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## NSW Parliamentary Research Service

### **Mining in NSW (October 2012)**

#### **Statistical Indicators 7/12**

by Nathan Wales

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# Mining in NSW (October 2012)

by

Nathan Wales

## NSW PARLIAMENTARY RESEARCH SERVICE

Gareth Griffith (BSc (Econ) (Hons), LLB (Hons), PhD),  
Manager, Politics & Government/Law ..... (02) 9230 2356

Lenny Roth (BCom, LLB),  
Acting Senior Research Officer, Law..... (02) 9230 2768

Lynsey Blayden (BA, LLB (Hons)),  
Research Officer, Law ..... (02) 9230 3085

Talina Drabsch (BA, LLB (Hons)),  
Research Officer, Social Issues/Law ..... (02) 9230 2484

Daniel Montoya (BEnvSc (Hons), PhD),  
Research Officer, Environment/Planning ..... (02) 9230 2003

Edwina Schneller (BSC, LLB),  
Research Officer, Law ..... (02) 9230 2484

Nathan Wales (BSc/BA, PhD),  
Research Officer, Environment/Planning..... (02) 9230 2906

John Wilkinson (MA, PhD),  
Research Officer, Economics ..... (02) 9230 2006

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## SUMMARY

This paper provides a statistical snapshot of indicators relevant to mining in NSW. These include quantity and value of mineral production, mineral consumption, mining export data, employment in mining, mineral income and royalties, major mining projects, mining lease entitlements, mining safety statistics and mining businesses. Mineral production and export statistics are described based on the different types of mining products, including: *energy minerals* such as coal and petroleum; *metallic minerals* such as copper, lead and zinc; *industrial minerals* such as iron ore, mineral sands, clays and gemstones; and *construction material* such as gravel, granite, marble, sandstone, slate and shale. While the focus of this paper is on NSW, some comparison is made to other States and Territories, and to Australia.

Coal is the most important mining commodity in NSW, accounting for 49.5% of the contribution made by primary industry to the NSW economy in 2009–2010. Other valuable mining commodities include copper, gold, silver, lead and zinc. In comparison, agricultural commodities contribute a smaller amount to the NSW economy, while the contribution of forestry is considerably smaller compared with both agriculture and mining. Forestry contributed 1.4% to the NSW economy in 2009–2010 (based on logs supplied).<sup>1</sup>

In August 2012 it was [reported](#) that the slump in commodity prices and a downturn in capital markets will likely impact Australia's mining sector. The extent to which this will occur will only become apparent in time. The decline in the contribution of the mining sector to the NSW and Australian economy is in part a result of the global financial crisis.

### Sources used

The most up-to-date data sources have been used in developing this paper. Much of the information refers to data collected by NSW Government Trade and Investment, the Australian Bureau of Statistics (ABS), the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), the Bureau of Resources and Energy Economics (BREE), and the NSW Minerals Council. The figures used are the original numbers, unless otherwise indicated. Sources other than ABS, ABARES, BREE and the NSW Minerals Council have been used where relevant and are identified in the paper itself.

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<sup>1</sup> NSW Trade and Investment, [The contribution of primary industries to the NSW economy: key data 2012](#)



## MINERAL PRODUCTION AND CONSUMPTION

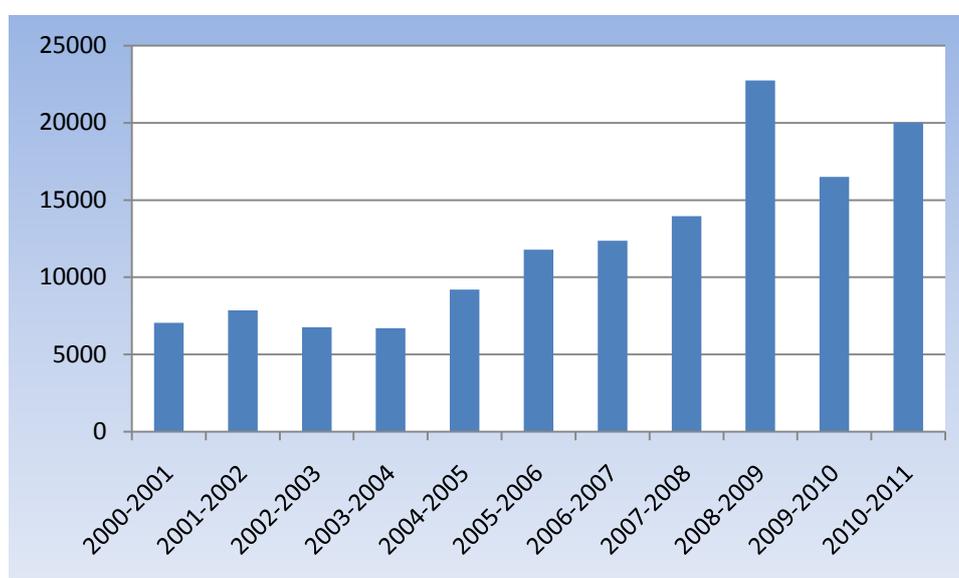
NSW is the most important mineral producing State in Australia after Western Australia and Queensland. The value of mineral production in NSW has shown an upwards trend during the period 2000–2001 to 2007–2008. Between 2000–2001 and 2007–2008, mineral production in NSW, as a % of mineral production in Australia, showed a downward trend, with an overall decline from 13.5% to 11.9%.

**Gross value of mineral production in NSW and Australia, 2000–2001 to 2007–2008 (\$m)**

	Mineral production NSW	Mineral production Australia	Mineral production NSW as a % of mineral production Australia
2000-2001	7,044	52,270	13.5
2001-2002	7,857	55,206	14.2
2002-2003	6,765	53,685	12.6
2003-2004	6,701	51,236	13.1
2004-2005	9,204	67,931	13.5
2005-2006	11,777	91,895	12.8
2006-2007	12,356	106,216	11.6
2007-2008	13,964	117,429	11.9

The gross value of mineral production in NSW for the year ending June 2011 was approximately \$20 billion. This amounted to an increase of 17.5% on the previous year.

**Gross value of mineral production in NSW, 2000–2001 to 2010–2011 (\$m)**



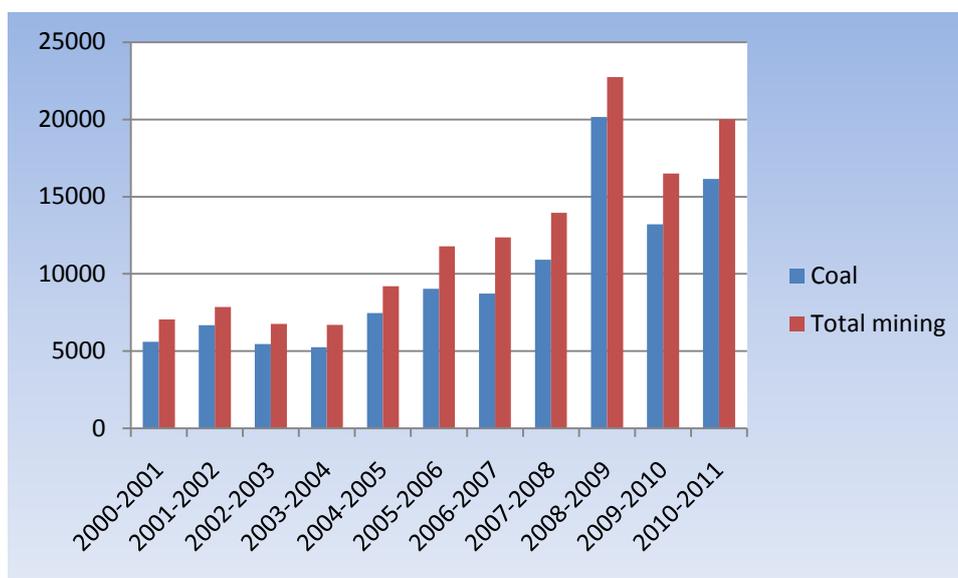
Source: Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), [Australian Commodity Statistics](#), 2010; and NSW Minerals Council, [Key Industry Statistics](#), 2011

## Coal production

Coal accounted for more than 75% of NSW's total mining production revenue between 2000–2001 and 2010–2011. Coal's contribution to annual mining production peaked at more than 88% in 2008–2009. The majority of black coal in Australia is produced in NSW and Queensland. Western Australia, Tasmania and South Australia produce only small amounts of black coal, while Victoria produces significant amounts of brown coal, the only State to do so.

**Gross value of coal production in NSW, 2000–2001 to 2010–2011 (\$m)**

	Coal	Total mining	Coal production as a % of total mining production NSW
2000-2001	5,606,000	7,044,000	79.6
2001-2002	6,672,000	7,857,000	84.9
2002-2003	5,469,000	6,765,000	80.8
2003-2004	5,246,000	6,701,000	78.3
2004-2005	7,463,000	9,204,000	81.1
2005-2006	9,036,000	11,777,000	76.7
2006-2007	8,718,000	12,356,000	70.6
2007-2008	10,919,000	13,964,000	78.2
2008-2009	20,169,000	22,756,000	88.6
2009-2010	13,216,000	16,505,000	80.1
2010-2011	16,153,000	20,024,000	80.7

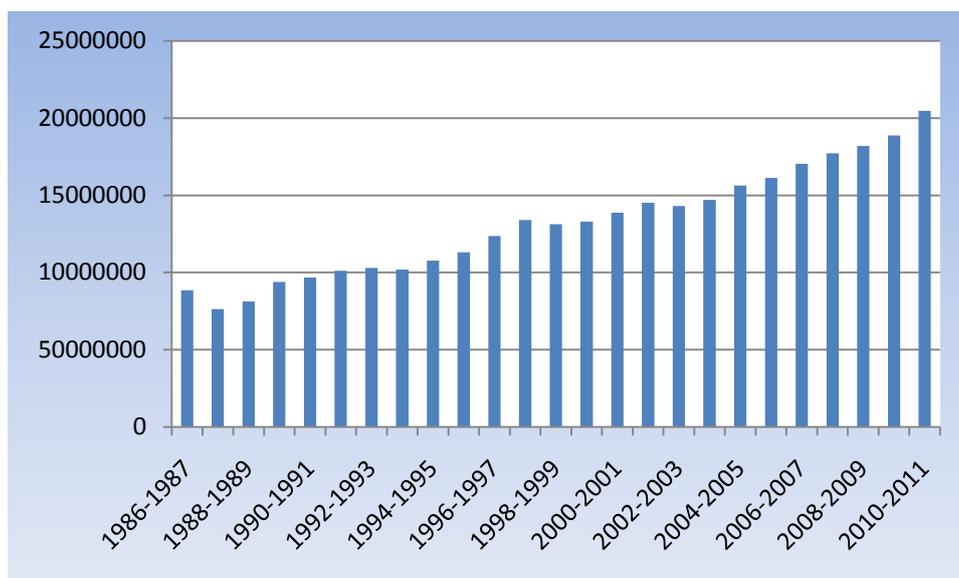


Source: NSW Minerals Council, [Key Industry Statistics, 2011](#)

Between 1986–1987 and 2010–2011 total coal production (tonnage) in NSW increased by almost 57%. Coal production from underground coal mining increased by approximately 16% and coal production from open cut mining increased by 74% during the same period.

