

# australian energy

national and state projections to 2029-30

statistical tables

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# statistical tables

Data are presented in these tables as energy units (joules). The use of energy units enables comparisons between the relative contributions of different fuels to meeting total primary or final energy consumption, or their share of total supply. Energy units must also be used to determine total energy production or consumption, because litres of oil and tonnes of coal cannot be added.

Some forms of energy are used to produce other forms of energy that are then finally consumed. Thus some entries in the energy balance tables (tables A1–A11) are negative, and derivation of totals may not be obvious. See box 1 for a description of the definitions of primary energy consumption as opposed to final energy consumption.

The energy balances shown in [tables A1–A11](#) summarise the overall energy situation in Australia. The first section of an energy balance presents the ‘total domestic availability’ of energy for domestic use. This is equal to indigenous production of primary fuels, plus imports of primary and derived fuels, less exports, less stock changes and discrepancies. This supply of energy, which is mainly in the form of primary fuels, is equal to total energy consumption and is referred to as total primary energy consumption.

The second section of the energy balance describes the energy flows involved in converting primary fuels to secondary fuels. Inputs to the conversion process are shown as positive, and outputs (the secondary or derived fuels produced) as negative. The row relating to petroleum refining, for example, shows input of crude oil feedstock and fuels such as natural gas and electricity used to provide energy for refinery processes, and an output of refined petroleum products. The total for this row shows the amount of nonoil fuels (natural gas and electricity) consumed in the conversion process. The quantity of petroleum products consumed as refinery fuel is shown separately in the ‘fuel use in conversion’ row.

The net amount of each fuel available for final use, shown in the ‘final domestic availability’ row is equal to primary energy consumption less net losses resulting from conversion processes. For some fuels (such as coal), this supply available for final use is much less than total supply; most is either converted into other fuels (such as electricity and coke) or used as an energy source (with some loss) for the conversion process.

The final section shows how broad end use sectors use the supply of energy available for final consumption and equates to total final energy consumption.

[Tables B1–B2](#) provide details on final energy consumption by industry grouping, for Australia and each of the states and territories (the Australian Capital Territory is included with New South Wales).

[Tables C1–C2](#) provide details on final energy consumption, by fuel, for Australia and each of the states.

[Tables D1–D2](#) and [E1–E2](#) mirror the previous two sets of tables (the B and C tables), but relate to primary energy consumption rather than final energy consumption.

[Table F](#) provides a detailed picture of final energy consumption in Australia and covers energy consumed by industry sector and fuel type.

[Table G](#) provides a similar level of detail but, again, in this case relates to the primary consumption of fuels.

[Table H](#) covers the production of primary fuels, [table I](#) electricity generation in Australia and [table J](#) net trade, by fuel.

## A1 Australian energy supply and disposal, 2005-06

	Black coal		Brown coal		Coke		Coal by-products		Oil		LPG		Other petroleum products a		Natural gas b		Hydro		Wind		Biomass		Biogas		Electricity		Solar		Total		
	PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		
<b>Supply</b>																															
Indigenous production	8 156.1		704.0				899.8		125.1		1 741.9		59.3		6.6		186.2		7.3								2.7		11 889.1		
Net exports	6 581.8						- 508.2		52.6		- 417.8		678.4																6 386.7		
Stock changes and discrepancies	- 59.9		- 2.0				- 68.2				- 55.1																		- 185.2		
Total primary energy consumption	1 634.2		706.0				1 476.2		72.5		1 063.5		59.3		6.6		186.2		7.3								2.7		5 687.5		
<b>Conversion</b>																															
Coke ovens	155.1				- 97.1		- 19.0																						390		
Blast furnaces					97.1		- 18.6																						78.4		
Petroleum refining							1 481.9		- 24.8		- 1 453.8		13.6																21.9		
Petrochemicals							- 5.7				5.7																		0.0		
Electricity generation c	1 341.4		706.0								47.7		382.2		6.6		36.3		7.3		- 924.4						0.3		1 662.6		
Fuel use in conversion											144.7		102.9																279.4		
Transmission losses																													95.6		
Final domestic availability	137.7		0.0		0.0		37.7		97.3		1 728.7		564.8		0.0		149.9		0.0		791.7					2.4		3 510.2			
<b>End use</b>																															
Agriculture									1.6		83.9		0.1																6.6		
Mining	7.4								0.4		123.9		31.7																71.3		
Wood, paper and printing	12.2								0.9		1.7		15.2				16.7												19.8		
Chemical products d	2.3								12.7		60.1		85.7																15.6		
Iron and steel	1.8								0.5		2.7		25.8																26.4		
Basic nonferrous metals	66.6								37.7																				94.9		
- aluminium smelting									0.1		47.0		112.3																207.0		
- other basic nonferrous metals	66.6								0.0		12.7		4.7																91.6		
Nonmetallic mineral products	31.4		0.0						0.1		34.3		107.5																115.4		
Other manufacturing e	9.5								5.2		4.9		51.8				0.9												13.3		
Road transport									2.6		44.2		44.0				80.4												25.2		
Rail transport									60.1		982.0		0.7																1 042.9		
Air transport											28.1		0.0																36.1		
Water transport	4.8										201.9																		201.9		
Pipeline transport											53.5		0.1																58.4		
Commercial and services	1.5								3.1		21.5		32.0																177.4		
Residential	0.1								10.0		1.3		126.5																220.9		
Other f											72.0																		72.0		
Total final energy consumption	137.7		0.0		0.0		37.7		97.3		1 728.7		564.8		0.0		149.9		0.0		791.7					2.4		3 510.2			

a Includes naturally occurring LPG. b Includes town gas. c Includes cogeneration. d Includes rubber and plastic products. e Includes construction. f Includes solvents, lubricants, bitumen and greases.

## A2 Australian energy supply and disposal, 2006-07

	Black coal		Brown coal		Coke		Coal by-products		Oil		LPG		Other petroleum products a		Natural gas b		Hydro		Wind		Biomass		Biogas		Electricity		Solar		Total	
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	
<b>Supply</b>																														
Indigenous production	8 435.4		708.1						1 067.6	126.4					2 089.0		61.8		9.9		212.7						2.8			12 743.6
Net exports	6 835.8								- 364.0	49.6				- 422.8	974.0															7 072.5
Stock changes and discrepancies			- 20						- 679				- 55.0																	- 184.5
Total primary energy consumption	1 659.3		710.0						1 499.6	76.8			477.8	1 115.0		61.8		9.9		212.7						2.8			5 855.6	
<b>Conversion</b>																														
Coke ovens	156.7				- 98.1		- 19.2																							39.4
Blast furnaces					98.1		- 18.9																							79.2
Petroleum refining									1 505.2	- 25.1			- 1 476.6	13.7																22.1
Petrochemicals									- 5.6				5.6																	0.0
Electricity generation c	1 354.2		710.0										49.9	390.4		61.8		9.9		61.2							0.3		1 719.5	
Fuel use in conversion													146.9	124.1																303.8
Transmission losses																														98.0
Final domestic availability	148.5		0.0		0.0		38.1		0.0	102.0			1 752.0	586.7		0.0		0.0		151.5						2.5			3 593.3	
<b>End use</b>																														
Agriculture										1.6			84.7	0.1																93.1
Mining	7.2								0.4	130.8			33.2																	245.4
Wood, paper and printing	12.1								0.9	1.6			15.4								16.9									67.0
Chemical products d	2.3								12.7	59.7			97.1																	187.7
Iron and steel	13.9						38.1		0.6	2.8			26.6																	108.8
Basic nonferrous metals	65.7								0.1	47.5			117.4																	445.0
- aluminium smelting									0.1	12.8			4.8																	111.8
- other basic nonferrous metals	65.7								0.1	34.7			112.6																	333.2
Nonmetallic mineral products	31.5		0.0						5.8	4.9			52.3																	108.8
Other manufacturing e	9.5								2.7	44.7			44.6								81.8									208.8
Road transport									63.3	988.7			0.7																	1 052.7
Rail transport										28.1			0.0																	36.3
Air transport										208.9																				208.9
Water transport	4.8									53.9			0.1																	58.7
Pipeline transport													33.8																	33.8
Commercial and services	1.4								3.3	21.7			39.6														0.2			248.0
Residential	0.1								10.6	3.0			125.8																	419.4
Other f										72.5																				72.5
Total final energy consumption	148.5		0.0		0.0		38.1		102.0	1 752.0		586.7				0.0		0.0		151.5						2.5			3 593.3	

a Includes naturally occurring LPG. b Includes town gas. c Includes cogeneration. d Includes rubber and plastic products. e Includes solvents, lubricants, bitumen and greases.

## A3 Australian energy supply and disposal, 2007-08

	Black coal		Brown coal		Coke		Coal by-products		Oil		LPG		Other petroleum products <sup>a</sup>		Natural gas <sup>b</sup>		Hydro		Wind		Biomass		Biogas		Electricity		Solar		Total	
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	
<b>Supply</b>																														
Indigenous production	8 922.4		7 16.4				1 126.9		137.3				2 140.5		62.2	12.8	226.3		33.5							2.9		13 381.2		
Net exports	7 298.0						- 343.6		50.1				- 434.5		997.4													7 567.4		
Stock changes and discrepancies	- 59.5		- 2.0				- 67.8						- 54.8															- 184.1		
Total primary energy consumption	1 683.9		7 18.4				1 538.3		87.1				489.3		1 143.1	12.8	226.3		33.5						2.9		5 997.8			
<b>Conversion</b>																														
Coke ovens	158.2				- 99.4		- 19.6																					392		
Blast furnaces					99.4		- 19.2																					80.3		
Petroleum refining							1 543.9		- 25.8				- 514.6		13.9													22.3		
Petrochemicals							- 5.6						5.6															0.0		
Electricity generation <sup>c</sup>	1 374.6		7 18.4										55.3		406.9	12.8	72.1		33.5		- 975.2				0.3		1 760.7			
Fuel use in conversion													150.7		124.4												308.7			
Transmission losses																											100.9			
Final domestic availability	151.1		0.0		0.0		38.7		112.9				1 792.3		598.0	0.0	154.3		0.0		835.4				2.6		3 685.3			
<b>End use</b>																														
Agriculture									1.8				86.3		0.1													94.9		
Mining	7.1								0.5				140.7		35.5													261.1		
Wood, paper and printing	12.1								0.9				1.6		15.9													68.4		
Chemical products <sup>d</sup>	2.3								12.9				59.5		99.2													190.1		
Iron and steel	15.8								1.4				3.2		26.8													113.2		
Basic nonferrous metals	66.6								0.1				48.9		119.7													454.3		
- aluminium smelting									0.1				12.9		4.8													111.7		
- other basic nonferrous metals	66.6								0.1				36.1		114.9													342.6		
Nonmetallic mineral products	31.5		0.0						7.8				5.1		53.0													111.9		
Other manufacturing <sup>e</sup>	9.4								2.9				45.8		44.8													212.8		
Road transport									69.1				1 000.2		0.8													1 070.0		
Rail transport													28.2		0.0													36.5		
Air transport													220.8															220.8		
Water transport	4.6												54.5		0.1													59.2		
Pipeline transport															34.0													34.0		
Commercial and services	1.6								4.1				22.7		40.6													257.9		
Residential	0.1								11.6				1.4		127.4													426.8		
Other <sup>f</sup>													73.4															73.4		
Total final energy consumption	151.1		0.0		0.0		38.7		112.9				1 792.3		598.0	154.3					835.4				2.6		3 685.3			

<sup>a</sup> Includes naturally occurring LPG. <sup>b</sup> Includes town gas. <sup>c</sup> Includes cogeneration. <sup>d</sup> Includes rubber and plastic products. <sup>e</sup> Includes construction. <sup>f</sup> Includes solvents, lubricants, bitumen and greases.

## A4 Australian energy supply and disposal, 2008-09

	Black coal		Brown coal		Coke		Coal by-products		Oil		LPG		Other petroleum products <sup>a</sup>		Natural gas <sup>b</sup>		Hydro		Wind		Biomass		Biogas		Electricity		Solar		Total	
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>Supply</b>																														
Indigenous production	9 129.7		725.2				1 435.7		144.4						2 095.8		62.4		15.9		234.0		36.7				2.9		13 882.9	
Net exports	7 492.0						- 60.8		50.8				- 445.2		935.2														7 971.9	
Stock changes and discrepancies	- 59.4		- 2.0				- 67.6					- 54.7																	- 183.6	
Total primary energy consumption	1 697.1		727.2				1 564.1		93.6			4 999.9		1 160.6		62.4		15.9		234.0		36.7				2.9		6 094.6		
<b>Conversion</b>																														
Coke ovens	158.0				- 99.3		- 19.5																						39.1	
Blast furnaces					99.3		- 19.1																						80.2	
Petroleum refining							1 569.7		- 26.2		- 1 539.9		14.0																22.5	
Petrochemicals							- 5.6				5.6																		0.0	
Electricity generation <sup>c</sup>	1 387.4		727.2								57.6		420.2		62.4		15.9		77.6		36.7		- 997.2		0.3			1 788.1		
Fuel use in conversion											153.2		119.9																307.5	
Transmission losses																													103.3	
Final domestic availability	151.8		0.0		0.0		38.7		119.9		1 823.4		606.6		0.0		0.0		156.4		0.0		854.2		2.6			3 753.5		
<b>End use</b>																														
Agriculture									1.8		87.5		0.1																96.2	
Mining	6.9								0.5		1 498		37.6																275.1	
Wood, paper and printing	12.0								1.0		1.6		16.4						17.5										69.4	
Chemical products <sup>d</sup>	2.3								12.9		59.1		101.6																192.5	
Iron and steel	16.8							38.7	1.9		3.3		26.8																114.9	
Basic nonferrous metals	66.5								0.1		49.8		119.5																458.4	
- aluminium smelting									0.1		12.9		4.8																111.8	
- other basic nonferrous metals	66.5								0.1		36.9		114.7																346.6	
Nonmetallic mineral products	31.6		0.0						8.8		5.1		53.9					0.9											114.1	
Other manufacturing <sup>e</sup>	9.4								2.9		46.5		45.2					85.9											216.0	
Road transport									73.3		1 008.7		0.8																1 082.7	
Rail transport											28.3		0.0																36.7	
Air transport											230.1																		230.1	
Water transport	4.6										55.0		0.1																59.6	
Pipeline transport													33.7																33.7	
Commercial and services	1.6								4.5		23.2		41.6																194.5	
Residential	0.1								12.3		1.5		129.3																236.8	
Other <sup>f</sup>											74.1																		74.1	
Total final energy consumption	151.8		0.0		38.7				119.9		1 823.4		606.6						156.4		0.0		854.2		2.6			3 753.5		

<sup>a</sup> Includes naturally occurring LPG. <sup>b</sup> Includes town gas. <sup>c</sup> Includes cogeneration. <sup>d</sup> Includes rubber and plastic products. <sup>e</sup> Includes construction. <sup>f</sup> Includes solvents, lubricants, bitumen and greases.

