Australian mineral statistics 2009

June quarter 2009

abare.gov.au

ISSN 1447-1159

Australian Bureau of Agricultural and Resource Economics

Postal address	GPO Box 1563	Canberra	ACT	2601	Australia
Location	7B London Circuit	Canberra	ACT	2601	
Switchboard	+61 2 6272 2000				
Facsimile	+61 2 6272 2001				

ABARE is a professionally independent government economic research agency.

ABARE project 1546

Contents

Data sources

The statistics in this publication are obtained from several sources, as follows.

- The bulk of mine production data (other than petroleum) is obtained from companies, published company reports and ABARE estimates. Data are supplemented where necessary by information from state mines departments (or their equivalents).
- Petroleum production and sales are based on data obtained from the Resources Division of the Australian Government Department of Resources, Energy and Tourism.
- Smelter and refinery production data are provided by companies operating the major smelters and refineries.
- Trade data are obtained from official ABS compiled statistics, supplemented by ABARE estimates where necessary.
- Price information is from published sources.

The assistance of the organisations supplying data is gratefully acknowledged by ABARE.

Note on mine production data

In most instances, data refer to actual mine output. However, in a small number of cases, despatches or sales data are used as proxies for production.

Quantities of minerals produced are reported in terms of the product in which they leave each mine site. This includes various stages of ore dressing, processing and elementary smelting where these are carried out in an associated plant at, or near, the mine. The output is recorded as ore where no treatment is undertaken at the mine, or as a concentrate where ore dressing operations are carried out.

Definitions

Definitions and explanations

Small discrepancies in totals are generally because of the rounding of components.

zero is used to denote nil or a negligible amount
p denotes a preliminary figure
s denotes an ABARE estimate

Australian merchandise exports: are valued on a free on board (fob) basis at the Australian port of export. The costs of freight, insurance and other distributive services beyond the Australian customs border are not included.

Australian merchandise imports: are valued on a customs value for duty (vfd) basis that is identical to a free on board (fob) basis. The customs vfd is the price actually paid at the port of origin, including inland freight and insurance costs incurred in delivering the commodity to the port of origin. The freight and insurance costs of delivering the commodity(s) to the Australian port of destination are excluded.

Accounting of international merchandise trade: the valuation of Australian merchandise exports and imports used in the accounting of international trade in the Australian Balance of Payments and the international trade statistical system are in accordance with the definitions published in the harmonised international standards determined by the International Monetary Fund, *Balance of Payments Manual* (version 5), 1993 and the United Nations, *System of National Accounts*, 1993.

Common abbreviations and conversions

kg	kilogram	2.20462 lb (pounds)
t	tonne	1000 kilograms
kt	kilotonne	1000 tonnes
Mt	megatonne	1 000 000 tonnes
mtu	metric ton unit	10 kilograms
ct	metric carat	
L	litre	1.761 pints
kL	kilolitre	1000 litres
ML	megalitre	1 000 000 litres
Mm³	million cubic metres	1 000 000 cubic metres
bbl	barrel	159 litres
oz	troy ounce	0.031 kilograms
$m	million dollars (Australian)	
fob	free on board	
for	free on rail	
fot	free on truck	
cif	cost, insurance and freight	

Main features

Overview

- The index of Australian mineral export prices increased by 35 per cent in 2008-09. This increase was supported by a 16 per cent depreciation of the Australian dollar and higher contract prices for bulk commodities in the first nine months of the financial year.
- Export volumes were lower for around half of the commodities covered including for nickel, metallurgical coal, LPG, bauxite and zinc.
- In 2008-09, Australia's mineral resource export earnings increased by 37 per cent to $159.7 billion.
- Australian production of energy and mineral commodities declined in 2008-09, with the index of mine production falling by 1 per cent. Declines in production were recorded for key commodities including nickel, iron and steel, zinc, gold and black coal.

Prices

In 2008-09, the index of export prices for Australian mineral resources (export unit returns) increased by 35 per cent compared with the previous year. Export unit returns for energy minerals increased by 68 per cent, which mainly reflects higher contract prices for thermal coal and metallurgical coal in the first nine months of the financial year. The index of metals and other minerals prices increased by 12 per cent, as higher export prices for iron ore were partly offset by lower export prices for most other commodities.

In the June quarter of 2009, the index of export prices declined by 23 per cent compared with the previous quarter, as prices for energy minerals decreased by 33 per cent and prices for metals and other minerals decreased by 19 per cent. Export prices for energy minerals declined as lower export prices for metallurgical (43 per cent) and thermal coal (31 per cent) offset higher export prices for crude oil (8 per cent). Export prices for metals and other minerals also declined as lower export prices for iron ore (31 per cent) more than offset higher export prices for some base metals such as copper and nickel.

Exports

Total earnings from Australia's mineral resource exports increased by 37 per cent to $159.7 billion in 2008-09. Increased export earnings primarily reflected higher contract prices for bulk commodities in the first nine months of 2009 and the effect of a 16 per cent depreciation of the Australian dollar.

In 2008-09, there were significant increases in export earnings for: metallurgical coal, up $20.7 billion (129 per cent) to $36.7 billion; thermal coal, up $9.5 billion (114 per cent) to $17.9 billion; liquefied natural gas (LNG), up $4.2 billion (72 per cent) to $10.1 billion; iron ore, up $13.7 billion (67 per cent) to $34.2 billion; and gold, up $5.2 billion (48 per cent) to $16.1 billion. Except for metallurgical coal, which recorded lower export volumes, increased export earnings reflected increased volumes shipped and higher export prices.

Australian energy and mineral exports

Percentage change 2007-08 to 2008-09

	export volume	export value	prices
Crude oil a	▲ 4%	▼ -16%	▼ -29%
LNG	▲ 13%	▲ +72%	▲ +52%
LPG	▼ -6%	▼ -14%	▼ -8%
Metallurgical coal	▼ -9%	▲ +129%	▲ +150%
Refinery products	▼ -37%	▼ -41%	▼ -6%
Thermal coal	▲ +18%	▲ +114%	▲ +81%
Uranium oxide (u_3o_8)	0%	▲ +12%	▲ +12%
Alumina	▲ +4%	▲ +4%	▼ -1%
Aluminium (ingot metal) a	▲ 6%	▼ -5%	▼ -33%
Bauxite	▼ -6%	▼ -7%	▼ -1%
Copper a	▲ 11%	▼ -14%	▼ -37%
Diamonds	▼ -2%	▲ +8%	▲ +10%
Gold a	▲ +15%	▲ +48%	▲ +6%
Iron and steel	▼ -18%	▼ -13%	▲ +7%
Iron ore and pellets	▲ +10%	▲ +67%	▲ +52%
Lead a	▲ +10%	▼ -21%	▼ -50%
Manganese ore and concentrate	▼ -37%	▼ -8%	▲ +45%
Nickel a	▼ -8%	▼ -53%	▼ -53%
Silver a	▲ +26%	▲ +31%	▼ -17%
Tin a	▲ +35%	▲ +67%	▼ -19%
Titanium and zircon	▲ +29%	▲ +14%	▼ -11%
Zinc a	▼ -2%	▼ -45%	▼ -46%

a Prices in US dollars. All other prices are export unit values denominated in Australian dollars.

Commodities recording significant declines in export earnings in 2008-09 include: nickel, down $3.0 billion (53 per cent) to $2.7 billion; zinc, down $1.5 billion (45 per cent) to $1.9 billion; petroleum refinery products, down $541 million (41 per cent) to $782 million; lead, down $424 million (21 per cent) to $1.6 billion; crude oil, down $1.7 billion (16 per cent) to $8.8 billion; copper, down $964 million (14 per cent) to $5.8 billion; and liquefied petroleum gas (LPG), down $161 million (14 per cent) to $1 billion.

Lower export values for lead, oil and copper reflected lower export unit values more than offsetting moderate increases in export volumes. Export values for nickel, zinc, petroleum refinery products and LPG declined as a result of both lower export volumes and export prices.

Production

Australian production of energy and minerals was lower in 2008-09 with the index of mine production falling by 1 per cent. Production of energy commodities was flat with metals and other minerals accounting for most of this decline.

Significant production declines occurred for intermediate nickel (53 per cent); iron and steel (31 per cent); manganese (31 per cent); refined nickel (8 per cent); zircon (8 per cent); and zinc ores and concentrates (8 per cent).

Intermediate nickel production declined in 2008-09, reflecting the closure of significant mine capacity. Mines closed in the financial year included: BHP Billiton's Ravensthorpe; Norilsk's Waterloo, Lake Johnson, Black Swan and Cawse; Australian Mines' Blair; Palmary's Kambalda; and Fox Resources' Radio Hill. Refined nickel production was lower as maintenance at BHP Billiton's Kalgoorlie smelter in the second half of 2008 led to lower production at their Kwinana refinery. Manganese production was lower primarily reflecting reduced production at BHP Billiton's Northern Territory operations. Iron and steel production declined, reflecting lower production at BlueScope Steel's Port Kembla Steelworks and OneSteel's Whyalla operations. Lower production of zircon concentrates reflected significant production cuts at Iluka's mineral sands operations. Zinc mine production was lower in the financial year as a number of mines were closed as a result of falling zinc prices in the second half of 2008. Mines which closed in the financial year include Teck Resources' Lennard Shelf, Intec's Hellyer and Xstrata's Handlebar Hill mine.

Increased production was observed for tin (138 per cent); refined silver (24 per cent); refined copper (12 per cent); iron ore (9 per cent); crude oil (9 per cent); and refined gold (6 per cent).

Tin production increased in 2008-09, reflecting the start-up of Metals X's Renison operation in the September quarter. Refined silver production was higher as a result of increased production at the Port Pirie refinery in South Australia. Production of refined copper increased reflecting higher production at Xstrata's Townsville refinery and BHP Billiton's Olympic Dam. Production of iron ore increased, being underpinned by increased output from Australia's largest producers, Rio Tinto, BHP Billiton and Fortescue Metals Group. Australia's crude oil production was higher in 2008-09 reflecting the start up of the Angel and Vincent fields and the continued ramp up of capacity at the Stybarrow field. Production of refined gold increased primarily because of an increased availability of overseas scrap for refining in Australia.

Commodity highlights

Energy

Oil and gas

In 2008-09, Australia's crude oil and condensate production totalled 27.8 gigalitres, which was an increase of 9 per cent from 2007-08. The increased production reflects the start up of the North West Shelf Joint Venture's Angel oil and gas field and Woodside's Vincent project, as well as increased production from Woodside's Lamarina-Corallina operation following improved field performance. In line with higher production, export volumes of crude oil and other refinery feedstock increased by 4 per cent to 16.7 gigalitres. Export earnings for the year decreased by 16 per cent to $8.8 billion, as a decline in oil prices more than offset higher export volumes.

Natural gas production increased in 2008-09 by 2 per cent to 40.1 billion cubic metres. This increased production largely reflects the start up of the Angel gas field, which will support expanded LNG production at the North West Shelf project. LNG production from the fifth train at the North West Shelf contributed to a 13 per cent increase in exports in 2008-09. Export earnings from LNG increased by 72 per cent to $10.1 billion, underpinned by increased export volumes as well as a higher average unit value compared with 2007-08.

Coal

Australian production of both raw and saleable black coal declined in 2008-09. Estimated lower production of metallurgical coal in Queensland accounted for most of this decline, with production in New South Wales estimated to have remained steady. Export earnings for black coal increased by 124 per cent to $54.6 billion. The large increase in export value reflects higher contract prices for both metallurgical and thermal coal in the first nine months of the financial year.

Uranium

Australia's uranium production (U_3O_8) increased by 197 tonnes (2 per cent) in 2008-09, as higher production at Energy Resources of Australia's Ranger mine was partially offset by lower production at BHP Billiton's Olympic Dam and Heathgate Resource's Beverley operations. Despite steady export volumes, the value of Australia's uranium exports increased by 12 per cent to $990 million reflecting a depreciation of the Australian dollar and higher export prices for uranium sold from Ranger.

Metals and other minerals

Iron ore

Iron ore production increased by 9 per cent to 353.8 million tonnes in 2008-09, reflecting increased production at BHP Billiton's and Rio Tinto's Pilbara operations and a full year of production at Fortescue Minerals Cloud Break operation. In line with higher production and export prices, the value of Australia's iron ore exports increased by 67 per cent to $34.2 billion.

Gold

Australia's gold mine production fell by 11 tonnes (5 per cent) to 218 tonnes in 2008-09, the lowest since 1989. This fall reflects lower production from large established mines and the closure of several older mines. Export earnings from gold increased by 48 per cent to $16.1 billion in 2008-09, supported by a 15 per cent increase in export volumes and a 29 per cent increase in the Australian dollar denominated gold price.

Copper

Copper mine production increased by 26 000 tonnes (3 per cent) to 889 000 tonnes as increased production at BHP Billiton's Olympic Dam and the commissioning of OZ Minerals' Prominent Hill project offset mine closures in the second half of 2008. Refined copper production increased by 55 000 tonnes (12 per cent) to

499 000 tonnes as higher production at Xstrata's Townsville refinery and BHP Billiton's Olympic Dam offset closures to SX-EW capacity. Despite exports of mine and refined copper increasing, the value of copper exports declined by 14 per cent to $5.8 billion in 2008-09, which reflects a sharp fall in average export prices.