**Coal production in NSW, 1986–1987 to 2010–2011 (t)**

	<b>Underground</b>	<b>Open Cut</b>	<b>Total</b>
1986-1987	51,844,000	36,663,000	88,507,000
1987-1988	44,324,000	31,944,000	76,268,000
1988-1989	45,597,000	35,675,000	81,272,000
1989-1990	51,048,000	42,845,000	93,893,000
1990-1991	51,134,000	45,563,000	96,697,000
1991-1992	49,682,000	51,488,000	101,170,000
1992-1993	50,419,000	52,495,000	102,914,000
1993-1994	46,791,000	55,164,000	101,955,000
1994-1995	48,702,000	59,079,000	107,781,000
1995-1996	54,314,000	58,775,000	113,089,000
1996-1997	54,642,000	69,036,000	123,678,000
1997-1998	58,299,000	75,710,000	134,009,000
1998-1999	51,318,000	80,063,000	131,381,000
1999-2000	52,763,000	80,133,000	132,896,000
2000-2001	53,719,000	85,060,000	138,779,000
2001-2002	52,591,000	92,637,000	145,228,000
2002-2003	46,957,000	96,109,000	143,066,000
2003-2004	49,355,000	97,691,000	147,046,000
2004-2005	51,907,000	104,402,000	156,309,000
2005-2006	52,346,000	108,909,000	161,255,000
2006-2007	57,241,000	113,083,000	170,324,000
2007-2008	61,316,000	115,851,000	177,167,000
2008-2009	63,069,000	118,909,000	181,978,000
2009-2010	62,804,000	125,993,000	188,797,000
2010-2011	62,012,000	142,718,000	204,730,000

**Total coal production in NSW, 1986–1987 to 2010–2011 (t)**

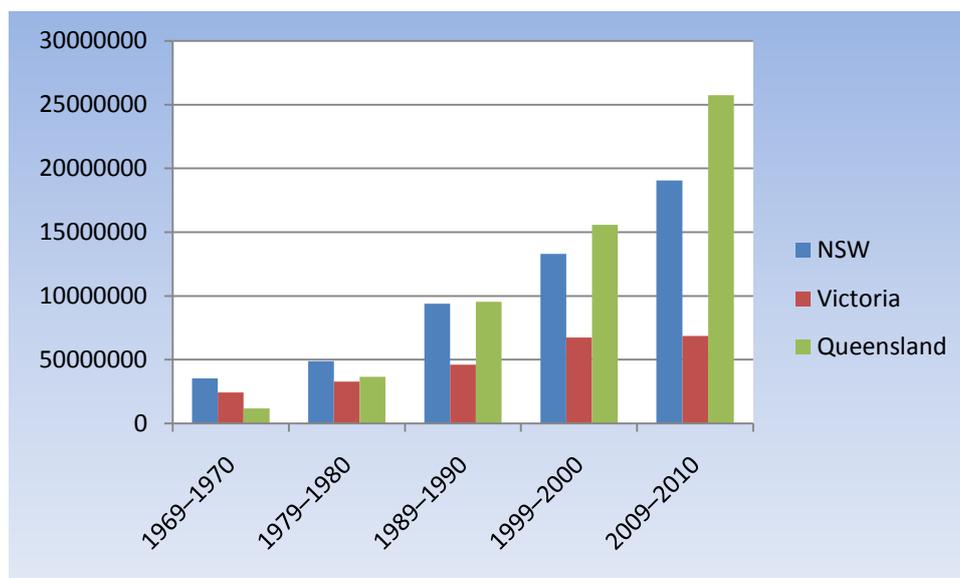
Source: NSW Government Industry and Investment, NSW Minerals Industry Annual, 2010; and Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), [Minerals and Energy Commodities](#), 2010; and NSW Minerals Council, [Key Industry Statistics](#), 2011

Since the mid 1960s, NSW, Victoria and Queensland have produced nearly all of the coal mined in Australia. During the period 1969–1970 and 2009–2010 the production of coal from NSW has decreased, relative to the combined amount of coal produced in Victoria and Queensland.

**Coal production in NSW, Victoria and Queensland, 1969–1970 to 2009–2010 (t)<sup>2</sup>**

	NSW	Victoria	Queensland	NSW % of total
1969–1970	35,320,000	24,310,000	11,650,000	49.6
1979–1980	48,710,000	32,900,000	36,530,000	41.2
1989–1990	93,890,000	45,960,000	95,300,000	39.9
1999–2000	132,900,000	67,360,000	155,720,000	37.3
2009–2010	190,660,000	68,700,000	257,440,000	36.9

<sup>2</sup> Due to different sources the values for NSW may vary slightly in this table compared to the values contained in the previous table.

**Coal production in NSW, Victoria and Queensland, 1969–1970 to 2009–2010 (t)**

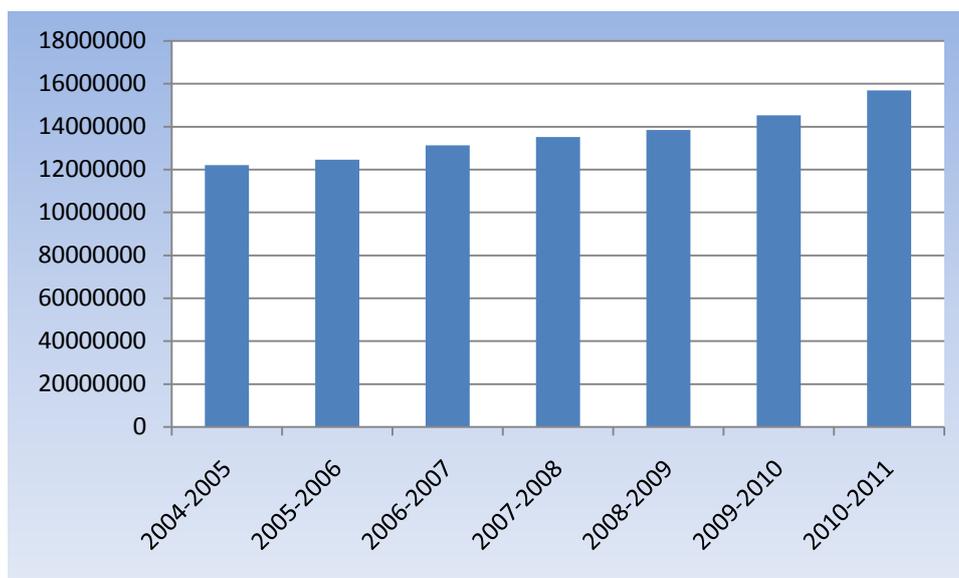
Source: Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), [Minerals and Energy Commodities](#), 2010

**Saleable coal production in NSW**

Saleable coal is the total coal remaining after mining, less the amount which is rejected from the production process and the amount consumed during preparation for market. There was an upward trend in saleable coal production in NSW between 2004–2005 and 2010–2011. Total saleable coal production, as a percentage of total coal production remained relatively stable in NSW across the same time period.

**Saleable coal production in NSW, 2004–2005 to 2010–2011 (t)**

	Underground	Open Cut	Total saleable	Total saleable coal as a % of total coal production in NSW
2004-2005	43,186,000	78,877,000	122,063,000	78.1
2005-2006	42,297,000	82,314,000	124,611,000	77.3
2006-2007	46,202,000	85,132,000	131,334,000	77.1
2007-2008	48,974,000	86,175,000	135,149,000	76.3
2008-2009	51,609,000	86,847,000	138,456,000	76.1
2009-2010	50,765,000	94,604,000	145,369,000	77.0
2010-2011	50,223,000	106,644,000	156,867,000	76.6

**Saleable coal production in NSW, 2004–2005 to 2010–2011 (t)**

Source: NSW Minerals Council, [Key Industry Statistics, 2011](#)

### Raw coal output per employee

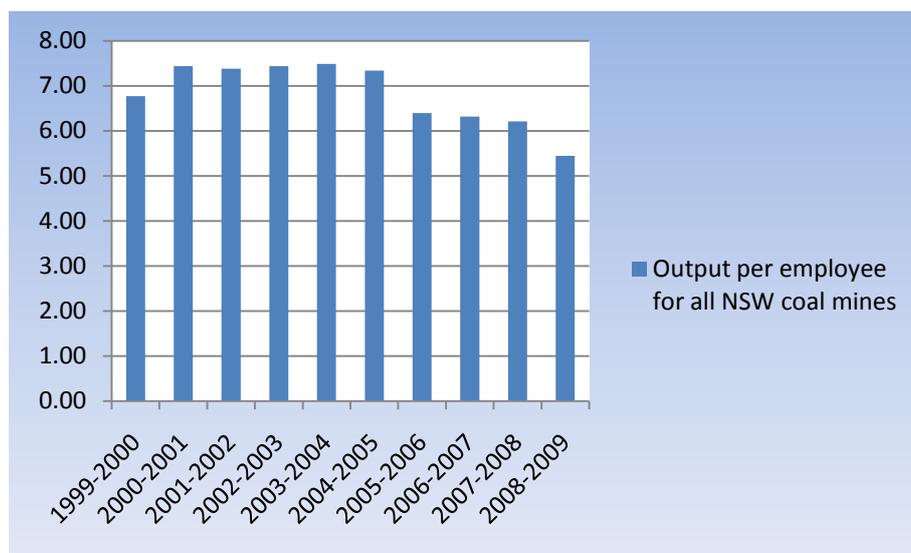
Between 1999–2000 and 2008–2009 there was an overall decline of almost 20% in raw coal output per employee in all NSW coal mining. More noticeable was a decline of 34% in raw coal output per employee in open cut coal mining in NSW for the same period. Raw coal output per employee, in all NSW coal mining, peaked between 2000–2001 and 2004–2005.

