
Government subsidies for pollution abatement and control	..	..	(b)E	E	..	M	..
Other government subsidies	..	..	(b)E	E	..	M	..
Total rent, leasing and hiring income	EM	EM <sup>S</sup>	EM <sup>S</sup>	EM	EM <sup>S</sup>	EM	EM
Land, buildings and other structures	..	..	..	..	..	E	E
Other income from rent, leasing and hiring	..	..	..	..	..	E	E
Turnover	ELM	ELM <sup>S</sup>	ELM <sup>S</sup>	EM	ELM <sup>S</sup>	EM	EM
Other income	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Total income	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Capital work done for own use, rental or lease	EM	EM <sup>S</sup>	EM <sup>S</sup>	EM	EM <sup>S</sup>	EM	EM
Capitalised wages and salaries	..	..	..	..	..	EM	EM
Capitalised purchases of materials	..	..	..	..	..	EM	EM
<b>Expense items</b>							
Wages and salaries	ELM	ELM <sup>S</sup>	ELM <sup>S</sup>	EM	ELM <sup>S</sup>	EM	EM
Payroll tax	M	..	..	M	..	M	M
Fringe benefits tax	M	..	..	M	..	M	M
Employer contributions to superannuation funds	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Workers' compensation costs	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Provision expenses for employee entitlements	..	..	..	..	..	..	M
Motor vehicle expenses (including motor vehicle rent, leasing and hiring)	M	T	T	EM	T	..	..
Motor vehicle expenses (excluding motor vehicle rent, leasing and hiring)	E	..	..	..	..	EM	EM

E Indicates that the data item is available at the establishment level.

(a) Includes transfers out of goods bought in.

L Indicates that the data item is available at the location level (i.e. for sub-State statistics).

(b) For selected manufacturing industries only.

M Indicates that the data item is available at the management unit level.

M<sup>S</sup> Data for these items were collected from a relatively small sample of management units, in the years applicable. Consequently, data are available only at the industry subdivision level and for total manufacturing.

T Establishment level data were collected from the Textile, clothing and footwear industry (ASIC classes 2342 to 2460 and 3451 for the 1990–91 and 1991–92 years and ANZSIC classes 2211 to 2261 for 1993–94).

# 1

## TABLE OF DATA ITEMS for the 1989–90 to 1995–96 collections *continued*

Description	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96		
<b>Expense items</b> <i>continued</i>									
Rent, leasing and hiring expenses	E	..	..	..	..	EM	EM		
Motor vehicles	E	..	..	..	..	EM	EM		
Other than for motor vehicles	EM	T	T	EM	T	EM	EM		
Land, buildings and other structures	E	..	..	..	..	E	EM		
Plant, machinery and equipment	E	..	..	..	..	E	EM		
Other rent, leasing and hiring expenses	..	..	..	..	..	E	(a)EM		
Outward freight and cartage	EM	T	T	EM	T	EM	EM		
Repair and maintenance expenses	EM	T	T	EM	T	EM	EM		
Total purchases	EM	M <sup>S</sup> T	M <sup>S</sup> T	EM	M <sup>S</sup> T	EM	EM		
Materials, components, containers, packaging materials and water	E	..	..	}	}	}	}		
Materials and components for use in production (including consumables)	..	..	..					..	E
Containers and packaging materials	..	..	..					..	E
Water charges (including water rates and excess water charges)	..	..	..					..	E
Electricity and fuels	E	..	..	}	}	}	}		
Electricity	..	..	..					..	E
Gas for fuel	..	..	..					..	E
Petroleum fuel products	..	..	..					..	E
Coal for fuel	..	..	..					..	E
Other fuels	..	..	..					..	E
Goods for resale	E	..	..	E	..	E	E		
Total transfers in of goods from other establishments of this business	E	T	T	E	T	E	E		
Transfers in of goods produced by other establishments for sale	E	..	..	E	..	E	E		
Transfers in of goods produced by other establishments for further processing, assembly or installation	E	..	..	E	..	E	E		
Transfers in of goods bought in by other establishments	E	..	..	E	..	E	E		
Goods for resale	..	..	..	..	..	E	E		
Materials, containers, fuels, etc.	..	..	..	..	..	E	E		
Total contract, subcontract and commission expenses	EM	T	T	EM	T	..	..		
Commission expenses	..	..	..	..	..	M	M		
Sales commission expenses	..	..	..	..	..	E	E		
Commission expenses for work done on materials provided by this business	..	..	..	..	..	E	E		
Ex-house printing expenses for material published by this business	..	..	..	..	..	..	E		
Insurance premiums	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M		
Interest expenses	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M		
Other bank charges	..	..	..	..	..	M	M		
Royalties expenses	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M		
Depreciation (and amortisation) on buildings and other fixed tangible assets	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M		
Buildings and other structures	M	..	..	..	..	..	..		
Other assets (e.g. plant and equipment)	M	..	..	..	..	..	..		
Bad/doubtful debts written off or change in provisions for doubtful debts	M	..	..	..	..	..	..		
Bad debts written off (excluding provisions)	..	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M		

E Indicates that the data item is available at the establishment level.

M Indicates that the data item is available at the management unit level.

M<sup>S</sup> Data for these items were collected from a relatively small sample of management units, in the years applicable. Consequently, data are available only at the industry subdivision level and for total manufacturing.

T Establishment level data were collected from the Textile, clothing and footwear industry (ASIC classes 2342 to 2460 and 3451 for the 1990–91 and 1991–92 years and ANZSIC classes 2211 to 2261 for 1993–94).