Nickel

Australian nickel mine production declined by 3 per cent in 2008-09 to 185 000 tonnes. This reflects the closure of some mines as a result of the lower nickel prices. The production decline was moderated by increased production from Xstrata's nickel operations in the first half of 2009. Refined nickel production declined by 8 per cent in 2008-09 to 110 000 tonnes, largely attributable to the shutdown at BHP Billiton's Kalgoorlie smelter in Western Australia. Nickel export volumes declined in 2008-09 by 8 per cent to 194 000 tonnes. Significantly lower world prices and export volumes more than offset the effects of a depreciation of the Australian dollar resulting in the value of nickel exports declining by 53 per cent to $2.7 billion.

Zinc

Zinc mine production decreased by around 160 000 tonnes (10 per cent) to 1.4 million tonnes in 2008-09 reflecting mine closures and production cuts in late 2008 and early 2009. Closures included Teck Resources' Lennard Shelf, Intec's Hellyer and Xstrata's Handlebar Hill mine. Refined zinc production was largely unchanged, reflecting that there were no new additions to capacity during the year. Export earnings from zinc were 45 per cent lower at $1.9 billion in 2008–09 as a result of both lower zinc prices and export volumes.

Fiscal year export summary

Australian minerals and energy sector

		export volume			export value			
		2007-08	2008-09	change %		2007-08	2008-09	change %
Bauxite	kt	7 917	7 470	–6	Bauxite s	$m 206	192	–7
Alumina	kt	15 739	16 395	4	Alumina a	$m 5 809	6015	4
Aluminium (ingot metal)	kt	1 650	1 749	6	Aluminium (ingot metal)	$m 4 967	4726	–5
Coal, black					Coal, black			
Coking	Mt	137	125	–9	Coking	$m 16 038	36690	129
Steaming	Mt	115	136	18	Steaming	$m 8 365	17901	114
Copper	kt	732	816	11	Copper f	$m 6 730	5766	–14
Diamonds	'000 ct	16 528	16 279	–2	Diamonds cs	$m 625	676	8
Gold	t	382	437	14	Gems, other than diamonds	$m 52	43	–17
Iron					Gold, refined	$m 10 903	16146	48
Iron ore and pellets	kt	294 293	323 338	10	Iron			
Iron and steel	kt	2 131	1 741	–18	Iron ore and pellets	$m 20 511	34249	67
Lead	kt	588	645	10	Iron and steel	$m 1 562	1363	–13
Manganese ore and concentrate s	kt	5 105	3 226	–37	Lead f	$m 2 027	1603	–21
Nickel	kt	210	194	–8	Magnesia	$m 72	82	14
Petroleum					Manganese ore and concentrate s	$m 1 532	1406	–8
Crude oil and other refinery feedstock	ML	15 975	16 665	4	Nickel fs	$m 5 716	2705	–53
LNG	Mt	14	16	13	Petroleum			
LPG	ML	2 589	2 427	–6	Crude oil and other refinery feedstock	$m 10 484	8758	–16
Refinery products	ML	1 807	1 136	–37	LNG	$m 5 854	10086	72
Salt	kt	10 686	10 978	3	LPG	$m 1 182	1021	–14
Tin	t	3 079	4 159	35	Refinery products	$m 1 323	782	–41
Titanium					Salt	$m 232	237	2
Ilmenite concentrate	kt	894	1 538	72	Silver, refined	$m 187	245	31
Leucoxene concentrate	kt	56	20	–64	Tin f	$m 42	70	67
Rutile concentrate	kt	399	550	38	Titanium			
Synthetic rutile s	kt	513	512	0	Ilmenite concentrate d	$m 104	171	64
Titanium dioxide pigment	kt	175	141	–19	Leucoxene concentrate	$m 15	12	–20
Uranium oxide (U_3O_8)	t	10 139	10 114	0	Rutile concentrate	$m 277	335	21
Zinc	kt	1 507	1 470	–2	Synthetic rutile s	$m 305	258	–15
Zircon concentrate	kt	637	685	8	Titanium dioxide pigment	$m 375	396	6
					Uranium oxide (U_3O_8)	$m 887	990	12
					Zinc f	$m 3 350	1853	–45
					Zircon concentrate e	$m 421	540	28
					Other mineral resources g	$m 6 147	4505	–27
					Total mineral resources h	$m 116 238	159746	37
					Total merchandise	$m 182 818	231728	
					Total goods and services	$m 233 853	285701	22

a Includes aluminium hydroxide. **b** Metallic content of all ores, concentrates, intermediate products (where applicable) and refined metal. **c** Unsorted and sorted. **d** Includes metal content of ores and concentrates, intermediate products and nickel metal. **e** Value of all ores, concentrates, intermediate products (where applicable) and refined metal. **f** Derived as the difference between total mineral resources exports, below, and the sum of the above items. **g** Total mineral resource exports on an ABARE balance of payments basis. **p** Preliminary. **s** ABARE estimate.
Sources: Australian Bureau of Statistics, Canberra; ABARE.

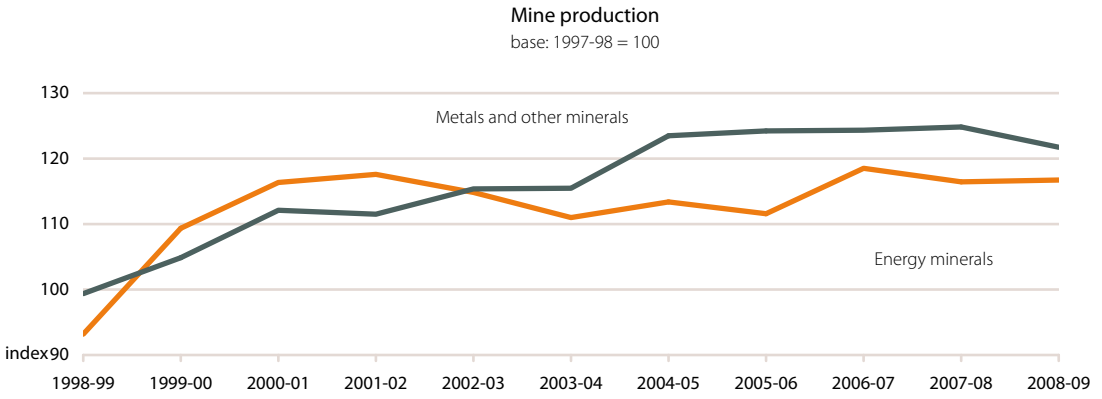
Fiscal year production summary

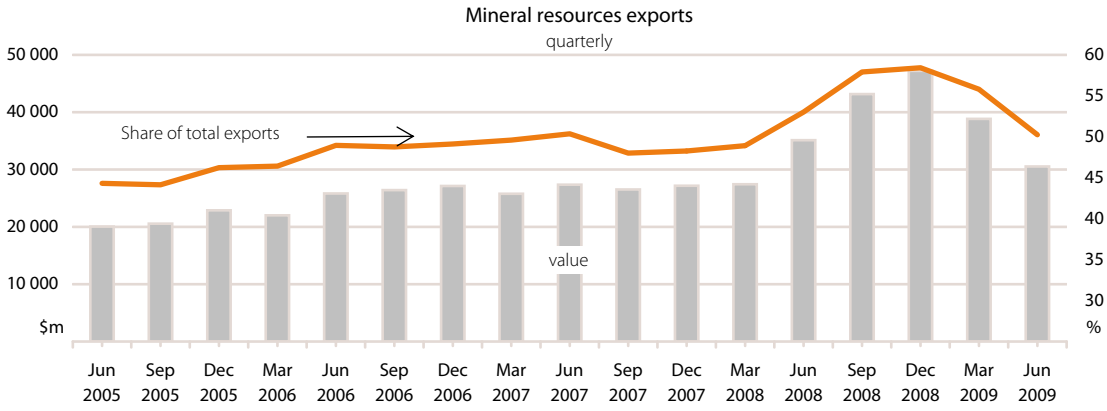
Australian minerals and energy sector

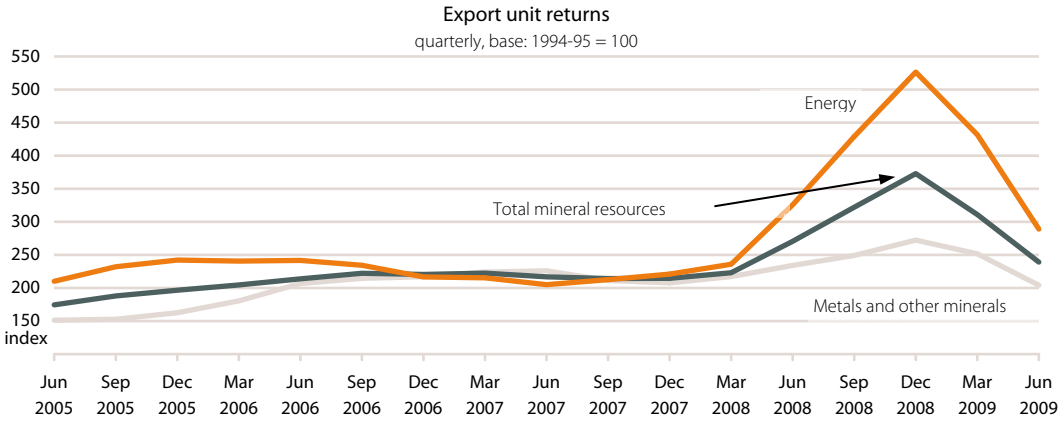
		2007-08	2008-09	% change
Bauxite	kt	63 463	64 418	2
Alumina	kt	19 359	19 597	1
Aluminium (ingot metal)	kt	1 964	1 974	1
Coal				
Black, raw	Mt	421	414	–2
Black, salable	Mt	327	318	–3
Brown **as**	Mt	72	73	1
Copper				
Mine **bs**	kt	863	889	3
Blister **c**	kt	395	459	16
Refined	kt	444	499	12
Diamonds	'000 ct	16 528	15 430	–7
Gold				
Mine **bs**	t	229	218	–5
Refined	t	364	386	6
Iron				
Iron ore and concentrate	kt	324 693	353 800	9
Iron	kt	6 488	4 410	–32
Raw steel	kt	8 121	5 587	–31
Lead				
Mine **bs**	kt	641	596	–7
Bullion **c**	kt	152	155	2
Refined	kt	203	213	5
Manganese	kt	5 436	3 749	–31
Nickel				
Mine **bs**	kt	190	185	–3
Intermediate	kt	45	21	–53
Refined, class 1	kt	105	95	–10
Refined , class 2	kt	15	15	0
Petroleum, field				
Crude oil and condensate	ML	25 789	27 789	8
LPG (naturally occurring)	ML	3 971	3 929	–1
Natural gas	Mm^3	39 283	40 109	2
Petroleum, refinery				
LPG	ML	1 515	1 477	–3
Automotive gasoline	ML	17 079	17 159	0
Aviation turbine fuel	ML	5182	5 494	6
Automotive diesel oil	ML	12 177	12 231	0
Other	ML	3 622	3 184	–12
Total	ML	39 575	39 546	0
Salt	kt	11 243	11 202	0
Silver				
Mine **bs**	t	1 867	1 785	–4
Refined	t	605	751	24
Tin				
Mine **bs**	t	1 631	3 879	138
Refined	t	0	0	na
Titanium				
Ilmenite concentrate	kt	2 205	1 950	–12
Leucoxene concentrate	kt	156	164	5
Rutile concentrate	kt	333	318	–5
Synthetic rutile **s**	kt	672	716	7
Titanium dioxide pigment	kt	201	221	10
Uranium oxide (U_3O_8)	t	10 114	10 311	2
Zinc				
Mine **bs**	kt	1 571	1 411	–10
Refined	kt	507	506	0
Zircon concentrate	kt	580	534	–8

a Total metallic content of minerals produced. **b** Metallic content. **p** Preliminary. **s** ABARE estimate. **na** Not available.
Sources: Australian Bureau of Statistics, Canberra; Coal Services Pty Limited; Queensland Government, Department of Natural Resources and Mines; ABARE.

Resources sector indicators







1 Production summary

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Bauxite	kt	63 463	64 418	15 905	16 069	15 982	16 677	16 179	15 580
Alumina	kt	19 359	19 597	4 792	4 841	4 813	5 000	4 810	4 974
Aluminium (ingot metal)	kt	1 964	1 974	486	491	498	499	485	492
Coal									
Black, raw	Mt	421	414	92	112	109	118	89	99
Black, salable	Mt	327	318	74	87	83	89	68	78
Brown **as**	Mt	72	73	na	na	na	na	na	na
Copper									
Mine **bs**	kt	863	889	205	219	235	227	198	229
Blister **c**	kt	395	459	88	119	120	122	101	115
Refined **s**	kt	444	499	101	134	134	134	109	122
Diamonds	'000 ct	16 528	15 430	2 277	3 126	4 839	5 428	4 579	583
Gold									
Mine **bs**	t	229	218	52	54	55	54	53	55
Refined	t	364	386	99	81	92	89	129	76
Iron									
Iron ore and concentrate	kt	324 693	353 800	79 935	88 835	93 445	80 299	80 632	99 424
Iron and steel **s**	Mt	8 121	5 587	2 010	2 047	1 966	1 681	1 042	898
Lead									
Mine **bs**	kt	641	596	169	154	161	166	119	150
Bullion **c**	kt	152	155	41	42	44	39	32	40
Refined	kt	203	213	52	56	56	56	45	55
Manganese **s**	kt	5 436	3 749	1 254	1 468	1 233	883	692	941
Nickel									
Mine **bs**	kt	190	185	49	50	52	49	46	38
Intermediate	kt	45	21	13	7	0	11	6	4
Refined, class 1	kt	105	95	27	26	13	23	28	31
Refined, class 2	kt	15	15	4	6	4	5	3	3
Petroleum, field									
Crude oil and condensate **s**	ML	25 537	27 789	5 923	6 598	6 968	7 491	6 852	6 478
LPG (naturally occurring)	ML	3 971	3 929	829	994	1 056	934	870	1 069
Natural gas	Mm^3	39 283	40 109	8 989	9 582	9 631	10 054	9 658	10 766
Petroleum, total refinery	ML	39 575	39 546	9 368	9 780	9 945	10 131	9 620	9 850
Salt **s**	kt	11 243	11 202	2 790	2 790	2 790	2 790	2 804	2 818
Silver									
Mine **bs**	t	1 867	1 785	500	429	451	546	351	437
Refined	t	605	751	148	145	183	188	186	195
Tin									
Mine **bs**	t	1 631	3 879	483	221	192	887	1 439	1 361
Titanium **s**									
Ilmenite concentrate	kt	2 205	1 950	545	493	493	511	445	501
Leucoxene concentrate	kt	156	164	26	51	40	41	43	40
Rutile concentrate	kt	333	318	85	77	82	81	89	66
Synthetic rutile	kt	672	716	155	155	188	185	190	153
Titanium dioxide pigment	kt	201	221	50	45	49	55	57	60
Uranium oxide (U_3O_8)	t	10 114	10 311	2 492	2 229	2 617	2 652	2 252	2 790
Zinc									
Mine **bs**	kt	1 571	1 411	365	391	370	393	291	357
Refined	kt	507	506	121	131	122	126	126	132
Zircon concentrate **s**	kt	580	534	148	127	139	136	146	112

a Quarterly data are not available. **b** Total metallic content of minerals produced. **c** Metallic content. **p** Preliminary. **s** ABARE estimate. **na** Not available.
Sources: Australian Bureau of Statistics, Canberra; Coal Services Pty Limited; Queensland Government, Department of Natural Resources and Mines; ABARE.

