

# **Economic Impact of Yancoal Australia Operations 2018/19**

Prepared for Yancoal Australia

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Prepared by:



# INTRODUCTION

Lawrence Consulting was commissioned by Yancoal Australia to undertake an economic impact assessment of the Australian operations and group assets in 2018/19. The analysis utilised data provided by Yancoal Australia relating to expenditure and other information by postcode in the following categories:

- Employee salaries and wages (by place of residence) for full-time direct employees as well as the number of FTE employees by place of operation;
- Goods and services expenditure by individual supplier, including separate identification of both operational expenditure (opex) data for current projects and capital expenditure (capex) data from projects currently under development;
- Voluntary community contributions by individual organisation;
- Local government payments, including council rates and infrastructure charges; and
- State and Federal government payments (including stamp duty, payroll tax, etc.).

This report contains a summary of results for all major group operations and assets; the assets that provided expenditure data as part of the study are shown in Table 1.

**Table 1: Yancoal Australia Group Assets Supplying Expenditure Data**

Ashton	Mount Thorley Warkworth (MTW)
Austar	Premier
Cameby Downs	Stratford Duralie
HVO	Yarrabee
Middlemount	Yancoal Corporate
Moolarben	

The data was supplied by Australian postcodes where the salary was paid (residence of the direct employee) and where the business expenditures were made. The postcode spend data were then aggregated to identify the geographical spread of impacts (direct, indirect and consumption-induced) from the Yancoal group across Australia at a number of different geographic scales:

- National;
- State;
- Regional, represented by Statistical Regions (SA4);
- Local, represented by Local Government Area (LGA);
- State electoral divisions (SED); and
- Commonwealth electoral divisions (CED).

For this study, the contribution made by Yancoal Australia to the local, state and regional economies of Australia has been measured using **LocalImpact** regional economic models based on input-output (I-O) tables developed by Lawrence Consulting specifically for these areas to estimate the sum of direct, indirect and consumption-induced effects. I-O techniques provide a solid approach for taking account of the inter-relationships between the various sectors of the economy in the short-term and hence are an appropriate tool for determining the direct, indirect and induced economic impact of economic stimuli.



Key advantages of using input-output models are the fineness of detail available at a disaggregated industry level, the relative ease of application, particularly for sub-regional levels, and the ability to model effects in a timely manner.

The stimulus from economic activity can be traced through the economy in several different ways:

- The first-round effect, or direct effect, are those from the activities expenditure in purchasing goods from other industries;
- The second-round effects are those from the supplying industries increasing their purchases to meet the additional demand. The second and subsequent rounds of purchasing are termed the indirect effects; and
- The consumption-induced effects, which recognise that the level of local production is important in determining regional levels of household consumption, that this in turn will be spent locally to a large extent and therefore influence the level of regional consumption and the level of output of each sector.

These effects can be represented by four common multipliers:

- Output
- Income
- Employment
- Value added.

# DIRECT IMPACT

## Spending

Expenditure data provided by major group operations indicated that Yancoal Australia **contributed approximately \$4.2 billion** in direct spending to the Australian economy in 2018/19, comprising:

- **\$549.9 million in wages and salaries** to approximately **4,354 fulltime resident employees**, representing an average salary level of approximately \$126,303 per annum. In addition, there were 600 fulltime equivalent contract workers engaged by Yancoal Australia in 2018/19;
- **\$2.9 billion** in purchases of goods and services **from over 4,700 local businesses**, with an average spend per supplier of approximately \$617,900;
- Almost **\$857,000** in voluntary contributions to **177 community organisations** across Australia;
- **\$35.5 million in local government payments** including rates, developer and other contributions); and
- **\$681.0 million in state and federal government payments** (including royalties, stamp duty, payroll tax and land tax).

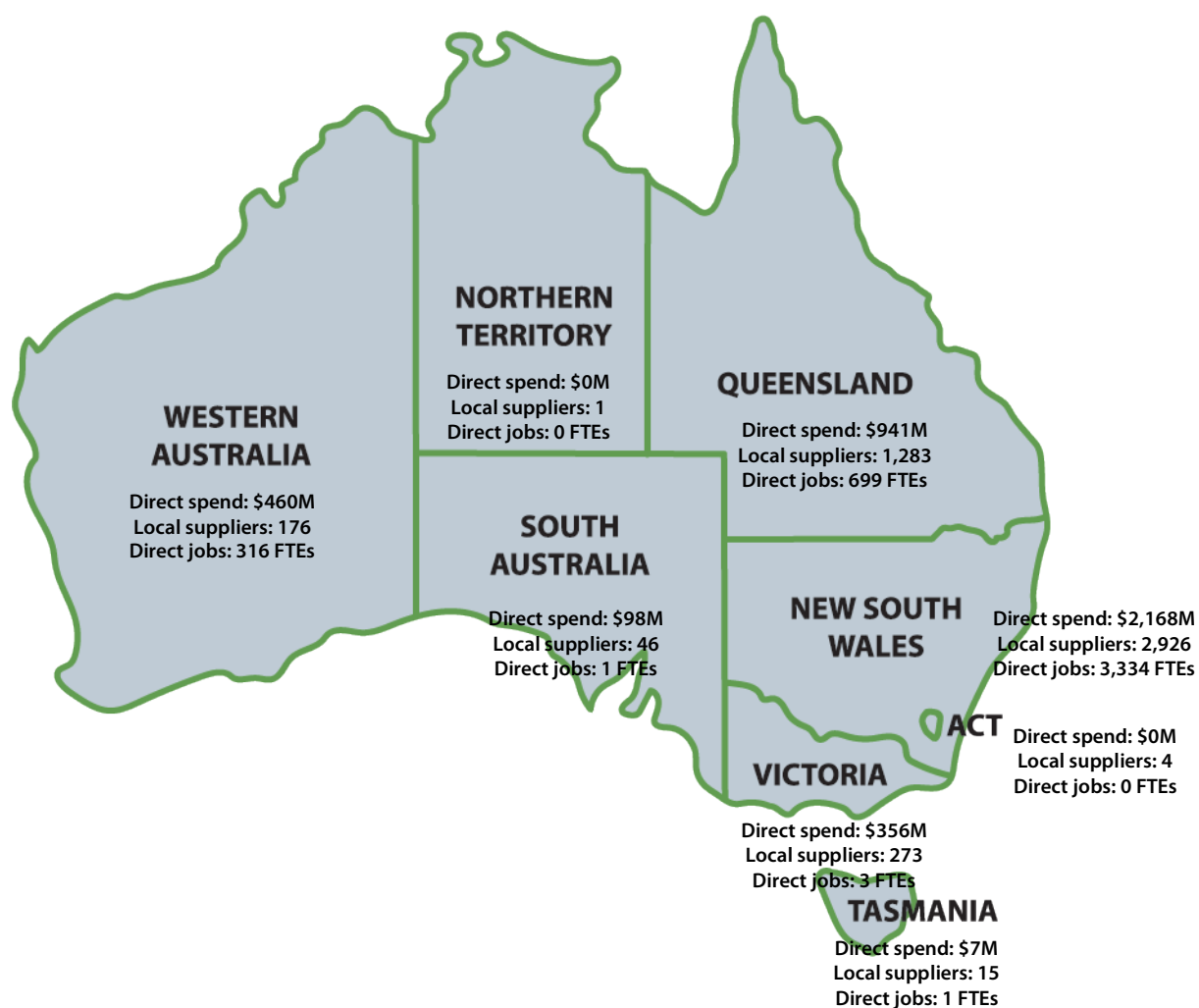
When overseas and other unallocated spending of \$147.7 million was also included, the **total expenditure relating to Yancoal Australia was approximately \$4.3 billion in 2018/19**.