## A5 Australian energy supply and disposal, 2009-10

	Black coal	Brown coal	Coke	Coal by-products	Oil	LPG	Other petroleum products <sup>a</sup>	Natural gas <sup>b</sup>	Hydro	Wind	Biomass	Biogas	Electricity	Solar	Total
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>Supply</b>															
Indigenous production	9 491.0	735.1			1 451.3	144.4		2 197.3	62.9	17.5	238.6	39.3		3.0	14 380.3
Net exports	7 846.0				- 70.1	44.2	- 457.0	1 004.0							8 367.1
Stock changes and discrepancies	- 59.3	- 2.0			- 67.5		- 54.6								- 183.3
Total primary energy consumption	1 704.3	737.0			1 388.9	100.2	511.6	1 193.3	62.9	17.5	238.6	39.3		3.0	6 196.5
<b>Conversion</b>															
Coke ovens	157.5		- 99.0	- 19.5											39.0
Blast furnaces			99.0	- 19.1											79.9
Petroleum refining					1 594.5	- 26.6	- 1 564.2	14.1					5.0		22.7
Petrochemicals					- 5.5		5.5								0.0
Electricity generation <sup>c</sup>	1 395.1	737.0					59.7	439.5	62.9	17.5	80.0	39.3	- 1 018.7	0.3	1 812.5
Fuel use in conversion							155.7	123.7					35.2		314.6
Transmission losses													105.6		105.6
Final domestic availability	151.7	0.0	0.0	38.6	0.0	126.8	1 854.9	616.0	0.0	0.0	158.6	0.0	872.6	2.7	3 821.9
<b>End use</b>															
Agriculture						1.9	88.6	0.1					6.9		97.6
Mining	6.7					0.5	159.0	39.8					83.4		289.5
Wood, paper and printing	11.9					1.0	1.6	16.8			17.8		21.3		70.4
Chemical products <sup>d</sup>	2.3					12.9	58.7	104.2					16.9		195.0
Iron and steel	17.0			38.6		2.4	3.4	26.7					27.6		115.7
Basic nonferrous metals	66.5					0.1	50.5	119.4					225.5		462.1
- aluminium smelting						0.1	12.9	4.8					94.1		111.8
- other basic nonferrous metals	66.5					0.1	37.7	114.6					131.4		350.3
Nonmetallic mineral products	31.8	0.0				9.7	5.1	54.8			0.9		13.8		116.3
Other manufacturing <sup>e</sup>	9.3					3.0	47.2	45.7			87.7		26.5		219.4
Road transport						77.5	1 017.2	0.8					8.5		1 095.5
Rail transport							28.4	0.0							36.9
Air transport							239.8								239.8
Water transport	4.5						55.4	0.1							60.0
Pipeline transport								33.6							33.6
Commercial and services	1.6					4.9	23.7	42.6					200.5	0.2	273.5
Residential	0.1					12.9	1.5	131.4			52.1		241.6	2.5	442.1
Other <sup>f</sup>							74.7								74.7
Total final energy consumption	151.7	0.0	0.0	38.6	0.0	126.8	1 854.9	616.0	0.0	0.0	158.6	0.0	872.6	2.7	3 821.9

<sup>a</sup> Includes naturally occurring LPG. <sup>b</sup> Includes town gas. <sup>c</sup> Includes cogeneration. <sup>d</sup> Includes rubber and plastic products. <sup>e</sup> Includes construction. <sup>f</sup> Includes solvents, lubricants, bitumen and greases.



## A7 Australian energy supply and disposal, 2011-12

	Black coal		Brown coal		Coke by-products		Oil		LPG		Other petroleum products <sup>a</sup>		Natural gas <sup>b</sup>		Hydro		Wind		Biomass		Biogas		Electricity		Solar		Total	
	PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ	
<b>Supply</b>																												
Indigenous production	10 129.0		755.4				1 350.8		150.3				2 625.9		64.1		18.2		245.4		41.1				3.1		15 383.3	
Net exports	8 454.5						- 209.1		46.8		- 489.2		1 284.0														9 087.0	
Stock changes and discrepancies	- 58.9		- 1.9				- 67.1				- 54.3																- 182.2	
Total primary energy consumption	1 733.5		757.3				1 626.9		103.5		543.5		1 341.9		64.1		18.2		245.4		41.1				3.1		6 478.5	
<b>Conversion</b>																												
Coke ovens	157.5				- 99.0		- 19.5																				390	
Blast furnaces					99.0		- 19.1																				799	
Petroleum refining							1 632.4		- 27.3		- 1 601.4		14.3														231	
Petrochemicals							- 5.5				5.5																0.0	
Electricity generation <sup>c</sup>	1 420.7		757.3								62.3		489.3		64.1		18.2		82.4		41.1		- 1 069.6		0.3		1 866.1	
Fuel use in conversion											159.4		144.3														340.7	
Transmission losses																											111.1	
Final domestic availability	155.3		0.0		0.0		38.5		130.8		1 917.8		694.0		0.0		0.0		163.0		0.0				2.9		4 018.3	
<b>End use</b>																												
Agriculture									2.1		90.9		0.1														100.2	
Mining	6.5								0.6		178.7		44.6														89.9	
Wood, paper and printing	11.7								1.0		1.5		17.8					18.4									72.4	
Chemical products <sup>d</sup>	2.2								12.7		57.9		110.2														200.7	
Iron and steel	17.3								2.2		3.5		26.8														116.2	
Basic nonferrous metals	70.2								0.1		52.0		173.4														531.9	
- aluminium smelting									0.1		12.8		4.8														111.5	
- other basic nonferrous metals	70.2								0.1		39.2		168.7														420.4	
Nonmetallic mineral products	32.1		0.0						9.1		5.1		57.1					0.9									118.4	
Other manufacturing <sup>e</sup>	9.1								3.1		48.5		46.8					91.5									226.1	
Road transport									81.7		1 033.3		0.8														1 115.8	
Rail transport											28.4		0.0														37.3	
Air transport											259.6																259.6	
Water transport	4.5										56.2		0.1														60.8	
Pipeline transport													34.8														34.8	
Commercial and services	1.6								4.9		24.5		44.7														289.5	
Residential	0.1								13.4		1.6		136.7														458.4	
Other <sup>f</sup>											760																760	
Total final energy consumption	155.3		0.0		38.5				130.8		1 917.8		694.0		0.0		0.0		163.0		0.0				2.9		4 018.3	

<sup>a</sup> Includes naturally occurring LPG. <sup>b</sup> Includes town gas. <sup>c</sup> Includes cogeneration. <sup>d</sup> Includes rubber and plastic products. <sup>e</sup> Includes construction. <sup>f</sup> Includes solvents, lubricants, bitumen and greases.

## A8 Australian energy supply and disposal, 2014-15

	Black coal		Brown coal		Coke		Coal by-products		Oil		LPG		Other petroleum products <sup>a</sup>		Natural gas <sup>b</sup>		Hydro		Wind		Biomass		Biogas		Electricity		Solar		Total	
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	
<b>Supply</b>																														
Indigenous production	10 577.6		766.8						1 222.6		178.8			4 165.3		65.3		18.4		260.6		40.8					3.3		17 299.4	
Net exports	8 857.4								- 385.7		73.5		- 522.9	2 619.0															10 641.3	
Stock changes and discrepancies	- 58.5		- 1.9						- 66.6				- 53.9																- 181.0	
Total primary energy consumption	1 778.7		768.7					1 674.9		105.3		576.9	1 546.3	65.3	18.4	260.6	40.8									3.3		6 839.1		
<b>Conversion</b>																														
Coke ovens	157.9				- 99.2		- 19.5																						39.1	
Blast furnaces					99.2		- 19.1																						80.1	
Petroleum refining								1 680.3		- 28.1		- 1 648.4		14.7															23.7	
Petrochemicals								- 5.3				5.3																	0.0	
Electricity generation <sup>c</sup>	1 465.0		768.7									63.2	562.5	65.3	18.4	91.7	40.8	- 1 142.6									0.3	1 933.3		
Fuel use in conversion												164.0		225.5															429.1	
Transmission losses																													118.7	
Final domestic availability	155.8		0.0		0.0		38.6		0.0	133.3		1 992.6	743.6	0.0	0.0	168.9	0.0									3.1	4 214.8			
<b>End use</b>																														
Agriculture										2.4		93.8	0.1																103.6	
Mining		6.1								0.6		207.7	52.0																365.9	
Wood, paper and printing		11.4								0.9		1.5	19.1			19.1													75.0	
Chemical products <sup>d</sup>		2.1								12.3		56.7	119.4																209.2	
Iron and steel		17.8					38.6			1.5		3.5	26.8																116.6	
Basic nonferrous metals		70.9								0.1		42.0	189.5																553.2	
- aluminium smelting										0.1		12.8	4.7																112.9	
- other basic nonferrous metals		70.9								0.1		29.2	184.8																440.2	
Nonmetallic mineral products		32.5		0.0						7.4		4.9	60.4			1.0													120.7	
Other manufacturing <sup>e</sup>		8.9								3.1		50.0	48.0			96.6													234.9	
Road transport										86.7		1 054.8	0.9																1 142.3	
Rail transport												28.6	0.0																37.8	
Air transport												287.8																	287.8	
Water transport		4.6										57.1	0.1																61.7	
Pipeline transport													35.9																35.9	
Commercial and services		1.5								4.5		25.1	48.0																311.8	
Residential		0.1								13.9		1.7	143.3			52.2													480.8	
Other <sup>f</sup>												77.6																	77.6	
Total final energy consumption	155.8		0.0		0.0		38.6		0.0	133.3		1 992.6	743.6	0.0	0.0	168.9	0.0									3.0	4 214.8			

<sup>a</sup> Includes naturally occurring LPG. <sup>b</sup> Includes town gas. <sup>c</sup> Includes cogeneration. <sup>d</sup> Includes rubber and plastic products. <sup>e</sup> Includes construction. <sup>f</sup> Includes solvents, lubricants, bitumen and greases.



	Black coal		Brown coal		Coke		Coal by-products		Oil		LPG		Other petroleum products <sup>a</sup>		Natural gas <sup>b</sup>		Wind		Biomass		Biogas		Electricity		Solar		Total		
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	
<b>Supply</b>																													
Indigenous production	12 279.3		829.9						1 086.1		243.6				5 462.9	70.7	20.3	322.1	39.0						4.0	20 357.7			
Net exports	10 357.9								- 694.0		110.5				3 630.7														12 711.2
Stock changes and discrepancies	- 57.2		- 1.9						- 65.1						- 52.7														- 176.8
Total primary energy consumption	1 978.5		831.8						1 845.1		133.0			746.7	1 832.2	70.7	20.3	322.1	39.0						4.0	7 823.4			
<b>Conversion</b>																													
Coke ovens	158.4				- 99.6		- 19.6																						39.2
Blast furnaces					99.6		- 19.2																						80.4
Petroleum refining								1 850.1		- 30.9			- 1 815.0		16.0														25.6
Petrochemicals								- 5.0					5.0																0.0
Electricity generation <sup>c</sup>	1 666.4		831.8										65.9		666.8	70.7	20.3	134.2	39.0	- 1 376.2				0.2				2 119.1	
Fuel use in conversion													180.6		278.1														506.5
Transmission losses																													143.3
Final domestic availability	153.8		0.0		0.0		38.8		0.0		163.9		2 310.2		871.3	0.0	0.0	187.9	0.0	1 179.2				3.7				4 908.8	
<b>End use</b>																													
Agriculture											3.6		103.0		0.1														114.6
Mining	5.0										0.8		323.9		81.3														544.9
Wood, paper and printing	10.5										0.8		1.4		23.7			21.5											84.1
Chemical products <sup>d</sup>	1.8										11.5		53.1		148.8														237.2
Iron and steel	19.2						38.8				1.2		3.5		27.2														120.0
Basic nonferrous metals	69.2										0.1		47.0		199.8														605.7
- aluminium smelting											0.1		12.8		4.8														116.2
- other basic nonferrous metals	69.2										0.1		34.3		195.0														489.5
Nonmetallic mineral products	33.4		0.0								6.6		4.6		70.6			1.1											132.1
Other manufacturing <sup>e</sup>	8.3										3.3		55.1		51.5			113.3											263.1
Road transport											114.2		1 125.5		1.0														1 240.7
Rail transport													29.0		0.0														39.6
Air transport													392.2																392.2
Water transport	4.9												59.6		0.1														64.5
Pipeline transport													41.7																41.7
Commercial and services	1.4										4.9		27.9		56.5														298.2
Residential	0.1										17.0		2.2		167.0			52.1											313.2
Other <sup>f</sup>													82.2																82.2
Total final energy consumption	153.8		0.0		0.0		38.8				163.9		2 310.2		871.3	0.0	0.0	187.9	0.0	1 179.2				3.7				4 908.8	

<sup>a</sup> Includes naturally occurring LPG. <sup>b</sup> Includes town gas. <sup>c</sup> Includes cogeneration. <sup>d</sup> Includes rubber and plastic products. <sup>e</sup> Includes construction. <sup>f</sup> Includes solvents, lubricants, bitumen and greases.