2 Volume of mine production indexes a

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Energy minerals	117.6	114.8	111.0	113.4	111.6	118.5	116.4	116.7
Metals and other minerals	111.5	115.4	115.5	123.5	124.2	124.3	124.8	121.7
Total minerals	114.9	115.2	113.3	118.6	118.1	121.2	120.6	119.3

a Uranium included with energy.

Note: ABARE revised the method for calculating production indexes in October 1999. The indexes are now calculated on a chained weight basis using Fishers' ideal index with a reference year of 1997-98 = 100.

Sources: Australian Bureau of Statistics, Canberra; ABARE.

3 Exports summary

				quarter					
		2007-08	2008-09 p	2007-08		2008-09 p			
				Mar	June	Sept	Dec	Mar	June
Bauxite	kt	7 917	7 470	2 005	1 660	2 822	2 174	1 157	1 317
Alumina **a**	kt	15 739	16 395	3 835	3 907	3 771	4 396	4 056	4 172
Aluminium (ingot metal)	kt	1 650	1 749	415	385	437	442	432	439
Coal, black									
Metallurgical	Mt	137	125	30	37	36	32	24	33
Thermal	Mt	115	136	29	30	32	35	34	35
Copper **bs**	kt	732	816	191	184	205	231	167	213
Diamonds **cs**	'000 ct	16 528	16 279	2 277	3 126	4 839	5 428	5 428	583
Gold **bs**	t	382	437	89	95	125	106	124	82
Iron									
Iron ore and pellets	kt	294 293	323 338	73 749	79 465	86 925	69 336	78 252	88 825
Iron and steel **s**	kt	2 131	1 741	495	476	444	397	413	488
Lead **bs**	kt	588	645	109	157	174	163	126	182
Manganese ore									
and concentrate	kt	5 105	3 226	1 226	1 363	1 131	283	706	1 106
Nickel **ds**	kt	210	194	55	63	33	58	53	50
Petroleum									
Crude oil and other									
refinery feedstock	ML	15 975	16 665	3 980	3 958	4 055	4 804	4 043	3 764
LNG	Mt	14.3	16.2	3.7	3.6	3.5	4.2	4.3	4.3
LPG	ML	2 589	2 427	595	516	660	596	550	621
Refinery products	ML	1 807	1 136	456	288	237	288	343	268
Salt s	kt	10 686	10 978 **s**	2 734	2 734	2 734	2 734	2 748	2 762
Tin **b**	t	3 079	4 159	1 304	455	132	893	1 651	1 483
Titanium									
Ilmenite concentrate	kt	894	1 538	257	179	265	317	389	567
Leucoxene concentrate	kt	56	20	3	3	9	6	2	3
Rutile concentrate	kt	399	550	102	111	110	116	148	177
Synthetic rutile **s**	kt	513	512	126	128	129	128	127	128
Titanium dioxide pigment	kt	175	141	43	43	31	29	26	55
Uranium oxide (U_3O_8)	t	10 139	10 114	2 385	2 180	2 572	2 526	2 172	2 844
Zinc **b**	kt	1 507	1 470	332	383	426	356	289	398
Zircon concentrate	kt	637	685	161	161	166	167	174	177

continued

3 Exports summary
continued

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Bauxite	$m	206	192	57	37	74	58	33	27
Alumina a	$m	5 809	6 015	1 346	1 471	1 552	2 013	1 349	1 102
Aluminium (ingot metal)	$m	4 967	4 726	1 209	1 202	1 439	1 393	1 004	889
Coal, black									
Metallurgical	$m	16 038	36 690	2 897	6 486	10 365	12 518	7 690	6 116
Thermal	$m	8 365	17 901	2 115	2 754	3 775	5 709	4 971	3 446
Copper e	$m	6 730	5 766	1 760	1 759	1 620	1 595	1 065	1 486
Diamonds cs	$m	625	676	140	119	169	190	241	76
Gems, other than diamonds	$m	52	43	18	11	10	11	15	8
Gold, refined	$m	10 903	16 146	2 851	2 822	3 770	3 890	5 388	3 099
Iron									
Iron ore and pellets	$m	20 511	34 249	4 967	6 873	9 588	8 714	8 939	7 008
Iron and steel s	$m	1 562	1 363	342	437	520	418	218	207
Lead e	$m	2 027	1 603	354	477	415	463	336	390
Manganese ore and concentrate	$m	1 532	1 406	378	682	718	243	250	195
Nickel es	$m	5 716	2 705	1 520	1 387	551	769	681	704
Petroleum									
Crude oil and other refinery feedstock	$m	10 484	8 758	2 591	3 116	3 250	2 220	1 643	1 646
LNG	$m	5 854	10 086	1 541	1 698	2 190	3 815	2 483	1 598
LPG	$m	1 182	1 021	299	259	340	290	193	198
Refinery products	$m	1 323	782	358	240	201	194	205	182
Salt s	$m	232	237	60	60	59	59	59	60
Silver, refined	$m	187	245	55	36	48	73	58	66
Tin e	$m	42	70	18	7	2	18	26	24
Titanium									
Ilmenite concentrate	$m	104	171	31	21	31	37	42	61
Leucoxene concentrate	$m	15	12	2	2	4	5	1	2
Rutile concentrate	$m	277	335	71	67	69	64	98	105
Synthetic rutile s	$m	305	258	74	71	69	59	68	62
Titanium dioxide pigment	$m	375	396	91	90	73	95	85	144
Uranium oxide (U_3O_8)	$m	887	990	172	171	148	246	293	304
Zinc e	$m	3 350	1 853	640	638	569	467	361	456
Zircon concentrate	$m	421	540	107	105	127	137	134	142
Other mineral resources f	$m	6 147	4 505	1 362	2 017	1 416	1 452	909	728
Total mineral resources g	$m	116 238	159 746	27 429	35 121	43 161	47 215	38 839	30 531
Total merchandise	$m	182 818	231 728	42 904	53 204	61 267	67 210	56 025	47 226
Total goods and services	$m	233 853	285 701	56 077	66 241	74 529	80 808	69 603	60 761

a Includes aluminium hydroxide. **b** Metallic content of all ores, concentrates, intermediate products (where applicable) and refined metal. **c** Unsorted and sorted. **d** Includes metal content of ores and concentrates, intermediate products and nickel metal. **e** Value of all ores, concentrates, intermediate products (where applicable) and refined metal. **f** Derived as the difference between total mineral resources exports, below, and the sum of the above items. **g** Total mineral resource exports on an ABARE balance of payments basis. **p** Preliminary. **s** ABARE estimate.

4 Mineral resources export unit returns a

	quarter 2007-08 Sept	2007-08 Dec	2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Energy minerals	212.6	221.0	235.8	325.7	429.0	526.4	431.8	289.1
Metals and other minerals	211.2	207.7	217.2	234.1	249.2	272.4	251.6	204.1
Total mineral resources	214.2	214.6	223.0	270.5	322.1	372.9	311.0	239.1

a Base: 1994-95 = 100. **p** Preliminary.

Sources: Australian Bureau of Statistics, Canberra; ABARE.

5 Imports summary

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Quantity									
Diamonds **a**	'000 ct	2 964	767	620	611	211	214	169	174
Iron ore	kt	4 401	3 599	1 074	884	1 130	1 561	550	358
Ingot steel	kt	1 848	2 082	411	492	811	675	364	231
Ferroalloys	kt	97	54	38	24	20	19	9	6
Petroleum									
Crude oil and other refinery feedstock	ML	26 223	24 307	6 382	5 735	6 296	6 100	5 571	6 339
Natural gas	kt	4 032	4 752	1 212	1 024	1 295	1 126	1 191	1 141
Refinery products	ML	17 982	19 700	5 062	5 207	4 513	5 464	4 933	4 790
Phosphate rock	kt	707	540	109	226	323	189	1	28
Value									
Diamonds **a**	$m	444	417	113	107	115	101	99	102
Gold **b**	$m	7 311	11 250	1 905	2 110	2 662	3 054	3 898	1 636
Iron ore	$m	311	269	73	62	64	141	53	10
Ingot steel	$m	2 225	3 191	526	623	1 025	1 185	635	346
Ferroalloys	$m	154	181	37	49	57	78	29	16
Petroleum									
Crude oil and other refinery feedstock	$m	17 149	14 706	4 302	4 532	5 547	3 824	2 380	2 955
Natural gas	$m	724	2 166	252	174	416	523	850	377
Refinery products	$m	12 730	13 124	3 593	4 424	3 955	4 009	2 657	2 503
Phosphate rock	$m	80	193	8	42	92	95	0	6
Silver	$m	80	223	26	29	32	81	98	12
Other	$m	1 271	1 356	362	325	381	563	238	174
Total	$m	42 479	47 075	11 197	12 478	14 348	13 653	10 939	8 135

a Includes sorted and unsorted, gem and industrial diamonds, and diamond dust and powder. **b** Refined and unrefined bullion. **p** Preliminary.
Sources: Australian Bureau of Statistics, Canberra; ABARE.

6 Private mineral exploration expenditure

		2006-07	2007-08 p	quarter 2007-08 p Dec	2007-08 p Mar	2007-08 p June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar
Energy									
Petroleum									
Onshore	$m	498.2	493.8	159.8	94.6	126.0	120.4	135.8	86.2
Offshore	$m	1 727.3	2 541.1	610.2	614.8	731.2	660.9	877.6	912.4
Total	$m	2 225.5	3 034.9	770.0	709.4	857.2	781.3	1 013.4	998.6
Coal	$m	193.2	234.8	59.8	54.1	70.8	68.5	82.9	69.2
Uranium	$m	114.1	231.5	69.6	49.2	62.7	56.7	51.9	27.7
Total energy	$m	2 532.8	3 501.2	899.4	812.7	990.7	906.5	1 148.2	1 095.5
Metals and other minerals									
Copper	$m	234.5	293.5	70.2	64.8	93.3	79.2	55.7	25.8
Diamonds	$m	26.9	21.7	5.3	6.1	5.3	2.4	3.5	2.0
Gold	$m	455.9	592.6	146.7	142.4	173.9	133.2	120.4	85.6
Iron ore	$m	285.4	449.8	98.5	91.9	146.6	162.0	182.5	105.6
Mineral sands	$m	37.3	37.0	10.5	8.9	10.4	9.1	9.1	5.4
Nickel, cobalt	$m	181.1	303.2	85.9	64.0	86.5	95.0	78.5	41.2
Silver, lead and zinc	$m	139.4	186.5	51.5	39.0	39.1	34.8	20.2	17.6
Other	$m	46.8	110.8	27.9	23.6	39.5	46.8	43.8	23.4
Total metals and other minerals	$m	1 407.3	1 995.1	496.5	440.7	594.6	562.5	513.7	306.6
Total expenditure	$m	3 940.1	5 496.3	1 395.9	1 253.4	1 585.3	1 469.0	1 661.9	1 402.1

p Preliminary.
Sources: Australian Bureau of Statistics, Canberra; ABARE.