(a) Other rent, leasing and hiring expenses are further classified by Transport containers, Plants and greenery, Office equipment and Other for the 1995–96 reference year.

# 1

## TABLE OF DATA ITEMS for the 1989–90 to 1995–96 collections *continued*

Description	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96
<b>Expense items</b> <i>continued</i>							
Other expenses(a)	(b)M	(c)M <sup>S</sup>	(c)M <sup>S</sup>	(b)M	(c)M <sup>S</sup>	(d)M	(d)M
Total expenses	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
<b>Assets and liabilities</b>							
Current assets — trading stock							
Total opening stocks	EM	M <sup>S</sup> T	M <sup>S</sup> T	EM	M <sup>S</sup> T	EM	EM
Raw materials, fuels, containers, etc.	E	M <sup>S</sup>	M <sup>S</sup>	E	M <sup>S</sup>	E	E
Work-in-progress	E	M <sup>S</sup>	M <sup>S</sup>	E	M <sup>S</sup>	E	E
Finished goods (including stocks for resale)	E	M <sup>S</sup>	M <sup>S</sup>	E	M <sup>S</sup>	E	E
Total closing stocks	EM	M <sup>S</sup> T	M <sup>S</sup> T	EM	M <sup>S</sup> T	EM	EM
Raw materials, fuels, containers, etc.	E	M <sup>S</sup>	M <sup>S</sup>	E	M <sup>S</sup>	E	E
Work-in-progress	E	M <sup>S</sup>	M <sup>S</sup>	E	M <sup>S</sup>	E	E
Finished goods (including stocks for resale)	E	M <sup>S</sup>	M <sup>S</sup>	E	M <sup>S</sup>	E	E
Current assets other than trading stocks	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Non-current assets	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Current liabilities	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Provisions for employee entitlements							
Beginning of reporting period	..	..	..	..	..	..	M
End of reporting period	..	..	..	..	..	..	M
Other current liabilities	..	..	..	..	..	..	M
Non-current liabilities	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Provisions for employee entitlements							
Beginning of reporting period	..	..	..	..	..	..	M
End of reporting period	..	..	..	..	..	..	M
Other non-current liabilities	..	..	..	..	..	..	M
Owners' equity	..	..	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
<b>Capital expenditure (acquisition) and disposal of assets</b>							
Total capital expenditure on selected assets (including capital work done by own employees)	EM	M <sup>S</sup>	(e)M <sup>S</sup>	(e)EM	M <sup>S</sup>	EM <sup>S</sup>	EM
Plant, machinery and equipment (including motor vehicles)	EM	M <sup>S</sup>	M <sup>S</sup>	EM	M <sup>S</sup>	EM <sup>S</sup>	EM
Industrial machinery and equipment	..	..	..	..	..	E	..
Road vehicles	..	..	..	..	..	E	..
Other transport equipment	..	..	..	..	..	E	..
Computers and peripherals (excluding computer software)	..	..	..	..	..	E	..
Communications equipment	..	..	..	..	..	E	..
Other plant, machinery and equipment	..	..	..	..	..	E	..

E Indicates that the data item is available at the establishment level.

M Indicates that the data item is available at the management unit level.

M<sup>S</sup> Data for these items were collected from a relatively small sample of management units, in the years applicable. Consequently, data are available only at the industry subdivision level and for total manufacturing.

T Establishment level data were collected from the Textile, clothing and footwear industry (ASIC classes 2342 to 2460 and 3451 for the 1990–91 and 1991–92 years and ANZSIC classes 2211 to 2261 for 1993–94).

(a) The components of 'Other expenses' may vary from year to year as the item is dependent upon the expense items that are individually sought for a particular year. See footnotes (b), (c) and (d).

(b) For the 1989–90 and 1992–93 reference years, 'Other expenses' includes: Management fees/charges paid to related and unrelated businesses; Office supplies and printing costs; Telephone, postage charges, etc.; Travelling and entertainment expenses; Accounting and legal services; Advertising costs; and Rates and land tax.

(c) For the 1990–91, 1991–92 and 1993–94 reference years, 'Other expenses' includes those components for 1989–90 and 1992–93 plus Repair and maintenance expenses; Freight charges by other businesses; Payroll tax and Fringe benefits tax; Motor vehicle running expenses; Contract, subcontract and commission expenses; and Rent, leasing and hiring expenses.

(d) From the 1994–95 reference year, 'Other expenses' includes: Audit and other accounting fees; Advertising expenses; Cleaning services; Payments for data processing services; Legal expenses; Paper, printing and stationery expenses; Postal, mailing and courier services; Payments for secretarial, word processing and copying services; Payments for staff training services; Telecommunication services; Travelling, accommodation and entertainment expenses; Other management and administrative services; Land tax and land rates; and Other operating expenses.

(e) Intangible assets exclude goodwill.