## Australian energy supply and disposal, 2029-30

	Black coal		Brown coal		Coke		Coal by-products		Oil		LPG		Other petroleum products <sup>a</sup>		Natural gas <sup>b</sup>		Hydro		Wind		Biomass		Biogas		Electricity		Solar		Total	
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	
<b>Supply</b>																														
Indigenous production	13 037.3	801.4							1 078.0		261.7				6 134.5		73.2	23.1	326.5								4.3	21 777.6		
Net exports	10 988.6								- 794.3		110.7				4 152.9													13 653.8		
Stock changes and discrepancies	- 56.5	- 1.9							- 64.3						- 52.0													- 174.6		
Total primary energy consumption	2 105.1	803.3							1 936.6		151.0				1 981.6		73.2	23.1	326.5							4.3	8 298.5			
<b>Conversion</b>																														
Coke ovens	158.4								- 99.6																			39.2		
Blast furnaces									99.6																			80.4		
Petroleum refining									- 19.2																			26.7		
Petrochemicals																												0.0		
Electricity generation <sup>c</sup>	1 792.5	803.2							1 941.4		- 32.4				1 904.6													2 155.1		
Fuel use in conversion									- 4.9					4.9														541.3		
Transmission losses														189.5														155.9		
Final domestic availability	154.2	0.0							0.0		183.4			2 499.1	940.8		0.0	0.0	197.5							4.1	5 299.5			
<b>End use</b>																														
Agriculture											4.3			107.6	0.2													120.3		
Mining	4.6										1.0			400.5	100.2													659.8		
Wood, paper and printing	10.1										0.8			1.4	26.2							22.6						88.8		
Chemical products <sup>d</sup>	1.7										11.1			51.4	164.2													252.3		
Iron and steel	19.8										1.2			3.5	27.5													121.6		
Basic nonferrous metals	69.6										0.1			50.0	204.3													631.2		
- aluminium smelting											0.1			12.9	4.9													117.1		
- other basic nonferrous metals	69.6										0.1			37.1	199.4													514.1		
Nonmetallic mineral products	33.8	0.0									6.5			4.5	75.8							1.1						138.0		
Other manufacturing <sup>e</sup>	8.0										3.4			57.8	53.0							121.8						277.1		
Road transport											131.1			1 163.0	1.1													1 295.2		
Rail transport														29.2	0.0													40.5		
Air transport														453.3														453.3		
Water transport	5.0													60.7	0.1													65.8		
Pipeline transport															44.5													44.5		
Commercial and services	1.4										5.2			29.6	63.6													434.3		
Residential	0.1										18.7			2.4	180.2													592.6		
Other <sup>f</sup>														84.3														84.3		
Total final energy consumption	154.2	0.0							38.8		183.4			2 499.1	940.8			0.0	197.5							4.1	5 299.5			

<sup>a</sup> includes naturally occurring LPG; <sup>b</sup> includes town gas; <sup>c</sup> includes cogeneration; <sup>d</sup> includes rubber and plastic products; <sup>e</sup> includes construction; <sup>f</sup> includes solvents, lubricants, bitumen and greases.

## B1 Final energy consumption in Australia, by industry

	Agriculture		Mining		Manufacturing and construction		Transport		Commercial and services <sup>a</sup>		Residential		Other <sup>b</sup>		Total	
	PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ	
2005-06	92.2		234.7		1 084.3		1 371.4		242.5		413.0		72.0		3 510.2	
2006-07	93.1		245.4		1 126.2		1 390.4		248.0		417.8		72.5		3 593.3	
2007-08	94.9		261.1		1 150.7		1 420.6		257.9		426.8		73.4		3 685.3	
2008-09	96.2		275.1		1 165.3		1 442.8		265.6		434.4		74.1		3 753.5	
2009-10	97.6		289.5		1 178.7		1 465.8		273.5		442.1		74.7		3 821.9	
2010-11	98.9		304.5		1 213.7		1 487.9		281.7		450.3		75.3		3 912.4	
2011-12	100.2		320.3		1 265.7		1 508.2		289.5		458.4		76.0		4 018.3	
2012-13	101.4		336.1		1 276.8		1 528.0		297.2		466.3		76.5		4 082.5	
2013-14	102.5		351.2		1 291.8		1 546.1		304.5		473.5		77.1		4 146.6	
2014-15	103.6		365.9		1 309.6		1 565.5		311.8		480.8		77.6		4 214.8	
2015-16	104.7		381.0		1 322.1		1 584.6		319.1		488.0		78.0		4 277.4	
2016-17	105.8		396.6		1 335.7		1 604.8		326.6		495.4		78.5		4 343.3	
2017-18	106.9		412.7		1 349.0		1 625.4		334.2		502.6		79.0		4 409.8	
2018-19	107.9		429.5		1 362.5		1 646.4		341.9		509.9		79.4		4 477.7	
2019-20	109.0		447.1		1 378.4		1 668.2		349.8		517.4		79.9		4 549.9	
2020-21	110.2		465.3		1 391.3		1 689.6		358.0		525.0		80.4		4 619.7	
2021-22	111.3		484.2		1 404.1		1 711.2		366.0		532.5		80.8		4 690.1	
2022-23	112.4		503.8		1 416.4		1 733.3		374.4		540.0		81.3		4 761.6	
2023-24	113.5		524.1		1 429.1		1 755.9		382.7		547.6		81.7		4 834.7	
2024-25	114.6		544.9		1 442.1		1 778.8		391.1		555.0		82.2		4 908.8	
2025-26	115.7		566.2		1 455.0		1 801.6		399.5		562.4		82.6		4 983.1	
2026-27	116.8		588.3		1 468.0		1 825.0		408.0		569.7		83.0		5 059.0	
2027-28	117.9		611.3		1 481.3		1 849.0		416.6		577.2		83.4		5 136.8	
2028-29	119.1		635.2		1 494.9		1 873.7		425.6		584.8		83.9		5 217.1	
2029-30	120.3		659.8		1 508.9		1 899.4		434.3		592.6		84.3		5 299.5	

<sup>a</sup> Includes ANZSIC Divisions F, G, H, J, K, L, M, N, O, P, Q, ANZSIC 3700 water, sewerage, drainage and ANZSIC 6700 storage industries. <sup>b</sup> Includes solvents, lubricants, bitumen and greases.

## Final energy consumption in Australia, by industry, by state

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>New South Wales</b>											
Agriculture	28.3	28.5	29.1	29.4	29.8	30.2	30.5	31.5	32.9	34.3	35.7
Mining	45.4	47.0	49.8	51.9	54.1	56.5	58.8	65.5	77.1	90.3	104.8
Manufacturing and construction	252.8	255.2	256.8	258.8	260.8	262.9	264.1	269.2	278.0	286.9	295.5
Transport	412.6	417.3	425.7	431.8	437.9	443.8	448.9	463.4	491.8	518.7	547.3
Commercial and services <b>a</b>	72.6	74.0	76.4	78.3	80.2	82.3	84.4	90.3	100.0	110.2	120.6
Residential	120.1	121.5	123.9	125.8	127.7	129.9	132.0	138.0	147.4	156.7	165.6
Other <b>b</b>	21.0	21.1	21.3	21.4	21.6	21.7	21.9	22.2	22.7	23.1	23.5
Total	952.7	964.6	982.9	997.5	1 012.2	1 027.2	1 040.5	1 080.1	1 149.8	1 220.2	1 293.0
<b>Victoria</b>											
Agriculture	15.4	15.4	15.6	15.8	15.9	16.0	16.1	16.4	16.9	17.3	17.7
Mining	6.4	6.6	6.9	7.2	7.5	7.8	8.1	9.0	10.5	12.1	13.9
Manufacturing and construction	255.7	259.2	263.4	267.1	270.8	274.6	278.4	290.1	308.9	328.1	347.3
Transport	341.5	346.1	353.5	358.5	363.2	367.5	370.8	380.8	396.2	415.8	438.1
Commercial and services <b>a</b>	66.7	68.2	70.4	72.3	74.3	76.4	78.6	84.7	94.8	105.3	116.2
Residential	150.9	151.3	153.9	156.3	158.8	161.5	164.5	171.8	184.2	197.0	210.3
Other <b>b</b>	14.7	14.8	15.0	15.1	15.2	15.3	15.4	15.7	16.1	16.5	16.8
Total	851.3	861.6	878.7	892.2	905.7	919.2	931.9	968.5	1 027.6	1 092.2	1 160.3
<b>Queensland</b>											
Agriculture	21.2	21.5	22.2	22.7	23.2	23.8	24.3	25.7	28.0	30.4	32.8
Mining	78.6	82.8	89.8	95.6	101.8	108.3	115.2	135.6	174.3	222.3	279.8
Manufacturing and construction	282.8	286.3	293.8	298.3	302.9	307.4	323.2	341.8	367.4	386.5	408.9
Transport	300.6	306.5	314.6	320.9	327.8	334.8	341.6	361.7	398.5	438.6	482.5
Commercial and services <b>a</b>	46.7	48.1	51.0	53.1	55.4	57.6	59.6	65.5	76.3	88.6	102.0
Residential	56.0	57.5	59.6	61.2	62.9	64.6	66.3	71.2	79.2	87.8	96.3
Other <b>b</b>	19.8	19.9	20.3	20.5	20.8	21.0	21.3	21.9	22.9	23.8	24.7
Total	805.6	822.7	851.2	872.4	894.7	917.5	951.4	1 023.3	1 146.5	1 278.1	1 427.1
<b>Western Australia</b>											
Agriculture	13.5	13.7	13.9	14.1	14.3	14.4	14.6	15.0	15.7	16.5	17.3
Mining	87.0	91.2	96.2	101.5	106.7	112.0	117.8	133.9	160.8	193.1	231.5
Manufacturing and construction	180.4	210.0	215.9	218.3	219.8	221.9	238.6	251.4	261.7	272.7	284.1
Transport	177.5	181.8	187.5	191.9	196.4	200.8	205.4	217.1	237.2	259.5	283.7
Commercial and services <b>a</b>	25.8	26.7	28.0	29.0	30.1	31.1	32.1	34.8	39.5	44.7	50.3
Residential	32.0	32.7	33.7	34.6	35.5	36.3	37.2	39.5	43.5	47.7	52.0
Other <b>b</b>	10.2	10.3	10.5	10.6	10.7	10.8	10.9	11.2	11.6	12.0	12.4
Total	526.6	566.4	585.8	600.0	613.4	627.5	656.5	702.9	770.0	846.1	931.2