**Raw coal output per employee in NSW coal mines, 1999–2000 to 2008–2009 (t)**

	Underground	Open cut	All mines
1999-2000	4.40	10.49	6.77
2000-2001	4.90	11.07	7.44
2001-2002	4.82	10.56	7.38
2002-2003	4.82	10.13	7.44
2003-2004	5.08	9.85	7.49
2004-2005	4.86	9.85	7.34
2005-2006	4.09	8.77	6.40
2006-2007	4.24	8.41	6.32
2007-2008	4.50	7.78	6.21
2008-2009	3.89	6.94	5.45

Source: NSW Government Trade and Investment, *NSW Coal Industry Profile, 2010*

### Raw coal output per employee in all NSW coal mines, 1999–2000 to 2008–2009 (t)

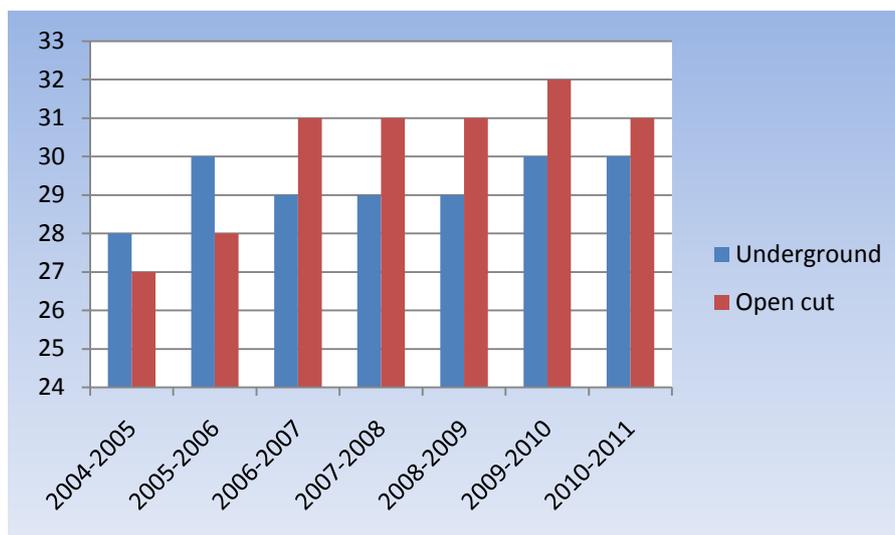


### Number of coal mines in NSW

The number of coal mines in NSW increased by 10% in the 6 years between 2004–2005 and 2010–2011. In 2010–2011 there were 61 coal mines in NSW.

#### Number of coal mines in NSW, 2004–2005 to 2010–2011

	Underground	Open cut	Total
2004-2005	28	27	55
2005-2006	30	28	58
2006-2007	29	31	60
2007-2008	29	31	60
2008-2009	29	31	60
2009-2010	30	32	62
2010-2011	30	31	61



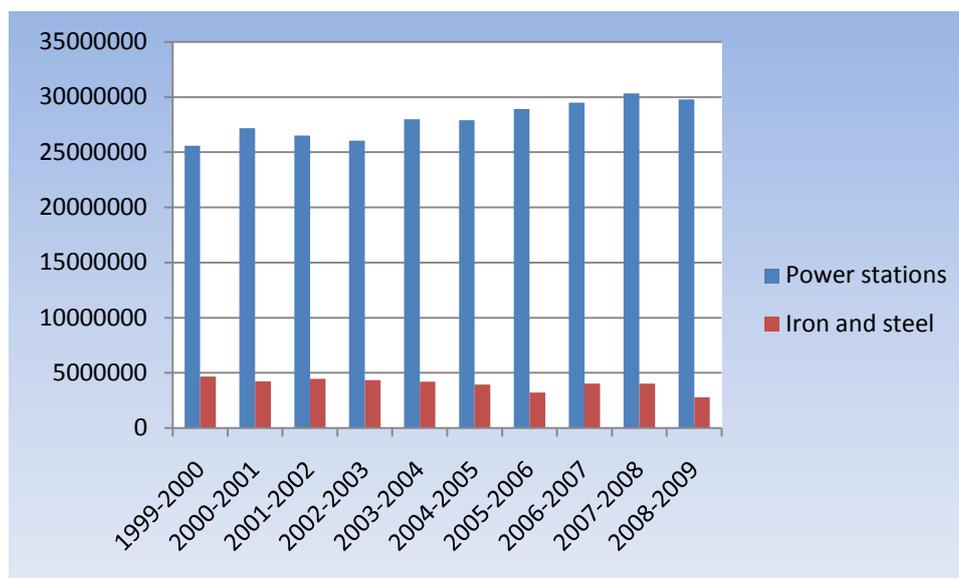
## Coal consumption

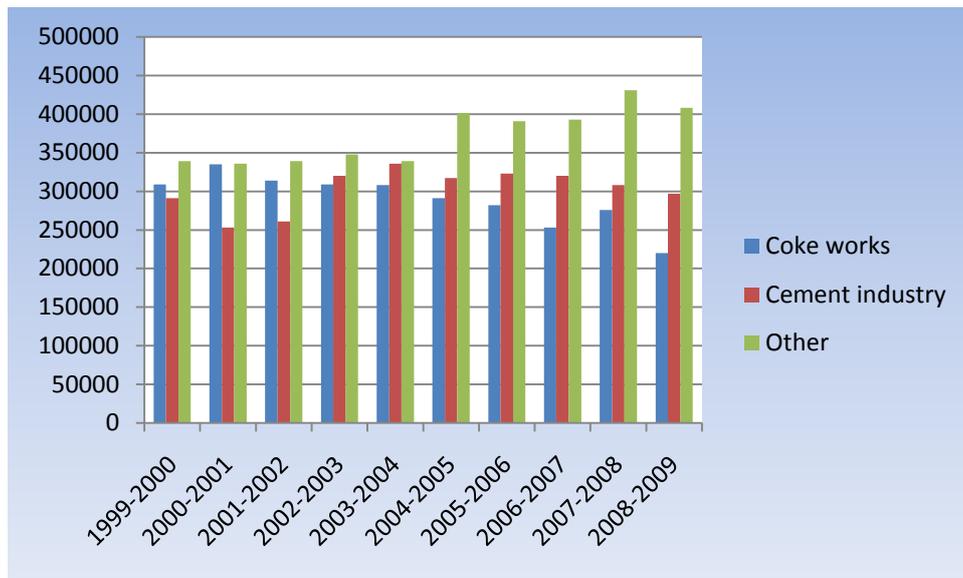
Coal in NSW is used primarily for the generation of electricity (power stations) and the production of iron and steel. Between 1999–2000 and 2008–2009, total coal consumption in NSW increased by approximately 7.5%. Between 2007–2008 and 2008–2009 coal consumption in NSW declined by approximately 5%, the most significant decline over the 10 years since 1999–2000.

**Coal consumption in NSW, 1999–2000 to 2008–2009 (t)**

	Power stations	Iron and steel	Coke works	Cement industry	Other	Total
1999-2000	25,594,000	4,649,000	309,000	291,000	339,000	31,182,000
2000-2001	27,188,000	4,221,000	335,000	253,000	336,000	32,333,000
2001-2002	26,517,000	4,464,000	314,000	261,000	339,000	31,895,000
2002-2003	26,049,000	4,353,000	309,000	320,000	348,000	31,379,000
2003-2004	27,980,000	4,204,000	308,000	336,000	339,000	33,167,000
2004-2005	27,912,000	3,951,000	291,000	317,000	401,000	32,872,000
2005-2006	28,909,000	3,217,000	282,000	323,000	391,000	33,122,000
2006-2007	29,507,000	4,017,000	253,000	320,000	393,000	34,490,000
2007-2008	30,332,000	4,015,000	276,000	308,000	431,000	35,362,000
2008-2009	29,796,000	2,789,000	220,000	297,000	408,000	33,510,000

**Coal consumption in NSW, for electricity generation and iron and steel production, 1999–2000 to 2008–2009 (t)**



**Coal consumption in NSW, by selected consumer types, 1999–2000 to 2008–2009 (t)**

Source: NSW Government Trade and Investment, *NSW Coal Industry Profile, 2010*

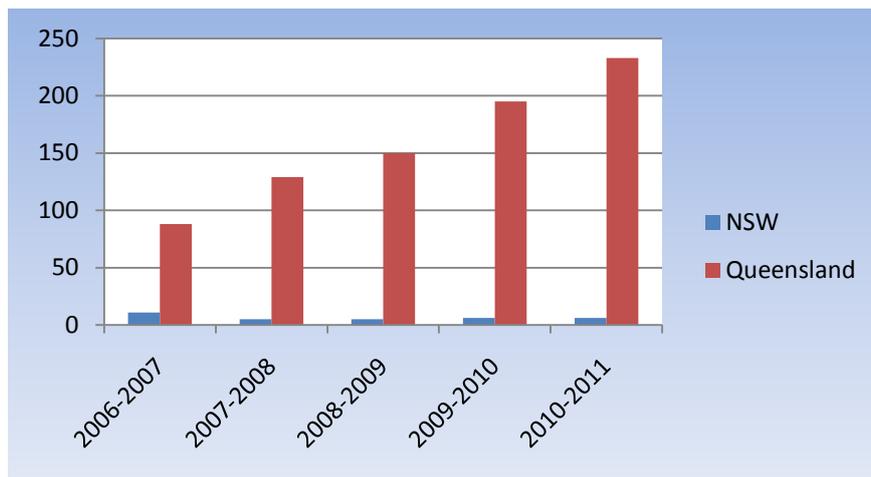
## Coal seam gas production

Petroleum production in NSW is primarily in the form of Coal seam gas (CSG). CSG is naturally occurring methane gas in coal seams. It is also referred to as coal seam methane and coal bed methane. A small amount of conventional gas (liquefied natural gas) is also produced in NSW.

Nationally, total production of CSG has increased significantly in the past five years, predominantly as a result of production in Queensland. The remaining production occurred in NSW. The production of CSG is expected to continue to grow, largely as a result of CSG export projects under construction in Queensland.

### Coal Seam Gas production in NSW, and Queensland, 2006–2007 to 2010–2011 (PJ)

	NSW	Queensland	NSW % of total
2006-2007	11	88	12.5
2007-2008	5	129	3.9
2008-2009	5	150	3.3
2009-2010	6	195	3.1
2010-2011	6	233	2.6



Source: Bureau of Resources and Energy Economics, [Energy in Australia 2012](#)

## Metallic mineral production

Between 2000–2001 and 2010–2011, the total value of principal metallic materials produced in NSW, excluding antimony, increased by 132%. The value of gold produced in NSW quadrupled between 2000–2001 and 2010–2011, its value doubling between 2005–2006 and 2010–2011.