# 1

## TABLE OF DATA ITEMS for the 1989–90 to 1995–96 collections *continued*

Description	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96
<b>Capital expenditure (acquisition) and disposal of assets</b> <i>continued</i>							
Total capital expenditure on selected assets (including capital work done by own employees) <i>continued</i>							
Dwellings	EM	M <sup>s</sup>	M <sup>s</sup>	EM	M <sup>s</sup>	EM <sup>s</sup>	EM
Other buildings and structures	EM	M <sup>s</sup>	M <sup>s</sup>				
New	EM	M <sup>s</sup>	M <sup>s</sup>	..	M <sup>s</sup>	EM <sup>s</sup>	..
Secondhand	EM	M <sup>s</sup>	M <sup>s</sup>	..	M <sup>s</sup>	EM <sup>s</sup>	..
Land	EM	M <sup>s</sup>	M <sup>s</sup>	(a)EM	M <sup>s</sup>	EM <sup>s</sup>	EM
Intangible assets	EM	M <sup>s</sup>	(a)M <sup>s</sup>				
Total disposal of selected assets	EM	M <sup>s</sup>	M <sup>s</sup>	EM	M <sup>s</sup>	EM <sup>s</sup>	EM
Plant, machinery and equipment (including motor vehicles)	EM	M <sup>s</sup>	M <sup>s</sup>	EM	M <sup>s</sup>	EM <sup>s</sup>	..
Dwellings	EM	M <sup>s</sup>	M <sup>s</sup>	EM	M <sup>s</sup>	EM <sup>s</sup>	..
Other buildings and structures	EM	M <sup>s</sup>	M <sup>s</sup>				
Land	EM	M <sup>s</sup>	M <sup>s</sup>	(a)EM	M <sup>s</sup>	EM <sup>s</sup>	..
Intangible assets	EM	M <sup>s</sup>	(a)M <sup>s</sup>				
<b>Source(s) of capital expenditure funds(b)</b>							
Number of businesses that sourced funds for capital expenditure from							
Local banks and lending authorities	..	..	..	M	..	..	..
Debentures and notes	..	..	..	M	..	..	..
Share float	..	..	..	M	..	..	..
Borrowing from parent company — Australia	..	..	..	M	..	..	..
Borrowing from parent company — Overseas	..	..	..	M	..	..	..
Sale of assets	..	..	..	M	..	..	..
Retained profits	..	..	..	M	..	..	..
Government grants	..	..	..	M	..	..	..
Private loans (including shareholders' loans)	..	..	..	M	..	..	..
Other — Australia	..	..	..	M	..	..	..
Other — Overseas	..	..	..	M	..	..	..
<b>Usage of electricity and fuels (value)</b>							
Electricity	E	..	..	..	..	..	..
Industrial and diesel fuel	E	..	..	..	..	..	..
Fuel oils	E	..	..	..	..	..	..
Other petroleum oils (lighting kerosene, power kerosene, heating oil, light, straight or virgin naphtha)	E	..	..	..	..	..	..
Mains gas	E	..	..	..	..	..	..
Other fuels (coal, coke, LPG, other gases used as fuel, steam, tar fuel)	E	..	..	..	..	..	..
Total	E	..	..	..	..	..	..
<b>Commodity data</b>							
Quantity produced (on a commission basis and on own account)(c)	E	..	..	..	E	..	..
Sales/transfers out of goods produced							
Quantity of goods sold/transferred out(c)	E	..	..	..	..	..	..
Value of goods sold/transferred out	E	..	..	..	E	(d)E	(e)E

E Indicates that the data item is available at the establishment level.

M Indicates that the data item is available at the management unit level.

M<sup>s</sup> Data for these items were collected from a relatively small sample of management units, in the years applicable. Consequently, data are available only at the industry subdivision level and for total manufacturing.

(a) Intangible assets exclude goodwill.

(b) A business may obtain funds from more than one source. That is, a business that obtains funds from more than one source is counted in each category from which it obtained the funds.

(c) Commencing with the 1994–95 reference year, the ABS has sought value (only) of sales and transfers out of commodities produced from the commodity section of annual manufacturing collection forms. Quantity data (i.e. production quantity and sales quantity of goods produced) are no longer being sought from the annual collection.

(d) Limited commodity data available for dissemination.

(e) Commodity data to be available early in 1998.

# 1

## TABLE OF DATA ITEMS for the 1989–90 to 1995–96 collections *continued*

Description	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96
<b>Environmental issues(a)</b>							
Number of establishments that recycle materials	..	E <sup>V</sup>	..	..	..	..	..
Number of establishments operating sites licensed under Federal or State Acts relating to the environment	..	E <sup>V</sup>	..	..	..	..	..
Number of establishments operating any equipment or using any processes to reduce, eliminate or control pollutants or wastes	..	E <sup>V</sup>	..	..	..	..	..
Number of establishments permitting and/or encouraging the return of its own containers or packaging	..	..	E <sup>V</sup>	..	..	..	..
Number of establishments marketing or producing any goods or services for monitoring, maintaining or improving the environment	..	..	E <sup>V</sup>	..	..	..	..
Percentage of turnover that comes from sales of these goods and services	..	..	E <sup>V</sup>	..	..	..	..
Number of establishments that conducted environmental impact assessments (for proposed new production) or environmental audits (existing production processes)	..	..	E <sup>V</sup>	..	..	..	..
<b>Expenditure relating to waste management and environmental protection, 1990–91 to 1994–95 (inclusive)(a)</b>							
Current expenditure on waste management and environmental protection	..	(b)E <sup>V</sup>	(c)E <sup>V</sup>	E <sup>V</sup>	M <sup>V</sup>	M <sup>V</sup>	} (e)
Waste management	..	(b)E <sup>V</sup>	..	..	..	..	
Other operational and maintenance costs incurred for the protection of the environment from pollution	..	(b)E <sup>V</sup>	..	..	..	..	
Government and council fees, charges and taxes relating to pollution abatement and control	..	..	(b)E <sup>V</sup>	E <sup>V</sup>	M <sup>V</sup>	M <sup>V</sup>	
Current expenditure for purchased services (e.g. payments to non-government contractors for waste removal)	..	..	(b)E <sup>V</sup>	..	..	..	
Other current expenditure on environmental protection	..	..	(b)E <sup>V</sup>	(d)E <sup>V</sup>	(d)M <sup>V</sup>	(d)M <sup>V</sup>	
Research and development expenditure by this establishment on pollution abatement and control	..	..	(b)E <sup>V</sup>	..	..	..	
Carried out by this establishment	..	..	(b)E <sup>V</sup>	..	..	..	
Carried out for this establishment by other establishments or businesses	..	..	(b)E <sup>V</sup>	..	..	..	
Expenditure on environmental impact assessments and audits	..	..	(b)E <sup>V</sup>	..	..	..	
Expenditure incurred on environmental impact assessments (for proposed new production)	..	..	(b)E <sup>V</sup>	..	..	..	
Expenditure incurred on environmental audits (for existing production processes)	..	..	(b)E <sup>V</sup>	..	..	..	
Expenditure incurred on energy audits	..	..	(b)E <sup>V</sup>	..	..	..	