Continued

Final energy consumption in Australia, by industry, by state *continued*

	2005-06		2006-07		2007-08		2008-09		2009-10		2010-11		2011-12		2014-15		2019-20		2024-25		2029-30	
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>South Australia</b>																						
Agriculture	9.2	9.3	9.4	9.5	9.6	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	10.0	10.3	10.6	10.6	10.3	10.6	10.6	10.9	10.9
Mining	7.8	8.1	8.4	8.7	9.0	9.4	9.4	9.4	9.0	9.4	9.4	9.7	9.7	10.5	12.0	13.6	13.6	12.0	13.6	13.6	15.3	15.3
Manufacturing and construction	49.0	49.5	52.4	52.9	53.5	54.1	54.1	54.1	53.5	54.1	54.1	54.2	54.2	55.1	56.8	58.6	58.6	56.8	58.6	58.6	60.4	60.4
Transport	89.3	88.5	88.4	88.5	88.8	89.0	89.0	89.0	88.8	89.0	89.0	89.1	89.1	89.5	90.3	91.0	91.0	90.3	91.0	91.0	91.7	91.7
Commercial and services <b>a</b>	18.3	18.6	19.1	19.5	19.9	20.4	20.4	20.4	19.9	20.4	20.4	20.7	20.7	21.8	23.5	25.3	25.3	23.5	25.3	25.3	27.1	27.1
Residential	34.7	34.9	35.4	35.8	36.2	36.7	36.7	36.7	36.2	36.7	36.7	37.1	37.1	38.3	40.2	42.0	42.0	40.2	42.0	42.0	43.7	43.7
Other <b>b</b>	4.7	4.7	4.7	4.7	4.7	4.8	4.8	4.8	4.7	4.7	4.8	4.8	4.8	4.8	4.9	5.0	5.0	4.9	5.0	5.0	5.0	5.0
Total	213.0	213.5	217.8	219.7	221.8	223.9	223.9	223.9	221.8	223.9	223.9	225.4	225.4	230.0	238.0	246.0	246.0	238.0	246.0	246.0	254.1	254.1
<b>Tasmania</b>																						
Agriculture	3.5	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.8	3.8
Mining	6.7	6.7	6.9	7.0	7.2	7.3	7.3	7.3	7.2	7.3	7.3	7.4	7.4	7.8	8.4	9.0	9.0	8.4	9.0	9.0	9.7	9.7
Manufacturing and construction	48.0	50.0	51.1	52.0	52.7	53.5	53.5	53.5	52.7	53.5	53.5	53.7	53.7	54.5	55.9	57.4	57.4	55.9	57.4	57.4	58.7	58.7
Transport	27.5	27.6	27.8	27.9	28.0	28.1	28.1	28.1	28.0	28.1	28.1	28.1	28.1	28.2	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
Commercial and services <b>a</b>	7.0	7.0	7.3	7.4	7.6	7.8	7.8	7.8	7.6	7.8	7.8	7.8	7.8	8.1	8.6	9.2	9.2	8.6	9.2	9.2	9.7	9.7
Residential	16.9	17.5	17.9	18.2	18.5	18.6	18.6	18.6	18.5	18.6	18.6	18.8	18.8	19.2	20.0	20.9	20.9	20.0	20.9	20.9	21.4	21.4
Other <b>b</b>	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Total	110.9	113.6	115.7	117.3	118.7	120.0	120.0	120.0	118.7	120.0	120.0	120.7	120.7	122.8	126.3	129.9	129.9	126.3	129.9	129.9	132.8	132.8
<b>Northern Territory</b>																						
Agriculture	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.6	1.8	1.8	1.6	1.8	1.8	2.0	2.0
Mining	2.9	3.0	3.0	3.1	3.2	3.3	3.3	3.3	3.2	3.3	3.3	3.4	3.4	3.6	4.1	4.5	4.5	4.1	4.5	4.5	5.0	5.0
Manufacturing and construction	15.5	15.8	17.4	18.0	18.3	19.3	19.3	19.3	18.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
Transport	22.4	22.7	23.0	23.3	23.6	23.9	23.9	23.9	23.6	23.9	23.9	24.2	24.2	24.8	25.7	26.7	26.7	25.7	26.7	26.7	27.6	27.6
Commercial and services <b>a</b>	5.3	5.4	5.7	5.8	6.0	6.1	6.1	6.1	6.0	6.1	6.1	6.2	6.2	6.6	7.1	7.8	7.8	7.1	7.8	7.8	8.4	8.4
Residential	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.7	2.9	3.1	3.1	2.9	3.1	3.1	3.3	3.3
Other <b>b</b>	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	50.2	50.9	53.2	54.4	55.3	57.0	57.0	57.0	55.3	57.0	57.0	58.1	58.1	61.2	64.7	69.2	69.2	64.7	69.2	69.2	74.0	74.0

**a** Includes ANZSIC Divisions F, G, H, J, K, L, M, N, O, P, Q, ANZSIC 3700 water, sewerage, drainage and ANZSIC 6700 storage industries. **b** Includes solvents, lubricants, bitumen and greases.

## C1 Final energy consumption in Australia, by fuel

C1

	Black coal		LPG		Other petroleum products		Natural gas		Electricity		Biomass		Solar energy		Total	
	PJ		PJ		PJ		PJ		PJ		PJ		PJ		PJ	
2005-06	175.3		97.3		1 728.7		564.8		791.7		149.9		2.4		3 510.2	
2006-07	186.5		102.0		1 752.0		586.7		812.1		151.5		2.5		3 593.3	
2007-08	189.8		112.9		1 792.3		598.0		835.4		154.3		2.6		3 685.3	
2008-09	190.5		119.9		1 823.5		606.6		854.2		156.4		2.6		3 753.5	
2009-10	190.3		126.8		1 854.9		616.0		872.6		158.6		2.7		3 821.9	
2010-11	190.1		132.7		1 886.2		647.9		891.9		160.8		2.8		3 912.4	
2011-12	193.9		130.8		1 917.8		694.0		916.1		163.0		2.9		4 018.3	
2012-13	194.4		131.8		1 937.2		713.9		937.1		165.1		2.9		4 082.5	
2013-14	193.7		132.1		1 964.7		727.7		958.4		167.0		3.0		4 146.6	
2014-15	194.5		133.3		1 992.6		743.6		978.8		168.9		3.0		4 214.8	
2015-16	194.3		133.9		2 020.9		756.2		998.2		170.8		3.1		4 277.4	
2016-17	194.2		136.9		2 049.8		769.1		1 017.4		172.7		3.2		4 343.3	
2017-18	194.0		140.0		2 079.3		781.4		1 037.2		174.5		3.2		4 409.8	
2018-19	193.9		143.3		2 109.8		794.1		1 056.9		176.4		3.3		4 477.7	
2019-20	194.2		146.6		2 141.3		808.5		1 077.5		178.3		3.4		4 549.9	
2020-21	193.9		149.9		2 173.4		821.2		1 097.8		180.2		3.4		4 619.7	
2021-22	193.6		153.2		2 206.2		833.5		1 118.2		182.1		3.5		4 690.1	
2022-23	193.1		156.7		2 240.2		845.8		1 138.1		184.1		3.6		4 761.6	
2023-24	192.8		160.3		2 275.1		858.4		1 158.4		186.0		3.7		4 834.7	
2024-25	192.6		163.9		2 310.2		871.3		1 179.2		187.9		3.7		4 908.8	
2025-26	192.3		167.6		2 345.6		884.1		1 200.0		189.8		3.8		4 983.1	
2026-27	192.1		171.3		2 382.0		897.1		1 220.9		191.7		3.9		5 059.0	
2027-28	191.9		175.2		2 419.5		910.2		1 242.4		193.6		3.9		5 136.8	
2028-29	191.8		179.2		2 458.4		924.1		1 264.1		195.5		4.0		5 217.1	
2029-30	193.0		183.4		2 499.1		940.8		1 281.6		197.5		4.1		5 299.5	

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>New South Wales</b>											
Black coal	48.9	49.1	48.7	48.6	48.5	48.4	48.4	48.2	47.9	47.7	47.5
LPG	25.7	26.6	29.1	30.6	32.1	33.3	32.2	31.6	32.5	33.9	35.3
Other petroleum products	511.0	516.6	527.0	534.4	542.0	549.4	556.7	576.5	610.2	647.1	687.2
Natural gas	113.2	113.8	114.7	116.2	117.9	119.7	122.1	128.2	141.2	151.1	160.9
Electricity	237.1	241.7	246.5	250.5	254.5	259.1	263.7	278.0	299.9	321.9	343.4
Biomass	16.2	16.2	16.4	16.5	16.5	16.6	16.7	16.9	17.2	17.5	17.8
Solar energy	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9
Total	952.7	964.6	982.9	997.5	1012.2	1027.2	1040.5	1080.1	1149.8	1220.2	1293.0
<b>Victoria</b>											
Black coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LPG	38.6	40.3	43.6	46.0	48.4	50.6	51.2	54.8	63.4	73.9	86.4
Other petroleum products	384.2	386.2	390.1	392.7	395.4	397.8	400.3	406.5	416.3	426.2	436.3
Natural gas	191.2	192.3	196.2	199.7	203.0	206.7	210.9	221.5	236.8	254.7	274.3
Electricity	210.5	215.8	221.5	226.4	231.3	236.3	241.5	257.3	282.1	307.6	332.8
Biomass	26.6	26.7	27.0	27.2	27.3	27.5	27.7	28.2	28.8	29.5	30.1
Solar energy	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Total	851.2	861.5	878.6	892.2	905.7	919.2	931.8	968.4	1027.6	1092.1	1160.3
<b>Queensland</b>											
Black coal	69.2	68.0	68.8	68.9	69.0	69.2	72.4	73.6	74.5	74.1	75.6
LPG	14.5	15.5	18.1	19.7	21.2	22.4	21.4	20.9	22.5	25.0	27.5
Other petroleum products	408.8	417.6	433.3	445.5	458.1	470.9	484.0	520.9	587.8	666.4	755.6
Natural gas	65.8	67.8	68.9	69.6	70.9	72.4	80.6	91.2	107.0	119.0	134.7
Electricity	167.4	172.5	178.7	183.7	188.7	194.0	202.5	221.4	251.7	282.8	314.8
Biomass	79.6	80.9	83.0	84.7	86.4	88.1	89.9	94.7	102.4	110.2	118.2
Solar energy	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.7
Total	805.6	822.7	851.2	872.4	894.7	917.5	951.4	1023.3	1146.5	1278.1	1427.1
<b>Western Australia</b>											
Black coal	31.6	43.9	45.8	46.5	46.3	46.1	46.7	46.6	46.0	45.3	44.7
LPG	8.9	9.5	10.9	11.8	12.6	13.3	13.1	13.4	14.8	16.7	18.7
Other petroleum products	246.1	252.1	260.2	267.8	275.2	282.6	290.4	311.8	347.2	388.0	434.8
Natural gas	150.8	168.9	173.5	175.7	178.0	180.9	197.3	212.5	227.8	245.2	264.0
Electricity	79.6	82.1	85.5	88.2	91.1	94.0	98.3	107.5	122.2	138.2	155.4
Biomass	8.6	8.7	8.9	9.0	9.2	9.3	9.5	9.9	10.5	11.2	11.9
Solar energy	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.3	1.4	1.6	1.8
Total	526.6	566.4	585.8	600.0	613.4	627.5	656.5	702.9	770.0	846.1	931.2

Continued

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>South Australia</b>											
Black coal	104	106	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.8
LPG	8.1	8.4	9.3	9.9	10.5	10.9	10.7	10.7	11.5	12.4	13.5
Other petroleum products	102.6	103.0	103.8	104.3	104.8	105.2	105.6	106.5	107.9	109.1	110.4
Natural gas	39.1	38.1	38.2	38.2	38.6	39.0	39.5	40.9	43.3	45.6	48.0
Electricity	45.4	46.1	47.4	48.2	48.9	49.7	50.4	52.7	56.1	59.4	62.6
Biomass	7.1	7.2	7.2	7.2	7.2	7.3	7.3	7.3	7.4	7.5	7.5
Solar energy	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Total	213.0	213.5	217.8	219.7	221.8	223.9	225.4	230.0	238.0	246.0	254.1
<b>Tasmania</b>											
Black coal	15.1	14.8	14.8	14.7	14.7	14.6	14.6	14.3	14.0	13.7	13.4
LPG	1.2	1.3	1.4	1.5	1.6	1.7	1.6	1.5	1.4	1.5	1.5
Other petroleum products	39.6	39.5	39.9	40.1	40.3	40.5	40.6	40.8	41.0	41.2	41.5
Natural gas	4.4	5.5	6.2	6.8	7.3	8.0	8.2	9.0	10.3	11.7	12.9
Electricity	38.8	40.7	41.4	42.3	42.8	43.3	43.9	45.3	47.6	49.9	51.6
Biomass	11.8	11.8	11.8	11.8	11.8	11.8	11.9	11.9	11.9	11.9	11.9
Solar energy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	110.9	113.6	115.7	117.3	118.7	120.0	120.7	122.8	126.3	129.9	132.8
<b>Northern Territory</b>											
Black coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LPG	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Other petroleum products	36.5	37.0	38.0	38.6	39.2	39.7	40.2	29.6	30.9	32.1	33.3
Natural gas	0.3	0.3	0.3	0.3	0.3	21.2	35.3	40.3	42.2	44.0	45.9
Electricity	12.9	13.2	14.3	14.9	15.2	15.5	15.8	16.6	18.0	19.4	20.9
Biomass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Solar energy	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total	50.1	50.9	53.2	54.4	55.3	77.0	91.8	87.2	91.6	96.2	100.9

## D] Primary energy consumption in Australia, by industry

	Manufacturing and construction										Total
	Agriculture	Mining	Manufacturing and construction	Electricity generation	Transport	Commercial and services a	Residential	Other b			
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
2005-06	85.6	266.3	1 056.0	2 587.1	1 363.4	65.1	192.0	72.0	5 687.5		
2006-07	86.4	295.8	1 092.8	2 667.6	1 382.3	66.2	192.0	72.5	5 855.6		
2007-08	88.2	308.1	1 115.7	2 736.0	1 412.3	69.2	194.9	73.4	5 997.8		
2008-09	89.4	314.7	1 128.0	2 785.3	1 434.4	71.1	197.6	74.1	6 094.6		
2009-10	90.7	329.8	1 139.4	2 831.2	1 457.2	73.0	200.6	74.7	6 196.5		
2010-11	91.9	354.2	1 172.3	2 876.8	1 479.2	74.8	203.6	75.3	6 328.2		
2011-12	93.2	374.8	1 217.0	2 935.7	1 499.4	75.9	206.7	76.0	6 478.5		
2012-13	94.3	412.6	1 223.7	2 982.6	1 519.1	77.2	209.6	76.5	6 595.6		
2013-14	95.3	453.9	1 234.3	3 028.7	1 537.0	78.2	211.4	77.1	6 715.8		
2014-15	96.3	492.0	1 247.7	3 075.9	1 556.3	79.3	214.1	77.6	6 839.1		
2015-16	97.3	514.2	1 256.8	3 119.8	1 575.2	80.4	216.5	78.0	6 938.5		
2016-17	98.4	529.2	1 267.1	3 165.2	1 595.3	81.8	219.4	78.5	7 034.8		
2017-18	99.4	543.3	1 276.9	3 211.5	1 615.8	83.0	221.9	79.0	7 130.9		
2018-19	100.4	556.0	1 287.1	3 259.5	1 636.7	84.3	224.7	79.4	7 228.2		
2019-20	101.4	569.6	1 299.1	3 310.6	1 658.3	85.7	227.5	79.9	7 332.2		
2020-21	102.5	596.6	1 308.8	3 351.1	1 679.6	87.2	230.3	80.4	7 436.4		
2021-22	103.5	619.3	1 318.4	3 391.3	1 701.1	88.5	233.1	80.8	7 536.0		
2022-23	104.6	638.2	1 327.7	3 427.2	1 723.0	90.1	236.1	81.3	7 628.2		
2023-24	105.7	667.0	1 337.4	3 460.9	1 745.5	91.5	239.1	81.7	7 728.7		
2024-25	106.7	689.1	1 347.2	3 495.3	1 768.2	92.9	241.8	82.2	7 823.4		
2025-26	107.8	710.9	1 357.0	3 529.0	1 790.9	94.3	244.5	82.6	7 916.9		
2026-27	108.8	732.9	1 366.9	3 562.5	1 814.1	95.7	247.1	83.0	8 011.0		
2027-28	109.9	760.7	1 376.9	3 596.9	1 838.0	97.0	249.8	83.4	8 112.6		
2028-29	110.9	784.5	1 387.3	3 631.3	1 862.5	98.5	252.7	83.9	8 211.5		
2029-30	112.1	806.1	1 400.2	3 650.5	1 888.0	100.1	257.1	84.3	8 298.5		

**a** Includes ANZSIC Divisions F, G, H, J, K, L, M, N, O, P, Q, ANZSIC 3700 water, sewerage, drainage and ANZSIC 6700 storage industries. **b** Includes solvents, lubricants, bitumen and greases.