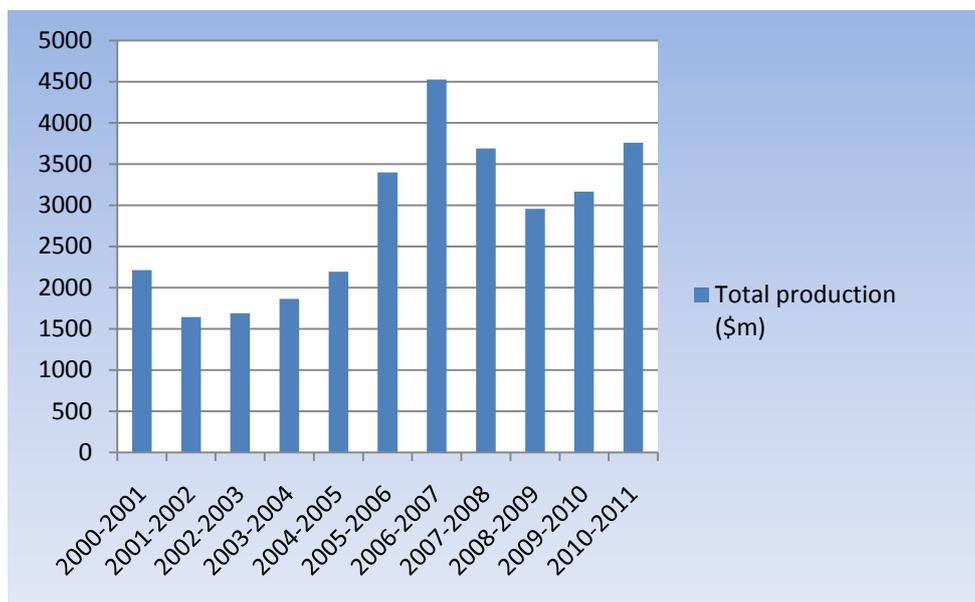
**Value of principal metallic minerals produced in NSW, excluding coal and antimony, at average annual market prices, 2000–2001 to 2010–2011 (\$m)<sup>3</sup>**

	Copper	Gold	Rutile	Zircon	Silver	Lead	Zinc	Total
2000-2001	438	303	7	3	40	112	533	1,436
2001-2002	351	332	4	4	31	104	356	1,182
2002-2003	389	482	4	4	22	81	313	1,295
2003-2004	534	493	0.5	0.4	20	103	305	1,456
2004-2005	735	525	0	0	29	132	320	1,741
2005-2006	1,384	659	0	0.1	38	155	505	2,741
2006-2007	1,772	843	43	47	43	198	692	3,638
2007-2008	1,264	1,000	47	45	42	241	404	3,043
2008-2009	1,040	1,049	45	44	39	142	228	2,587
2009-2010	1,176	1,037	46	26	51	183	232	2,751
2010-2011	1,412	1,312	69	61	61	184	239	3,338

Source: NSW Minerals Council, [Key Industry Statistics, 2011](#)

<sup>3</sup> All numbers have been rounded to the nearest million

**Value of total principal metallic minerals produced in NSW, excluding coal and antimony, at average annual market prices, 2000–2001 to 2010–2011 (\$m)**



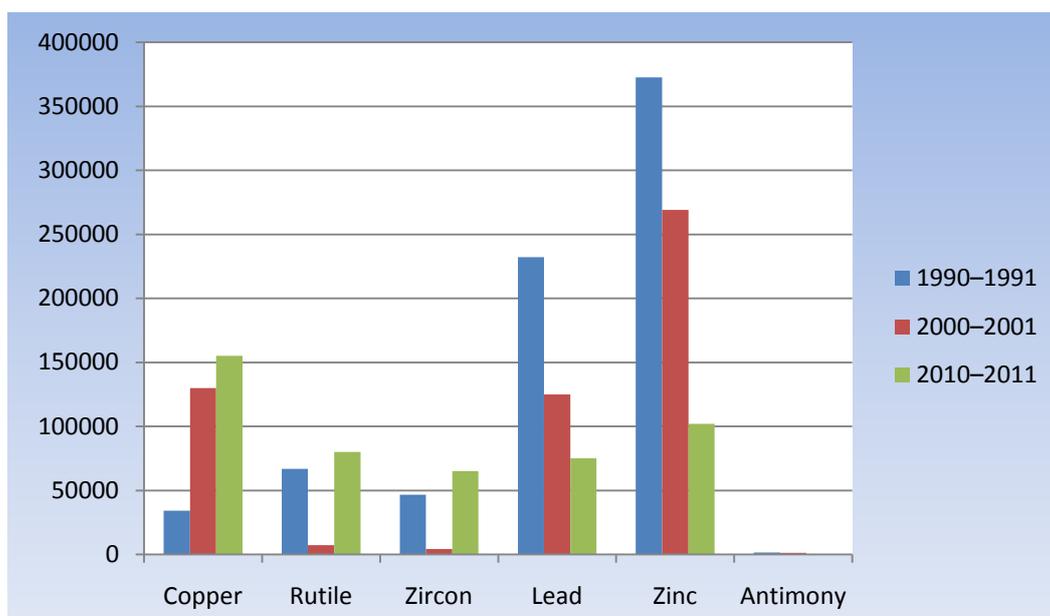
Source: NSW Minerals Council, [Key Industry Statistics, 2011](#)

There was considerable fluctuation in the production levels of metallic minerals in NSW between 1990–1991 and 2010–2011. Between 1990–1991 and 2010–2011 the production of copper in NSW increased considerably. During the same period the production of zinc and lead decreased markedly. The production of rutile and zircon plummeted in the period 1990–1991 to 2000–2001 before increasing in 2010–2011 to levels higher than those observed in 1990–1991.

**Production of principal metallic minerals in NSW, excluding coal, 1990–1991, 2000–2001 and 2010–2011 (tonnes)<sup>4</sup>**

Commodity	1990–1991	2000–2001	2010–2011	% change 1990–1991 to 2010–2011
Copper	34,182	130,000	155,000	353
Zinc	372,491	269,000	102,000	-73
Rutile	66,951	7,346	80,000	19
Lead	232,107	125,000	75,000	-68
Silver	313,035	141,000	70,000	-78
Zircon	46,644	4,230	65,000	39
Gold	7,247	18,590	30,000	314
Antimony	1,496	1,251	0	n/a

<sup>4</sup> Gold and silver are measured in kilograms



Sources: NSW Government Industry and Investment, *NSW Minerals Industry Annual, 2010* and NSW Minerals Council, [Key Industry Statistics, 2011](#)

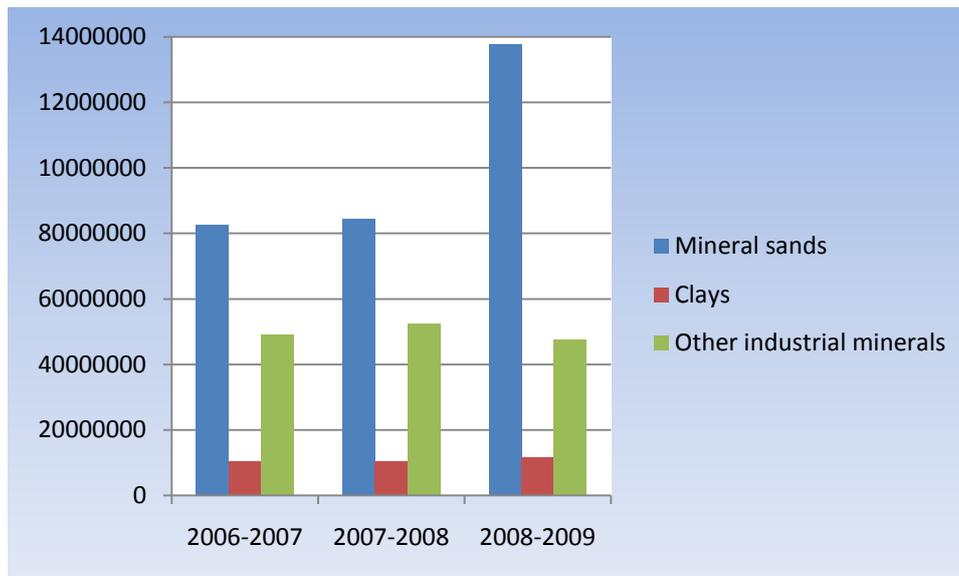
### Industrial mineral production

Mineral sands are the most important single industrial mineral produced in NSW. Between the years 2006–2007 and 2008–2009, the value of mineral sands produced in NSW increased by 67%. In comparison, the value of clays and other industrial minerals produced in NSW showed only minor fluctuations.

#### Value of industrial minerals produced in NSW, 2006–2007 to 2008–2009 (\$m)<sup>5</sup>

	2006-2007	2007-2008	2008-2009	% change 2006-2007 to 2008-2009
Mineral sands	82,556,678	84,408,397	137,681,975	67
Clays	10,416,041	10,327,131	11,715,169	13
Other industrial minerals	49,064,675	52,312,213	47,669,295	-3
<b>Total</b>	<b>142,037,394</b>	<b>147,047,741</b>	<b>197,066,439</b>	<b>39</b>

<sup>5</sup> Gemstones have been excluded due to a lack of comprehensive data

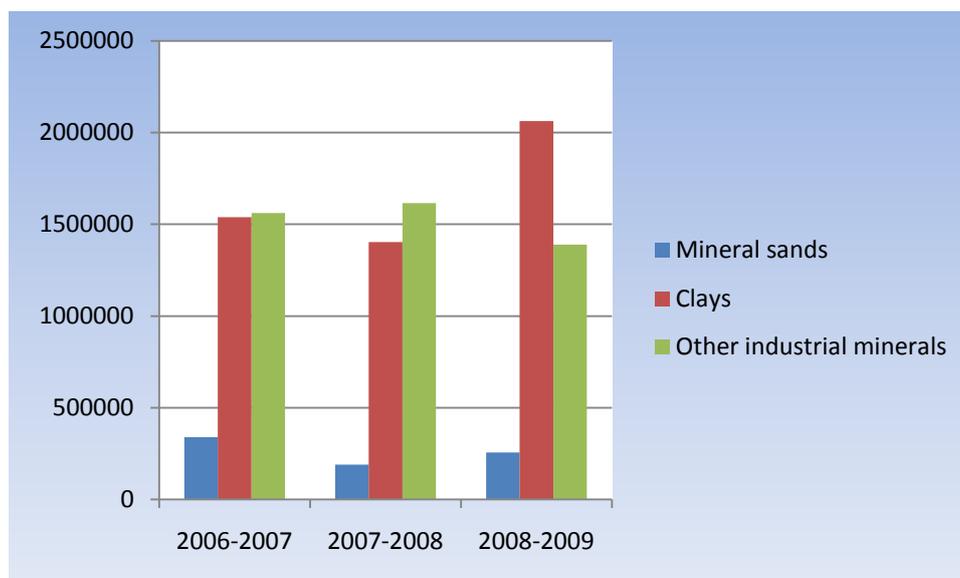
**Value of industrial minerals produced in NSW, 2006–2007 to 2008–2009 (\$m)**

Source: NSW Government Industry and Investment, *NSW Minerals Industry Annual, 2010*

Despite an increase of 67% in the value of mineral sands produced in NSW between 2006–2007 and 2008–2009, total tonnage of mineral sands produced during the same period decreased by 25%. In comparison, the tonnage of clays produced during this period increased by 34%.