E<sup>V</sup> For the 1990–91 to 1992–93 (inclusive) reference years, environmental statistics were collected at the establishment level only. Statistics relating to expenditure on waste management and environmental protection are published in *Cost of Environment Protection, Australia: Selected Industries* (for the 1990–91 and 1991–92 reference years) and *Environment Protection Expenditure, Australia* (for the 1992–93 reference year) (both Cat. no. 4603.0).

M<sup>V</sup> Commencing with the 1993–94 reference year, environmental statistics are collected at the management unit level only. The latest statistics relating to expenditure on waste management and environmental protection are published in *Environment Protection Expenditure, Australia, 1992–93 and 1993–94* (Cat. no. 4603.0).

- (a) Environmental statistics were first collected experimentally for the 1990–91 reference year. The questions asked and their emphasis have been modified over the years 1991–92 to 1995–96. Consequently, direct comparisons from year to year, in a number of instances, are not possible.
- (b) For establishments employing four or more persons in selected manufacturing industries.
- (c) For establishments employing four or more persons in all manufacturing industries.

- (d) For the 1992–93 to 1994–95 (inclusive) reference years, 'Other current expenditure on environmental protection' includes: Expenditure to operate or maintain plant and equipment which abates pollution; Additional energy costs incurred to operate production processes for pollution abatement or control; An estimate for wages and salaries, materials, electricity and fuels involved; Payments to contractors to remove and dispose of wastes arising from this business' production processes; Costs of removal of scrap bin material for recycling; Research and development expenditure by this business on pollution abatement or control; Expenditure on environmental impact assessments for proposed products; Expenditure on environmental audits for existing production processes; Expenditure incurred on energy audits; and Expenditure on regular sampling tests.
- (e) For 'Expenditure relating to waste management and environmental protection' for 1995–96, see pages 33 and 34. Also, see footnote (a). 'Income relating to waste management and environmental protection' was first collected for the 1995–96 reference year — see page 34.

# 1

## TABLE OF DATA ITEMS for the 1989–90 to 1995–96 collections *continued*

Description	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96
<b>Expenditure relating to waste management and environmental protection, 1990–91 to 1994–95 (inclusive)(a) <i>continued</i></b>							
Capital expenditure for new plant, machinery or equipment designed to abate or control pollution	..	(b) <sup>E<sup>V</sup></sup>	(c) <sup>E<sup>V</sup></sup>	E <sup>V</sup>	M <sup>V</sup>	M <sup>V</sup>	} (d)
End-of-line techniques	..	..	(b) <sup>E<sup>V</sup></sup>	E <sup>V</sup>	M <sup>V</sup>	M <sup>V</sup>	
To abate water pollutants	..	(b) <sup>E<sup>V</sup></sup>	(b) <sup>E<sup>V</sup></sup>	..	..	..	
To abate solid waste pollutants — Non-hazardous wastes	..	..	(b) <sup>E<sup>V</sup></sup>	..	..	..	
To abate solid waste pollutants — Hazardous wastes	..	..	(b) <sup>E<sup>V</sup></sup>	..	..	..	
To abate air pollutants	..	(b) <sup>E<sup>V</sup></sup>	(b) <sup>E<sup>V</sup></sup>	..	..	..	
To abate noise pollutants	..	..	(b) <sup>E<sup>V</sup></sup>	..	..	..	
To abate other pollutants	..	..	(b) <sup>E<sup>V</sup></sup>	..	..	..	
Change-in-production processes	..	..	(b) <sup>E<sup>V</sup></sup>	E <sup>V</sup>	M <sup>V</sup>	M <sup>V</sup>	
To abate water pollutants	..	(b) <sup>E<sup>V</sup></sup>	(b) <sup>E<sup>V</sup></sup>	..	..	..	
To abate solid waste pollutants — Non-hazardous wastes	..	..	(b) <sup>E<sup>V</sup></sup>	..	..	..	
To abate solid waste pollutants — Hazardous wastes	..	..	(b) <sup>E<sup>V</sup></sup>	..	..	..	
To abate air pollutants	..	(b) <sup>E<sup>V</sup></sup>	(b) <sup>E<sup>V</sup></sup>	..	..	..	
To abate noise pollutants	..	..	(b) <sup>E<sup>V</sup></sup>	..	..	..	
To abate other pollutants	..	..	(b) <sup>E<sup>V</sup></sup>	..	..	..	
Capital expenditure for new plant, machinery or equipment designed to control and manage wastes other than those emitted to air and water	..	(b) <sup>E<sup>V</sup></sup>	..	..	..	..	
Hazardous wastes	..	(b) <sup>E<sup>V</sup></sup>	..	..	..	..	
Non-hazardous wastes	..	(b) <sup>E<sup>V</sup></sup>	..	..	..	..	