**Table 2: Direct Impact of Yancoal Australia, 2018/19**

State	Direct employees (FTEs)	Associated salaries (\$M)	No. of local suppliers (no.)	Business purchases (\$M)	State and federal govt payments (\$M)	Total direct spending (\$M)
New South Wales	3,334	421.4	2,926	1,326.2	386.3	2,168.3
Victoria	3	0.3	273	355.5	0.0	355.8
Queensland	699	86.0	1,283	726.5	126.4	940.5
South Australia	1	0.1	46	98.0	0.0	98.1
Western Australia	316	42.0	176	405.8	12.4	460.4
Tasmania	1	0.1	15	6.9	0.0	7.0
Northern Territory	0	0.0	1	0.0	0.0	0.0
Australian Capital Territory	0	0.0	4	0.2	0.0	0.2
Other Territories	0	0.0	0	0.0	0.0	0.0
Undefined <sup>(a)</sup>	0	0.0	0	0.0	155.9	155.9
	0	0.0	0	0.0	0.0	0.0
<b>Total Australia</b>	<b>4,354</b>	<b>549.9</b>	<b>4,724</b>	<b>2,919.1</b>	<b>681.0</b>	<b>4,186.3</b>
Overseas	0	0.0	32	6.6	0.0	6.6
Other	10	1.3	48	138.9	0.0	141.1
<b>Total</b>	<b>4,364</b>	<b>551.2</b>	<b>4,804</b>	<b>3,064.6</b>	<b>681.0</b>	<b>4,334.0</b>

Note: (a) Includes Federal Government payments.

The highest direct expenditure by state was in New South Wales (\$2.2 billion), followed by Queensland (\$940.5 million) and Western Australia (\$460.4 million; New South Wales also recorded the highest number of direct employees by place of residence (3,334 FTEs), followed by Queensland (699 FTEs) and Western Australia (316 FTEs).

**Figure 1: Yancoal Australia Direct Expenditure and Employment by State, 2018/19**

## Community Organisations Supported

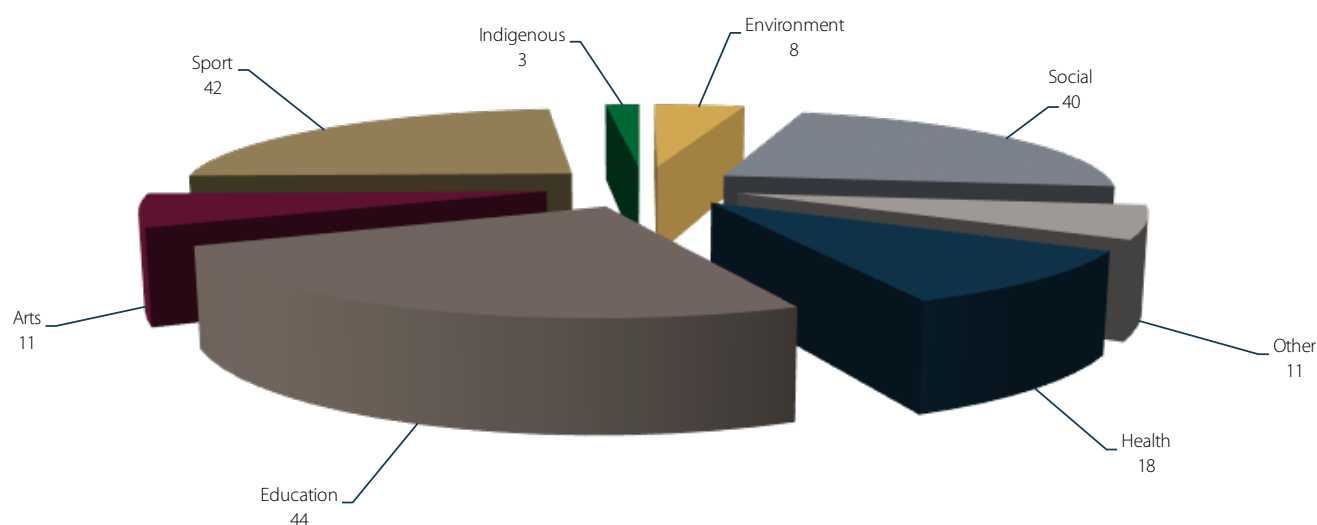
During 2018/19, Yancoal Australia directly contributed approximately \$857,000 to 177 separate community groups in a wide range of areas including health, education, environment and the arts. The highest level of community contribution by state was in New South Wales (\$478,400 to 120 organisations), followed by Queensland (\$197,500 to 36 organisations) and Western Australia (\$175,200 to 19 organisations).

**Table 3: Number of Community Organisations Supported by State and Type, 2018/19**

	No. of organisations	Total contribution (\$)
<b>State</b>		
New South Wales	120	478,433
Victoria	2	5,750
Queensland	36	197,505
South Australia	0	0
Western Australia	19	175,223
Tasmania	0	0
Northern Territory	0	0
Australian Capital Territory	0	0
Other Territories	0	0
Unallocated	0	0
<b>Total</b>	<b>177</b>	<b>856,910</b>
<b>Type</b>		
Health	18	157,046
Education	44	222,149
Arts	11	36,929
Sport	42	111,826
Indigenous	3	2,500
Environment	8	32,200
Social	40	122,493
Other	11	171,767

## Community Organisations Supported by Yancoal Australia

2018/19



## INDIRECT AND TOTAL IMPACT

Economic modelling of the flow-on effects of the direct expenditure of Yancoal Australia has estimated the indirect and consumption-induced effects flowing from the two key direct impacts on the economy, i.e. those generated by business supply chain expenditure in each region and those generated by consumption-induced spending in each region. These impacts have been modelled separately and then aggregated to identify the level of impacts on output, incomes, employment and industry value added for each state and region.

The total economic impact of Yancoal Australia on the Australian economy in 2018/19 – based on Type II multipliers (i.e. including both indirect industry and consumption-induced effects) – amounted to:

- \$9.3 billion in output/turnover (a measure of direct and supply chain purchases from businesses);
- **\$8.6 billion in value added**, amounting to **0.5% contribution to Gross National Product** (GNP) for Australia through \$4.2 billion in direct effects and \$4.4 billion in supply chain and consumption effects;
- \$3.2 billion in income (wages and salaries) paid to workers; and
- **43,372** full time equivalent jobs supported, or 0.4% of total employment in Australia during 2018/19.

Under the more conservative Type I scenario (i.e. excluding consumption-induced effects), direct spending by Yancoal Australia and flow-on impacts contributed 0.4% to GNP and 0.2% of total employment.

(Note: Estimates of the contribution to Gross National Product (GNP) require an estimate of the initial contribution of the industry in terms of direct value added – defined as compensation of employees plus gross operating surplus plus other taxes less subsidies on production – plus the value-added effects generated through the business chain and consumption effects. A precise measure of direct value added for Yancoal Australia is not available from the data; an estimated value added of \$4.2 billion – equivalent to the sum of input and labour costs, or total direct spending – has instead been adopted.)