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>New South Wales</b>											
Agriculture	26.5	26.7	27.2	27.6	28.0	28.3	28.7	29.5	30.9	32.3	33.7
Mining	31.9	33.6	36.0	37.9	39.9	41.9	44.2	50.2	66.1	77.9	90.4
Manufacturing and construction	303.5	305.4	305.6	307.4	309.0	310.9	311.8	315.6	322.4	329.6	336.8
Electricity generation	702.4	724.3	727.4	729.4	730.7	731.5	743.1	796.2	839.4	927.2	993.1
Transport	409.1	413.8	422.2	428.2	434.3	440.1	445.2	459.7	487.9	514.7	543.1
Commercial and services <b>a</b>	14.2	14.4	15.0	15.4	15.7	16.1	16.3	17.0	18.2	19.6	20.9
Residential	34.9	34.8	35.3	35.7	36.2	36.6	37.0	38.0	39.9	42.0	44.2
Other <b>b</b>	21.0	21.1	21.3	21.4	21.6	21.7	21.9	22.2	22.7	23.1	23.5
Total	1 543.5	1 574.2	1 590.1	1 603.1	1 615.4	1 627.2	1 648.1	1 728.5	1 827.5	1 966.3	2 085.7
<b>Victoria</b>											
Agriculture	13.9	14.0	14.1	14.3	14.4	14.5	14.6	14.9	15.3	15.7	16.1
Mining	21.1	24.3	28.1	29.8	30.6	31.2	31.4	32.3	28.1	29.6	32.8
Manufacturing and construction	185.6	186.6	189.2	191.3	193.4	195.6	197.3	202.5	211.4	220.5	229.9
Electricity generation	751.5	762.5	776.8	790.1	803.7	816.2	828.3	846.0	908.7	931.0	915.8
Transport	339.9	344.5	351.9	356.9	361.6	365.9	369.2	379.0	394.4	413.9	436.1
Commercial and services <b>a</b>	23.9	24.4	25.0	25.6	26.2	26.8	27.5	29.4	32.4	35.5	38.6
Residential	106.3	105.7	107.1	108.5	110.1	111.8	113.7	118.1	126.1	134.5	143.7
Other <b>b</b>	14.7	14.8	15.0	15.1	15.2	15.3	15.4	15.7	16.1	16.5	16.8
Total	1 457.0	1 476.7	1 507.2	1 531.5	1 555.1	1 577.3	1 597.3	1 637.8	1 732.5	1 797.2	1 829.9
<b>Queensland</b>											
Agriculture	19.7	20.1	20.7	21.2	21.7	22.2	22.6	24.0	26.1	28.4	30.7
Mining	56.4	59.8	65.4	70.1	75.1	80.4	86.0	102.7	134.8	175.4	224.7
Manufacturing and construction	282.2	285.0	293.0	297.9	302.9	307.7	320.4	336.0	358.7	376.6	398.5
Electricity generation	676.5	713.1	750.1	774.8	798.7	822.8	846.0	893.5	991.1	1 028.8	1 096.8
Transport	297.9	303.8	311.8	318.1	324.9	331.9	338.7	358.6	395.2	435.1	478.8
Commercial and services <b>a</b>	9.0	9.1	9.9	10.4	10.7	11.1	11.1	11.2	11.9	13.0	14.1
Residential	10.9	11.0	11.4	11.6	11.9	12.1	12.3	12.8	13.7	14.8	16.0
Other <b>b</b>	19.8	19.9	20.3	20.5	20.8	21.0	21.3	21.9	22.9	23.8	24.7
Total	1 372.4	1 421.9	1 482.7	1 524.5	1 566.6	1 609.1	1 658.3	1 760.6	1 954.3	2 095.9	2 284.2
<b>Western Australia</b>											
Agriculture	12.9	13.0	13.2	13.4	13.5	13.7	13.8	14.2	14.9	15.6	16.4
Mining	124.0	137.1	142.4	142.7	150.7	165.6	177.0	257.5	291.3	337.9	389.8
Manufacturing and construction	191.1	220.4	226.6	229.1	230.8	232.9	248.1	260.1	270.0	280.7	291.8
Electricity generation	269.8	275.0	283.0	288.7	294.3	300.5	310.8	328.6	353.3	381.2	409.1
Transport	177.2	181.4	187.2	191.5	196.0	200.4	204.9	216.5	236.4	258.5	282.3
Commercial and services <b>a</b>	9.2	9.5	10.0	10.3	10.6	10.9	11.1	11.5	12.4	13.3	14.3
Residential	13.9	14.2	14.6	14.9	15.2	15.5	15.8	16.7	18.0	19.5	21.0
Other <b>b</b>	10.2	10.3	10.5	10.6	10.7	10.8	10.9	11.2	11.6	12.0	12.4
Total	808.3	861.0	887.5	901.2	921.9	950.4	992.5	1 116.3	1 207.9	1 318.7	1 437.2

Continued

Primary energy consumption in Australia, by industry, by state *continued*

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>South Australia</b>											
Agriculture	8.3	8.4	8.5	8.6	8.7	8.7	8.8	9.0	9.3	9.6	9.9
Mining	22.9	15.3	10.3	8.3	7.8	7.6	7.6	7.8	8.9	10.3	11.7
Manufacturing and construction	55.1	55.9	60.7	61.0	61.4	61.9	61.9	62.4	63.5	64.7	66.0
Electricity generation	96.0	99.8	101.7	103.1	103.8	104.6	105.3	106.2	108.9	113.6	119.6
Transport	89.3	88.5	88.4	88.5	88.8	89.0	89.1	89.5	90.3	91.0	91.7
Commercial and services <b>a</b>	6.1	6.2	6.4	6.5	6.6	6.7	6.8	7.0	7.5	7.9	8.3
Residential	17.2	17.1	17.3	17.4	17.6	17.7	17.9	18.3	19.0	19.7	20.5
Other <b>b</b>	4.7	4.7	4.7	4.7	4.7	4.8	4.8	4.8	4.9	5.0	5.0
<b>Total</b>	299.6	295.8	297.9	298.2	299.3	301.0	302.2	305.1	312.4	321.8	332.7
<b>Tasmania</b>											
Agriculture	3.2	3.1	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.4	3.4
Mining	3.4	3.3	3.4	3.5	3.6	3.7	3.7	4.0	4.3	4.7	5.1
Manufacturing and construction	26.8	27.5	28.1	28.5	28.9	29.4	29.3	29.2	29.2	29.3	29.5
Electricity generation	50.9	52.7	53.8	54.8	55.5	56.2	56.9	58.7	61.3	63.8	65.0
Transport	27.5	27.6	27.8	27.9	28.0	28.1	28.1	28.2	28.4	28.4	28.4
Commercial and services <b>a</b>	1.4	1.3	1.5	1.5	1.6	1.7	1.7	1.7	1.9	2.1	2.2
Residential	8.6	8.8	9.0	9.2	9.4	9.4	9.5	9.8	10.3	10.9	11.3
Other <b>b</b>	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
<b>Total</b>	123.0	125.6	128.0	129.8	131.3	132.9	133.7	136.2	140.0	143.8	146.2
<b>Northern Territory</b>											
Agriculture	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.6	1.8	1.9
Mining	6.5	22.3	22.5	22.4	22.1	23.8	24.8	37.4	35.9	53.3	51.5
Manufacturing and construction	11.7	11.9	12.5	12.8	13.0	34.0	48.2	42.0	43.8	45.8	47.7
Electricity generation	39.9	40.2	43.2	44.3	44.6	45.0	45.4	46.6	48.0	49.7	51.3
Transport	22.4	22.7	23.0	23.3	23.6	23.9	24.2	24.8	25.7	26.7	27.6
Commercial and services <b>a</b>	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.5	1.6	1.6	1.7
Residential	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
Other <b>b</b>	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
<b>Total</b>	83.7	100.3	104.6	106.3	106.9	130.4	146.3	154.6	157.5	179.7	182.6

**a** Includes ANZSIC Divisions F, G, H, J, K, L, M, N, O, P, Q, ANZSIC 3700 water, sewerage, drainage, and ANZSIC 6700 storage industries. **b** Includes solvents, lubricants, bitumen and greases.

## E1 Primary energy consumption in Australia, by fuel

	Black coal	Brown coal	Oil	Natural gas	Biomass	Biogas	Hydro-electricity	Solar energy	Wind energy	Total
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
2005-06	1 634.2	706.0	2 021.7	1 063.5	186.2	7.3	59.3	2.7	6.6	5 687.5
2006-07	1 659.3	710.0	2 054.2	1 115.0	212.7	30.0	61.8	2.8	9.9	5 855.6
2007-08	1 683.9	718.4	2 114.7	1 143.1	226.3	33.5	62.2	2.9	12.8	5 997.8
2008-09	1 697.1	727.2	2 157.7	1 160.6	234.0	36.7	62.4	2.9	15.9	6 094.6
2009-10	1 704.3	737.0	2 200.7	1 193.3	238.6	39.3	62.9	3.0	17.5	6 196.5
2010-11	1 711.2	746.7	2 241.9	1 260.8	242.1	41.0	63.4	3.1	18.1	6 328.2
2011-12	1 733.5	757.3	2 273.9	1 341.9	245.4	41.1	64.1	3.1	18.2	6 478.5
2012-13	1 744.2	764.1	2 296.5	1 415.2	248.2	41.2	64.6	3.2	18.3	6 595.6
2013-14	1 771.3	763.1	2 326.0	1 476.1	251.8	41.0	64.8	3.3	18.4	6 715.8
2014-15	1 778.7	768.7	2 357.0	1 546.3	260.6	40.8	65.3	3.3	18.4	6 839.1
2015-16	1 780.2	776.0	2 387.6	1 596.6	270.0	40.5	65.7	3.4	18.5	6 938.5
2016-17	1 793.2	785.9	2 421.5	1 625.7	280.0	40.3	66.2	3.4	18.6	7 034.8
2017-18	1 804.3	795.2	2 455.9	1 655.6	290.9	40.1	66.7	3.5	18.7	7 130.9
2018-19	1 824.9	806.9	2 491.5	1 672.8	302.5	40.0	67.2	3.6	18.8	7 228.2
2019-20	1 848.5	819.1	2 528.4	1 691.0	315.1	39.9	67.7	3.6	18.9	7 332.2
2020-21	1 870.2	831.0	2 565.6	1 722.4	316.5	39.7	68.3	3.7	19.0	7 436.4
2021-22	1 894.0	841.5	2 603.8	1 747.6	317.9	39.4	68.9	3.8	19.2	7 536.0
2022-23	1 920.1	843.5	2 643.5	1 769.8	319.3	39.3	69.5	3.8	19.4	7 628.2
2023-24	1 949.1	837.6	2 684.1	1 804.2	320.7	39.1	70.1	3.9	19.8	7 728.7
2024-25	1 978.6	831.8	2 724.8	1 832.2	322.1	39.0	70.7	4.0	20.3	7 823.4
2025-26	2 007.3	826.0	2 766.0	1 859.2	323.5	38.8	71.2	4.0	20.8	7 916.9
2026-27	2 036.6	820.3	2 808.3	1 886.2	324.2	38.5	71.5	4.1	21.4	8 011.0
2027-28	2 066.8	814.6	2 852.0	1 918.2	324.9	38.2	71.8	4.2	21.9	8 112.6
2028-29	2 096.8	808.9	2 897.1	1 946.3	325.7	37.9	72.1	4.2	22.5	8 211.5
2029-30	2 105.1	803.3	2 943.8	1 981.6	326.5	37.6	73.2	4.3	23.1	8 298.5