### Expenditure relating to waste management and environmental protection, 1995–96(a)

Current expenditure on waste management and environmental protection							
Environmental taxes, levies, fines and licences							M <sup>V</sup>
Payments to government agencies for waste management and environmental protection services							M <sup>V</sup>
Payments to private contractors/other businesses for waste management and environmental protection services							M <sup>V</sup>
	(e)	(e)	(e)	(e)	(e)	(e)	
Research and development expenditure on waste management and environmental protection							
Carried out by this business							M <sup>V</sup>
Carried out by another business							M <sup>V</sup>

<sup>E<sup>V</sup></sup> For the 1990–91 to 1992–93 (inclusive) reference years, environmental statistics were collected at the establishment level only. Statistics relating to expenditure on waste management and environmental protection are published in *Cost of Environment Protection, Australia: Selected Industries* (for the 1990–91 and 1991–92 reference years) and *Environment Protection Expenditure, Australia* (for the 1992–93 reference year) (both Cat. no. 4603.0).

<sup>M<sup>V</sup></sup> Commencing with the 1993–94 reference year, environmental statistics are collected at the management unit level only. The latest statistics relating to expenditure on waste management and environmental protection are published in *Environment Protection Expenditure, Australia, 1992–93 and 1993–94* (Cat. no. 4603.0).

(a) Environmental statistics were first collected experimentally for the 1990–91 reference year. The questions asked and their emphasis have been modified over the years 1991–92 to 1995–96. Consequently, direct comparisons from year to year, in a number of instances, are not possible.

(b) For establishments employing four or more persons in selected manufacturing industries.

(c) For establishments employing four or more persons in all manufacturing industries.

(d) For 'Expenditure relating to waste management and environmental protection' for 1995–96, see this page and page 34. Also, see footnote (a). 'Income relating to waste management and environmental protection' was first collected for the 1995–96 reference year — see page 34.

(e) For 'Expenditure relating to waste management and environmental protection' for the years 1990–91 to 1994–95, see page 32 and this page. Also, see footnote (a).



# 1

## TABLE OF DATA ITEMS for the 1989–90 to 1995–96 collections *continued*

Description	1989– 90	1990– 91	1991– 92	1992– 93	1993– 94	1994– 95	1995– 96
<b>Expenditure relating to waste management and environmental protection, 1995–96(a) <i>continued</i></b>							
Total current expenditure on waste management and environmental protection, classified by the following categories							
Protection of ambient air and climate							M <sup>v</sup>
Waste water management/water pollution							M <sup>v</sup>
Non-hazardous solid waste management							M <sup>v</sup>
Hazardous solid waste management							M <sup>v</sup>
Noise and vibration abatement							M <sup>v</sup>
Other environmental protection activities							M <sup>v</sup>
Expenses relating to waste management and environmental protection activities carried out by own employees							M <sup>v</sup>
Capital expenditure on waste management and environmental protection							
Capital work done by own employees for own use for waste management or environmental protection							M <sup>v</sup>
Other capital expenditure for waste management and environmental protection							M <sup>v</sup>
Total capital expenditure on waste management and environmental protection, classified by the following categories							
End-of-line techniques	(b)	(b)	(b)	(b)	(b)	(b)	M <sup>v</sup>
Protection of ambient air and climate							M <sup>v</sup>
Waste water management/water pollution							M <sup>v</sup>
Non-hazardous solid waste management							M <sup>v</sup>
Hazardous solid waste management							M <sup>v</sup>
Noise and vibration abatement							M <sup>v</sup>
Other environmental protection activities							M <sup>v</sup>
Change-in-production/integrated technology/cleaner production processes							M <sup>v</sup>
Protection of ambient air and climate							M <sup>v</sup>
Waste water management/water pollution							M <sup>v</sup>
Non-hazardous solid waste management							M <sup>v</sup>
Hazardous solid waste management							M <sup>v</sup>
Noise and vibration abatement							M <sup>v</sup>
Other environmental protection activities							M <sup>v</sup>
Number of businesses with capital expenditure (for commercial purposes) on change-in-production/integrated technology/cleaner production processes							M <sup>v</sup>
<b>Income relating to waste management and environmental protection(c)</b>							
Government subsidies for waste management and environmental protection	..	..	..	..	..	..	M <sup>v</sup>
Capital grants for waste management and environmental protection	..	..	..	..	..	..	M <sup>v</sup>
Income from waste management and environmental protection services	..	..	..	..	..	..	M <sup>v</sup>
Income from sales of by-products resulting from waste management and environmental protection activities carried out by own employees	..	..	..	..	..	..	M <sup>v</sup>

M<sup>v</sup> Commencing with the 1993–94 reference year, environmental statistics are collected at the management unit level only. The latest statistics relating to expenditure on waste management and environmental protection are published in *Environment Protection Expenditure, Australia, 1992–93 and 1993–94* (Cat. no. 4603.0).

(b) For 'Expenditure relating to waste management and environmental protection' for the years 1990–91 to 1994–95 (inclusive), see pages 32 and 33. Also, see footnote (a).

(c) First collected for the 1995–96 reference year.

(a) Environmental statistics were first collected experimentally for the 1990–91 reference year. The questions asked and their emphasis have been modified over the years 1991–92 to 1995–96. Consequently, direct comparisons from year to year, in a number of instances, are not possible.