**Total production of industrial minerals produced in NSW, 2006–2007 to 2008–2009 (t)**

	2006-2007	2007-2008	2008-2009	% change 2006-2007 to 2008-2009
Mineral sands	338,646	189,018	255,778	-25
Clays	1,539,228	1,403,737	2,062,416	34
Other industrial minerals	1,561,964	1,614,996	1,389,222	-11
<b>Total</b>	<b>3,439,838</b>	<b>3,207,751</b>	<b>3,707,416</b>	<b>8</b>

**Total production of industrial minerals produced in NSW, 2006–2007 to 2008–2009 (t)**

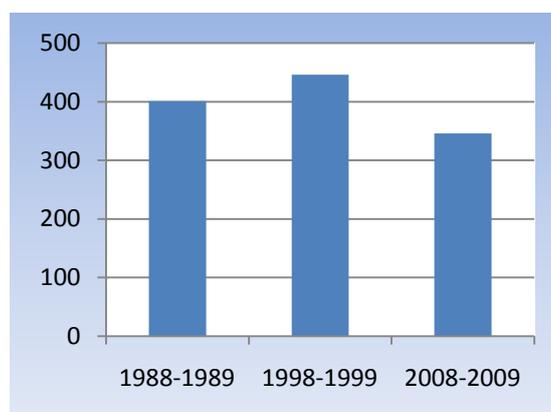
Source: NSW Government Industry and Investment, *NSW Minerals Industry Annual, 2010*

**Construction materials produced from mining**

Construction materials produced from mining ("mining construction materials") include crushed and broken stone, gravel, granite, marble, sandstone, slate and shale. Between the years 1988–1989 and 2008–2009, the value of mining construction materials produced in NSW decreased overall by 14%.

**Value of mining construction materials produced in NSW, 1988–1989, 1998–1999 and 2008–2009 (\$m)**

	1988-1989	1998-1999	2008-2009	% change 1988-1989 to 2008-2009
Mining construction materials	401	446	346	-14



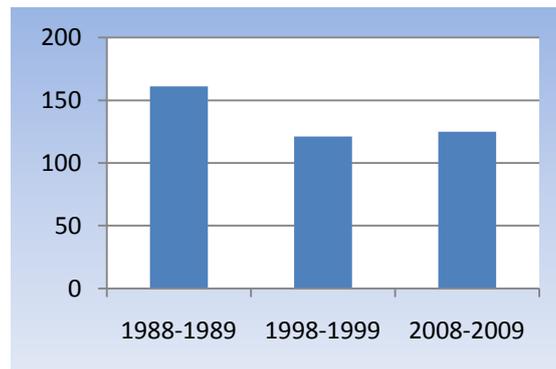
Source: NSW Government Industry and Investment, *NSW Minerals Industry Annual, 2010*

## Production of other mining materials

Other mining materials important to NSW mining include diatomite, gypsum, magnetite, silica, serpentinite, magnesite and dolomite. Between the years 1988–1989 and 2008–2009, the value of other mining materials produced in NSW decreased overall by 22%.

### Value of other mining materials produced in NSW, 1988–1989, 1998–1999 and 2008–2009 (\$m)

	1988-1989	1998-1999	2008-2009	% change 1988-1989 to 2008-2009
Other mining materials	161	121	125	-22



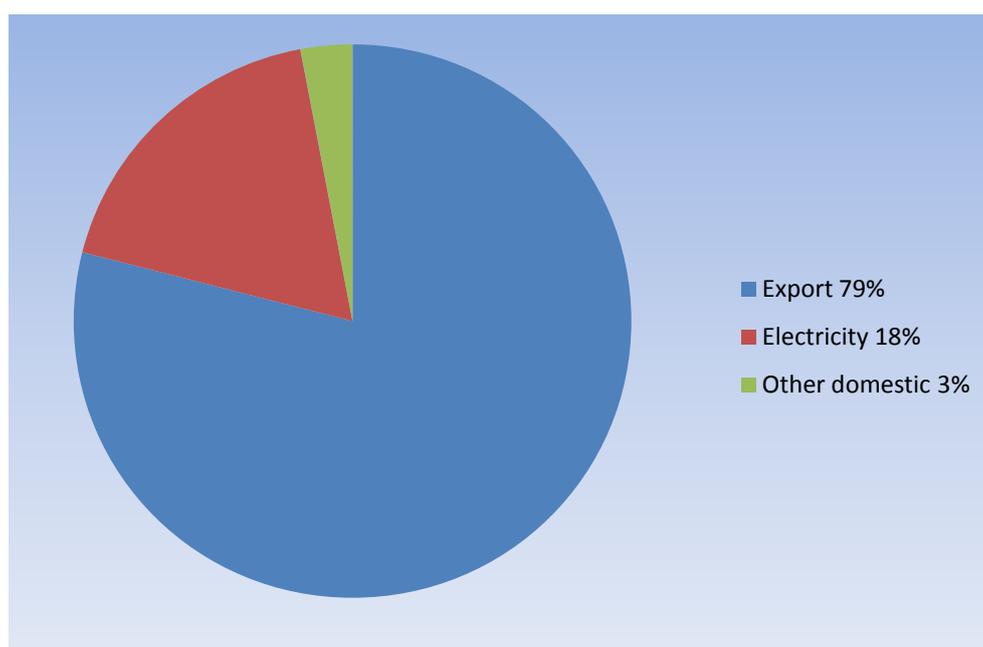
Source: NSW Government Industry and Investment, *NSW Minerals Industry Annual, 2010*

## MINING EXPORT DATA

The export value of energy minerals and metals from NSW has shown an upwards trend during the period 2003–2004 to 2010–2011. The main mineral and processed metal exports for NSW are coal, iron and steel, and aluminium. Data on construction material exports for NSW is not available.<sup>6</sup>

NSW coal is predominantly used to supply the export market, with the remainder supplying the electricity industry and other domestic uses.

Market for NSW coal, 2010–2011 (%)<sup>7</sup>



Source: NSW Minerals Council, [Key Industry Statistics, 2011](#)

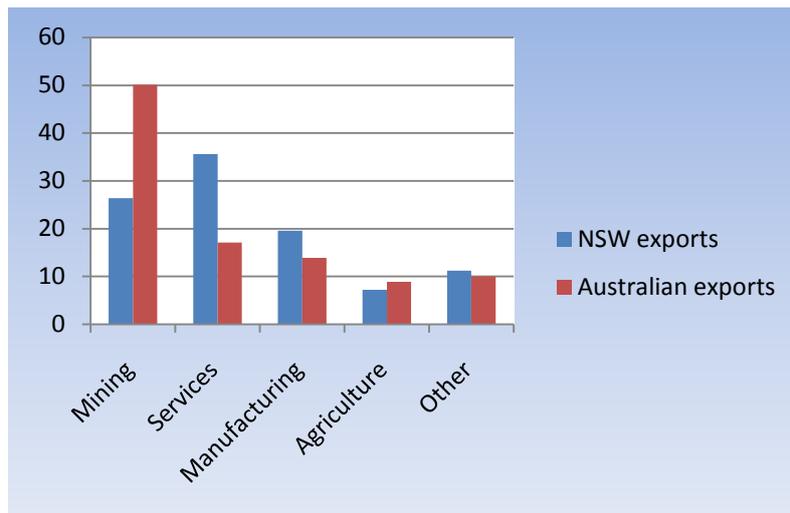
Mining accounted for 26.4% of total NSW exports in 2009. In comparison, mining exports in Australia, compared to total exports, were almost double that of NSW for the same period.

<sup>6</sup> All numbers described in this section have been rounded to the nearest million

<sup>7</sup> Other domestic includes iron and steel, cokeworks, cement and other non-specified

### Mining exports compared to total exports, in NSW and Australia, 2009–2010 (%)

	NSW exports	Australian exports
Mining	26.4	50.1
Services	35.6	17.1
Manufacturing	19.6	13.9
Agriculture	7.2	8.9
Other	11.2	10
<b>Total</b>	<b>100</b>	<b>100</b>



Source: NSW Government Trade and Investment, [Composition of Exports](#), 2012 and Australian Government Department of Foreign Affairs and Trade, [Australia's Trade by State and Territory](#), 2010-11

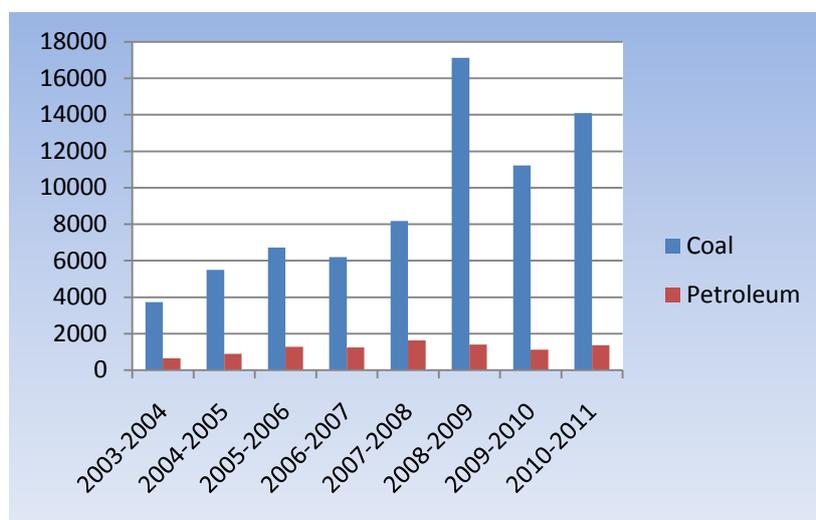
### Energy mineral exports

Between 2003–2004 and 2010–2011, the total value of coal and refined petroleum exports from NSW increased by approximately 250%. The value of coal exports from NSW peaked in 2008–2009, increasing by more than double on the previous year, before declining by approximately 18% between 2008–2009 and 2010–2011.