## Primary energy consumption in Australia, by fuel, by state

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>New South Wales</b>											
Black coal	802.2	802.1	799.1	798.0	796.6	795.5	805.7	854.3	889.2	970.7	1 029.2
Oil	564.7	571.7	585.9	595.6	605.4	614.6	621.2	641.4	678.0	718.3	761.9
Natural gas	135.2	135.9	137.9	141.1	144.3	147.6	151.5	162.6	188.7	206.4	225.0
Biomass	21.8	27.6	30.0	31.1	31.6	31.9	32.1	32.8	35.3	35.2	34.8
Biogas	3.3	20.5	20.7	20.9	21.0	21.2	21.2	20.8	19.8	18.8	17.9
Hydroelectricity	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
Solar energy	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0
Wind energy	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5
Total	1 543.6	1 574.3	1 590.1	1 603.2	1 615.4	1 627.3	1 648.2	1 728.5	1 827.6	1 966.4	2 085.7
<b>Victoria</b>											
Brown coal	706.0	710.0	718.4	727.2	737.0	746.7	757.3	768.7	819.1	831.8	803.3
Oil	473.3	478.5	488.3	494.7	501.2	507.0	510.8	522.4	544.4	568.8	595.1
Natural gas	244.6	252.2	262.0	269.4	275.2	280.8	286.2	303.2	324.8	351.3	385.0
Biomass	26.9	27.1	27.3	27.5	27.7	27.9	28.1	28.5	29.2	30.0	30.7
Biogas	1.8	3.5	4.2	4.7	5.1	5.5	5.4	5.3	5.2	5.1	4.9
Hydroelectricity	3.3	3.4	3.4	3.5	3.6	3.7	3.8	3.8	4.0	4.4	5.1
Solar energy	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Wind energy	0.9	1.8	3.1	4.1	5.1	5.5	5.5	5.5	5.5	5.5	5.5
Total	1 456.9	1 476.7	1 507.1	1 531.4	1 555.0	1 577.2	1 597.3	1 637.8	1 732.4	1 797.1	1 829.8
<b>Queensland</b>											
Black coal	629.7	642.5	665.0	679.2	688.0	695.6	705.4	700.1	731.5	774.2	835.2
Oil	483.1	495.2	517.8	533.7	549.9	565.7	578.8	617.2	688.2	772.1	866.7
Natural gas	144.9	148.6	152.7	157.2	169.7	184.9	208.2	263.8	304.1	312.9	340.9
Biomass	109.2	129.0	139.6	145.7	149.3	152.1	154.9	168.3	218.8	224.4	227.8
Biogas	0.6	1.6	2.3	3.3	4.1	5.0	5.0	5.0	5.1	5.2	5.0
Hydroelectricity	4.4	4.6	4.8	5.0	5.1	5.3	5.4	5.4	5.8	6.3	7.5
Solar energy	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.7	0.8
Wind energy	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
Total	1 372.4	1 421.9	1 482.7	1 524.5	1 566.6	1 609.1	1 658.3	1 760.6	1 954.3	2 095.9	2 284.2

Continued

## E2 Primary energy consumption in Australia, by fuel, by state continued

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>Western Australia</b>											
Black coal	123.0	134.8	136.2	136.4	136.0	136.3	138.3	140.2	142.8	146.9	152.2
Oil	294.1	301.2	311.4	320.3	329.0	337.6	345.4	368.0	406.4	450.6	501.2
Natural gas	379.7	411.4	424.5	427.3	437.8	456.9	488.6	587.0	635.9	696.8	757.9
Biomass	8.6	8.7	8.9	9.0	9.2	9.3	9.5	9.9	10.5	11.2	11.9
Biogas	0.6	1.9	3.3	4.7	5.9	6.1	6.3	6.5	6.8	6.9	6.9
Hydroelectricity	1.0	1.3	1.4	1.5	1.8	1.7	1.8	1.9	2.0	2.2	2.4
Solar energy	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.3	1.4	1.6	1.8
Wind energy	0.3	0.5	0.7	0.9	1.1	1.2	1.3	1.6	2.0	2.5	3.0
<b>Total</b>	<b>808.3</b>	<b>861.0</b>	<b>887.5</b>	<b>901.2</b>	<b>921.9</b>	<b>950.4</b>	<b>992.5</b>	<b>1 116.3</b>	<b>1 207.9</b>	<b>1 318.7</b>	<b>1 437.2</b>
<b>South Australia</b>											
Black coal	59.1	59.7	63.4	63.5	63.6	63.8	64.1	64.2	65.3	67.2	69.1
Oil	111.8	112.5	114.4	115.5	116.7	117.6	117.8	118.7	120.9	123.3	125.7
Natural gas	115.3	106.6	101.6	99.7	99.4	99.9	100.6	102.5	106.3	110.6	115.2
Biomass	7.9	8.6	8.7	8.8	8.8	8.9	9.0	9.1	9.3	9.4	9.4
Biogas	1.0	2.4	3.0	3.2	3.3	3.2	3.2	3.1	3.0	3.0	2.9
Hydroelectricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Solar energy	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Wind energy	4.3	5.8	6.6	7.3	7.3	7.3	7.3	7.3	7.3	8.0	10.1
<b>Total</b>	<b>299.6</b>	<b>295.8</b>	<b>297.9</b>	<b>298.2</b>	<b>299.3</b>	<b>301.0</b>	<b>302.2</b>	<b>305.1</b>	<b>312.4</b>	<b>321.8</b>	<b>332.7</b>
<b>Tasmania</b>											
Black coal	20.2	20.2	20.2	20.1	20.0	20.0	20.0	19.9	19.7	19.5	19.5
Oil	42.7	42.5	43.3	43.6	44.0	44.3	44.3	44.4	44.7	44.9	45.3
Natural gas	12.4	12.7	13.6	14.1	14.8	15.8	16.2	17.6	19.6	21.4	22.9
Biomass	11.8	11.8	11.8	11.8	11.8	11.8	11.9	11.9	11.9	11.9	11.9
Biogas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hydroelectricity	35.1	37.0	37.0	36.9	36.9	37.2	37.6	38.7	40.4	42.3	42.8
Solar energy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wind energy	0.8	1.4	2.1	3.3	3.7	3.7	3.7	3.7	3.7	3.7	3.7
<b>Total</b>	<b>123.0</b>	<b>125.6</b>	<b>128.0</b>	<b>129.8</b>	<b>131.3</b>	<b>132.9</b>	<b>133.7</b>	<b>136.2</b>	<b>140.0</b>	<b>143.8</b>	<b>146.2</b>

Continued

## E2 Primary energy consumption in Australia, by fuel, by state *continued*

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>Northern Territory</b>											
Black coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil	52.1	52.6	53.6	54.2	54.7	55.2	55.6	44.8	45.8	46.8	47.8
Natural gas	31.4	47.6	50.8	51.9	52.0	75.0	90.6	109.5	111.5	132.7	134.7
Biomass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Biogas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hydroelectricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Solar energy	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Wind energy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>83.7</b>	<b>100.3</b>	<b>104.6</b>	<b>106.3</b>	<b>106.9</b>	<b>130.4</b>	<b>146.3</b>	<b>154.6</b>	<b>157.5</b>	<b>179.7</b>	<b>182.6</b>

## F Final energy consumption in Australia, by industry and fuel type

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>Agriculture</b>											
LPG	1.6	1.6	1.8	1.8	1.9	2.0	2.1	2.4	2.9	3.6	4.3
Other petroleum products	83.9	84.7	86.3	87.5	88.6	89.8	90.9	93.8	98.4	103.0	107.6
Natural gas	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Electricity	6.6	6.7	6.8	6.8	6.9	7.0	7.1	7.3	7.6	7.9	8.2
Energy consumption	92.2	93.1	94.9	96.2	97.6	98.9	100.2	103.6	109.0	114.6	120.3
<b>Mining</b>											
Black coal	7.4	7.2	7.1	6.9	6.7	6.6	6.5	6.1	5.5	5.0	4.6
LPG	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.8	1.0
Other petroleum products	123.9	130.8	140.7	149.8	159.0	168.7	178.7	207.7	259.6	323.9	400.5
Natural gas	31.7	33.2	35.5	37.6	39.8	42.1	44.6	52.0	65.5	81.3	100.2
Electricity	71.3	73.7	77.3	80.3	83.4	86.6	89.9	99.4	115.8	133.9	153.5
Energy consumption	234.7	245.4	261.1	275.1	289.5	304.5	320.3	365.9	447.1	544.9	659.8
<b>Manufacturing and construction</b>											
<b>Wood, paper and printing</b>											
Black coal	122	121	121	120	119	118	117	114	109	105	101
LPG	0.9	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.8
Other petroleum products	1.7	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4
Natural gas	15.2	15.4	15.9	16.4	16.8	17.3	17.8	19.1	21.3	23.7	26.2
Biomass	16.7	16.9	17.3	17.5	17.8	18.1	18.4	19.1	20.3	21.5	22.6
Electricity	19.8	20.2	20.6	20.9	21.3	21.6	22.0	23.0	24.6	26.3	27.8
Energy consumption	66.4	67.0	68.4	69.4	70.4	71.4	72.4	75.0	79.4	84.1	88.8
<b>Chemical products a</b>											
Black coal	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.0	1.8	1.7
LPG	12.7	12.7	12.9	12.9	12.9	12.8	12.7	12.3	11.8	11.5	11.1
Other petroleum products	60.1	59.7	59.5	59.1	58.7	58.3	57.9	56.7	54.9	53.1	51.4
Natural gas	85.7	97.1	99.2	101.6	104.2	107.0	110.2	119.4	134.0	148.8	164.2
Electricity	15.6	15.9	16.3	16.6	16.9	17.3	17.7	18.7	20.4	22.1	23.8
Energy consumption	176.4	187.7	190.1	192.5	195.0	197.7	200.7	209.2	223.0	237.2	252.3
<b>Nonmetallic mineral products</b>											
Black coal	31.4	31.5	31.6	31.7	31.8	31.9	32.1	32.5	33.0	33.4	33.8
LPG	5.2	5.8	7.8	8.8	9.7	10.5	9.1	7.4	6.7	6.6	6.5
Other petroleum products	4.9	4.9	5.1	5.1	5.1	5.1	5.1	4.9	4.7	4.6	4.5
Natural gas	51.8	52.3	53.0	53.9	54.8	55.9	57.1	60.4	65.5	70.6	75.8
Biomass	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.1
Electricity	13.3	13.4	13.6	13.7	13.8	14.0	14.1	14.6	15.2	15.8	16.4
Energy consumption	107.6	108.8	111.9	114.1	116.3	118.3	118.4	120.7	126.1	132.1	138.0

Continued

**F Final energy consumption in Australia, by industry and fuel type** *continued*

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>Iron and steel</b>											
Black coal	39.5	52.0	54.5	55.5	55.5	55.7	55.8	56.4	57.3	58.0	58.6
LPG	0.5	0.6	1.4	1.9	2.4	3.0	2.2	1.5	1.2	1.2	1.2
Other petroleum products	2.7	2.8	3.2	3.3	3.4	3.5	3.5	3.5	3.5	3.5	3.5
Natural gas	25.8	26.6	26.8	26.8	26.7	26.7	26.8	26.8	27.1	27.2	27.5
Electricity	26.4	26.8	27.3	27.5	27.6	27.7	27.9	28.4	29.2	30.0	30.8
Energy consumption	94.9	108.8	113.2	114.9	115.7	116.6	116.2	116.6	118.3	120.0	121.6
<b>Basic nonferrous metals</b>											
Black coal	66.6	65.7	66.6	66.5	66.5	66.5	70.2	70.9	70.7	69.2	69.6
LPG	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other petroleum products	47.0	47.5	48.9	49.8	50.5	51.3	52.0	42.0	44.4	47.0	50.0
Natural gas	112.3	117.4	119.7	119.5	119.4	140.4	173.4	189.5	196.5	199.8	204.3
Electricity	207.0	214.3	219.0	222.5	225.5	228.6	236.2	250.7	270.8	289.6	307.2
Energy consumption	433.0	445.0	454.3	458.4	462.1	486.9	531.9	553.2	582.6	605.7	631.2
<b>Other manufacturing and construction b</b>											
Black coal	9.5	9.5	9.4	9.4	9.3	9.2	9.1	8.9	8.5	8.3	8.0
LPG	2.6	2.7	2.9	2.9	3.0	3.1	3.1	3.1	3.2	3.3	3.4
Other petroleum products	44.2	44.7	45.8	46.5	47.2	47.9	48.5	50.0	52.4	55.1	57.8
Natural gas	44.0	44.6	44.8	45.2	45.7	46.3	46.8	48.0	49.9	51.5	53.0
Biomass	80.4	81.8	84.1	85.9	87.7	89.6	91.5	96.6	104.8	113.3	121.8
Electricity	25.2	25.5	25.8	26.2	26.5	26.8	27.2	28.3	30.0	31.6	33.0
Energy consumption	205.9	208.8	212.8	216.0	219.4	222.9	226.1	234.9	248.9	263.1	277.1
<b>Total manufacturing and construction</b>											
Black coal	161.6	173.1	176.5	177.3	177.3	177.3	181.1	182.2	182.5	181.2	181.9
LPG	22.0	22.8	25.9	27.5	29.2	30.5	28.1	25.2	23.9	23.5	23.1
Other petroleum products	160.5	161.3	164.0	165.4	166.6	167.7	168.6	158.5	161.3	164.7	168.5
Natural gas	334.8	353.4	359.5	363.4	367.6	393.6	432.1	463.3	494.4	521.5	550.9
Biomass	98.0	99.6	102.2	104.3	106.4	108.6	110.8	116.7	126.1	135.8	145.6
Electricity	307.4	316.0	322.5	327.3	331.6	336.0	345.1	363.7	390.3	415.3	438.9
Energy consumption	1 084.3	1 126.1	1 150.7	1 165.3	1 178.7	1 213.7	1 265.7	1 309.6	1 378.4	1 442.1	1 508.9