Description	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96
<b>Selected derived data items for establishments</b>							
Average employment over the whole year(a)	E	..	..	E	..	..	..
Average employees over the whole year(b)	E	..	..	E	..	..	..
Number of employees at the end of June(b)	E	E	E	E	E	E	E
Persons employed per establishment at the end of June(c)	E	E	E	E	E	E	E
Total sales of goods and transfers out	E	..	..	E	E	E	E
Value of exports (of goods produced)	..	..	..	E	..	E	E
Purchases and transfers in	E	T	T	E	T	E	E
Selected expenses(d)	E	T	T	E	T	E	E
Purchases, transfers in and selected expenses	E	T	T	E	T	E	E
Change in stocks	E	T	T	E	T	E	E
Cost of goods sold(e)	E	T	T	E	T	E	E
Cost of inputs(f)	(g)E	..	..	(g)E	..	E	E
Net capital expenditure (includes intangible assets)	E	..	..	(h)E	..	E	E
Net fixed capital expenditure	E	..	..	..	..	E	..
Turnover	E	E	E	E	E	E	E
Turnover per person employed at the end of June	E	E	E	E	E	E	E
Turnover per person employed using average employment over the whole year	E	..	..	E	..	..	..
Turnover per establishment(c)	E	E	E	E	E	E	E
Value added	E	T	T	E	T	(i)E	(i)E
Value added per person employed using average employment over the whole year	E	..	..	E	..	..	..
Value added to turnover	E	T	T	E	T	(i)E	(i)E
Industry gross product	..	..	..	E	..	..	E
Industry gross product per person employed at the end of June	..	..	..	E	..	..	E
Wages and salaries per employee at the end of June	E	E	E	E	E	E	E
Wages and salaries per employee using average employees over the whole year	E	..	..	E	..	..	..
Wages and salaries to value added	E	T	T	E	T	(i)E	(i)E
Wages and salaries to turnover	E	E	E	E	E	E	E
Wages and salaries to industry gross product	..	..	..	E	..	..	E
Current expenditure on environmental protection as a proportion of total turnover	..	(j)E <sup>v</sup>	E <sup>v</sup>	E <sup>v</sup>	(k)	(k)	(k)
Capital expenditure on environmental protection as a proportion of total capital expenditure	..	..	E <sup>v</sup>	E <sup>v</sup>	(k)	(k)	(k)

E Indicates that the data item is available at the establishment level.

E<sup>v</sup> For the 1990–91 to 1992–93 (inclusive) reference years, environmental statistics were collected at the establishment level only. Statistics relating to expenditure on waste management and environmental protection are published in *Cost of Environment Protection, Australia, Selected Industries* (for the 1990–91 and 1991–92 reference years) and *Environment Protection Expenditure, Australia* (for the 1992–93 reference year) (both Cat. no. 4603.0).

T Establishment level data were collected from the Textile, clothing and footwear industry (ASIC classes 2342 to 2460 and 3451 for the 1990–91 and 1991–92 years and ANZSIC classes 2211 to 2261 for 1993–94).

(a) Includes working proprietors.

(b) Excludes working proprietors.

(c) The ABS cautions against the use of 'numbers of establishments', or ratios which use them, as an analytical indicator of industry performance. Primarily, this is because the 'establishment' is a statistical data collection unit and does not necessarily represent a single physical location. In recent years, year-to-year movements in establishment numbers have borne little relationship to changes in economic performance of the industries involved. The ABS ceased publication of the 'number of manufacturing establishments' from the 1994–95 suite of publications. However, the data can be made available on request, with notes on their limitations.

(d) Includes contract, subcontract and commission expenses (including sales commission payments), repair and maintenance expenses, outward freight and cartage expenses, motor vehicle running expenses, and rent, leasing and hiring expenses.

(e) Total purchases and transfers in plus total opening stocks minus total closing stocks.

(f) Purchases of materials, fuels, etc. plus transfers in of materials, fuels, etc. and of goods for further processing, plus opening stocks of raw materials minus closing stocks of raw materials.

(g) For the 1989–90 and 1992–93 reference years, transfers in of goods bought in (i.e. originally bought in by other establishments of this business) include goods for resale.

(h) Intangible assets exclude goodwill.

(i) Value added is not a readily available data item. However, the item is able to be derived and can be made available for a charge. From 1995–96, the ABS has adopted a new measure, industry gross product, for manufacturing statistics. The difference between value added and industry gross product is that industry gross product takes into account more of the operating expenses incurred by manufacturers in the production, marketing and distribution processes.

(j) For establishments employing four or more persons in selected manufacturing industries.

(k) Commencing with the 1993–94 reference year, environmental statistics have been collected at the management unit level only.