**Table 4: Indirect and Total Impacts of Yancoal Australia by State, 2018/19**

Region	Flow-on impact				Total impact	
	Indirect jobs supported (FTEs)	Associated salaries (\$M)	Business purchases (\$M)	Indirect value added (\$M)	Total value added (\$M)	Total employment (FTEs)
New South Wales	19,879	1,398.5	2,749.3	2,336.4	4,504.8	23,213
Victoria	3,488	224.2	472.8	394.0	749.8	3,491
Queensland	9,065	593.2	997.1	946.5	1,887.0	9,764
South Australia	1,000	63.1	130.5	112.4	210.5	1,001
Western Australia	4,516	288.3	519.6	469.9	930.4	4,832
Tasmania	69	4.3	9.2	7.7	14.7	70
Northern Territory	0	0.0	0.0	0.0	0.0	0
Australian Capital Territory	2	0.1	0.2	0.2	0.4	2
Other Territories	0	0.0	0.0	0.0	0.0	0
Undefined	1,099	89.1	194.0	177.5	333.5	1,099
<b>Total Australia</b>	<b>39,119</b>	<b>2,660.8</b>	<b>5,072.8</b>	<b>4,444.8</b>	<b>8,631.1</b>	<b>43,472</b>

Note: Consumption-induced impacts, i.e. the increase in economic activity generated to service the additional employment generated or sustained through the direct and indirect effects, are included in Type II impacts, but are excluded from Type I impacts.

In terms of total economic benefit, Yancoal Australia has the highest overall impact in New South Wales, with total value added of \$4.5 billion (or 0.8% of gross state product (GSP), followed by Queensland (\$1.9 billion, or 0.6% of GSP). With regard to employment, the greatest impact on jobs was again in New South Wales, supporting 23,213 FTEs comprising 0.6% of the total workforce, followed by Queensland (9,764 FTEs, or 0.4%).



## REGIONAL IMPACT

The postcode expenditure data provided by Yancoal Australia was aggregated using geographical concordances at the regional (or SA4) level. The level of employment, direct expenditure and total economic impact is summarised for the 89 SA4s across Australia in Appendix A.

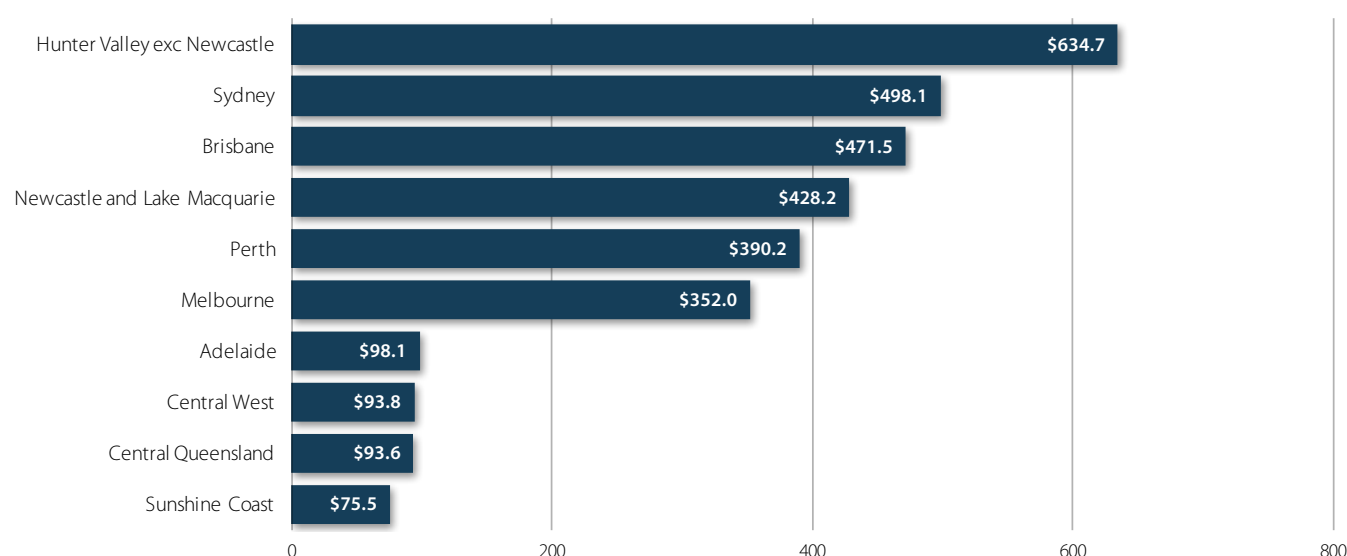
Table 5 shows the distribution of direct spending (i.e. salaries, business purchases and community contributions) by Yancoal Australia across Australia to the top 10 regions by expenditure and total economic impact. Hunter Valley recorded the largest share of direct expenditure in 2018/19 (\$634.7 million), followed by Sydney (\$498.1 million), Brisbane (\$471.5 million), Newcastle and Lake Macquarie (\$428.2 million) and Perth (\$390.2 million). Direct employment was again greatest in Hunter Valley (2,074 FTEs), followed by Central West (502 FTEs), Newcastle and Lake Macquarie (462 FTEs), Bunbury (313 FTEs) and Central Queensland (303 FTEs).

**Table 5: Regional Impact of Yancoal Australia, Top 10 Regions by Expenditure, 2018/19**

Region	Direct impact			Total impact		
	Direct employees (FTEs)	Associated salaries (\$M)	No. of local suppliers (no.)	Total direct spending (\$M)	Total value added (\$M)	Total employment (FTEs)
Hunter Valley exc Newcastle	2,074	267.9	940	634.7	1,312.7	8,038
Sydney	145	34.1	803	498.1	1,020.0	5,070
Brisbane	30	4.1	554	471.5	930.3	4,806
Newcastle and Lake Macquarie	462	56.3	725	428.2	885.9	4,639
Perth	1	0.1	157	390.2	791.6	3,896
Melbourne	1	0.1	256	352.0	742.1	3,452
Adelaide	1	0.1	46	98.1	210.5	1,001
Central West	502	47.1	171	93.8	193.4	1,384
Central Queensland	303	37.8	209	93.6	184.3	1,219
Sunshine Coast	40	4.7	44	75.5	151.3	822

### Yancoal Australia Direct Spend by Region, Top 10

2018/19 (\$ million)





## Major Regions

### Central West (NSW)

#### Direct contribution

In this region during 2018/19, Yancoal Australia contributed \$93.8 million in direct spending through:

- \$47.1 million in wages and salaries to 502 direct full-time employees;
- \$45.0 million in purchases of goods and services from 171 local businesses (includes contractors) and community contributions; and
- \$1.7 million in local government payments.

#### Indirect contribution

This \$93.8 million in direct spending generated:

- \$123.2 million in additional supply chain goods and services purchases; and
- \$63.8 million in wages and salaries associated with 882 additional jobs supported in this region.

#### Total contribution

The total economic contribution in this region (direct, indirect and induced) during 2018/19 from Yancoal Australia amounted to:

- \$168.0 million in supplying business purchases;
- \$110.9 million in total wages and salaries paid to workers;
- \$193.4 million in value added to the regional economy; and
- 1,384 full-time equivalent jobs, or 1.4% of the entire workforce in this region.



## **Hunter Valley (NSW)**

### **Direct contribution**

In this region during 2018/19, Yancoal Australia contributed \$634.7 million in direct spending through:

- \$267.9 million in wages and salaries to 2,074 direct full-time employees;
- \$335.4 million in purchases of goods and services from 940 local businesses (includes contractors) and community contributions; and
- \$31.4 million in local government payments.