7 Mineral resources prices

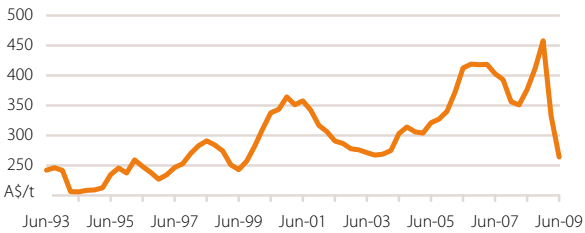
	Alumina avg export unit value	Aluminium (high grade) LME cash	Gold London AM fix	Iron ore a avg export unit value	Thermal coal avg export unit value	Metallurgical coal avg export unit value	Crude oil b world trade wtd ave	Uranium c Industry spot price
	A$/t	US$/t	US$/oz	A$/t	A$/t	A$/t	US$/bbl	US$/lb
2006-07	414.63	2 692.18	638.56	60.27	60.54	113.96	59.45	81.17
2007-08	369.08	2 665.02	823.35	69.70	72.70	117.14	91.97	80.75
2008-09	366.90	1 781.42	873.99	105.92	131.22	292.92	66.05	51.25
2008								
April	385.70	2 959.27	911.60	83.86	88.58	126.55	104.98	65.00
May	377.35	2 902.90	889.13	88.24	92.02	172.52	118.93	60.00
June	368.15	2 957.86	889.54	87.13	99.40	221.37	128.06	59.00
July	384.40	3 071.24	941.17	101.12	105.15	245.04	133.52	64.50
August	408.66	2 764.38	840.39	109.90	113.52	285.44	113.97	64.50
September	444.87	2 525.82	824.92	120.60	131.19	321.26	98.52	53.00
October	480.76	2 121.41	812.82	137.72	158.60	379.74	73.95	45.00
November	467.28	1 852.43	757.85	127.92	165.49	404.70	50.47	55.00
December	426.08	1 490.43	819.94	110.17	164.91	384.86	39.71	53.00
2009								
January	343.35	1 413.12	857.73	111.20	149.11	354.15	40.36	48.00
February	343.03	1 330.20	939.76	119.03	152.32	340.98	41.23	45.00
March	311.52	1 335.84	925.99	112.23	132.72	287.93	45.19	42.00
April	277.91	1 420.83	892.66	86.79	108.66	238.40	49.36	44.00
May	260.36	1 460.39	926.83	74.90	99.49	173.16	52.91	49.00
June	253.54	1 573.73	947.81	75.81	91.75	151.72	67.70	52.00

	Copper (high grade) LME cash	Lead LME cash	Zinc (high grade) LME cash	Silver d London fix	Nickel LME cash	Ilmenite e avg export unit value	Rutile f avg export unit value	Zircon g avg export unit value
	US$/t	US$/t	US$/t	USc/troy oz	US$/t	A$/t	A$/t	A$/t
2006-07	7 086.78	1 694.20	3 672.41	1 274.16	37 908.78	112.89	845.61	861.55
2007-08	7 791.00	2 891.49	2 598.83	1 544.29	28 564.32	116.32 s	693.21	660.98
2008-09	4 936.25	1 453.98	1 400.89	1 289.13	13 322.04	111.12 s	609.23	788.70
2008								
April	8 684.93	2 822.75	2 263.80	1 750.00	28 763.18	na	789.49	861.56
May	8 382.75	2 233.38	2 182.10	1 705.15	25 735.00	na	791.89	842.09
June	8 260.60	1 863.05	1 894.48	1 696.90	22 549.05	na	771.03	850.30
July	8 414.04	1 944.91	1 852.37	1 803.39	20 160.22	na	731.16	899.29
August	7 634.70	1 923.58	1 723.28	1 468.58	18 927.75	na	789.21	971.60
September	6 990.86	1 868.36	1 736.84	1 240.84	17 794.55	na	849.51	1 128.50
October	4 925.70	1 482.20	1 302.11	1 039.78	12 139.78	na	1 048.51	1 219.98
November	3 717.00	1 294.45	1 152.60	986.53	10 701.50	na	1 087.24	1 310.15
December	3 071.98	962.88	1 102.43	1 028.52	9 698.81	na	1 050.24	1 292.65
2009								
January	3 220.69	1 132.74	1 187.38	1 129.14	11 354.05	na	1 201.24	1 412.00
February	3 314.73	1 100.53	1 112.08	1 341.25	10 408.75	na	1 309.77	1 595.97
March	3 749.75	1 238.91	1 216.75	1 311.68	9 696.36	na	1 093.22	1 336.37
April	4 406.53	1 383.05	1 378.80	1 251.48	11 165.75	na	1 151.07	1 369.15
May	4 568.58	1 439.89	1 483.76	1 402.89	12 633.42	na	1 088.67	1 284.57
June	5 011.82	1 674.45	1 557.27	1 465.43	14 916.90	na	1 030.52	1 242.78

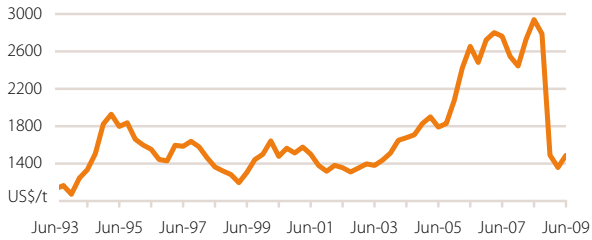
a Lump and fines. **b** US Department of Energy, *Energy Information Administration*. **c** Average of weekly restricted spot price published by The Ux Consulting Company. **d** London fix rate from May 2001; Handy and Harman, commercial bar, minimum 99.9 per cent prior to May 2001. **e** Bulk grade only after January 1992, confidential after August 2007. **f** Bagged only after August 1999. **g** Bagged only after September 1999. **na** Not available.
Sources: Australian Bureau of Statistics, Canberra; London Metal Exchange; London Bullion Market Association; The Ux Consulting Company; US Department of Energy; ABARE.

Mineral resources prices, ended June quarter 2009

Alumina

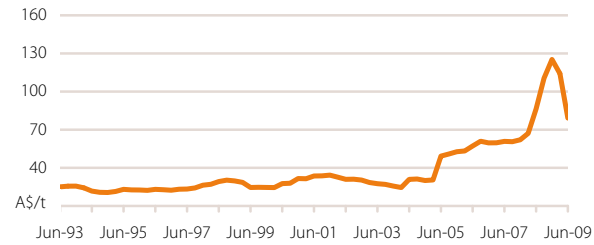


Aluminium

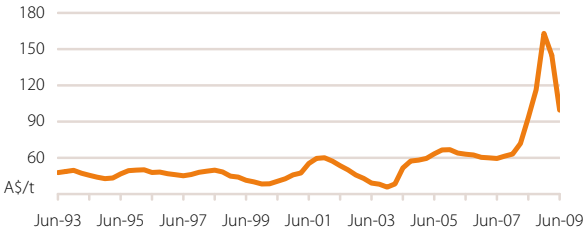


Gold

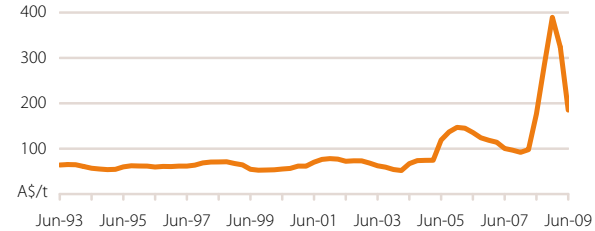
Iron ore



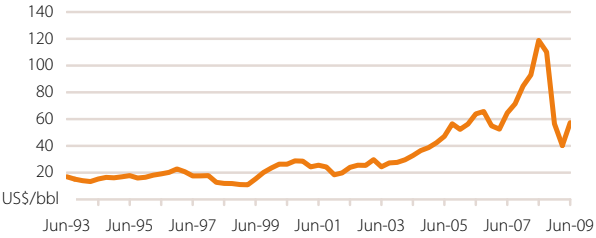
Thermal coal



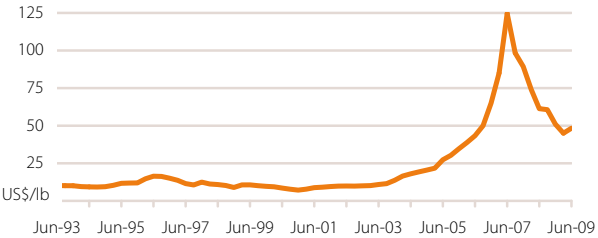
Metallurgical coal



Crude oil

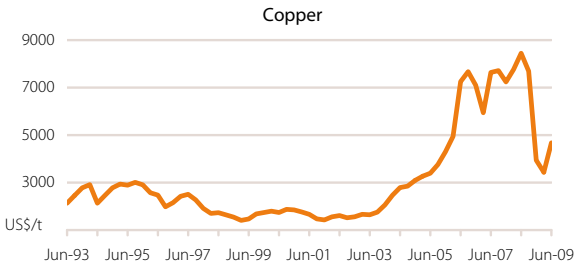


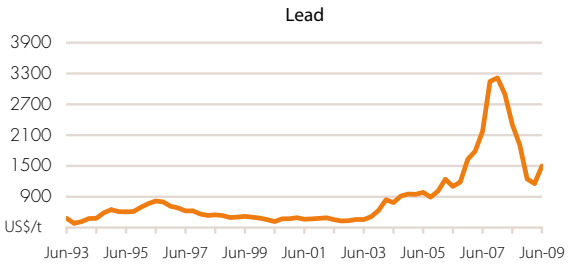
Uranium

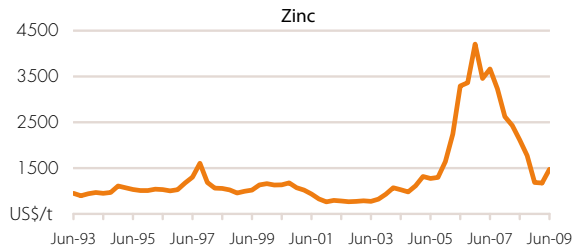


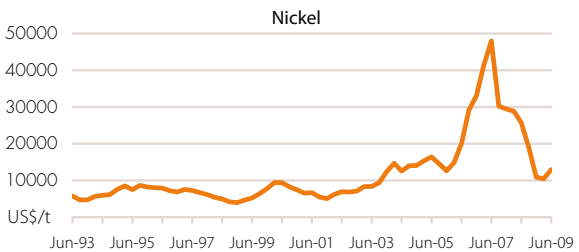
Mineral resources prices, ended June quarter 2009

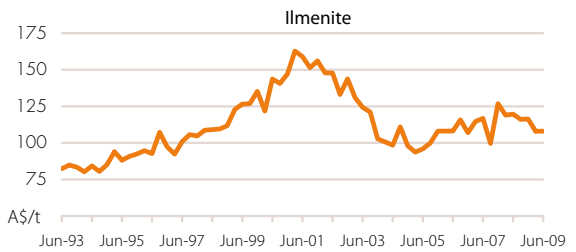
continued

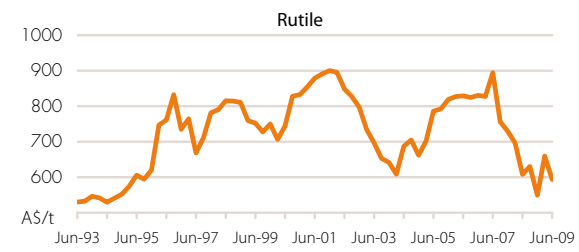


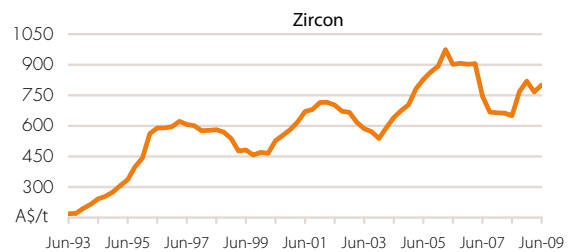












Sources: Australian Bureau of Statistics, Canberra; London Metal Exchange; London Bullion Market Association; The Ux Consulting Company; US Department of Energy, *Energy Information Administration* ; ABARE.

8 Aluminium

				quarter					
		2007-08	2008-09 p	2007-08		2008-09 p			
				Mar	June	Sept	Dec	Mar	June
Production									
Mine									
Bauxite									
Queensland	kt	16 814	16 585	4 215	4 218	3 951	4 355	4 153	4 125
Western Australia	kt	41 398	42 183	10 363	10 409	10 584	10 712	10 544	10 343
Northern Territory	kt	5 251	5 651	1 327	1 442	1 447	1 609	1 482	1 112
Australia	kt	63 463	64 418	15 905	16 069	15 982	16 677	16 179	15 580
Alumina content	kt	23 406	24 205	5 910	5 821	5 892	6 228	6 010	6 075
Smelter and refinery									
Alumina	kt	19 359	19 597	4 792	4 841	4 813	5 000	4 810	4 974
Aluminium (ingot metal)	kt	1 964	1 974	486	491	498	499	485	492
Exports									
Quantity									
Bauxite **a**	kt	7 917	7 470	2 005	1 660	2 822	2 174	1 157	1 317
Alumina **bc**	kt	15 739	16 395	3 835	3 907	3 771	4 396	4 056	4 172
Aluminium (ingot metal)									
Chinese Taipei	kt	195	164	47	46	52	36	27	49
Indonesia	kt	85	77	24	22	26	19	9	22
Japan	kt	609	478	166	144	173	163	85	58
Korea, Rep. of	kt	231	369	52	42	59	77	131	103
Malaysia	kt	101	145	26	22	25	38	51	30
Thailand	kt	220	185	52	61	55	49	43	37
Other	kt	207	332	48	48	47	59	86	140
Total	kt	1 650	1 749	415	385	437	442	432	439
Value									
Bauxite **a**	$m	206	192	57	37	74	58	33	27
Alumina **bc**	$m	5 809	6 015	1 346	1 471	1 552	2 013	1 349	1 102
Aluminium (ingot metal)	$m	4 967	4 726	1 209	1 202	1 439	1 393	1 004	889
Imports									
Quantity									
Bauxite **a**	kt	8	14	2	3	5	5	3	0
Alumina **bc**	kt	12	10	2	3	4	4	2	1
Aluminium (ingot metal)	kt	3	2	1	1	1	1	1	0
Value									
Bauxite	$m	3	10	1	1	3	4	3	0
Alumina **b**	$m	13	13	3	4	4	5	2	2
Aluminium (ingot metal)	$m	10	7	2	2	2	2	2	1
Prices									
Alumina **d**	A$/t	369	367	351	377	412	458	332	264
Aluminium									
LME cash **e**	US$/t	2 665	1 781	2 729	2 940	2 787	1 490	1 360	1 488
Australia **d**	A$/t	3 011	2 701	2 914	3 124	3 291	3 155	2 326	2 025

a Bauxite export quantities are not available prior to September quarter 2004. Bauxite export values up to and including June quarter 2004 are ABARE estimates. **b** Includes aluminium hydroxide. **c** Country details confidential. **d** Average export unit value. **e** High grade. **p** Preliminary. **s** ABARE estimate.
Sources: Australian Bureau of Statistics, Canberra; London Metal Exchange; ABARE.