# 1

## TABLE OF DATA ITEMS for the 1989–90 to 1995–96 collections *continued*

Description	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96
<b>Selected derived data items for management units</b>							
Turnover	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Trading profit	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Earnings before interest and tax	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Change in stocks	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Value added	M	..	..	M	..	M	M
Industry gross product	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Selected expenses(a)	M	..	..	M	..	M	M
Selected labour costs	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Major labour costs	M	..	..	M	..	M	M
Cost of sales (i.e. total purchases and selected expenses plus total opening stocks minus total closing stocks)	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Total value of assets	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Total value of liabilities	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Net worth	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Funds	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Total capital expenditure	M	M <sup>S</sup>	(b)M <sup>S</sup>	(b)M	M <sup>S</sup>	M <sup>S</sup>	M
Total disposal of assets	M	M <sup>S</sup>	(b)M <sup>S</sup>	(b)M	M <sup>S</sup>	M <sup>S</sup>	M
Net capital expenditure (includes intangible assets)	M	M <sup>S</sup>	(b)M <sup>S</sup>	(b)M	M <sup>S</sup>	M <sup>S</sup>	M
Net fixed capital expenditure	M	M <sup>S</sup>	M <sup>S</sup>	..	M <sup>S</sup>	M <sup>S</sup>	..
Stocks turnover	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Assets turnover	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Operating profit before tax	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Operating profit margin	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Return on owners' equity	..	..	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Return on assets	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Return on net worth	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Liquidity ratio	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Current ratio	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Interest coverage	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Debt to assets	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Short-term debt to equity	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Long-term debt to equity	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Operating profit before tax per person employed at the end of June	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Selected labour costs per person employed at the end of June	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Major labour costs per person employed at the end of June	M	..	..	M	..	M	M
Assets per person employed at the end of June	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Industry gross product per person employed at the end of June	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Acquisitions of assets to disposals of assets	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Net capital expenditure (including intangible assets) to assets	M	M <sup>S</sup>	(b)M <sup>S</sup>	(b)M	M <sup>S</sup>	M <sup>S</sup>	M
Net capital expenditure (including intangible assets) to profit	M	M <sup>S</sup>	(b)M <sup>S</sup>	(b)M	M <sup>S</sup>	M <sup>S</sup>	M
Debt coverage	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M <sup>S</sup>	M
Trading profit margin	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Government subsidisation (i.e. government subsidies divided by total income)	M	M <sup>S</sup>	M <sup>S</sup>	M	M <sup>S</sup>	M	M
Current expenditure on environmental protection as a proportion of total turnover	..	(c)	(c)	(c)	M <sup>V</sup>	M <sup>V</sup>	M <sup>V</sup>
Proportion of total capital expenditure used for capital expenditure on environmental protection	..	..	(c)	(c)	M <sup>V</sup>	M <sup>V</sup>	M <sup>V</sup>

M Indicates that the data item is available at the management unit level.

M<sup>S</sup> Data for these items were collected from a relatively small sample of management units, in the years applicable. Consequently, data are available only at the industry subdivision level and for total manufacturing.

M<sup>V</sup> Commencing with the 1993–94 reference year, environmental statistics are collected at the management unit level only. The latest statistics relating to expenditure on waste management and environmental protection are published in *Environment Protection Expenditure, Australia, 1992–93 and 1993–94* (Cat. no. 4603.0)

(a) Includes contract, subcontract and commission expenses (including sales commission payments), repair and maintenance expenses, outward freight and cartage expenses, motor vehicle running expenses, and rent, leasing and hiring expenses, as well as fringe benefits tax, payroll tax and other operating expenses (excluding income tax and extraordinary expenses).

(b) Intangible assets exclude goodwill.

(c) For the 1990–91 to 1992–93 (inclusive) reference years, environmental statistics were collected at the establishment level only.

## APPENDIX ANZSIC Codes and Descriptions

INDUSTRY.....

ANZSIC  
code Description

<b>21</b>	<b>Food, beverage and tobacco mfg</b>
211	Meat and meat product mfg
2111	Meat processing
2112	Poultry processing
2113	Bacon, ham and smallgood mfg
212	Dairy product mfg
2121	Milk and cream processing
2122	Ice cream mfg
2129	Dairy product mfg n.e.c.
213	Fruit and vegetable processing
2130	Fruit and vegetable processing
214	Oil and fat mfg
2140	Oil and fat mfg
215	Flour mill and cereal food mfg
2151	Flour mill product mfg
2152	Cereal food and baking mix mfg
216	Bakery product mfg
2161	Bread mfg
2162	Cake and pastry mfg
2163	Biscuit mfg
217	Other food mfg
2171	Sugar mfg
2172	Confectionery mfg
2173	Seafood processing
2174	Prepared animal and bird feed mfg
2179	Food mfg n.e.c.
218	Beverage and malt mfg
2181	Soft drink, cordial and syrup mfg
2182	Beer and malt mfg
2183	Wine mfg
2184	Spirit mfg
219	Tobacco product mfg
2190	Tobacco product mfg
<b>22</b>	<b>Textile, clothing, footwear and leather mfg</b>
221	Textile fibre, yarn and woven fabric mfg
2211	Wool scouring
2212	Synthetic fibre textile mfg
2213	Cotton textile mfg
2214	Wool textile mfg
2215	Textile finishing
222	Textile product mfg
2221	Made-up textile product mfg
2222	Textile floor covering mfg
2223	Rope, cordage and twine mfg
2229	Textile product mfg n.e.c.
223	Knitting mills
2231	Hosiery mfg
2232	Cardigan and pullover mfg
2239	Knitting mill product mfg n.e.c.
224	Clothing mfg
2241	Men's and boys' wear mfg
2242	Women's and girls' wear mfg
2243	Sleepwear, underwear and infant clothing mfg
2249	Clothing mfg n.e.c.
225	Footwear mfg
2250	Footwear mfg

INDUSTRY.....