### **Indirect contribution**

This \$634.7 million in direct spending generated:

- \$834.1 million in additional supply chain goods and services purchases; and
- \$428.9 million in wages and salaries associated with 5,964 additional jobs supported in this region.

### **Total contribution**

The total economic contribution in this region (direct, indirect and induced) during 2018/19 from Yancoal Australia amounted to:

- \$1.2 billion in supplying business purchases;
- \$696.9 million in total wages and salaries paid to workers;
- \$1.3 billion in value added to the regional economy; and
- 8,038 full-time equivalent jobs, or 6.2% of the entire workforce in this region.



## **Mid North Coast (NSW)**

### **Direct contribution**

In this region during 2018/19, Yancoal Australia contributed \$47.2 million in direct spending through:

- \$8.8 million in wages and salaries to 74 direct full-time employees;
- \$37.5 million in purchases of goods and services from 88 local businesses (includes contractors) and community contributions; and
- \$0.9 million in local government payments.

### **Indirect contribution**

This \$47.2 million in direct spending generated:

- \$63.0 million in additional supply chain goods and services purchases; and
- \$30.8 million in wages and salaries associated with 452 additional jobs supported in this region.

### **Total contribution**

The total economic contribution in this region (direct, indirect and induced) during 2018/19 from Yancoal Australia amounted to:

- \$100.4 million in supplying business purchases;
- \$39.5 million in total wages and salaries paid to workers;
- \$98.8 million in value added to the regional economy; and
- 526 full-time equivalent jobs, or 0.6% of the entire workforce in this region.



## **Newcastle and Lake Macquarie (NSW)**

### **Direct contribution**

In this region during 2018/19, Yancoal Australia contributed \$428.2 million in direct spending through:

- \$56.3 million in wages and salaries to 462 direct full-time employees; and
- \$371.9 million in purchases of goods and services from 725 local businesses (includes contractors), community contributions and local government payments.

### **Indirect contribution**

This \$428.2 million in direct spending generated:

- \$542.2 million in additional supply chain goods and services purchases; and
- \$276.7 million in wages and salaries associated with 4,178 additional jobs supported in this region.

### **Total contribution**

The total economic contribution in this region (direct, indirect and induced) during 2018/19 from Yancoal Australia amounted to:

- \$914.2 million in supplying business purchases;
- \$332.9 million in total wages and salaries paid to workers;
- \$885.9 million in value added to the regional economy; and
- 4,639 full-time equivalent jobs, or 2.5% of the entire workforce in this region.



## **Central Queensland (QLD)**

### **Direct contribution**

In this region during 2018/19, Yancoal Australia contributed \$93.6 million in direct spending through:

- \$37.8 million in wages and salaries to 303 direct full-time employees; and
- \$55.8 million in purchases of goods and services from 209 local businesses (includes contractors), community contributions and local government payments.

### **Indirect contribution**

This \$93.6 million in direct spending generated:

- \$92.1 million in additional supply chain goods and services purchases; and
- \$55.8 million in wages and salaries associated with 916 additional jobs supported in this region.

### **Total contribution**

The total economic contribution in this region (direct, indirect and induced) during 2018/19 from Yancoal Australia amounted to:

- \$147.8 million in supplying business purchases;
- \$93.6 million in total wages and salaries paid to workers;
- \$184.3 million in value added to the regional economy; and
- 1,219 full-time equivalent jobs, or 1.1% of the entire workforce in this region.



## **Darling Downs and Maranoa (QLD)**

### **Direct contribution**

In this region during 2018/19, Yancoal Australia contributed \$19.5 million in direct spending through:

- \$10.9 million in wages and salaries to 85 direct full-time employees;
- \$8.3 million in purchases of goods and services from 89 local businesses (includes contractors) and community contributions; and
- \$0.3 million in local government payments.

### **Indirect contribution**

This \$19.5 million in direct spending generated:

- \$18.9 million in additional supply chain goods and services purchases; and
- \$11.0 million in wages and salaries associated with 185 additional jobs supported in this region.

### **Total contribution**

The total economic contribution in this region (direct, indirect and induced) during 2018/19 from Yancoal Australia amounted to:

- \$27.2 million in supplying business purchases;
- \$21.9 million in total wages and salaries paid to workers;
- \$38.2 million in value added to the regional economy; and
- 270 full-time equivalent jobs, or 0.4% of the entire workforce in this region.



## **Mackay-Isaac-Whitsunday (QLD)**

### **Direct contribution**

In this region during 2018/19, Yancoal Australia contributed \$72.1 million in direct spending through:

- \$8.0 million in wages and salaries to 75 direct full-time employees;
- \$63.1 million in purchases of goods and services from 167 local businesses (includes contractors) and community contributions; and
- \$1.0 million in local government payments.

### **Indirect contribution**

This \$72.1 million in direct spending generated:

- \$81.7 million in additional supply chain goods and services purchases; and
- \$46.4 million in wages and salaries associated with 704 additional jobs supported in this region.

### **Total contribution**

The total economic contribution in this region (direct, indirect and induced) during 2018/19 from Yancoal Australia amounted to:

- \$144.7 million in supplying business purchases;
- \$54.4 million in total wages and salaries paid to workers;
- \$145.8 million in value added to the regional economy; and
- 779 full-time equivalent jobs, or 0.8% of the entire workforce in this region.





## **Bunbury (WA)**

### **Direct contribution**

In this region during 2018/19, Yancoal Australia contributed \$56.2 million in direct spending through:

- \$41.7 million in wages and salaries to 313 direct full-time employees; and
- \$14.4 million in purchases of goods and services from 15 local businesses (includes contractors), community contributions and local government payments.

### **Indirect contribution**

This \$56.2 million in direct spending generated:

- \$53.6 million in additional supply chain goods and services purchases; and
- \$29.8 million in wages and salaries associated with 519 additional jobs supported in this region.

### **Total contribution**

The total economic contribution in this region (direct, indirect and induced) during 2018/19 from Yancoal Australia amounted to:

- \$67.9 million in supplying business purchases;
- \$71.5 million in total wages and salaries paid to workers;
- \$108.8 million in value added to the regional economy; and
- 832 full-time equivalent jobs, or 0.9% of the entire workforce in this region.

## LOCAL IMPACT

Similar to the analysis at a regional level, the expenditure data was also aggregated using geographical concordances at the local government area (LGA) level. The level of employment, direct expenditure and total economic impact is summarised for the 541 LGAs across Australia in Appendix B (where significant activity occurs in an LGA).