9 Coal

				quarter					
		2007-08	2008-09 p	2007-08		2008-09 p			
				Mar	June	Sept	Dec	Mar	June
Production									
Mine									
Black coal, raw									
Underground	Mt	104.80	99.13	22.65	29.23	26.94	28.57	20.83	22.79
Opencut	Mt	316.38	315.23	69.14	83.16	81.81	89.11	68.41	75.90
New South Wales	Mt	177.02	181.16	43.09	44.81	47.00	48.50	41.23	44.44
Queensland	Mt	233.24	221.93	45.96	64.82	58.94	66.36	45.19	51.44
Western Australia a	Mt	6.44	6.80	1.62	1.64	1.70	1.70	1.70	1.70
South Australia a	Mt	3.84	3.84	0.96	0.96	0.96	0.96	0.96	0.96
Tasmania a	Mt	0.64	0.64	0.16	0.16	0.16	0.16	0.16	0.16
Australia	Mt	421.18	414.37	91.79	112.39	108.75	117.68	89.24	98.70
Black coal, salable									
Underground	Mt	83.78	78.16	18.87	22.45	21.42	22.13	15.80	18.80
Opencut	Mt	243.02	239.51	54.68	64.37	61.66	66.52	52.15	59.18
New South Wales	Mt	134.98	135.33	32.26	34.02	35.27	35.19	31.21	33.67
Queensland	Mt	180.92	171.08	38.55	50.05	45.01	50.65	33.92	41.50
Western Australia a	Mt	6.44	6.80	1.62	1.64	1.70	1.70	1.70	1.70
South Australia a	Mt	3.84	3.84	0.96	0.96	0.96	0.96	0.96	0.96
Tasmania a	Mt	0.62	0.62	0.15	0.15	0.15	0.15	0.15	0.15
Australia	Mt	326.80	317.66	73.55	86.82	83.09	88.65	67.95	77.98
Brown coal b									
Victoria s	Mt	72.40	72.90	na	na	na	na	na	na
Exports									
Quantity									
Metallurgical coal, high quality									
Brazil	Mt	3.27	2.34	0.62	0.77	0.96	0.60	0.23	0.55
China	Mt	1.37	9.81	0.35	0.00	0.43	0.07	3.66	5.65
Chinese Taipei	Mt	3.43	2.66	0.79	1.06	0.73	0.81	0.43	0.69
European Union 27	Mt	19.82	12.70	3.40	5.47	5.03	4.47	1.35	1.85
India	Mt	18.94	19.17	4.16	5.11	6.08	4.05	3.35	5.69
Japan	Mt	24.87	22.79	5.33	7.35	6.76	6.85	4.59	4.58
Korea, Rep. of	Mt	6.57	5.47	1.71	1.72	1.22	1.79	1.44	1.01
Other	Mt	5.37	4.61	1.31	1.47	1.91	1.46	0.50	0.75
Total	Mt	83.65	79.55	17.67	22.95	23.12	20.12	15.55	20.77
Metallurgical coal, other c									
Chinese Taipei	Mt	2.96	0.00	0.67	0.33	0.00	0.00	0.00	0.00
European Union 27	Mt	4.69	1.98	1.14	1.17	0.91	0.42	0.33	0.33
India	Mt	5.28	5.10	1.04	1.71	1.65	1.05	0.73	1.67
Japan	Mt	25.33	19.45	5.99	6.12	6.01	5.53	3.91	4.00
Other	Mt	15.00	19.17	3.09	4.46	4.63	5.04	3.22	6.28
Total	Mt	53.27	45.70	11.94	13.80	13.19	12.03	8.19	12.29
Total metallurgical coal	Mt	136.92	125.25	29.61	36.75	36.31	32.14	23.74	33.06
Thermal coal									
Chinese Taipei	Mt	18.56	20.30	4.09	5.10	5.39	5.32	4.98	4.62
European Union 27	Mt	2.15	3.64	1.14	0.57	0.91	0.84	1.22	0.67
Japan	Mt	66.92	62.58	17.40	16.20	17.61	16.77	16.00	12.20
Korea, Rep. of	Mt	18.55	30.14	4.61	5.79	5.47	8.61	8.04	8.02
Other	Mt	8.89	19.76	2.18	1.86	3.07	3.48	4.07	9.14
Total	Mt	115.07	136.42	29.42	29.51	32.45	35.02	34.31	34.64

9 Coal
continued

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Exports									
Quantity d									
Other coal	Mt	0.20	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Value									
Metallurgical coal									
High quality	$m	10 847	25 217	1 958	4 334	7 250	8 534	5 328	4 105
Other quality	$m	5 191	11 472	939	2 152	3 116	3 983	2 362	2 011
Total metallurgical coal	$m	16 038	36 690	2 897	6 486	10 365	12 518	7 690	6 116
Thermal coal	$m	8 365	17 901	2 115	2 754	3 775	5 709	4 971	3 446
Other coal	$m	12	3	0	0	0	0	2	0
Total coal	$m	24 416	54 593	5 013	9 241	14 140	18 227	12 663	9 562
Coke	$m	176	232	60	57	49	71	42	70
Imports									
Quantity									
Coke	Mt	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00
Value									
Coke	$m	1	3	0	0	0	0	3	0
Prices e									
Metallurgical coal									
High quality	A$/t	129.66	316.99	110.82	188.87	313.63	424.27	342.53	197.68
Other quality	A$/t	97.46	251.03	78.64	155.96	236.19	331.15	288.47	163.60
Thermal coal	A$/t	72.70	131.22	71.90	93.34	116.32	163.05	144.88	99.47

a Quarterly data derived from annual ABARE estimates. **b** Quarterly data not available. **c** Country details confidential for various time periods for Brazil, Chinese Taipei, Dem. Peoples Rep. of Korea, Italy, Pakistan and Republic of Korea - commencing from October 1996. **d** Quantity details for coke not available. **e** Average export unit value. **p** Preliminary. **s** ABARE estimate. **na** Not available.

Sources: Australian Bureau of Statistics, Canberra; Coal Services Pty Limited; Queensland Government, Department of Natural Resources and Mines; ABARE.

10 Copper

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Mine s									
Copper ore and concentrate	kt	3 222	3 475	816	836	834	844	879	918
Copper content of all minerals produced									
New South Wales a	kt	146	158	34	35	37	39	41	42
Queensland a	kt	392	343	94	92	101	102	68	72
Western Australia a	kt	124	134	34	27	36	29	35	35
South Australia	kt	170	226	36	58	55	48	50	73
Tasmania	kt	30	26	7	7	6	8	5	8
Australia a	kt	863	889	205	219	235	227	198	229
Smelter and refinery									
Blister copper (primary) b	kt	395	459	88	119	120	122	101	115
Refined copper (primary) s	kt	444	499	101	134	134	134	109	122
Exports									
Quantity									
Copper concentrate									
China c	kt	567	638	188	117	134	164	127	213
India	kt	523	491	161	83	146	141	93	111
Japan	kt	339	395	88	67	112	103	77	103
Korea, Rep. of	kt	183	178	9	74	56	54	31	37
Other	kt	81	100	18	43	15	34	31	20
Total	kt	1 694	1 802	463	384	463	496	358	485
Refined copper									
Chinese Taipei	kt	95	58	21	31	23	19	3	12
Germany	kt	0	0	0	0	0	0	0	0
Indonesia	kt	17	14	5	7	7	5	1	2
Japan	kt	9	4	0	8	3	0	0	0
Singapore	kt	1	14	1	0	5	8	1	0
Thailand	kt	43	25	8	13	8	7	4	6
Other	kt	131	247	39	32	43	65	71	67
Total	kt	296	361	74	92	90	104	80	86
Copper content of all primary materials exported ds	kt	732	816	191	184	205	231	167	213
Value									
Copper concentrate	$m	4 151	3 544	1 129	946	926	1 018	636	964
Refined copper	$m	2 579	2 222	631	813	694	577	429	522
Total	$m	6 730	5 766	1 760	1 759	1 620	1 595	1 065	1 486
Prices e									
LME cash	US$/t	7 791	4 936	7 763	8 448	7 692	3 940	3 435	4 675
Australia	A$/t	8 702	6 418	8 617	8 984	8 549	5 750	5 213	6 161

a Includes copper cathode and copper precipitate. **b** Copper content. **c** Excludes Hong Kong. **d** Copper content of all ores and concentrates, slags, residues, intermediate products, refined copper, copper powder and flakes. **e** Based on LME cash, midday, high grade, 25 tonne warrants. **p** Preliminary. **s** ABARE estimate.

Sources: Australian Bureau of Statistics, Canberra; London Metal Exchange; ABARE.

11 Diamonds and other gemstones

				quarter					
		2007-08	2008-09 p	2007-08		2008-09 p			
				Mar	June	Sept	Dec	Mar	June
Production									
Diamonds									
Western Australia	'000 ct	16 528	15 430	2 277	3 126	4 839	5 428	4 579	583
Australia	'000 ct	16 528	15 430	2 277	3 126	4 839	5 428	4 579	583
Exports									
Quantity									
Diamonds									
Unsorted s	'000 ct	16 266	16 207	2 255	2 923	4 816	5 403	5 417	572
Sorted									
Gem	'000 ct	261	71	22	203	23	25	12	11
Industrial a	'000 ct	0	0	0	0	0	0	0	0
Total s	'000 ct	16 528	16 279	2 277	3 126	4 839	5 428	5 428	583
Value									
Diamonds									
Unsorted s	$m	475	489	100	84	123	141	195	30
Sorted									
Gem	$m	149	187	40	35	46	49	46	46
Industrial a	$m	0	1	0	0	0	0	0	0
Total s	$m	625	676	140	119	169	190	241	76
Opals									
Rough	$m	10	7	3	2	1	2	4	0
Cut and polished	$m	34	29	13	6	7	6	9	7
Total	$m	45	36	17	8	8	8	13	7
Sapphires									
Rough	$m	1	1	0	0	0	0	0	0
Total	$m	1	1	0	0	0	0	0	0
Other gemstones b	$m	7	6	1	3	1	3	1	1
Total gemstones	$m	52	43	18	11	10	11	15	8
Imports									
Quantity									
Diamonds									
Unsorted	'000 ct	2	0	0	0	0	0	0	0
Sorted									
Gem	'000 ct	493	325	90	74	90	93	73	69
Industrial a	'000 ct	166	6	13	13	1	1	4	0
Dust and powder	'000 ct	2 303	435	518	524	120	120	92	104
Value									
Diamonds									
Unsorted	$m	0	1	0	0	0	0	1	0
Sorted									
Gem	$m	440	412	112	107	114	100	97	101
Industrial a	$m	2	3	1	0	1	0	1	0
Dust and powder	$m	1	1	0	0	0	0	0	0
Total	$m	444	417	113	107	115	101	99	102

a Excludes dust, powder and unsorted diamonds. **b** Includes cut and polished sapphires from 1 July 2000. **p** Preliminary. **s** ABARE estimate.

Sources: Australian Bureau of Statistics, Canberra; ABARE; Department of Minerals and Energy, Western Australia; Department of Minerals and Energy, Northern Territory.

12 Gold

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Mine s									
Gold content of all minerals produced									
New South Wales	t	34	28	8	7	9	7	6	6
Victoria	t	5	7	1	1	1	2	2	2
Queensland	t	21	17	4	5	5	5	4	4
Western Australia	t	142	140	31	34	33	34	35	37
South Australia	t	6	8	1	2	2	2	2	2
Tasmania	t	5	5	1	1	2	1	1	1
Northern Territory	t	16	12	4	4	4	3	3	3
Australia	t	229	218	52	54	55	54	53	55
Refinery									
Primary									
Australian origin	t	190	179	45	43	44	45	45	45
Overseas origin	t	58	74	14	16	17	19	21	17
Secondary									
Australian origin	t	5	6	1	1	1	2	1	1
Overseas origin	t	110	127	39	20	30	22	63	12
Total	t	364	386	99	81	92	89	129	76
Exports									
Quantity									
Refined and unrefined bullion									
Hong Kong, China	t	1	2	0	1	0	1	1	0
India	t	141	160	37	41	49	32	28	51
Japan	t	4	0	0	1	0	0	0	0
Korea, Rep. of	t	2	0	1	1	0	0	0	0
Malaysia	t	1	0	0	1	0	0	0	0
Middle East	t	37	38	0	13	19	15	3	1
United Arab Emirates	t	37	38	0	13	19	15	3	1
Singapore	t	2	9	0	2	4	2	1	3
Switzerland	t	28	9	0	2	0	4	1	3
Thailand	t	20	38	5	9	12	11	4	12
United Kingdom	t	140	178	46	21	40	40	87	12
Other	t	7	3	1	3	1	1	0	0
Total	t	382	437	89	95	125	106	124	82
Value									
Refined	$m	10 903	16 146	2 851	2 822	3 770	3 890	5 388	3 099
Imports									
Value									
Refined and unrefined bullion	$m	7 311	11 250	1 905	2 110	2 662	3 054	3 898	1 636
Prices									
London AM fix	US$/oz	823	874	928	897	869	797	908	922
Australia	A$/oz	917	1 186	1 023	952	977	1 185	1 365	1 215

p Preliminary. **s** ABARE estimate.