ANZSIC  
code Description

226	Leather and leather product mfg
2261	Leather tanning and fur dressing
2262	Leather and leather substitute product mfg
<b>23</b>	<b>Wood and paper product mfg</b>
231	Log sawmilling and timber dressing
2311	Log sawmilling
2312	Wood chipping
2313	Timber resawing and dressing
232	Other wood product mfg
2321	Plywood and veneer mfg
2322	Fabricated wood mfg
2323	Wooden structural component mfg
2329	Wood product mfg n.e.c.
233	Paper and paper product mfg
2331	Pulp, paper and paperboard mfg
2332	Solid paperboard container mfg
2333	Corrugated paperboard container mfg
2334	Paper bag and sack mfg
2339	Paper product mfg n.e.c.
<b>24</b>	<b>Printing, publishing and recorded media</b>
241	Printing and services to printing
2411	Paper stationery mfg
2412	Printing
2413	Services to printing
242	Publishing
2421	Newspaper printing or publishing
2422	Other periodical publishing
2423	Book and other publishing
243	Recorded media manufacturing and publishing
2430	Recorded media manufacturing and publishing
<b>25</b>	<b>Petroleum, coal, chemical and associated product mfg</b>
251	Petroleum refining
2510	Petroleum refining
252	Petroleum and coal product mfg n.e.c.
2520	Petroleum and coal product mfg n.e.c.
253	Basic chemical mfg
2531	Fertiliser mfg
2532	Industrial gas mfg
2533	Synthetic resin mfg
2534	Organic industrial chemical mfg n.e.c.
2535	Inorganic industrial chemical mfg n.e.c.
254	Other chemical product mfg
2541	Explosive mfg
2542	Paint mfg
2543	Medicinal and pharmaceutical product mfg
2544	Pesticide mfg
2545	Soap and other detergent mfg
2546	Cosmetic and toiletry preparation mfg
2547	Ink mfg
2549	Chemical product mfg n.e.c.
255	Rubber product mfg
2551	Rubber tyre mfg
2559	Rubber product mfg n.e.c.

## APPENDIX ANZSIC Codes and Descriptions *continued*

INDUSTRY.....

ANZSIC

code Description

256	Plastic product mfg
2561	Plastic blow moulded product mfg
2562	Plastic extruded product mfg
2563	Plastic bag and film mfg
2564	Plastic product, rigid fibre reinforced, mfg
2565	Plastic foam product mfg
2566	Plastic injection moulded product mfg
<b>26</b>	<b>Non-metallic mineral product mfg</b>
261	Glass and glass product mfg
2610	Glass and glass product mfg
262	Ceramic mfg
2621	Clay brick mfg
2622	Ceramic product mfg
2623	Ceramic tile and pipe mfg
2629	Ceramic product mfg n.e.c.
263	Cement, lime, plaster and concrete product mfg
2631	Cement and lime mfg
2632	Plaster product mfg
2633	Concrete slurry mfg
2634	Concrete pipe and box culvert mfg
2635	Concrete product mfg n.e.c.
264	Non-metallic mineral product mfg n.e.c.
2640	Non-metallic mineral product mfg n.e.c.
<b>27</b>	<b>Metal product mfg</b>
271	Iron and steel mfg
2711	Basic iron and steel mfg
2712	Iron and steel casting and forging
2713	Steel pipe and tube mfg
272	Basic non-ferrous metal mfg
2721	Alumina production
2722	Aluminium smelting
2723	Copper, silver, lead and zinc smelting, refining
2729	Basic non-ferrous metal mfg n.e.c.
273	Non-ferrous basic metal product mfg
2731	Aluminium rolling, drawing, extruding
2732	Non-ferrous metal rolling, drawing, extruding n.e.c.
2733	Non-ferrous metal casting
274	Structural metal product mfg
2741	Structural steel fabricating
2742	Architectural aluminium product mfg
2749	Structural metal product mfg n.e.c.
275	Sheet metal product mfg
2751	Metal container mfg
2759	Sheet metal product mfg n.e.c.
276	Fabricated metal product mfg
2761	Hand tool and general hardware mfg
2762	Spring and wire product mfg
2763	Nut, bolt, screw and rivet mfg
2764	Metal coating and finishing
2765	Non-ferrous pipe fitting mfg
2769	Fabricated metal product mfg n.e.c.

INDUSTRY.....

ANZSIC

code Description

<b>28</b>	<b>Machinery and equipment mfg</b>
281	Motor vehicle and part mfg
2811	Motor vehicle mfg
2812	Motor vehicle body mfg
2813	Automotive electrical and instrument mfg
2819	Automotive component mfg n.e.c.
282	Other transport equipment mfg
2821	Shipbuilding
2822	Boatbuilding
2823	Railway equipment mfg
2824	Aircraft mfg
2829	Transport equipment mfg n.e.c.
283	Photographic and scientific equipment mfg
2831	Photographic and optical good mfg
2832	Medical and surgical equipment mfg
2839	Professional and scientific equipment mfg n.e.c.
284	Electronic equipment mfg
2841	Computer and business machine mfg
2842	Telecommunication, broadcasting and transceiving equipment mfg
2849	Electronic equipment mfg n.e.c.
285	Electrical equipment and appliance mfg
2851	Household appliance mfg
2852	Electric cable and wire mfg
2853	Battery mfg
2854	Electric light and sign mfg
2859	Electrical equipment mfg n.e.c.
286	Industrial machinery and equipment mfg
2861	Agricultural machinery mfg
2862	Mining and construction machinery mfg
2863	Food processing machinery mfg
2864	Machine tool and part mfg
2865	Lifting and material handling equipment mfg
2866	Pump and compressor mfg
2867	Commercial space heating and cooling equipment mfg
2869	Industrial machinery and equipment mfg n.e.c.
<b>29</b>	<b>Other manufacturing</b>
291	Prefabricated building mfg
2911	Prefabricated metal building mfg
2919	Prefabricated building mfg n.e.c.
292	Furniture mfg
2921	Wooden furniture and upholstered seat mfg
2922	Sheet metal furniture mfg
2923	Mattress mfg (except rubber)
2929	Furniture mfg n.e.c.
294	Miscellaneous manufacturing
2941	Jewellery and silverware mfg
2942	Toy and sporting good mfg
2949	Manufacturing n.e.c.





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