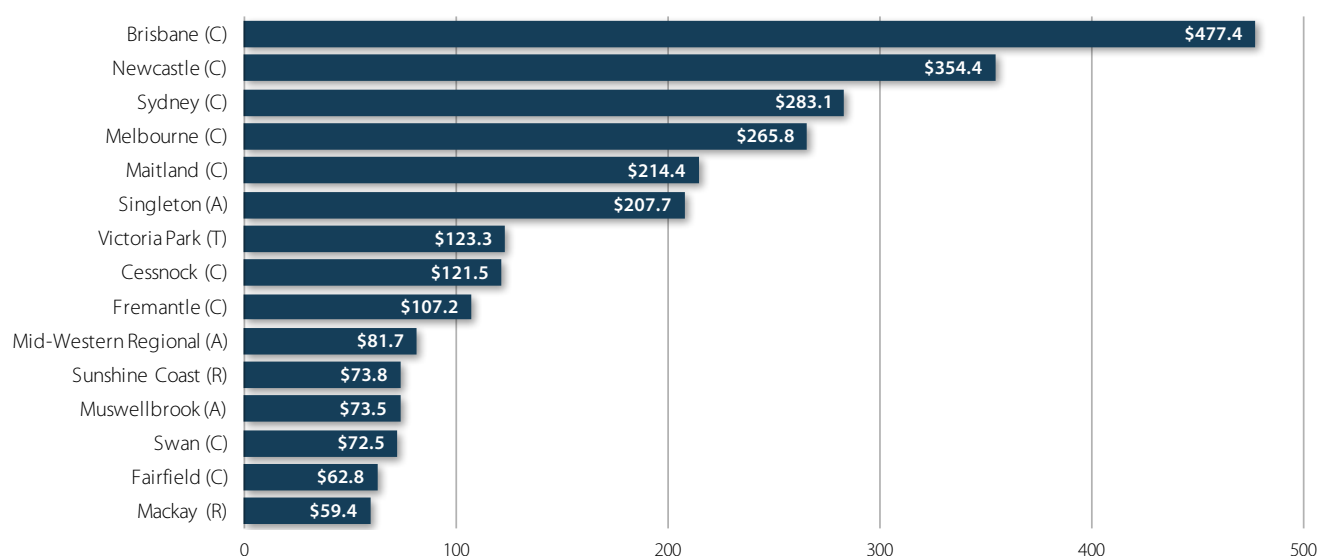
Table 6 shows the distribution of total direct spending (i.e. salaries, business purchases and community contributions) by Yancoal Australia across Australia to the top 15 LGAs by expenditure and total economic impact. Brisbane LGA recorded the largest share of direct expenditure in 2018/19 (\$477.4 million), followed by Newcastle (\$354.4 million), Sydney (\$283.1 million), Melbourne (\$265.8 million) and Maitland (\$214.4 million). Direct employment was greatest in the Maitland LGA (598 FTEs), followed by the Singleton (586 FTEs), Cessnock (565 FTEs), Mid-Western Regional (471 FTEs) and Lake Macquarie (223 FTEs), LGAs.

**Table 6: Local Impact of Yancoal Australia, Top 15 LGAs by Expenditure, 2018/19**

Region	Direct impact			Total impact		
	Direct employees (FTEs)	Associated salaries (\$M)	No. of local suppliers (no.)	Total direct spending (\$M)	Total value added (\$M)	Total employment (FTEs)
Brisbane (C)	25	3.5	559	477.4	943.2	4,862
Newcastle (C)	216	28.0	441	354.4	732.9	3,695
Sydney (C)	132	32.3	181	283.1	568.8	2,951
Melbourne (C)	0	0.0	54	265.8	562.1	2,607
Maitland (C)	598	102.5	318	214.4	434.9	2,543
Singleton (A)	586	64.4	378	207.7	417.6	2,398
Victoria Park (T)	0	0.0	18	123.3	243.9	1,247
Cessnock (C)	565	65.6	140	121.5	245.2	1,674
Fremantle (C)	0	0.0	1	107.2	226.3	1,055
Mid-Western Regional (A)	471	44.2	127	81.7	158.5	1,149
Sunshine Coast (R)	37	4.4	37	73.8	147.8	803
Muswellbrook (A)	137	13.5	72	73.5	151.1	810
Swan (C)	0	0.0	19	72.5	150.6	711
Fairfield (C)	0	0.0	51	62.8	131.8	636
Mackay (R)	35	3.3	141	59.4	120.5	624

### Yancoal Australia Direct Spend by LGA, Top 15

2018/19 (\$ million)



## APPENDIX A: ECONOMIC IMPACT BY REGION

**Table A1: Estimated Total Economic Impacts of Yancoal Australia by Region, 2018/19**

Region (SA4)	Direct impact			Total impact (Type II)		
	Direct employees (FTEs)	Associated wages (\$M)	Local suppliers (no.)	Total direct spending (\$M)	Value added (\$M)	Total employees (FTEs)
Hunter Valley exc Newcastle	2,074	267.9	940	634.7	1,312.7	8,038
Sydney	145	34.1	803	498.1	1,020.0	5,070
Brisbane	30	4.1	554	471.5	930.3	4,806
Newcastle and Lake Macquarie	462	56.3	725	428.2	885.9	4,639
Perth	1	0.1	157	390.2	791.6	3,896
Melbourne	1	0.1	256	352.0	742.1	3,452
Adelaide	1	0.1	46	98.1	210.5	1,001
Central West	502	47.1	171	93.8	193.4	1,384
Central Queensland	303	37.8	209	93.6	184.3	1,219
Sunshine Coast	40	4.7	44	75.5	151.3	822
Mackay - Isaac - Whitsunday	75	8.0	167	72.1	145.8	779
Bunbury	313	41.7	15	56.2	108.8	832
Mid North Coast	74	8.8	88	47.2	98.8	526
Southern Highlands and Shoalhaven	2	0.0	16	36.0	75.5	347
Central Coast	26	2.7	52	24.0	50.5	249
Gold Coast	21	2.5	40	22.0	44.3	239
Darling Downs - Maranoa	85	10.9	89	19.5	38.2	270
Logan - Beaudesert	9	1.1	36	15.0	31.0	165
Toowoomba	18	2.2	32	13.6	27.3	152
Wide Bay	69	9.0	25	13.0	26.5	194
Ipswich	18	2.4	34	10.5	21.7	120
West and North West	1	0.1	10	6.6	13.9	66
Illawarra	4	0.5	71	6.6	13.9	67
Richmond - Tweed	7	0.7	2	4.4	9.3	46
Far West and Orana	22	1.9	29	4.3	8.9	63
Townsville	6	0.6	19	3.3	7.1	40
New England and North West	9	0.9	17	3.1	6.5	38
Moreton Bay - North	20	2.0	10	2.4	4.7	42
Geelong	1	0.1	6	1.9	3.8	20
Western Australia - Wheat Belt	2	0.2	2	1.7	3.5	17
Moreton Bay - South	2	0.3	22	1.6	3.2	17

Note: (a) Excludes regions with total direct spend of less than \$1 million.