Sources: Australian Bureau of Statistics, Canberra; London Bullion Market Association; ABARE.

13 Iron

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Iron ore and concentrate **a**									
Western Australia	kt	313 505	341 543	77 262	85 949	90 458	77 492	77 503	96 090
South Australia	kt	8 138	7 641	2 006	2 065	1 909	1 732	2 000	2 000
Tasmania **s**	kt	2 435	2 409	602	610	650	630	572	557
Northern Territory	kt	615	2 207	66	211	428	444	558	777
Australia **s**	kt	324 693	353 800	79 935	88 835	93 445	80 299	80 632	99 424
Iron content **s**	kt	198 723	211 719	47 834	53 158	58 623	49 110	49 502	54 483
Iron and steel **bs**	kt	8 121	5 587	2 010	2 047	1 966	1 681	1 042	898
Exports									
Quantity									
Iron ore and pellets									
Pellets, sinters and briquettes	kt	1 142	1 429	215	284	385	197	540	307
Fines	kt	205 166	230 334	51 350	54 279	59 924	51 095	55 770	63 546
Lump and run of mine	kt	87 985	91 575	22 184	24 902	26 616	18 044	21 942	24 973
China **c**	kt	167 574	222 917	41 663	49 628	52 318	39 696	60 560	70 343
Chinese Taipei	kt	10 411	7 663	2 595	2 711	2 539	2 148	1 574	1 402
European Union 27	kt	5 918	3 056	2 087	1 079	2 040	679	151	185
Japan	kt	78 427	61 050	19 772	17 885	20 722	18 468	11 009	10 851
Korea, Rep. of	kt	31 614	28 309	7 579	8 118	9 256	8 343	4 805	5 906
Other	kt	350	343	52	44	50	0	153	140
Total iron ore and pellets	kt	294 293	323 338	73 749	79 465	86 925	69 336	78 252	88 825
Iron content	kt	183 107	200 985	45 887	49 486	54 112	43 028	48 644	55 201
Steel									
Iron and steel **s**	kt	2 131	1 741	495	476	444	397	413	488
Scrap	kt	1 783	1 743	307	748	331	358	455	598
Value									
Iron ore and pellets									
Pellets, sinters and briquettes	$m	79	163	16	22	25	26	86	26
Fines	$m	13 247	22 714	3 267	4 290	5 917	5 884	6 051	4 862
Lump and run of mine	$m	7 184	11 373	1 684	2 562	3 646	2 804	2 803	2 120
Total	$m	20 511	34 249	4 967	6 873	9 588	8 714	8 939	7 008
Steel									
Iron and steel **s**	$m	1 562	1 363	342	437	520	418	218	207
Scrap	$m	833	752	157	328	172	169	210	202
Total	$m	2 396	2 115	499	765	692	587	428	409
Imports									
Quantity									
Iron ore **d**	kt	4 401	3 599	1 074	884	1 130	1 561	550	358
Iron and steel	kt	1 848	2 082	411	492	811	675	364	231
Ferroalloys	kt	97	54	38	24	20	19	9	6
Value									
Iron ore **d**	$m	311	269	73	62	64	141	53	10
Iron and steel	$m	2 225	3 191	526	623	1 025	1 185	635	346
Ferroalloys	$m	154	181	37	49	57	78	29	16
Total	$m	2 690	3 641	636	734	1 147	1 405	717	372
Prices									
Japanese negotiated **e**	USc/dmtu	80.43	144.67	80.43	144.67	144.67	144.67	144.67	97.00

a For use in iron and steel making; includes pellets for Tasmania. **b** Includes recovery from scrap. **c** Excludes Hong Kong. **d** Includes limonite ore used in the production of refined nickel products. **e** Indicative price: Australian hematite fines to Japan (fob), per dry metric tonne unit, for Japanese fiscal year commencing 1 April. **p** Preliminary. **s** ABARE estimate.

Sources: Australian Bureau of Statistics. Canberra: ABARE.

14 Lead

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Mine s									
Lead ore and concentrates	kt	888	842	234	209	218	243	172	209
Lead content of all minerals produced									
New South Wales	kt	75	73	19	21	18	13	20	21
Queensland	kt	469	439	127	107	119	128	84	108
Western Australia	kt	30	12	7	9	3	7	2	0
South Australia	kt	0	6	0	0	2	1	1	2
Tasmania	kt	32	31	8	9	9	7	7	8
Northern Territory	kt	35	35	9	9	9	10	6	10
Australia	kt	641	596	169	154	161	166	119	150
Smelter and refinery									
Refined lead (primary) a	kt	203	213	52	56	56	56	45	55
Domestic despatches									
Refined lead	kt	25	25	5	8	6	5	4	10
Exports									
Quantity									
Lead concentrate									
China	kt	72	147	4	23	37	29	16	64
European Union 27	kt	34	43	0	0	23	10	10	0
Japan	kt	74	49	21	25	11	11	5	22
Korea, Rep. of	kt	103	91	31	16	11	33	26	22
Other	kt	25	52	9	3	27	11	4	11
Total	kt	308	382	66	67	109	93	62	118
Lead bullion b									
United Kingdom	kt	169	147	27	51	26	45	29	47
Total	kt	169	147	27	51	26	45	29	47
Refined lead									
Chinese Taipei	kt	5	14	2	0	1	3	3	6
India	kt	26	47	4	6	9	10	11	17
Indonesia	kt	7	15	2	2	4	4	6	2
Japan	kt	0	1	0	0	1	1	0	0
Korea, Rep. of	kt	40	35	10	8	8	10	7	11
Thailand	kt	17	14	2	4	5	5	0	3
Other	kt	100	135	13	36	45	24	34	32
Total	kt	193	261	33	56	72	57	62	70
Lead content of all primary materials exported cs	kt	588	645	109	157	174	163	126	182
Value									
Lead concentrate	$m	757	611	154	118	145	165	146	155
Lead bullion	$m	595	432	93	175	95	143	79	116
Refined lead	$m	674	560	108	183	175	155	111	119
Total	$m	2 027	1 603	354	477	415	463	336	390
Prices									
LME cash d	US$/t	2 891	1 454	2 900	2 306	1 912	1 247	1 157	1 500
Australia e	A$/t	3 639	2 269	3 515	3 229	2 319	2 480	2 017	2 258

a Includes lead content of lead alloys from primary sources. **b** Includes a substantial precious metal content, mainly silver. **c** Lead content of all ores, concentrates, slags, residues, bullion, and refined lead. **d** Based on LME cash, midday, standard grade, minimum 25 tonne warrants. **e** Pasminco Metals, 99.97–99.99 per cent, fob/for Port Pirie. **p** Preliminary. **s** ABARE estimate.

15 Manganese

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Manganese ore and concentrate									
Western Australia s	kt	1 262	880	281	335	149	82	216	433
Northern Territory	kt	4 174	2 869	972	1 132	1 084	800	476	508
Australia s	kt	5 436	3 749	1 254	1 468	1 233	883	692	941
Manganese content s	kt	2 609	1 799	602	704	592	424	332	452
Exports a									
Quantity									
Manganese ore and concentrate	kt	5 105	3 226	1 226	1 363	1 131	283	706	1 106
Value									
Manganese ore and concentrate	$m	1 532	1 406	378	682	718	243	250	195
Prices									
Japanese negotiated b	US$/mtu	2.70	11.20	2.70	11.20	11.20	11.20	11.20	9.00
	A$/t	144.66	718.95	143.23	570.38	603.88	797.55	807.50	567.69

a Quarterly data derived from annual ABARE estimates to June quarter 2004. ABS data from September quarter 2004. **b** Indicative price: high grade ore (48 per cent Mn) to Japan for Japanese fiscal year commencing 1 April. **p** Preliminary. **s** ABARE estimate.

Sources: Australian Bureau of Statistics, Canberra; ABARE.

16 Nickel

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	Dec	Mar	June
Production as									
Mine									
Nickel content									
Western Australia	kt	190	182	49	50	51	48	45	38
Tasmania	kt	0	3	0	0	1	1	1	0
Australia	kt	190	185	49	50	52	49	46	38
Smelter and refinery									
Intermediate nickel	kt	45	21	13	7	0	11	6	4
Refined nickel, class 1 **b**	kt	105	95	27	26	13	23	28	31
Refined nickel, class 2 **c**	kt	15	15	4	6	4	5	3	3
Exports s									
Quantity									
Nickel **d**	kt	210	194	55	63	33	58	53	50
Value									
Ores and concentrates	$m	1 088	795	246	400	239	284	153	118
Intermediate products **e**	$m	912	206	245	212	0	99	55	51
Refined nickel, class 1 **b**	$m	3 288	1 499	912	631	253	322	424	500
Refined nickel, class 2 **c**	$m	429	205	117	144	59	63	48	35
Total	$m	5 716	2 705	1 520	1 387	551	769	681	704
Imports									
Value									
Primary nickel products **f**	$m	262	141	62	56	52	54	17	18
Prices									
LME cash **g**	US$/t	28 564	13 322	28 863	25 730	18 980	10 889	10 475	12 943
	A$/t	31 884	17 816	31 900	27 299	21 320	16 155	15 734	17 009

a Details of production of nickel metal, matte, oxide, sinter and nickel–cobalt sulphide are not available. **b** Products with a nickel content of 99 per cent or more. Includes electrolytic nickel, pellets, briquettes and powder. **c** Products with a nickel content of less than 99.8 per cent. Includes ferronickel, nickel oxides and oxide sinter. **d** Includes metal content of ores and concentrates, intermediate products and nickel metal. **e** Includes matte and speiss for further refining. **f** Includes matte, sinter and intermediate products; ferronickel, unwrought nickel metal and alloys and scrap. **g** Average cash settlement price for melting grade refined nickel. **p** Preliminary. **s** ABARE estimate.

Sources: Australian Bureau of Statistics, Canberra; International Nickel Study Group; London Metal Exchange; ABARE.

17 Petroleum

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	Dec	Mar	June
Production									
Field									
Crude oil	ML	18 832	20 109	4 410	4 924	5 292	5 491	4 956	4 370
Condensate	ML	6 957	7 680	1 513	1 674	1 676	2 000	1 896	2 108
Total	ML	25 789	27 789	5 923	6 598	6 968	7 491	6 852	6 478
Production rate	'000 bbl/day	451	486	414	461	487	524	479	453
LPG	ML	3 971	3 929	829	994	1 056	934	870	1 069
Ethane **a**	Mm^3	454	395	103	116	118	91	75	111
Natural gas **a**	Mm^3	39 283	40 109	8 989	9 582	9 631	10 054	9 658	10 766
Refinery									
Refinery input	ML	38 346	38 808	9 452	9 426	9 398	10 003	9 615	9 792
Refinery output									
LPG	ML	1 515	1 477	396	424	512	428	266	271
Automotive gasoline	ML	17 079	17 159	3 814	4 239	4 249	4 238	4 300	4 372
Aviation gasoline	ML	119	105	39	27	29	18	31	27
Aviation turbine fuel	ML	5 182	5 494	1 262	1 291	1 381	1 405	1 367	1 341
Kerosine	ML	1	2	0	1	1	0	1	1
Heating oil	ML	102	69	9	33	27	9	16	16
Automotive diesel oil	ML	12 177	12 231	2 926	2 962	2 981	3 180	2 975	3 094
Industrial and marine diesel fuel	ML	3	13	4	– 12	4	3	4	3
Fuel oil (excl. refinery fuel)	ML	979	872	242	270	204	233	239	196
Lubricating oil basestock	ML	121	114	34	34	22	36	34	22
Bitumen	ML	1 452	1 294	327	360	316	335	317	326
Other products	ML	844	716	314	150	218	247	70	180
Total	ML	39 575	39 546	9 368	9 780	9 945	10 131	9 620	9 850
Sales									
LPG									
Automotive use **b**	ML	2 238	2 253	532	558	582	580	548	543
Total	ML	4 024	3 996	912	992	1 079	1 004	924	989
Automotive gasoline									
Premium unleaded	ML	1 780	1 728	434	419	408	449	448	423
Regular unleaded	ML	15 212	13 802	3 763	3 609	3 562	3 568	3 416	3 256
Other unleaded	ML	2 242	3 204	567	608	696	825	820	862
Total	ML	19 234	18 734	4 764	4 636	4 667	4 843	4 684	4 541
Aviation gasoline	ML	88	96	20	23	27	28	19	22
Aviation turbine fuel	ML	6 070	6 173	1 497	1 550	1 578	1 576	1 462	1 557
Kerosine	ML	43	25	18	6	7	4	6	8
Heating oil	ML	12	7	3	3	3	1	1	3
Automotive diesel oil	ML	18 245	18 587	4 382	4 790	4 742	4 811	4 316	4 718
Industrial and marine diesel fuel	ML	11	16	3	2	4	3	3	6
Fuel oil	ML	1 583	1 423	418	376	360	392	357	314
Lubricating oil and greases	ML	435	437	105	113	116	107	101	113
Bitumen	ML	785	809	213	207	158	221	221	208
Other products	ML	258	311	61	69	72	93	71	74
Total	ML	50 788	50 614	12 395	12 769	12 814	13 082	12 166	12 552