Continued

**F** Final energy consumption in Australia, by industry and fuel type *continued*

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>Transport</b>											
<b>Road transport</b>											
LPG	60.1	63.3	69.1	73.3	77.5	81.1	81.7	86.7	99.3	114.2	131.1
Other petroleum products	982.0	988.7	1 000.2	1 008.7	1 017.2	1 025.2	1 033.3	1 054.8	1 089.8	1 125.5	1 163.0
Natural gas	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.1
Energy consumption	1 042.9	1 052.7	1 070.0	1 082.7	1 095.5	1 107.1	1 115.8	1 142.3	1 190.1	1 240.7	1 295.2
<b>Rail transport</b>											
Petroleum products	28.1	28.1	28.2	28.3	28.4	28.4	28.4	28.6	28.8	29.0	29.2
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	8.0	8.1	8.3	8.4	8.5	8.7	8.8	9.2	9.9	10.6	11.3
Energy consumption	36.1	36.3	36.5	36.7	36.9	37.1	37.3	37.8	38.7	39.6	40.5
<b>Water transport</b>											
Black coal	4.8	4.8	4.6	4.6	4.5	4.5	4.5	4.6	4.8	4.9	5.0
Petroleum products	53.5	53.9	54.5	55.0	55.4	55.8	56.2	57.1	58.4	59.6	60.7
Natural gas	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Energy consumption	58.4	58.7	59.2	59.6	60.0	60.4	60.8	61.7	63.2	64.5	65.8
<b>Air transport</b>											
Petroleum products	201.9	208.9	220.8	230.1	239.8	249.6	259.6	287.8	336.9	392.2	453.3
Energy consumption	201.9	208.9	220.8	230.1	239.8	249.6	259.6	287.8	336.9	392.2	453.3
<b>Pipeline transport</b>											
Natural gas	32.0	33.8	34.0	33.7	33.6	33.8	34.8	35.9	39.4	41.7	44.5
Energy consumption	32.0	33.8	34.0	33.7	33.6	33.8	34.8	35.9	39.4	41.7	44.5
<b>Total transport</b>											
Black coal	4.8	4.8	4.6	4.6	4.5	4.5	4.5	4.6	4.8	4.9	5.0
LPG	60.1	63.3	69.1	73.3	77.5	81.1	81.7	86.7	99.3	114.2	131.1
Other petroleum products	1 265.5	1 279.7	1 303.7	1 322.0	1 340.8	1 359.0	1 377.5	1 428.2	1 513.9	1 606.3	1 706.2
Natural gas	32.9	34.6	34.8	34.6	34.5	34.7	35.7	36.8	40.4	42.8	45.7
Electricity	8.0	8.1	8.3	8.4	8.5	8.7	8.8	9.2	9.9	10.6	11.3
Energy consumption	1 371.4	1 390.4	1 420.6	1 442.8	1 465.8	1 487.9	1 508.2	1 565.5	1 668.2	1 778.8	1 899.4

*Continued*

## Final energy consumption in Australia, by industry and fuel type continued

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
<b>Commercial and services <sup>c</sup></b>											
Black coal	1.5	1.4	1.6	1.6	1.6	1.7	1.6	1.5	1.4	1.4	1.4
LPG	3.1	3.3	4.1	4.5	4.9	5.2	4.9	4.5	4.6	4.9	5.2
Other petroleum products	21.5	21.7	22.7	23.2	23.7	24.1	24.5	25.1	26.3	27.9	29.6
Natural gas	38.9	39.6	40.6	41.6	42.6	43.6	44.7	48.0	53.2	58.5	63.6
Electricity	177.4	181.8	188.7	194.5	200.5	206.9	213.5	232.5	264.1	298.2	334.1
Solar energy	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Energy consumption	242.5	248.0	257.9	265.6	273.5	281.7	289.5	311.8	349.8	391.1	434.3
<b>Residential</b>											
Black coal	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LPG	10.0	10.6	11.6	12.3	12.9	13.4	13.4	13.9	15.2	17.0	18.7
Other petroleum products	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.9	2.2	2.4
Natural gas	126.5	125.8	127.4	129.3	131.4	133.8	136.7	143.3	154.9	167.0	180.2
Biomass	51.9	51.9	52.0	52.1	52.1	52.2	52.2	52.2	52.2	52.1	51.9
Electricity	220.9	225.8	231.9	236.8	241.6	246.7	251.7	266.7	289.9	313.2	335.4
Solar energy	2.3	2.3	2.4	2.5	2.5	2.6	2.7	2.9	3.2	3.5	3.8
Energy consumption	413.0	417.8	426.8	434.4	442.1	450.3	458.4	480.8	517.4	555.0	592.6
<b>Other <sup>d</sup></b>											
Other petroleum products	72.0	72.5	73.4	74.1	74.7	75.3	76.0	77.6	79.9	82.2	84.3
Energy consumption	72.0	72.5	73.4	74.1	74.7	75.3	76.0	77.6	79.9	82.2	84.3
<b>Total</b>											
Black coal	175.3	186.5	189.8	190.5	190.3	190.1	193.9	194.5	194.2	192.6	193.0
LPG	97.3	102.0	112.9	119.9	126.8	132.7	130.8	133.3	146.6	163.9	183.4
Other petroleum products	1 728.7	1 752.0	1 792.3	1 823.5	1 854.9	1 886.2	1 917.8	1 992.6	2 141.3	2 310.2	2 499.1
Natural gas	564.8	586.7	598.0	606.6	616.0	647.9	694.0	743.6	808.5	871.3	940.8
Biomass	149.9	151.5	154.3	156.4	158.6	160.8	163.0	168.9	178.3	187.9	197.5
Electricity	791.7	812.1	835.4	854.2	872.6	891.9	916.1	978.8	1 077.5	1 179.2	1 281.6
Solar energy	2.4	2.5	2.6	2.6	2.7	2.8	2.9	3.0	3.4	3.7	4.1
Energy consumption	3 510.2	3 593.3	3 685.3	3 753.5	3 821.9	3 912.4	4 018.3	4 214.8	4 549.9	4 908.8	5 299.5

**a** Includes rubber and plastic products. **b** Includes ANZSIC groups 2, 1, 22, 274-276, 28, 29 and Div. E. **c** Includes ANZSIC 3700 water, sewerage and drainage and ANZSIC 6700 storage. **d** Includes solvents, lubricants, bitumen and greases.



Primary energy consumption in Australia, by industry and fuel type

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>Agriculture</b>											
Oil	85.5	86.3	88.1	89.3	90.6	91.8	93.0	96.2	101.3	106.6	111.9
Natural gas	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Energy consumption	85.6	86.4	88.2	89.4	90.7	91.9	93.2	96.3	101.4	106.7	112.1
<b>Mining</b>											
Black coal	7.4	7.2	7.1	6.9	6.7	6.6	6.5	6.1	5.5	5.0	4.6
Oil	124.3	131.2	141.1	150.3	159.5	169.2	179.3	208.4	260.3	324.7	401.4
Natural gas	134.7	157.4	159.9	157.5	163.5	178.4	188.9	277.5	303.7	359.4	400.0
Energy consumption	266.3	295.8	308.1	314.7	329.8	354.2	374.8	492.0	569.6	689.1	806.1
<b>Manufacturing and construction</b>											
<b>Wood, paper and printing</b>											
Black coal	12.2	12.1	12.1	12.0	11.9	11.8	11.7	11.4	10.9	10.5	10.1
Oil	2.5	2.4	2.5	2.5	2.5	2.5	2.5	2.4	2.3	2.2	2.1
Natural gas	15.2	15.4	15.9	16.4	16.8	17.3	17.8	19.1	21.3	23.7	26.2
Biomass	16.7	16.9	17.3	17.5	17.8	18.1	18.4	19.1	20.3	21.5	22.6
Energy consumption	46.6	46.9	47.8	48.4	49.1	49.8	50.4	52.0	54.8	57.8	61.0
<b>Petroleum refining</b>											
Oil	148.0	150.4	154.2	156.8	159.3	161.5	163.1	167.9	176.1	184.8	193.9
Natural gas	13.6	13.7	13.9	14.0	14.1	14.2	14.3	14.7	15.3	16.0	16.6
Energy consumption	161.7	164.1	168.1	170.8	173.4	175.7	177.4	182.6	191.5	200.8	210.6
<b>Chemical products <sup>a</sup></b>											
Black coal	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.0	1.8	1.7
Oil	72.8	72.5	72.3	72.0	71.6	71.2	70.6	69.0	66.7	64.6	62.5
Natural gas	85.7	97.1	99.2	101.6	104.2	107.0	110.2	119.4	134.0	148.8	164.2
Energy consumption	160.8	171.9	173.8	175.9	178.1	180.4	183.0	190.5	202.7	215.2	228.5
<b>Nonmetallic mineral products</b>											
Black coal	31.4	31.5	31.6	31.7	31.8	31.9	32.1	32.5	33.0	33.4	33.8
Oil	10.1	10.7	12.9	13.9	14.9	15.6	14.2	12.3	11.4	11.2	10.9
Natural gas	51.8	52.3	53.0	53.9	54.8	55.9	57.1	60.4	65.5	70.6	75.8
Biomass	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.1
Energy consumption	94.3	95.4	98.3	100.4	102.4	104.3	104.3	106.2	110.9	116.2	121.6

Continued



Primary energy consumption in Australia, by industry and fuel type *continued*

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>Iron and steel</b>											
Black coal	1 36.9	170.5	174.0	174.8	174.4	174.5	174.7	175.6	176.8	177.6	178.2
Oil	3.1	3.5	4.5	5.2	5.9	6.5	5.7	4.9	4.7	4.7	4.7
Natural gas	25.8	26.6	26.8	26.8	26.7	26.7	26.8	26.8	27.1	27.2	27.5
Energy consumption	185.9	200.6	205.3	206.8	207.0	207.7	207.2	207.4	208.6	209.5	210.4
<b>Basic nonferrous metals</b>											
Black coal	66.6	65.7	66.6	66.5	66.5	66.5	70.2	70.9	70.7	69.2	69.6
Oil	47.1	47.6	49.1	49.9	50.7	51.4	52.1	42.1	44.5	47.2	50.1
Natural gas	112.3	117.4	119.7	119.5	119.4	140.4	173.4	189.5	196.5	199.8	204.3
Energy consumption	226.0	230.7	235.3	235.9	236.6	258.4	295.7	302.5	311.7	316.1	324.0
<b>Other manufacturing and construction b</b>											
Black coal	9.5	9.5	9.4	9.4	9.3	9.2	9.1	8.9	8.5	8.3	8.0
Oil	46.9	47.4	48.7	49.4	50.2	51.0	51.6	53.0	55.6	58.4	61.2
Natural gas	44.0	44.6	44.8	45.2	45.7	46.3	46.8	48.0	49.9	51.5	53.0
Biomass	80.4	81.8	84.1	85.9	87.7	89.6	91.5	96.6	104.8	113.3	121.8
Energy consumption	180.7	183.3	187.0	189.9	192.9	196.0	198.9	206.5	218.9	231.5	244.1
<b>Total manufacturing and construction</b>											
Black coal	279.0	291.7	296.0	296.6	296.2	296.2	300.0	301.4	302.0	300.8	301.5
Oil	330.6	334.4	344.2	349.7	355.1	359.7	359.7	351.6	361.3	373.1	385.6
Natural gas	348.4	367.1	373.4	377.4	381.7	407.8	446.4	478.0	509.7	537.5	567.5
Biomass	80.4	81.8	84.1	85.9	87.7	89.6	91.5	96.6	104.8	113.3	121.8
Energy consumption	1 038.4	1 075.0	1 097.6	1 109.6	1 120.7	1 153.3	1 197.7	1 227.6	1 277.8	1 324.7	1 376.5
<b>Electricity generation</b>											
Black coal	1 341.4	1 354.2	1 374.6	1 387.4	1 395.1	1 402.2	1 420.7	1 465.0	1 534.8	1 666.4	1 792.5
Brown coal	706.0	710.0	718.4	727.2	737.0	746.7	757.3	768.7	819.1	831.8	803.2
Oil	47.7	49.9	55.3	57.6	59.7	61.5	62.3	63.2	64.3	65.9	67.3
Natural gas	382.2	390.4	406.9	420.2	439.5	462.4	489.3	562.5	628.9	666.8	724.4
Hydroelectricity	59.3	61.8	62.2	62.4	62.9	63.4	64.1	65.3	67.7	70.7	73.2
Wind energy	6.6	9.9	12.8	15.9	17.5	18.1	18.2	18.4	18.9	20.3	23.1
Biogas	36.3	61.2	72.1	77.6	80.0	81.3	82.4	91.7	136.8	134.2	129.0
Biomass	7.3	30.0	33.5	36.7	39.3	41.0	41.1	40.8	39.9	39.0	37.6
Energy consumption	2 587.1	2 667.6	2 736.0	2 785.3	2 831.2	2 876.8	2 935.7	3 075.9	3 310.6	3 495.2	3 650.5