## APPENDIX B: ECONOMIC IMPACT BY LGA

**Table B1: Estimated Total Economic Impacts of Yancoal Australia by LGA, 2018/19**

LGA	Direct impact			Total impact (Type II)		
	Direct employees (FTEs)	Associated wages (\$M)	Local suppliers (no.)	Total direct spending (\$M)	Value added (\$M)	Total employees (FTEs)
Brisbane (C)	25	3.5	559	477.4	943.2	4,862
Newcastle (C)	216	28.0	441	354.4	732.9	3,695
Sydney (C)	132	32.3	181	283.1	568.8	2,951
Melbourne (C)	0	0.0	54	265.8	562.1	2,607
Maitland (C)	598	102.5	318	214.4	434.9	2,543
Singleton (A)	586	64.4	378	207.7	417.6	2,398
Victoria Park (T)	0	0.0	18	123.3	243.9	1,247
Cessnock (C)	565	65.6	140	121.5	245.2	1,674
Fremantle (C)	0	0.0	1	107.2	226.3	1,055
Mid-Western Regional (A)	471	44.2	127	81.7	158.5	1,149
Sunshine Coast (R)	37	4.4	37	73.8	147.8	803
Muswellbrook (A)	137	13.5	72	73.5	151.1	810
Swan (C)	0	0.0	19	72.5	150.6	711
Fairfield (C)	0	0.0	51	62.8	131.8	636
Mackay (R)	35	3.3	141	59.4	120.5	624
Canning (C)	1	0.0	10	53.9	104.3	549
Lake Macquarie (C)	223	25.7	250	53.9	111.1	734
Unley (C)	0	0.0	13	47.9	101.2	472
Port Phillip (C)	0	0.0	28	47.7	99.0	474
Central Highlands (R) (Qld)	122	15.8	102	42.5	80.0	509
Mid-Coast (A)	78	9.2	80	39.3	81.5	446
Parramatta (C)	0	0.0	71	39.3	82.8	384
Collie (S)	214	28.4	7	36.8	59.9	444
Wingecarribee (A)	2	0.0	13	32.6	68.4	315
Salisbury (C)	0	0.0	8	27.8	62.5	307
Rockhampton (R)	75	9.3	65	24.8	49.3	317
Central Coast (C) (NSW)	26	2.7	52	24.0	50.5	249
Gold Coast (C)	20	2.4	40	21.7	43.9	236
West Torrens (C)	0	0.0	7	20.7	43.2	205
Port Stephens (A)	87	11.4	35	20.2	40.7	267
Western Downs (R)	77	9.9	85	18.3	34.4	238
Cumberland (A)	0	0.0	21	16.3	34.3	154
Belmont (C)	0	0.0	26	15.2	29.9	152
Logan (C)	9	1.1	36	15.0	31.0	165
Livingstone (S)	85	10.1	22	14.3	26.6	205
Canterbury-Bankstown (A)	0	0.0	26	14.2	29.0	142
Blacktown (C)	0	0.0	74	14.2	29.9	137
Toowoomba (R)	19	2.4	34	14.0	28.0	157
Camden (A)	1	0.1	7	13.9	29.4	131
North Sydney (A)	0	0.0	36	13.6	28.8	129
Isaac (R)	32	3.9	24	11.9	22.9	132
Bunbury (C)	69	9.3	4	11.5	21.0	163
Gladstone (R)	16	2.1	14	11.2	21.5	125
Bayside (A)	1	0.1	45	10.6	22.0	106

**Table B1: Estimated Total Economic Impacts of Yancoal Australia by LGA, 2018/19**

LGA	Direct impact				Total impact (Type II)	
	Direct employees (FTEs)	Associated wages (\$M)	Local suppliers (no.)	Total direct spending (\$M)	Value added (\$M)	Total employees (FTEs)
Port Macquarie-Hastings (A)	2	0.3	12	9.6	20.1	96
Upper Hunter Shire (A)	61	6.1	13	8.3	15.6	126
Stirling (C)	0	0.0	19	7.8	15.2	80
Bathurst Regional (A)	7	0.6	10	7.6	15.9	80
Ryde (C)	1	0.1	59	7.6	15.8	72.6
Dungog (A)	56	6.3	11	7.2	11.8	98
Bundaberg (R)	38	5.4	11	7.0	13.4	99
Knox (C)	0	0.0	23	6.6	13.7	64
Hume (C)	0	0.0	6	6.2	12.9	61
Boroondara (C)	0	0.0	7	5.9	12.5	58
Wollongong (C)	2	0.3	62	5.7	12.1	57
Burnie (C)	0	0.0	8	5.5	11.6	54
Monash (C)	1	0.1	25	4.4	9.3	44
Capel (S)	25	3.3	3	4.3	7.8	58
Moreton Bay (R)	21	2.3	32	3.9	7.7	58
Maribyrnong (C)	0	0.0	10	3.9	8.2	34
Willoughby (C)	0	0.0	24	3.8	8.0	35
Richmond Valley (A)	1	0.1	1	3.7	7.9	34
Gosnells (C)	0	0.0	5	3.5	7.3	35
Ipswich (C)	15	2.0	20	3.5	6.7	47
Shoalhaven (C)	0	0.0	3	3.3	6.8	31
Townsville (C)	5	0.5	19	3.2	6.9	38
Banyule (C)	0	0.0	12	3.1	6.5	29
Melville (C)	0	0.0	8	3.1	6.5	30
Liverpool (C)	0	0.0	9	2.9	6.1	28
Western Plains Regional (A)	16	1.3	18	2.7	5.6	41
Gympie (R)	5	0.6	5	2.6	6.3	35
Penrith (C)	3	0.3	17	2.5	5.3	27
Warroona (S)	0	0.0	1	2.5	4.8	26
Inner West (A)	0	0.0	11	2.2	4.7	21
Whitehorse (C)	0	0.0	14	2.0	4.1	18
Fraser Coast (R)	16	1.8	4	1.9	3.8	34
Northern Beaches (A)	1	0.5	22	1.9	4.0	19
Greater Geelong (C)	1	0.1	6	1.9	3.8	20
Wanneroo (C)	0	0.0	11	1.7	3.6	16
Noosa (S)	2	0.3	6	1.7	3.4	19
Warrumbungle Shire (A)	9	0.7	5	1.6	3.0	21
Moonee Valley (C)	0	0.0	12	1.5	3.2	15
Burnside (C)	1	0.1	7	1.4	3.1	14
The Hills Shire (A)	1	0.2	30	1.4	2.9	14
Gunnedah (A)	2	0.2	3	1.3	2.7	13
Dalwallinu (S)	0	0.0	1	1.3	2.7	11
Campbelltown (C) (NSW)	0	0.0	16	1.2	2.6	12
Orange (C)	4	0.2	14	1.2	2.4	15

**Table B1: Estimated Total Economic Impacts of Yancoal Australia by LGA, 2018/19**

LGA	Direct impact				Total impact (Type II)	
	Direct employees (FTEs)	Associated wages (\$M)	Local suppliers (no.)	Total direct spending (\$M)	Value added (\$M)	Total employees (FTEs)
Lithgow (C)	8	1.1	1	1.2	2.1	17
Sutherland Shire (A)	0	0.0	25	1.1	2.4	11
Moreland (C)	0	0.0	0	1.1	2.3	11
Maroondah (C)	0	0.0	10	1.0	2.2	10
Hunters Hill (A)	0	0.0	3	1.0	2.1	9
Redland (C)	6	0.8	7	1.0	1.9	15

Note: (a) Excludes LGAs with total direct spend of less than \$1 million.