#### Value of coal and refined petroleum exports from NSW, 2003–2004 to 2010–2011 (\$m)

	Coal	Petroleum	Total
2003-2004	3,727	641	4,368
2004-2005	5,494	894	6,388
2005-2006	6,729	1,281	8,010
2006-2007	6,200	1,242	7,442
2007-2008	8,185	1,635	9,820
2008-2009	17,120	1,407	18,527
2009-2010	11,224	1,116	12,340
2010-2011	14,089	1,361	15,450

### Value of coal and refined petroleum exports from NSW, 2003–2004 to 2010–2011 (\$m)



NSW Minerals Council, [Key Industry Statistics, 2011](#)

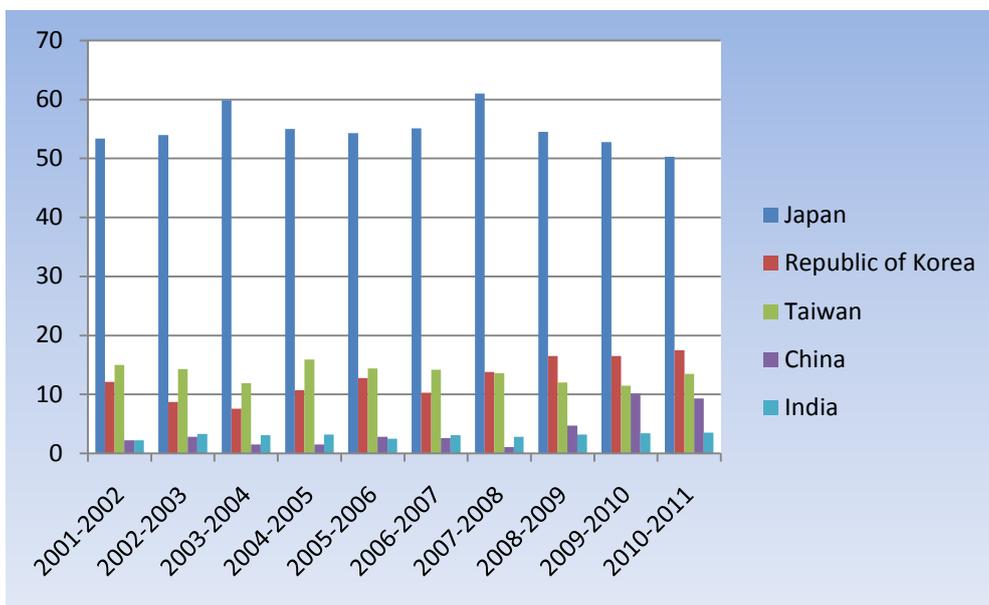
### Coal exports

The most important market for NSW coal exports is Japan, followed by the Republic of Korea and Taiwan. Between 2001–2002 and 2010–2011 Japan accounted for more than 50% of the international market share for NSW coal. Since 2009–2010, China has become an increasingly important market for NSW coal exports, accounting for close to 10% of the market, an almost tenfold increase since 2007–2008.

### International market share for NSW coal exports, by top ten countries of export, 2001–2002 to 2010–2011 (%)

	Japan	Republic of Korea	Taiwan	China	India	Thailand	Mexico	Malaysia	New Caledonia	Italy
2001-2002	53.4	12.1	15	2.2	2.2	0	2.5	1	0.2	0.6
2002-2003	54	8.7	14	2.8	3.3	0	4.1	2.2	0.3	0.8
2003-2004	59.9	7.6	12	1.5	3.1	0	2.7	2	0.3	0.9
2004-2005	55	10.7	16	1.5	3.2	0	4.7	3.2	0.3	0.6
2005-2006	54.3	12.8	14	2.8	2.5	0.6	6.3	2.3	0.2	0.4
2006-2007	55.1	10.3	14	2.6	3.1	1.7	6.1	2.5	0.3	0.5
2007-2008	61	13.8	14	1.1	2.8	1.5	1	1.2	0.3	0.5
2008-2009	54.5	16.5	12	4.7	3.2	1.9	2	1.8	0.2	0.3
2009-2010	52.8	16.5	12	10	3.4	0.9	2.8	0.4	0.4	0.2
2010-2011	50.3	17.5	14	9.3	3.5	1.6	1.4	1.3	0.4	0.2

**International market share for NSW coal exports, by top five countries of export, 2001–2002 to 2010–2011 (%)**



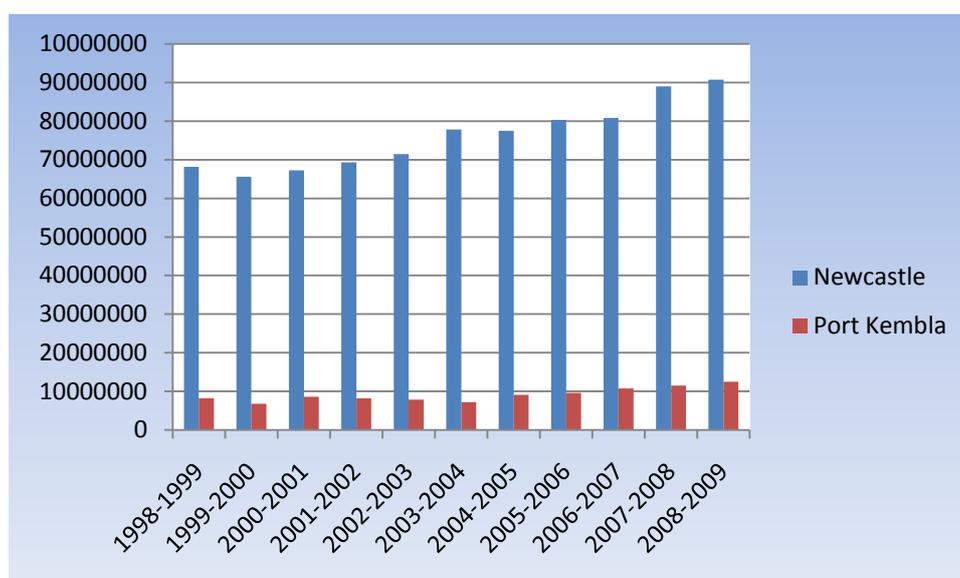
NSW Minerals Council, [Key Industry Statistics, 2011](#)

The total quantity of coal exports has shown an upwards trend between 1998–1999 and 2008–2009, with an overall increase of 35%. The majority of NSW coal is exported from the port of Newcastle. In 2008–2009, coal exports from Newcastle accounted for 88% of total coal exports from NSW.

**Total NSW coal exports, by port, 1998–1999 to 2008–2009 (t)**

	Newcastle	Port Kembla	Total
1998-1999	68,177,000	8,229,000	76,406,000
1999-2000	65,573,000	6,816,000	72,389,000
2000-2001	67,282,000	8,574,000	75,856,000
2001-2002	69,299,000	8,207,000	77,506,000
2002-2003	71,432,000	7,858,000	79,290,000
2003-2004	77,814,000	7,194,000	85,008,000
2004-2005	77,507,000	9,061,000	86,568,000
2005-2006	80,277,000	9,562,000	89,839,000
2006-2007	80,792,000	10,741,000	91,533,000
2007-2008	88,979,000	11,486,000	100,465,000
2008-2009	90,756,000	12,519,000	103,275,000

Total NSW coal exports, by port, 1998–1999 to 2008–2009 (t)



Source: NSW Government Trade and Investment, *NSW Coal Industry Profile, 2010*

The Singleton-North West district supplied 74% of coal exported from NSW in 2008–2009. The contribution of coal mined from the Western district, to supply the NSW export market, increased by 65% between 2004–2005 and 2008–2009.

NSW coal exports by districts, by port, 2004–2005 to 2008–2009 (t)

	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
<b>Singleton-North West</b>	<b>67,212,000</b>	<b>69,583,000</b>	<b>68,769,000</b>	<b>74,723,000</b>	<b>76,028,000</b>
Newcastle	67,124,000	69,568,000	68,712,000	74,639,000	75,877,000
Port Kembla	88,000	15,000	57,000	84,000	151,000
<b>Newcastle</b>	<b>6,128,000</b>	<b>6,765,000</b>	<b>7,275,000</b>	<b>7,820,000</b>	<b>6,948,000</b>
Newcastle	6,110,000	6,749,000	7,254,000	7,459,000	6,224,000
Port Kembla	18,000	16,000	21,000	361,000	724,000
<b>West</b>	<b>8,290,000</b>	<b>8,276,000</b>	<b>8,963,000</b>	<b>11,667,000</b>	<b>13,680,000</b>
Newcastle	4,272,000	3,960,000	4,817,000	6,881,000	8,655,000
Port Kembla	4,018,000	4,316,000	4,146,000	4,786,000	5,025,000
<b>South</b>	<b>4,938,000</b>	<b>5,215,000</b>	<b>6,526,000</b>	<b>6,255,000</b>	<b>6,619,000</b>
Newcastle	0	0	9,000	0	0
Port Kembla	4,938,000	5,215,000	6,517,000	6,255,000	6,619,000
<b>NSW Total</b>	<b>86,568,000</b>	<b>89,839,000</b>	<b>91,533,000</b>	<b>100,465,000</b>	<b>102,275,000</b>

Source: NSW Government Trade and Investment, *NSW Coal Industry Profile, 2010*

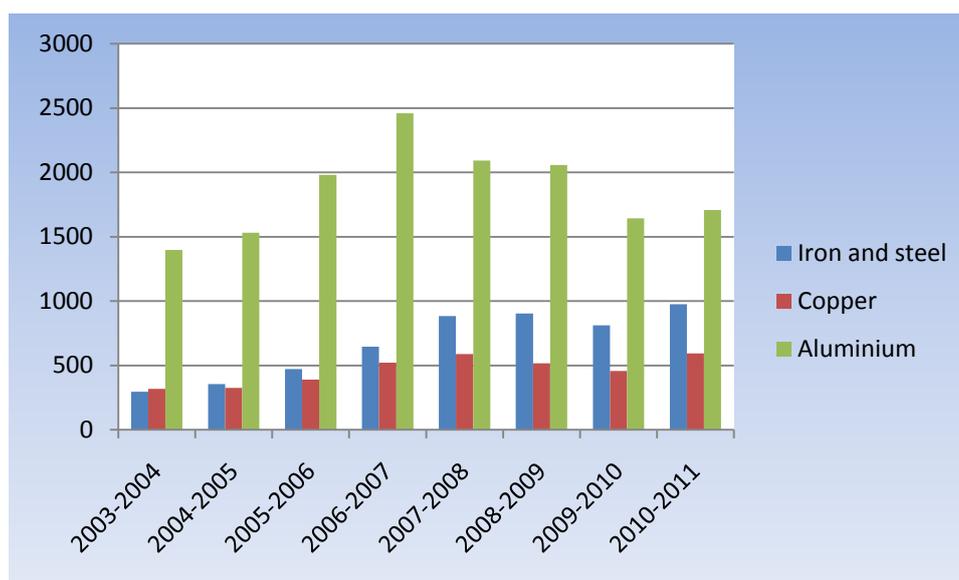
## Metals exports

Between 2003–2004 and 2010–2011 the total value of main metals exports from NSW increased by 62%. Aluminium is the most important metal export for NSW. Between 2003–2004 and 2010–2011 the value of aluminium exports from NSW increased by 22%. In 2010–2011, Aluminium exports contributed over half of the total value of main metals exports from NSW.