Continued

**G** Primary energy consumption in Australia, by industry and fuel type *continued*

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>Transport</b>											
Road transport											
Oil	1 042.2	1 052.0	1 069.3	1 081.9	1 094.7	1 106.2	1 115.0	1 141.5	1 189.2	1 239.7	1 294.1
Natural gas	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.1
Energy consumption	1 042.9	1 052.7	1 070.0	1 082.7	1 095.5	1 107.1	1 115.8	1 142.3	1 190.1	1 240.7	1 295.2
<b>Rail transport</b>											
Oil	28.1	28.1	28.2	28.3	28.4	28.4	28.4	28.6	28.8	29.0	29.2
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Energy consumption	28.1	28.2	28.3	28.3	28.4	28.4	28.5	28.6	28.8	29.0	29.2
<b>Water transport</b>											
Black coal	4.8	4.8	4.6	4.6	4.5	4.5	4.5	4.6	4.8	4.9	5.0
Oil	53.5	53.9	54.5	55.0	55.4	55.8	56.2	57.1	58.4	59.6	60.7
Natural gas	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Energy consumption	58.4	58.7	59.2	59.6	60.0	60.4	60.8	61.7	63.2	64.5	65.8
<b>Air transport</b>											
Oil	201.9	208.9	220.8	230.1	239.8	249.6	259.6	287.8	336.9	392.2	453.3
Energy consumption	201.9	208.9	220.8	230.1	239.8	249.6	259.6	287.8	336.9	392.2	453.3
<b>Pipeline transport</b>											
Natural gas	32.0	33.8	34.0	33.7	33.6	33.8	34.8	35.9	39.4	41.7	44.5
Energy consumption	32.0	33.8	34.0	33.7	33.6	33.8	34.8	35.9	39.4	41.7	44.5
<b>Total transport</b>											
Black coal	4.8	4.8	4.6	4.6	4.5	4.5	4.5	4.6	4.8	4.9	5.0
Oil	1 325.7	1 342.9	1 372.9	1 395.3	1 418.2	1 440.1	1 459.2	1 514.8	1 613.2	1 720.5	1 837.3
Natural gas	32.9	34.6	34.8	34.6	34.5	34.7	35.7	36.8	40.4	42.8	45.7
Energy consumption	1 363.4	1 382.3	1 412.3	1 434.4	1 457.2	1 479.2	1 499.4	1 556.3	1 658.3	1 768.2	1 888.0

Continued

## G Primary energy consumption in Australia, by industry and fuel type *continued*

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	Pj	Pj	Pj	Pj	Pj	Pj	Pj	Pj	Pj	Pj	Pj
<b>Commercial and services c</b>											
Black coal	1.5	1.4	1.6	1.6	1.6	1.7	1.6	1.5	1.4	1.4	1.4
Oil	24.6	25.0	26.8	27.7	28.6	29.3	29.4	29.7	30.9	32.8	34.8
Natural gas	38.9	39.6	40.6	41.6	42.6	43.6	44.7	48.0	53.2	58.5	63.6
Solar energy	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Energy consumption	65.1	66.2	69.2	71.1	73.0	74.8	75.9	79.3	85.7	92.9	100.1
<b>Residential</b>											
Black coal	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Oil	11.3	11.9	13.0	13.7	14.4	15.0	15.0	15.6	17.1	19.1	21.1
Natural gas	126.5	125.8	127.4	129.3	131.4	133.8	136.7	143.3	154.9	167.0	180.2
Biomass	51.9	51.9	52.0	52.1	52.1	52.2	52.2	52.2	52.2	52.1	51.9
Solar energy	2.3	2.3	2.4	2.5	2.5	2.6	2.7	2.9	3.2	3.5	3.8
Energy consumption	192.0	192.0	194.9	197.6	200.6	203.6	206.7	214.1	227.5	241.8	257.1
<b>Other d</b>											
Oil	72.0	72.5	73.4	74.1	74.7	75.3	76.0	77.6	79.9	82.2	84.3
Energy consumption	72.0	72.5	73.4	74.1	74.7	75.3	76.0	77.6	79.9	82.2	84.3
<b>Total</b>											
Black coal	1 634.2	1 659.3	1 683.9	1 697.1	1 704.3	1 711.2	1 733.5	1 778.7	1 848.5	1 978.6	2 105.1
Brown coal	706.0	710.0	718.4	727.2	737.0	746.7	757.3	768.7	819.1	831.8	803.3
Oil	2 021.7	2 054.2	2 114.7	2 157.7	2 200.7	2 241.9	2 273.9	2 357.0	2 528.4	2 724.8	2 943.8
Natural gas	1 063.5	1 115.0	1 143.1	1 160.6	1 193.3	1 260.8	1 341.9	1 546.3	1 691.0	1 832.2	1 981.6
Biomass	186.2	212.7	226.3	234.0	238.6	242.1	245.4	260.6	315.1	322.1	326.5
Biogas	7.3	30.0	33.5	36.7	39.3	41.0	41.1	40.8	39.9	39.0	37.6
Hydroelectricity	59.3	61.8	62.2	62.4	62.9	63.4	64.1	65.3	67.7	70.7	73.2
Solar energy	2.7	2.8	2.9	2.9	3.0	3.1	3.1	3.3	3.6	4.0	4.3
Wind energy	6.6	9.9	12.8	15.9	17.5	18.1	18.2	18.4	18.9	20.3	23.1
Energy consumption	5 687.5	5 855.6	5 997.8	6 094.6	6 196.5	6 328.2	6 478.5	6 839.1	7 332.2	7 823.4	8 298.5

**a** Includes rubber and plastic products. **b** Includes ANZSIC groups 21, 22, 27.4-27.6, 28, 29 and Div. E. **c** Includes ANZSIC 3700 water, sewerage and drainage and ANZSIC 6700 storage. **d** Includes solvents, lubricants, bitumen and greases.

## H Australian production of primary fuels

	Black coal	Brown coal	Naturally occurring LPG	Oil	Natural gas	Biomass	Biogas	Hydro-electricity	Solar energy	Wind energy
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
2005-06	8 156.1	704.0	125.1	899.8	1 741.9	186.2	7.3	59.3	2.7	6.6
2006-07	8 435.4	708.1	126.4	1 067.6	2 089.0	212.7	30.0	61.8	2.8	9.9
2007-08	8 922.4	716.4	137.3	1 126.9	2 140.5	226.3	33.5	62.2	2.9	12.8
2008-09	9 129.7	725.2	144.4	1 435.7	2 095.8	234.0	36.7	62.4	2.9	15.9
2009-10	9 491.0	735.1	144.4	1 451.3	2 197.3	238.6	39.3	62.9	3.0	17.5
2010-11	9 825.0	744.8	147.1	1 410.9	2 444.8	242.1	41.0	63.4	3.1	18.1
2011-12	10 129.0	755.4	150.3	1 350.8	2 625.9	245.4	41.1	64.1	3.1	18.2
2012-13	10 230.4	762.2	163.0	1 300.3	3 059.2	248.2	41.2	64.6	3.2	18.3
2013-14	10 414.6	761.2	170.0	1 250.2	3 628.1	251.8	41.0	64.8	3.3	18.4
2014-15	10 577.6	766.8	178.8	1 222.6	4 165.3	260.6	40.8	65.3	3.3	18.4
2015-16	10 730.9	774.0	191.6	1 205.9	4 410.6	270.0	40.5	65.7	3.4	18.5
2016-17	10 892.6	783.9	202.2	1 188.7	4 499.8	280.0	40.3	66.2	3.4	18.6
2017-18	11 052.4	793.3	210.8	1 172.5	4 571.1	290.9	40.1	66.7	3.5	18.7
2018-19	11 221.2	805.0	218.5	1 155.3	4 594.0	302.5	40.0	67.2	3.6	18.8
2019-20	11 389.4	817.2	228.0	1 139.1	4 619.4	315.1	39.9	67.7	3.6	18.9
2020-21	11 554.3	829.1	228.8	1 123.9	4 891.4	316.5	39.7	68.3	3.7	19.0
2021-22	11 727.8	839.6	228.1	1 108.7	5 074.6	317.9	39.4	68.9	3.8	19.2
2022-23	11 908.7	841.6	233.1	1 092.5	5 146.2	319.3	39.3	69.5	3.8	19.4
2023-24	12 092.9	835.7	239.7	1 088.3	5 337.2	320.7	39.1	70.1	3.9	19.8
2024-25	12 279.3	829.9	243.6	1 086.1	5 462.9	322.1	39.0	70.7	4.0	20.3
2025-26	12 449.4	824.1	247.6	1 088.9	5 591.4	323.5	38.8	71.2	4.0	20.8
2026-27	12 602.6	818.4	251.3	1 089.7	5 713.5	324.2	38.5	71.5	4.1	21.4
2027-28	12 757.1	812.7	259.0	1 083.4	5 936.9	324.9	38.2	71.8	4.2	22.0
2028-29	12 911.2	807.0	261.9	1 084.2	6 065.9	325.7	37.9	72.1	4.2	22.5
2029-30	13 037.3	801.4	261.7	1 078.0	6 134.5	326.5	37.6	73.2	4.3	23.1

## Electricity generation in Australia

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2014-15	2019-20	2024-25	2029-30
	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ	PJ
<b>Electricity generation, by fuel</b>											
Black coal	503.6	509.4	518.3	524.1	528.1	532.8	541.8	564.8	602.7	670.9	739.9
Brown coal	194.6	196.8	200.2	203.7	207.5	211.7	216.2	224.2	247.3	260.1	260.1
Oil	16.0	16.8	18.7	19.6	20.4	21.1	21.4	22.0	22.8	23.8	24.8
Natural gas	138.7	144.0	152.5	160.2	170.6	182.0	195.4	234.2	279.2	310.9	355.1
Renewables											
Biomass	4.1	5.8	6.9	7.5	7.8	8.0	8.2	9.4	14.6	15.0	15.1
Biogas	1.2	4.8	5.4	6.0	6.5	6.8	6.9	7.1	7.3	7.5	7.6
Hydroelectricity	59.3	61.8	62.2	62.4	62.9	63.4	64.1	65.3	67.7	70.7	73.2
Solar energy	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Wind energy	6.6	8.3	10.8	13.4	14.7	15.2	15.3	15.5	15.9	17.1	19.4
Total	924.4	948.1	975.2	997.2	1 018.7	1 041.3	1 069.6	1 142.6	1 257.9	1 376.2	1 495.4
<b>Fuel inputs</b>											
Black coal	1 341.4	1 354.2	1 374.6	1 387.4	1 395.1	1 402.2	1 420.7	1 465.0	1 534.8	1 666.4	1 792.5
Brown coal	706.0	710.0	718.4	727.2	737.0	746.7	757.3	768.7	819.1	831.8	803.2
Oil	47.7	49.9	55.3	57.6	59.7	61.5	62.3	63.2	64.3	65.9	67.3
Natural gas	382.2	390.4	406.9	420.2	439.5	462.4	489.3	562.5	628.9	666.8	724.4
Renewables											
Biomass	36.3	61.2	72.1	77.6	80.0	81.3	82.4	91.7	136.8	134.2	129.0
Biogas	7.3	30.0	33.5	36.7	39.3	41.0	41.1	40.8	39.9	39.0	37.6
Hydroelectricity	59.3	61.8	62.2	62.4	62.9	63.4	64.1	65.3	67.7	70.7	73.2
Wind energy	6.6	9.9	12.8	15.9	17.5	18.1	18.2	18.4	18.9	20.3	23.1
Solar energy	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
Total	2 587.1	2 667.6	2 736.0	2 785.3	2 831.2	2 876.8	2 935.7	3 075.9	3 310.6	3 495.2	3 650.5

## Australian net energy trade, by fuel

	Net exports					Net imports			
	Black coal		LPG		Other petroleum products		LNG	Oil	
	PJ		PJ		PJ		PJ		
2005-06	6 581.8		52.6	-417.8			678.4		508.2
2006-07	6 835.8		49.6	-422.8			974.0		364.0
2007-08	7 298.0		50.1	-434.5			997.4		343.6
2008-09	7 492.0		50.8	-445.2			935.2		60.8
2009-10	7 846.0		44.2	-457.0			1 004.0		70.1
2010-11	8 172.9		41.3	-470.5			1 184.0		133.1
2011-12	8 454.5		46.8	-489.2			1 284.0		209.1
2012-13	8 544.9		58.7	-495.3			1 644.0		275.6
2013-14	8 701.9		65.7	-509.0			2 152.0		341.8
2014-15	8 857.4		73.5	-522.9			2 619.0		385.7
2015-16	9 009.1		86.0	-537.0			2 814.0		418.8
2016-17	9 157.7		93.9	-551.8			2 874.0		452.6
2017-18	9 306.2		99.7	-566.9			2 915.5		485.6
2018-19	9 454.3		104.4	-583.0			2 921.1		519.7
2019-20	9 598.8		110.8	-599.9			2 928.5		552.9
2020-21	9 741.9		108.7	-617.3			3 169.1		585.5
2021-22	9 891.4		104.9	-635.2			3 327.0		618.1
2022-23	10 045.9		106.7	-654.4			3 376.4		652.0
2023-24	10 201.0		109.9	-674.3			3 532.9		673.9
2024-25	10 357.9		110.5	-694.0			3 630.7		694.0
2025-26	10 499.2		111.2	-714.0			3 732.2		709.3
2026-27	10 622.9		111.5	-734.9			3 827.3		726.7
2027-28	10 747.0		115.6	-756.8			4 018.7		751.4
2028-29	10 871.0		114.8	-779.9			4 119.6		769.3
2029-30	10 988.6		110.7	-804.2			4 152.9		794.3