## APPENDIX C: ECONOMIC IMPACT BY CED

**Table C1: Estimated Total Economic Impacts of Yancoal Australia by CED, 2018/19**

CED	Direct impact			Total impact (Type II)		
	Direct employees (FTEs)	Associated wages (\$M)	Local suppliers (no.)	Total direct spending (\$M)	Value added (\$M)	Total employees (FTEs)
Hunter	1,268	141.8	643	368.5	763.3	4,722
Brisbane	6	1.1	276	368.1	725.6	3,740
Newcastle	187	24.5	390	321.5	663.8	3,355
Paterson	735	109.8	418	296.0	613.8	3,531
Sydney	132	32.2	179	283.1	568.6	2,950
Melbourne	0	0.0	54	259.7	549.5	2,548
Swan	1	0.0	53	191.1	375.5	1,938
Fremantle	0	0.0	6	107.3	226.5	1,056
Calare	498	46.7	158	93.1	191.9	1,374
Lyne	249	38.1	144	88.5	183.0	1,087
Fairfax	23	2.7	20	71.0	142.2	762
Adelaide	0	0.0	24	66.4	140.2	653
Flynn	185	23.6	134	61.0	119.3	781
McMahon	0	0.0	60	61.0	128.1	613
Melbourne Ports	0	0.0	34	54.2	112.5	536
Capricornia	173	20.7	120	53.4	106.6	687
Dawson	34	3.2	127	53.3	108.3	562
Parramatta	0	0.0	37	42.0	88.7	409
Griffith	4	0.5	58	40.3	79.1	413
Hasluck	0	0.0	9	39.5	82.0	387
O'Connor	217	28.9	7	37.4	72.5	561
Bonner	2	0.3	40	36.3	71.4	369
Pearce	0	0.0	7	32.8	68.1	322
Whitlam	4	0.3	17	30.8	64.7	299
Shortland	114	12.9	144	28.2	58.2	382
Makin	0	0.0	7	27.9	62.7	308
Maranoa	87	11.1	91	19.7	38.6	274
North Sydney	0	0.0	67	18.6	39.2	174
Forrest	98	13.1	7	16.5	32.1	250
Watson	0	0.0	9	13.9	28.3	139
Groom	18	2.2	34	13.8	27.7	154
Fowler	0	0.0	7	11.9	24.9	120
Robertson	5	0.5	16	11.7	24.7	112
Dobell	18	1.8	32	11.2	23.5	123
Moncrieff	6	0.7	13	11.1	22.5	117
Hume	2	0.3	11	10.9	23.0	105
Forde	4	0.5	13	10.6	22.0	116
Kingsford Smith	0	0.0	47	10.5	21.8	103
Lilley	4	0.5	47	10.2	21.0	105
Moreton	3	0.3	75	10.1	20.1	105
New England	68	6.9	25	9.7	19.8	158
Oxley	7	1.1	38	9.0	18.8	94
Chifley	0	0.0	35	8.3	17.6	80
Greenway	0	0.0	40	7.9	16.8	77
Stirling	0	0.0	19	7.8	15.2	80
Bennelong	1	0.1	62	7.6	16.0	73
Hinkler	42	5.8	11	7.3	14.2	109
Macarthur	0	0.0	16	6.8	14.5	65
Fadden	4	0.4	14	6.8	13.8	72

**Table C1: Estimated Total Economic Impacts of Yancoal Australia by CED, 2018/19**

CED	Direct impact			Total impact (Type II)		
	Direct employees (FTEs)	Associated wages (\$M)	Local suppliers (no.)	Total direct spending (\$M)	Value added (\$M)	Total employees (FTEs)
Braddon	0	0.0	10	6.5	13.7	65
Aston	0	0.0	23	6.5	13.5	63
Calwell	0	0.0	7	6.5	13.6	64
Kooyong	0	0.0	6	5.9	12.5	58
Cunningham	2	0.3	60	5.7	11.9	56
Parkes	24	2.2	36	5.6	11.6	77
Chisholm	0	0.0	22	5.5	11.7	53
Wide Bay	13	1.5	15	5.1	11.3	67
Ryan	2	0.3	30	4.5	9.2	47
Page	5	0.5	4	4.3	9.1	43
Wright	8	0.9	8	4.3	8.5	51
Burt	0	0.0	6	3.9	8.0	37
Tangney	0	0.0	9	3.9	8.2	37
Gilmore	1	0.1	8	3.8	8.0	38
Gellibrand	0	0.0	12	3.4	7.2	30
Jagajaga	0	0.0	16	3.2	6.7	31
Herbert	4	0.4	16	2.9	6.3	34
Rankin	5	0.5	21	2.8	5.8	32
Fisher	15	1.7	17	2.8	5.6	40
Hindmarsh	0	0.0	5	2.8	5.4	28
Reid	1	0.2	39	2.6	5.5	27
Canning	0	0.0	3	2.6	5.1	27
Maribyrnong	0	0.0	13	2.3	4.9	22
Lindsay	3	0.3	13	2.3	4.8	24
Cowan	0	0.0	19	2.2	4.6	21
Longman	17	1.7	9	2.1	4.1	37
Blair	12	1.4	11	2.0	3.9	30
McPherson	8	1.1	9	1.9	3.9	26
Corio	1	0.1	6	1.9	3.8	20
Mackellar	1	0.5	18	1.8	3.8	18
Grayndler	0	0.0	9	1.8	3.8	17
Mitchell	1	0.2	31	1.6	3.3	16
Dickson	2	0.3	21	1.5	3.1	17
Werriwa	0	0.0	8	1.4	3.0	14
Durack	0	0.0	1	1.3	2.7	11
Hughes	0	0.0	16	1.2	2.5	12
Banks	0	0.0	16	1.1	2.4	12
Wills	0	0.0	0	1.1	2.3	11
Riverina	5	0.3	11	1.1	2.3	15
Bowman	6	0.8	7	1.0	1.9	15
Sturt	1	0.1	5	1.0	2.0	10

Note: (a) Excludes CEDs with total direct spend of less than \$1 million.



## APPENDIX D: ECONOMIC IMPACT BY SED

**Table D1: Estimated Total Economic Impacts of Yancoal Australia by SED, 2018/19**

SED	Direct impact			Total impact (Type II)		
	Direct employees (FTEs)	Associated wages (\$M)	Local suppliers (no.)	Total direct spending (\$M)	Value added (\$M)	Total employees (FTEs)
McConnel	4	0.6	210	332.2	653.9	3,373
Newcastle	109	15.8	318	306.1	631.1	3,122
Upper Hunter	883	95.2	518	298.9	614.3	3,624
Sydney	130	32.3	164	282.3	567.0	2,941
Melbourne (Northern Metropolitan)	0	0.0	48	259.4	548.8	2,545
Maitland	596	102.2	318	214.2	434.6	2,539
Cannington (South Metropolitan)	1	0.0	22	142.8	275.6	1,459
Cessnock	633	73.1	209	142.7	288.7	1,936
Cottesloe (North Metropolitan)	0	0.0	1	107.2	226.3	1,055
Dubbo	446	41.9	139	78.4	158.4	1,154
Badcoe	0	0.0	14	65.7	138.7	647
Fairfield	0	0.0	26	60.5	127.0	614
Maroochydore	6	0.6	6	57.4	114.9	605
Albert Park (Southern Metropolitan)	0	0.0	31	52.2	108.2	516
Wallsend	108	12.1	131	49.4	102.3	566
Gregory	123	15.9	103	42.8	81.6	522
Collie-Preston (South West)	223	29.7	8	38.7	70.9	541
Mackay	16	1.5	84	37.5	76.2	387
West Swan (East Metropolitan)	0	0.0	14	33.3	69.1	326
Goulburn	1	0.1	13	32.6	68.4	314
Belmont (East Metropolitan)	0	0.0	28	31.4	63.7	312
Victoria Park (South Metropolitan)	0	0.0	4	30.4	64.1	299
Parramatta	0	0.0	27	29.7	62.7	292
South Brisbane	1	0.1	35	28.9	56.7	294
Myall Lakes	19	2.2	18	28.2	59.2	287
Cooper	1	0.1	35	27.3	53.8	279
Midland (East Metropolitan)	0	0.0	4	25.9	53.8	254
Lytton	1	0.1	17	22.5	44.4	228
Port Stephens	90	11.8	40	21.5	43.5	284
Lake Macquarie	89	10.6	85	20.8	42.0	279
Bulimba	2	0.2	17	20.6	39.9	212
Playford	0	0.0	4	20.3	45.5	223
Keppel	92	11.1	33	18.6	35.6	260
Callide	81	10.2	74	17.3	33.2	240
Rockhampton	48	5.8	49	17.2	34.7	219
Charlestown	66	7.7	86	16.8	34.0	220
Bunbury (South West)	89	11.9	6	14.7	26.9	209