continued

17 Petroleum
continued

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Exports									
Quantity									
Crude oil and other refinery feedstock									
China	ML	972	1 009	382	211	0	371	177	460
Chinese Taipei	ML	343	403	196	13	110	191	87	16
Japan	ML	2 280	2 564	416	570	670	606	760	527
Korea, Rep. of	ML	3 701	4 395	726	636	994	998	1 370	1 034
New Zealand	ML	600	321	81	315	143	3	70	105
Singapore	ML	3 089	3 542	1 197	861	726	1 095	897	823
United States	ML	1 157	1 421	296	501	513	760	148	0
Other	ML	3 833	3 011	686	849	898	781	533	798
Total	ML	15 975	16 665	3 980	3 958	4 055	4 804	4 043	3 764
LNG	Mt	14.33	16.25	3.67	3.57	3.49	4.17	4.32	4.26
LPG	ML	2 589	2 427	595	516	660	596	550	621
Refinery products									
Automotive gasoline	ML	628	245	84	97	84	25	46	91
Aviation turbine fuel	ML	149	113	43	29	28	16	29	40
Diesel fuel c	ML	462	357	215	37	5	144	137	71
Fuel oil	ML	257	188	55	57	45	76	48	20
Aviation gasoline	ML	96	56	6	10	5	11	33	7
Lubricants	ML	178	142	50	43	63	8	43	29
Other products	ML	35	34	2	14	9	9	7	9
Total	ML	1 807	1 136	456	288	237	288	343	268
Ships' and aircraft stores									
Aviation turbine fuel	ML	1 893	1 909	473	473	473	473	473	489
Fuel oil	ML	251	275	63	63	64	70	72	69
Other products	ML	24	33	3	9	6	14	7	7
Total	ML	2 169	2 217	540	545	543	557	552	565
Value									
Crude oil and other refinery feedstock	$m	10 484	8 758	2 591	3 116	3 250	2 220	1 643	1 646
LNG	$m	5 854	10 086	1 541	1 698	2 190	3 815	2 483	1 598
LPG	$m	1 182	1 021	299	259	340	290	193	198
Refinery products									
Automotive gasoline	$m	444	167	65	83	71	13	29	53
Aviation turbine fuel	$m	120	70	35	30	27	9	15	20
Diesel fuel c	$m	363	225	174	34	6	99	76	44
Fuel oil	$m	130	96	29	37	31	34	19	12
Aviation gasoline	$m	73	45	6	10	6	11	22	6
Lubricants	$m	152	147	43	37	44	27	34	41
Other products	$m	41	34	6	10	15	1	10	7
Total	$m	1 323	782	358	240	201	194	205	182
Total	$m	18 843	20 648	4 789	5 313	5 980	6 519	4 524	3 624
Ships' and aircraft stores									
Aviation turbine fuel	$m	1 325	1 355	344	363	434	382	305	235
Fuel oil	$m	107	142	27	27	27	37	47	31
Other products	$m	25	39	4	10	7	18	6	7
Total	$m	1 457	1 537	375	400	469	437	358	273

continued

17 Petroleum
continued

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Imports									
Quantity									
Crude oil and other refinery feedstock									
Indonesia	ML	3 289	3 667	759	827	709	855	861	1 242
Malaysia	ML	4 103	4 461	1 252	734	1 026	1 343	1 228	865
Middle East									
Saudi Arabia	ML	573	775	14	116	96	206	243	230
United Arab Emirates	ML	3 660	2 918	774	830	778	477	572	1 091
Other	ML	43	40	43	0	0	40	0	0
Total Middle East	ML	4 276	3 734	830	946	875	723	814	1 321
New Zealand	ML	1 974	2 313	545	544	637	659	453	564
Papua New Guinea	ML	2 190	1 349	412	417	324	371	319	334
Singapore	ML	713	555	175	132	165	179	111	101
Viet Nam	ML	6 318	5 280	1 426	1 240	1 483	1 234	1 144	1 420
Other	ML	3 360	2 947	984	895	1 078	736	640	492
Total	ML	26 223	24 307	6 382	5 735	6 296	6 100	5 571	6 339
Natural gas	kt	4 032	4 752	1 212	1 024	1 295	1 126	1 191	1 141
Refined products									
LPG	ML	965	1 004	180	343	183	301	167	354
Automotive gasoline	ML	3 533	4 086	1 292	1 012	567	1 320	1 465	734
Aviation turbine fuel	ML	1 846	2 022	494	576	464	457	526	575
Diesel fuel **c**	ML	7 470	8 252	1 939	2 211	2 108	2 339	1 661	2 144
Fuel oil	ML	1 625	1 682	432	432	475	409	444	354
Lubricants	ML	396	369	99	98	105	92	94	78
Other products	ML	2 147	2 285	627	536	612	545	576	552
Total	ML	17 982	19 700	5 062	5 207	4 513	5 464	4 933	4 790
Value									
Crude oil and other refinery feedstock	$m	17 149	14 706	4 302	4 532	5 547	3 824	2 380	2 955
Natural gas	$m	724	2 166	252	174	416	523	850	377
Refined products									
LPG	$m	436	381	90	164	92	122	59	108
Automotive gasoline	$m	2 719	2 785	1 001	869	516	969	861	438
Aviation turbine fuel	$m	1 505	1 388	381	589	473	330	272	313
Diesel fuel **c**	$m	6 155	6 319	1 601	2 252	2 182	1 957	960	1 220
Fuel oil	$m	831	862	226	249	332	197	177	156
Lubricants	$m	477	629	117	128	170	201	146	113
Other products	$m	1 331	2 927	430	347	607	755	1 033	532
Total	$m	12 730	13 124	3 593	4 424	3 955	4 009	2 657	2 503
Total	$m	30 603	29 996	8 147	9 130	9 918	8 355	5 888	5 834
Prices									
Dubai	US$/bbl	90.19	63.88	90.71	117.23	108.53	52.00	39.19	55.81
West Texas intermediate	US$/bbl	96.73	68.83	97.22	123.97	114.50	58.80	41.70	60.31
Brent	US$/bbl	95.37	67.18	96.16	122.13	114.51	54.50	41.20	58.52
Tapis	US$/bbl	100.84	74.38	102.29	128.82	125.81	60.79	48.09	61.33
World trade weighted	US$/bbl	91.97	66.05	93.00	118.79	110.10	56.50	40.25	57.34
average	A$/bbl	102.66	88.33	102.79	126.03	123.67	83.82	60.46	75.35

a Commercial sales plus field and plant usage. **b** This is a minimum level and includes only direct sales by the oil industry. The data do not include volumes sold to distributors etc. which are subsequently used or sold for automotive use. **c** Includes automotive diesel oil and industrial and marine diesel fuel. **p** Preliminary. **s** ABARE estimate.

Sources: Australian Bureau of Statistics, Canberra; Department of Resources, Energy and Tourism, Canberra; US Department of Energy, *Energy Information Administration;* Tokyo Commodity Exchange; ABARE.

18 Petroleum production, by basin

	Crude oil	Condensate	Total crude oil and condensate		LPG (naturally occurring) a	Ethane a	Natural gas a
	ML	ML	ML	'000 bbl/day	ML	Mm^3	Mm^3
March quarter 2009							
Adavale	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amadeus	13.6	0.0	13.6	1.0	0.0	0.0	133.5
Bonaparte	177.4	0.0	177.4	12.4	0.0	0.0	0.0
Bowen–Surat	4.4	6.1	10.6	0.7	7.2	0.0	55.6
Canning	1.9	0.0	1.9	0.1	0.0	0.0	0.0
Carnarvon							
Barrow Island	194.2	0.0	194.2	13.6	0.0	0.0	462.0
North West Shelf	604.3	1 670.1	2 274.5	159.0	398.7	0.0	6 912.5
Other	2 058.0	15.7	2 073.7	144.9	0.0	0.0	186.6
Cooper–Eromanga							
Queensland	205.3	40.9	246.1	17.2	0.0	0.0	0.0
South Australia	602.7	43.9	646.6	45.2	139.9	64.0	691.2
Gippsland	994.0	99.0	1 093.0	76.4	297.4	10.8	1 164.8
Otway	0.0	19.6	19.6	1.4	26.8	0.0	0.8
Perth	100.1	0.4	100.5	7.0	0.0	0.0	50.7
Total	4 955.9	1 895.8	6 851.7	478.9	869.9	74.8	9 657.7
June quarter 2009 p							
Adavale	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amadeus	13.6	0.0	13.6	1.0	0.0	0.0	133.2
Bonaparte	237.3	0.0	237.3	16.6	0.0	0.0	0.0
Bowen–Surat	3.8	4.8	8.6	0.6	5.8	0.0	48.7
Canning	1.9	0.0	1.9	0.1	0.0	0.0	0.0
Carnarvon							
Barrow Island	114.2	0.0	114.2	8.0	0.0	0.0	513.1
North West Shelf	587.3	1 749.2	2 336.5	163.3	434.6	0.0	7 284.1
Other	1 507.4	24.8	1 532.1	107.1	0.0	0.0	219.1
Cooper–Eromanga							
Queensland	207.0	40.9	247.9	17.3	0.0	0.0	0.0
South Australia	552.1	43.9	596.0	41.7	139.9	64.0	691.2
Gippsland	1 058.9	216.9	1 275.8	89.2	450.2	47.3	1 826.0
Otway	0.0	26.8	26.8	1.9	38.6	0.0	0.8
Perth	86.6	0.4	87.0	6.1	0.0	0.0	50.2
Total	4 370.1	2 107.8	6 477.8	452.7	1 069.1	111.4	10 766.5
2008-09 p							
Adavale	0.0	0.0	0.0	0.0	0.0	0.0	1.9
Amadeus	54.6	0.0	54.6	1.0	0.0	0.0	536.6
Bonaparte	811.8	0.0	811.8	14.2	0.0	0.0	0.0
Bowen–Surat	18.5	21.4	39.9	0.7	23.9	0.0	210.9
Canning	7.4	0.0	7.4	0.1	0.0	0.0	0.0
Carnarvon							
Barrow Island	728.4	0.0	728.4	12.7	0.0	0.0	1 694.5
North West Shelf	2 961.2	6 435.9	9 397.2	164.2	1 582.0	0.0	27 325.7
Other	8 307.4	44.0	8 351.4	145.9	0.0	0.0	467.4
Cooper–Eromanga							
Queensland	854.7	163.4	1 018.1	17.8	0.0	0.0	0.0
South Australia	2 024.8	175.7	2 200.5	38.4	559.5	256.1	2 765.0
Gippsland	3 922.4	738.2	4 660.6	81.4	1 628.3	139.0	6 878.2
Otway	0.0	99.1	99.1	1.7	135.7	0.0	5.0
Perth	417.9	1.9	419.8	7.3	0.0	0.0	224.1
Total	20 109.0	7 679.6	27 788.7	485.5	3 929.4	395.2	40 109.3

a Commercial sales plus field and plant usage. **p** Preliminary. **s** ABARE estimate.
Sources: Department of Resources, Energy and Tourism, Canberra; ABARE.

19 Sales of petroleum products, by state marketing area

	NSW a	Vic.	QLD	WA	SA	Tas.	NT	Aust.
	ML	ML	ML	ML	ML	ML	ML	ML
June quarter 2009 p								
LPG **b**								
Automotive use **c**	167	222	48	47	55	3	2	543
Total	286	361	145	80	94	16	7	989
Automotive gasoline								
Premium unleaded	130	88	102	57	26	14	5	423
Regular unleaded	926	875	671	391	273	86	33	3 256
Other unleaded **d**	401	128	275	34	22	2	0	862
Total	1 456	1 091	1 048	483	321	103	39	4 541
of which sales to retailers	1 196	876	781	424	235	47	22	3 581
Aviation gasoline	4	3	7	4	2	0	2	22
Aviation turbine fuel	664	266	348	183	45	10	40	1 557
Kerosine	1	2	4	1	0	0	1	8
Heating oil	1	1	0	0	1	0	0	3
Automotive diesel oil	966	735	1 340	1 086	328	89	173	4 718
of which sales to retailers	339	288	315	188	68	7	21	1 226
Industrial and marine diesel fuel	5	1	0	0	0	0	0	6
Fuel oil **e**	65	86	11	33	0	0	118	314
Lubricating oil and greases	38	23	27	14	8	1	2	113
Bitumen	37	36	85	27	20	3	1	208
Other products **f**	57	7	4	3	2	0	0	74
Total	3 580	2 613	3 017	1 914	821	224	382	12 552
2008-09 p								
LPG **b**								
Automotive use **c**	697	902	208	192	235	13	7	2 253
Total	1 202	1 410	584	324	382	66	28	3 996
Automotive gasoline								
Premium unleaded	524	371	405	244	106	58	21	1 728
Regular unleaded	3 980	3 684	2 850	1 670	1 117	370	131	13 802
Other unleaded **d**	1 491	449	1 038	133	83	9	0	3 204
Total	5 996	4 503	4 293	2 048	1 305	436	152	18 734
of which sales to retailers	4 918	3 531	3 112	1 748	985	198	81	14 572
Aviation gasoline	19	13	28	19	7	2	9	96
Aviation turbine fuel	2 660	1 074	1 324	722	205	37	150	6 173
Kerosine	3	4	14	1	0	1	2	25
Heating oil	3	1	0	0	1	2	0	7
Automotive diesel oil	3 895	2 913	5 254	4 206	1 247	378	694	18 587
of which sales to retailers	1 340	1 119	1 235	801	292	31	69	4 888
Industrial and marine diesel fuel	13	2	1	0	0	0	0	16
Fuel oil **e**	339	383	52	177	0	0	472	1 423
Lubricating oil and greases	137	88	107	59	33	7	7	437
Bitumen	183	146	309	84	65	17	5	809
Other products **f**	228	33	22	15	10	0	2	311
Total	14 677	10 572	11 989	7 655	3 255	946	1 520	50 614

a Includes Australian Capital Territory. **b** Includes sales for petrochemical feedstock. **c** This is a minimum level and includes only direct sales by the oil industry. The data do not include volumes sold to distributors etc. which are subsequently used or sold for automotive use. **d** Includes proprietary brand and other blends. **e** Excludes refinery fuel. **f** Sales of LPG for petrochemical feedstock are included in LPG sales. **p** Preliminary.
Source: Department of Resources, Energy and Tourism, Canberra.