Value of main metals exports from NSW, 2003–2004 to 2010–2011 (\$m)

	Iron and steel	Copper	Aluminium	Zinc	Total
2003-2004	296	317	1,397	9	2,019
2004-2005	356	324	1,530	2	2,212
2005-2006	472	390	1,979	2	2,843
2006-2007	644	520	2,458	9	3,631
2007-2008	883	589	2,092	7	3,571
2008-2009	904	515	2,057	2	3,478
2009-2010	811	456	1,643	4	2,914
2010-2011	975	593	1,708	9	3,285

Value of main metals exports from NSW (excluding zinc), 2003–2004 to 2010–2011 (\$m)



Source: NSW Minerals Council, [Key Industry Statistics, 2011](#)

## Mining-related merchandise exports

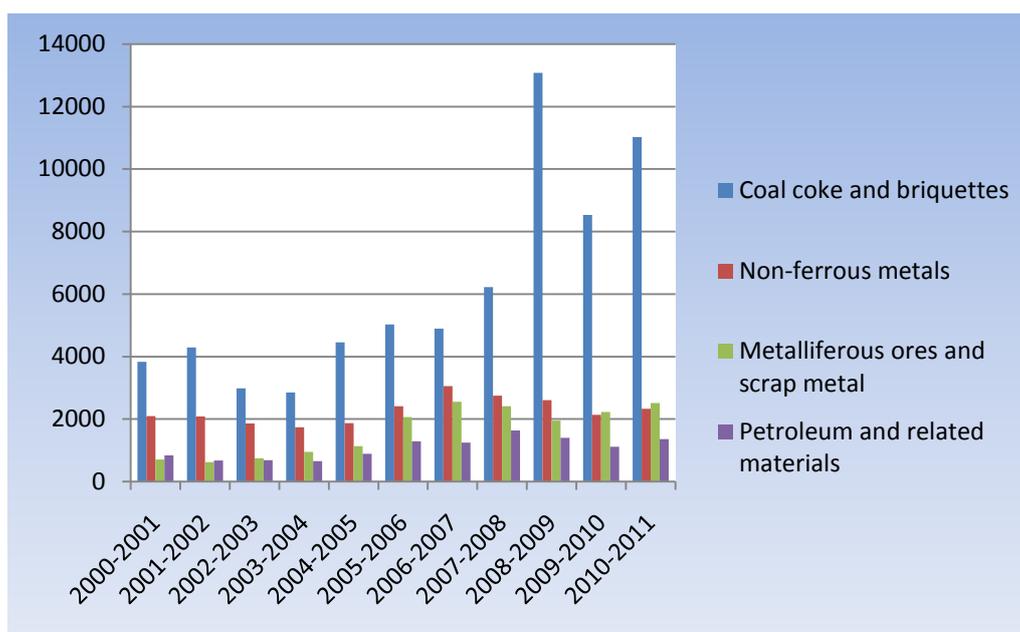
The total value of mining-related merchandise exports showed an upwards trend between 2000–2001 and 2008–2009. However, in 2009–2010 there was a decline in the total value of mining-related merchandise exports of 26% compared to the previous year.

"Coal coke" and "coal briquettes" are the most important of the major mining-

related merchandise exports from NSW. Between 2000–2001 and 2010–2011 the value of coal coke and briquettes exports from NSW increased by 188%. In 2010–2011 coal coke and briquettes exports contributed to 56% of the total value of mining-related merchandise exports from NSW.

**Value of major mining-related merchandise exports from NSW, 2000–2001 to 2010–2011 (\$m)**

	Coal coke and briquettes	Non-ferrous metals	Metalliferous ores and scrap metal	Petroleum and related materials	Total
2000-2001	3,832	2,090	706	838	7,466
2001-2002	4,288	2,084	620	670	7,662
2002-2003	2,980	1,856	745	682	6,263
2003-2004	2,855	1,740	947	655	6,197
2004-2005	4,454	1,871	1,139	893	8,357
2005-2006	5,026	2,414	2,063	1,286	10,789
2006-2007	4,895	3,053	2,551	1,243	11,742
2007-2008	6,225	2,744	2,413	1,638	13,020
2008-2009	13,078	2,606	1,948	1,405	19,037
2009-2010	8,534	2,136	2,223	1,116	14,009
2010-2011	11,031	2,332	2,517	1,360	17,240



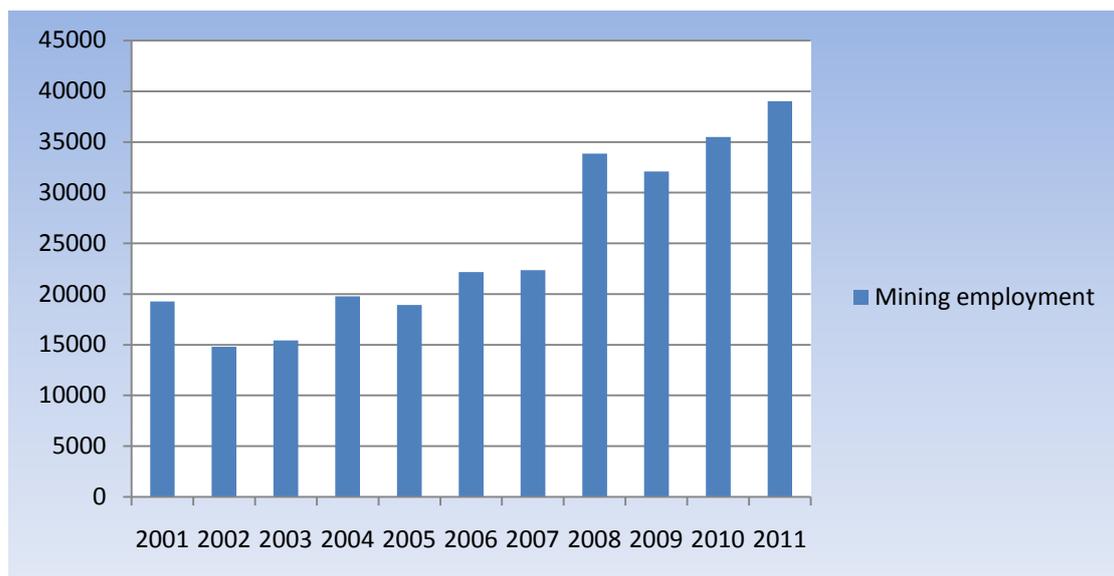
Source: NSW Minerals Council, [Key Industry Statistics, 2011](#)

## EMPLOYMENT IN MINING

There was an overall upwards trend in total employment in mining in NSW in the 10 years between 2001 and 2011, despite a considerable fall in total employment in mining in NSW in 2002, and minor falls in 2005 and 2009.

**Total employment in NSW mining, 2001–2011**

	NSW Mining employment
2001	19,264
2002	14,805
2003	15,417
2004	19,778
2005	18,926
2006	22,182
2007	22,363
2008	33,843
2009	32,103
2010	35,495
2011	39,004



Source: NSW Minerals Council, [Key Industry Statistics, 2011](#) and ABS, [Labour Force, Australia, Detailed – Electronic Delivery, March 2012](#), 6291.0.55.001, April 2012.

## Employment in mining, by Statistical Region

Employment in mining in NSW fluctuated considerably between August 2001 and August 2011, across all Statistical Regions. Employment in the Hunter Region has shown an upwards trend during the period 2001 to 2011, despite small declines in employment in 2002, 2004 and 2010. A sizeable spike in employment was observed in 2008, in the combined Northern, Far West, North Western and Central West Statistical Region. With the exception of the Murray-Murrumbidgee, Richmond-Tweed and Mid-North Coast regions, employment numbers increased considerably across all regions between 2001 and 2011. The changing pattern of employment across the Murray-Murrumbidgee Statistical Region is difficult to quantify given a lack of data for the period of this study.

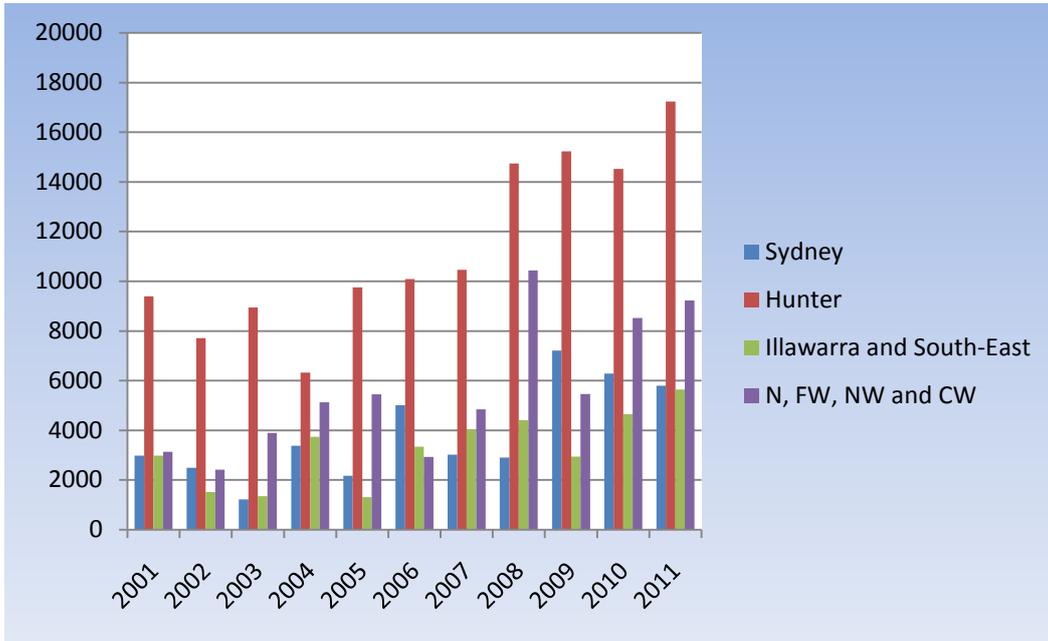
**Employment in NSW mining, by Statistical Region, August 2001 to August 2011<sup>8</sup>**

	Sydney	Hunter	Illawarra and South-East	N, FW, NW and CW	R-T and M-NC	Murray-Murrumbidgee	Total
2001	2,984	9,396	2,985	3,132	374	394	19,264
2002	2,489	7,711	1,519	2,414	397	275	14,805
2003	1,221	8,951	1,355	3,889	no data	no data	15,417
2004	3,376	6,330	3,741	5,129	1,201	no data	19,778
2005	2,171	9,758	1,317	5,446	234	no data	18,926
2006	5,011	10,093	3,339	2,928	810	no data	22,182
2007	3,020	10,458	4,042	4,842	no data	no data	22,363
2008	2,899	14,739	4,413	10,438	no data	1355	33,843
2009	7,214	15,236	2,947	5,468	1,239	no data	32,103
2010	6,284	14,529	4,659	8,528	1,495	no data	35,495
2011	5,801	17,232	5,638	9,225	532	576	39,004