**Table D1: Estimated Total Economic Impacts of Yancoal Australia by SED, 2018/19**

SED	Direct impact				Total impact (Type II)	
	Direct employees (FTEs)	Associated wages (\$M)	Local suppliers (no.)	Total direct spending (\$M)	Value added (\$M)	Total employees (FTEs)
Whitsunday	14	1.3	37	14.1	28.4	153
Lakemba	0	0.0	9	13.9	28.4	139
Camden	1	0.1	7	13.9	29.4	131
Clayfield	1	0.2	43	13.5	27.8	135
North Shore	0	0.0	34	13.3	28.1	126
Prospect	0	0.0	33	12.3	25.8	118
Mirani	30	3.5	28	12.3	24.1	145
Ninderry	7	0.9	6	11.9	23.8	130
Burdekin	35	4.2	24	11.6	22.8	137
Bathurst	39	3.6	16	11.6	23.9	148
Granville	0	0.0	9	9.0	19.0	86
Macalister	1	0.1	7	9.0	18.6	96
Gladstone	7	0.9	12	8.9	17.2	96
The Entrance	8	0.7	20	8.5	17.9	87
Toohey	1	0.1	52	8.2	16.1	84
Gosford	1	0.0	10	8.1	17.1	75
Balcatta (North Metropolitan)	0	0.0	19	7.8	15.2	80
Wright	0	0.0	3	7.6	17.1	84
Oxley	2	0.2	8	7.6	15.9	76
Gaven	3	0.3	5	7.3	14.1	77
Seven Hills	0	0.0	23	6.8	14.3	65
Sunbury (Western Metropolitan)	0	0.0	3	6.7	14.2	67
Swansea	38	4.1	29	6.5	13.0	96
Maroubra	0	0.0	17	6.5	13.5	64
Toowoomba South	3	0.3	15	6.1	12.3	64
Hawthorn (Southern Metropolitan)	0	0.0	6	5.9	12.5	58
Blacktown	0	0.0	34	5.8	12.3	57
Heffron	1	0.0	43	5.6	11.6	56
Inala	1	0.1	7	5.6	11.8	56
Lane Cove	0	0.0	28	5.3	11.1	48
Toowoomba North	6	0.8	12	5.1	10.1	56
Mount Druitt	0	0.0	17	5.0	10.7	48
Rowville (South-Eastern Metropolitan)	0	0.0	11	4.8	9.9	47
Southport	1	0.1	6	4.7	9.8	47
Wollongong	1	0.2	39	4.2	8.8	41
Willoughby	0	0.0	25	4.1	8.7	38
Bonney	1	0.1	6	4.0	8.5	40
Burnett	24	3.4	4	4.0	7.4	56
Clarence	3	0.3	2	4.0	8.3	38
Bundaberg	18	2.8	7	3.8	7.1	50
Kiama	0	0.0	7	3.7	7.8	36
Warrego	9	1.2	18	3.7	7.1	42
Ryde	1	0.1	45	3.6	7.5	37
Wyong	10	1.1	12	3.3	6.7	40
Maiwar	1	0.1	19	3.2	6.6	33
Footscray (Western Metropolitan)	0	0.0	9	3.2	6.9	29

**Table D1: Estimated Total Economic Impacts of Yancoal Australia by SED, 2018/19**

SED	Direct impact				Total impact (Type II)	
	Direct employees (FTEs)	Associated wages (\$M)	Local suppliers (no.)	Total direct spending (\$M)	Value added (\$M)	Total employees (FTEs)
Ivanhoe (Eastern Metropolitan)	0	0.0	11	3.1	6.5	29
Braddon (Murchison)	0	0.0	4	3.0	6.3	30
Terrigal	4	0.5	5	3.0	6.3	32
Gympie	5	0.6	5	2.7	6.6	37
Logan	2	0.3	5	2.7	5.6	31
Bayswater (Eastern Metropolitan)	0	0.0	18	2.7	5.8	25
Condamine	9	1.1	6	2.6	5.1	33
Colton	0	0.0	2	2.6	5.1	27
Southern River (South Metropolitan)	0	0.0	3	2.6	5.3	25
Murray-Wellington (South West)	0	0.0	3	2.5	4.9	26
Braddon (Montgomery)	0	0.0	4	2.5	5.3	25
Auburn	0	0.0	37	2.5	5.2	25
Port Macquarie	2	0.4	6	2.4	5.1	26
Barwon	11	1.0	15	2.4	4.9	33
Bateman (South Metropolitan)	0	0.0	6	2.4	5.0	23
Woodridge	2	0.3	14	2.3	4.8	25
Orange	7	0.5	26	2.3	4.8	29
Tamworth	6	0.5	12	2.2	4.5	26
Nudgee	1	0.1	19	2.0	4.1	21
Prahran (Southern Metropolitan)	0	0.0	2	2.0	4.2	19
Mount Waverley (Eastern Metropolitan)	1	0.1	3	2.0	4.2	20
Greenslopes	1	0.3	11	2.0	4.0	20
Mansfield	0	0.0	7	1.9	3.9	20
Lara (Western Victoria)	1	0.1	6	1.9	3.8	20
Holsworthy	0	0.0	4	1.9	4.0	18
Niddrie (Western Metropolitan)	0	0.0	13	1.9	3.8	18
Nicklin	8	1.0	7	1.8	3.4	24
Everton	0	0.1	10	1.7	3.5	17
Mount Ommaney	2	0.2	17	1.7	3.6	18
Stafford	1	0.4	8	1.7	3.3	17
Forest Hill (Eastern Metropolitan)	0	0.0	4	1.6	3.5	15
Townsville	0	0.0	7	1.6	3.6	18
Londonderry	1	0.1	5	1.6	3.3	16
Oakleigh (Southern Metropolitan)	0	0.0	8	1.5	3.2	15
Keira	1	0.1	17	1.5	3.2	15
Jordan	5	0.8	9	1.5	2.8	18
Penrith	2	0.2	13	1.4	3.0	15
Macquarie Fields	0	0.0	15	1.4	2.9	14

**Table D1: Estimated Total Economic Impacts of Yancoal Australia by SED, 2018/19**

SED	Direct impact				Total impact (Type II)	
	Direct employees (FTEs)	Associated wages (\$M)	Local suppliers (no.)	Total direct spending (\$M)	Value added (\$M)	Total employees (FTEs)
Newtown	0	0.0	4	1.3	2.8	13
Moore (Agricultural)	0	0.0	1	1.3	2.7	11
Algeria	1	0.2	19	1.3	2.6	14
Theodore	1	0.1	4	1.2	2.3	13
Curumbin	4	0.5	5	1.2	2.3	15
Pittwater	0	0.0	11	1.1	2.4	11
Kawana	3	0.4	8	1.1	2.3	13
Nanango	8	1.0	5	1.1	2.1	18
Coomera	1	0.2	4	1.1	2.2	13
Noosa	1	0.1	4	1.0	2.1	11
Mudgeeraba	1	0.1	1	1.0	1.9	11
Williamstown (Western Metropolitan)	0	0.0	3	1.0	2.1	9
East Hills	0	0.0	14	1.0	2.0	10
Braddon (Mersey)	0	0.0	2	1.0	2.0	10
Wanneroo (North Metropolitan)	0	0.0	6	1.0	2.0	9

Note: (a) Excludes SEDs with total direct spend of less than \$1 million.