20 Phosphate

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Single superphosphate **as**	kt	1 413	na	218	452	646	378	na	na
Imports									
Quantity									
Phosphate rock									
China	kt	55	15	0	24	13	1	0	0
Morocco	kt	438	284	78	125	128	129	0	27
Nauru	kt	112	86	31	27	58	27	0	0
Other	kt	101	154	0	51	123	31	0	0
Total	kt	707	540	109	226	323	189	1	28
Phosphates									
Diammonium **b**	kt	313	214	107	133	24	7	64	119
Monammonium **c**	kt	583	455	242	197	29	72	175	179
High analysis **d**	kt	107	107	31	60	22	21	43	21
Value									
Phosphate rock	$m	80	193	8	42	92	95	0	6
Phosphates									
Diammonium **b**	$m	261	140	83	139	31	7	36	66
Monammonium **c**	$m	454	337	165	220	40	93	107	97
High analysis **d**	$m	63	72	16	41	23	19	20	10
Prices									
Australia **e**	A$/t	104.44	384.89	77.53	184.56	284.37	502.45	546.10	206.63

a Single superphosphate manufactured from imported phosphate rock; P_2O_5 equivalent: 21 per cent. **b** P_2O_5 equivalent: 46 per cent. **c** P_2O_5 equivalent: 50 per cent. **d** P_2O_5 equivalent: 48 per cent. **e** Average import unit value. **p** Preliminary. **s** ABARE estimate.

Sources: Australian Bureau of Statistics, Canberra; ABARE.

21 Salt

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Australia **as**	kt	11 243	11 202	2 790	2 790	2 790	2 790	2 804	2 818
Exports s									
Quantity									
Bulk, bagged and table	kt	10 686	10 978	2 734	2 734	2 734	2 734	2 748	2 762
Value									
Bulk, bagged and table	$m	232	237	60	60	59	59	59	60
Prices									
Australia **b**	A$/t	21.67	21.60	22.00	22.00	21.50	21.50	21.63	21.76

a Combination of sales and production data, excludes Victoria. **b** Average export unit value. **p** Preliminary. **s** ABARE estimate. **na** Not available.

Sources: Australian Bureau of Statistics, Canberra; ABARE.

22 Silver

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Mine s									
Silver content of all minerals produced									
New South Wales	t	77	71	19	21	18	14	17	21
Queensland	t	1 504	1 473	423	332	371	458	280	364
Western Australia	t	114	73	17	28	20	35	15	3
South Australia	t	29	30	7	8	8	7	8	7
Tasmania	t	106	99	25	29	24	22	25	29
Northern Territory	t	38	40	9	9	10	11	6	12
Australia	t	1 867	1 785	500	429	451	546	351	437
Refinery									
Refined silver	t	605	751	148	145	183	188	186	195
Exports									
Quantity									
Refined silver bullion	t	335	423	96	58	80	113	109	120
Value									
Refined silver a	$m	187	245	55	36	48	73	58	66
Imports									
Value									
Refined silver bullion	$m	80	223	26	29	32	81	98	12
Prices									
World b	USc/oz	1 544	1 289	1 768	1 717	1 504	1 018	1 261	1 373
Australia c	A$/kg	551	553	624	586	540	485	608	579

a Includes refined bullion, powder, unwrought silver and semi manufactured forms. **b** London Bullion Market Association, fixed rate. **c** Pasminco Metals, fob/fot Port Pirie. **p** Preliminary. **s** ABARE estimate.

Sources: Australian Bureau of Statistics, Canberra; London Bullion Market Association; ABARE.

23 Tin

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Mine									
Tin content of all minerals produced									
Queensland **s**	t	1 631	0	483	221	0	0	0	0
Tasmania	t	0	3 879	0	0	192	887	1 439	1 361
Australia **s**	t	1 631	3 879	483	221	192	887	1 439	1 361
Smelter and refinery									
Refined tin (primary) **s**	t	na	na	na	na	na	na	na	na
Exports									
Quantity									
Tin concentrate	t	6 527	9 607	3 511	1 057	522	2 815	3 241	3 029
Refined tin	t	185	85	1	0	0	0	80	4
Tin content of primary materials exported **as**	t	3 079	4 159	1 304	455	132	893	1 651	1 483
Value									
Tin concentrate	$m	39	69	18	7	2	18	25	24
Refined tin	$m	3	1	0	0	0	0	0	0
Total	$m	42	70	18	7	2	18	26	24
Imports									
Quantity									
Refined tin	t	603	529	181	169	170	107	122	130
Value									
Refined tin	$m	12	11	3	4	4	3	2	2
Prices									
LME **b**	US$/t	18 529	14 568	17 784	22 650	20 551	13 131	11 024	13 540

a Tin content of tin ores and concentrates and refined tin. **b** LME official close. **p** Preliminary. **s** ABARE estimate. **na** Not available.
Sources: Australian Bureau of Statistics, Canberra; London Metal Exchange; ABARE.

24 Titanium minerals

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production s									
Ilmenite concentrate									
New South Wales	kt	197	190	43	49	40	40	50	60
Queensland	kt	222	108	57	63	59	35	8	6
Victoria	kt	0	7	0	0	0	0	6	1
South Australia	kt	5	20	2	4	5	5	5	5
Western Australia	kt	1 779	1 624	443	376	388	431	375	429
Northern Territory	kt	3	1	1	1	1	0	0	0
Australia	kt	2 205	1 950	545	493	493	511	445	501
Leucoxene concentrate									
New South Wales	kt	86	92	10	34	23	23	23	23
Victoria	kt	5	6	2	2	1	1	2	1
South Australia	kt	3	8	1	2	2	2	2	2
Western Australia	kt	60	58	13	12	14	15	15	14
Northern Territory	kt	2	1	1	1	1	0	0	0
Australia	kt	156	164	26	51	40	41	43	40
Rutile concentrate									
New South Wales	kt	63	80	15	16	20	20	20	20
Victoria	kt	72	73	19	16	15	16	28	14
Queensland	kt	85	54	20	19	18	16	14	5
South Australia	kt	2	6	1	1	1	2	2	2
Western Australia	kt	105	104	29	22	27	26	25	26
Northern Territory	kt	6	1	1	2	1	0	0	0
Australia	kt	333	318	85	77	82	81	89	66
Synthetic rutile	kt	672	716	155	155	188	185	190	153
Titanium dioxide pigment	kt	201	221	50	45	49	55	57	60
Exports									
Quantity									
Ilmenite concentrate a	kt	894	1 538	257	179	265	317	389	567
Leucoxene concentrate	kt	56	20	3	3	9	6	2	3
Rutile concentrate s	kt	399	550	102	111	110	116	148	177
Synthetic rutile s	kt	513	512	126	128	129	128	127	128
Titanium dioxide pigment	kt	175	141	43	43	31	29	26	55
Value									
Ilmenite concentrate a	$m	104	171	31	21	31	37	42	61
Leucoxene concentrate	$m	15	12	2	2	4	5	1	2
Rutile concentrate s	$m	277	335	71	67	69	64	98	105
Synthetic rutile s	$m	305	258	74	71	69	59	68	62
Titanium dioxide pigment	$m	375	396	91	90	73	95	85	144
Prices b									
Ilmenite concentrate									
Bulk	A$/t	116 s	111 s	na	na	na	na	na	na
Leucoxene concentrate									
Bulk	A$/t	166	na	na	na	na	na	na	na
Bagged	A$/t	631	598	656	645	457	784	625	602
Rutile concentrate									
Bagged	A$/t	742	1 010	710	784	786	1 063	1 192	1 082
Titanium dioxide pigment	A$/t	2 137	2 810	2 112	2 072	2 346	3 259	3 224	2 635

a From January 1992, bulk only. **b** Average export unit value. **p** Preliminary. **s** ABARE estimate. **na** Not available.

Sources: Australian Bureau of Statistics, Canberra; ABARE.

25 Uranium

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Mine									
Uranium oxide (U_3O_8)	t	10 114	10 311	2 492	2 229	2 617	2 652	2 252	2 790
Uranium (U content)									
South Australia	t	4 105	3 929	988	1 016	1 075	863	880	1 110
Northern Territory	t	4 472	4 815	1 125	873	1 144	1 386	1 029	1 256
Australia	t	8 577	8 744	2 113	1 890	2 219	2 249	1 910	2 366
Exports a									
Quantity									
Uranium oxide (U_3O_8)	t	10 139	10 114	2 385	2 180	2 572	2 526	2 172	2 844
Value									
Uranium oxide (U_3O_8)	$m	887	990	172	171	148	246	293	304
Prices									
Uranium oxide (U_3O_8)									
Industry spot **b**	US$/lb	80.75	51.25	74.00	61.33	60.67	51.00	45.00	48.33
Australia **c**	A$/kg	87.45	97.92	72.11	78.36	57.39	97.21	134.93	106.94

a Country details not available. **b** Average of weekly restricted spot price, published by The Ux Consulting Company. **c** Average export unit value. **p** Preliminary.

Sources: Australian Bureau of Statistics, Canberra; The Ux Consulting Company; ABARE.

26 Zircon

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Zircon concentrate **s**									
New South Wales	kt	48	56	13	12	12	12	14	18
Victoria	kt	141	92	38	23	27	25	27	14
Queensland	kt	66	39	14	14	13	12	11	3
South Australia		15	48	5	10	11	12	13	13
Western Australia	kt	295	296	74	63	74	76	81	65
Northern Territory	kt	16	3	4	5	3	0	0	0
Australia	kt	580	534	148	127	139	136	146	112
Exports									
Quantity									
Zircon concentrate **s**	kt	637	685	161	161	166	167	174	177
Value									
Zircon concentrate **s**	$m	421	540	107	105	127	137	134	142
Prices a									
Zircon concentrate									
All grades – bagged	A$/t	943	1 174	923	851	979	1 274	1 419	1 283

a Average export unit value. **p** Preliminary. **s** ABARE estimate.

Sources: Australian Bureau of Statistics, Canberra; ABARE.

27 Zinc

		2007-08	2008-09 p	quarter 2007-08 Mar	2007-08 June	2008-09 p Sept	2008-09 p Dec	2008-09 p Mar	2008-09 p June
Production									
Mine s									
Zinc ore and concentrates	kt	3 034	2 643	697	736	696	742	543	662
Zinc content of all minerals produced									
New South Wales	kt	140	122	33	41	40	27	27	29
Queensland	kt	897	897	221	233	227	237	188	244
Western Australia	kt	205	142	41	56	35	68	29	10
South Australia	kt	94	17	12	0	7	3	2	5
Tasmania	kt	102	87	26	28	24	19	21	23
Northern Territory	kt	134	145	33	33	37	39	23	46
Australia	kt	1 571	1 411	365	391	370	393	291	357
Smelter and refinery									
Refined zinc (primary)	kt	507	506	121	131	122	126	126	132
Domestic despatches									
Refined zinc	kt	85	71	21	23	23	18	14	16
Exports									
Quantity									
Zinc concentrates									
Belgium–Luxembourg	kt	93	32	26	19	13	19	0	0
China	kt	823	943	153	217	263	175	199	306
Japan	kt	311	273	69	78	70	103	38	62
Korea, Rep. of	kt	345	291	80	98	102	78	47	64
Netherlands	kt	351	231	84	81	80	67	22	62
Spain	kt	161	146	19	34	56	48	17	25
Other	kt	239	183	54	74	45	42	49	46
Total	kt	2 323	2 098	485	600	628	533	373	564
Refined zinc									
Chinese Taipei	kt	83	59	24	22	22	17	5	16
Hong Kong, China	kt	82	57	18	20	18	11	12	16
Indonesia	kt	15	10	4	4	4	2	2	3
Malaysia	kt	26	71	6	12	22	24	19	6
New Zealand	kt	12	9	3	3	3	3	2	2
Other	kt	192	244	46	44	48	37	64	95
Total	kt	411	451	101	105	116	93	104	138
Zinc content of all primary materials exported **as**	kt	1 507	1 470	332	383	426	356	289	398
Value									
Zinc concentrates	$m	2 031	929	370	357	308	242	168	211
Refined zinc	$m	1 319	923	270	281	261	225	193	245
Total	$m	3 350	1 853	640	638	569	467	361	456
Prices									
LME cash **b**	US$/t	2 599	1 401	2 429	2 113	1 771	1 186	1 174	1 473
Australia **c**	A$/t	3 341	2 136	2 909	2 701	2 174	2 192	1 999	2 177

a Zinc content of all ores, concentrates, slags, residues, intermediate products, refined zinc, zinc powders, flakes and dust. **b** LME cash, midday, registered brands, minimum 98 per cent, 25 tonne warrants. **c** EZ Industries, Prime Western, 98.5 per cent. **p** Preliminary. **s** ABARE estimate.

Sources: Australian Bureau of Statistics, Canberra; London Metal Exchange; ABARE.