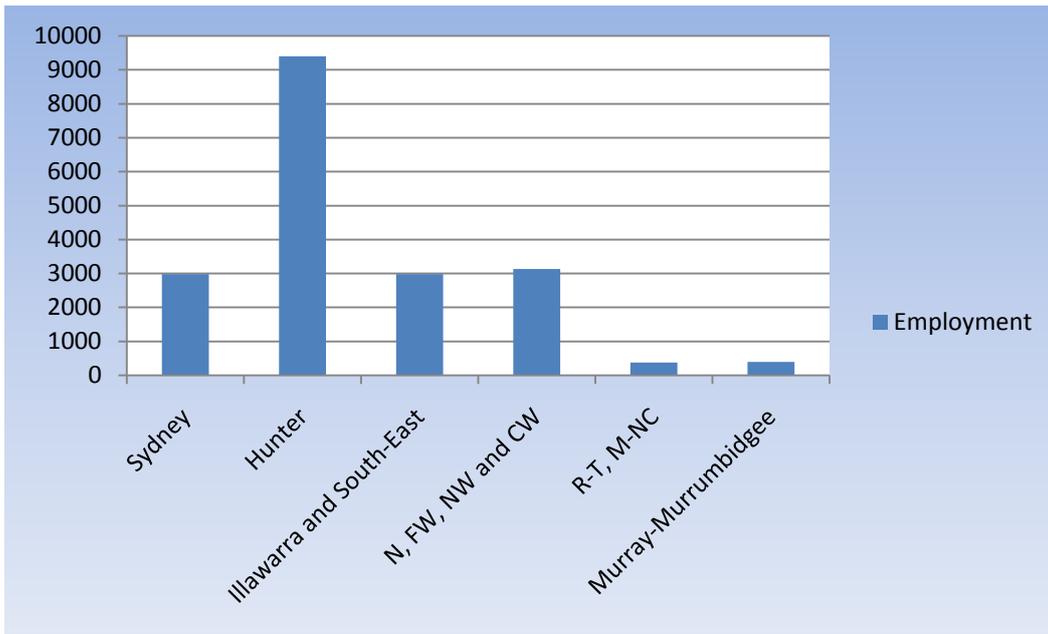
Source: NSW Minerals Council, [Key Industry Statistics, 2011](#)

<sup>8</sup> R-T and M-NC refers to the Richmond-Tweed and Mid-North Coast Statistical Regions and N, FW, NW and CW refers to the Northern, Far West, North Western and Central West Statistical Regions

**Total employment in NSW mining, by Statistical Region, August 2001 to August 2011<sup>9</sup>**

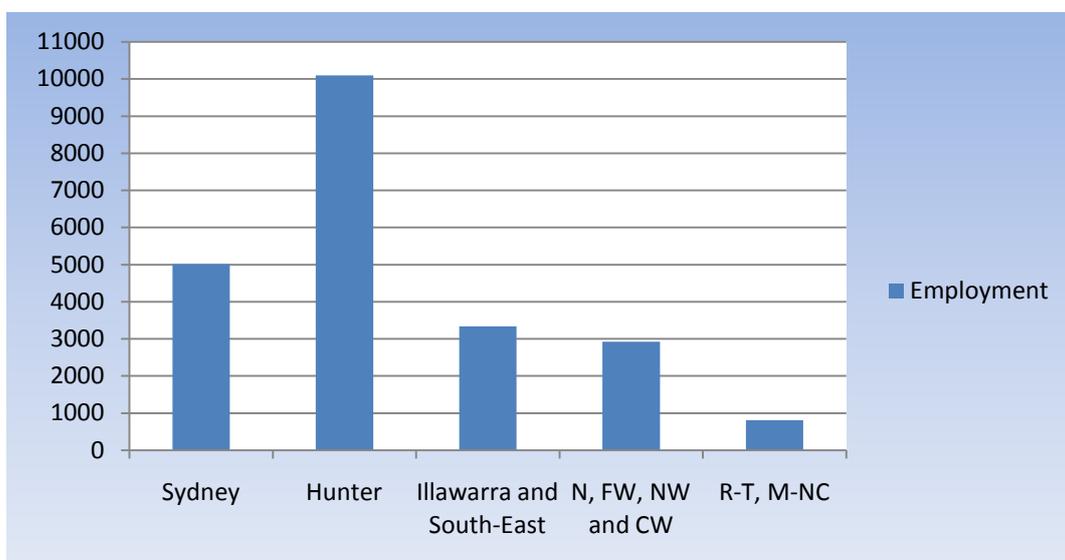


**Total employment in NSW mining, by Statistical Region, August 2001**

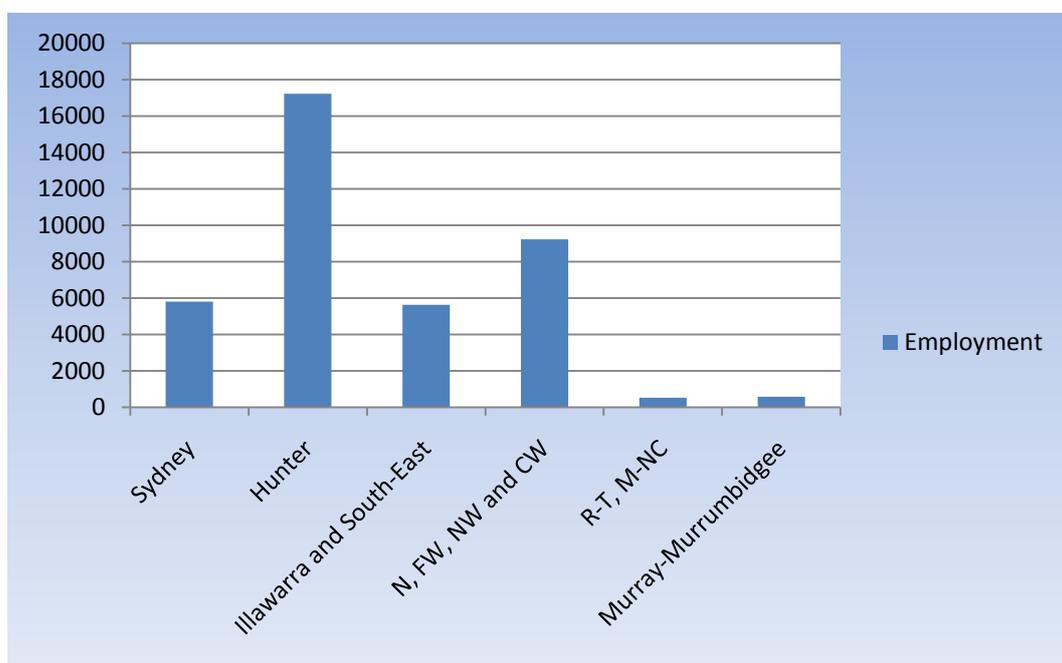


<sup>9</sup> R-T, M-NC and the Murray-Murrumbidgee Statistical Regions have been excluded due to a lack of comprehensive data across the study period

**Total employment in NSW mining, by Statistical Region, August 2006<sup>10</sup>**



**Total employment in NSW mining, by Statistical Region, August 2011**



<sup>10</sup> The Murray-Murrumbidgee Statistical Region has been excluded due to a lack of data for 2006

### Employment in mining, by principal mining activity

Principal mining activities in NSW include coal, mineral sands, metallic minerals such as copper, lead and zinc; also included are industrial minerals such as iron ore, clays and gemstones, and other mining activities such as exploration leases.

Employment in coal mining is very high, compared with employment in other principal mining activities in NSW, representing 78% of total employment in mining in 2008–2009. Between 1998–1999 and 2008–2009, employment in coal mining increased by more than 60%.

Employment in the mining of metallic minerals in NSW increased by 124% between 1998–1999 and 2008–2009, more than double that for coal mining. This increase occurred despite considerable fluctuations in employment across the time period of the study. Fluctuations in levels of employment in the mining of mineral sands, industrial minerals and other minerals were also observed.

#### Employment in NSW, by principal mining activity, June 1998 – June 1999 to June 2008 – June 2009<sup>11</sup>

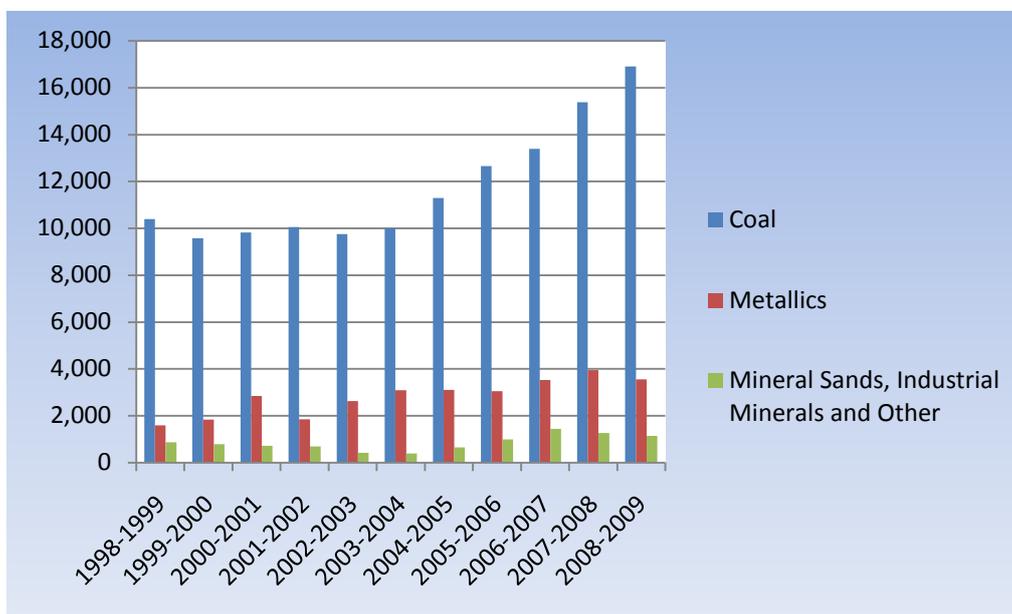
	Coal	Metallics	Mineral Sands	Industrial Minerals	Other	Total
1998-1999	10,400	1,589	79	394	405	14,819
1999-2000	9,583	1,840	32	435	319	14,157
2000-2001	9,821	2,843	60	408	248	15,218
2001-2002	10,052	1,849	66	336	291	14,417
2002-2003	9,758	2,633	28	248	150	14,529
2003-2004	9,998	3,097	2	246	141	14,702
2004-2005	11,290	3,100	0	379	281	16,079
2005-2006	12,658	3,057	211	525	252	18,120
2006-2007	13,392	3,534	282	899	266	20,686
2007-2008	15,387	3,955	273	730	268	23,177
2008-2009	16,914	3,553	258	605	282	19,861

Source: NSW Government Industry and Investment, *NSW Minerals Industry Annual, 2010*

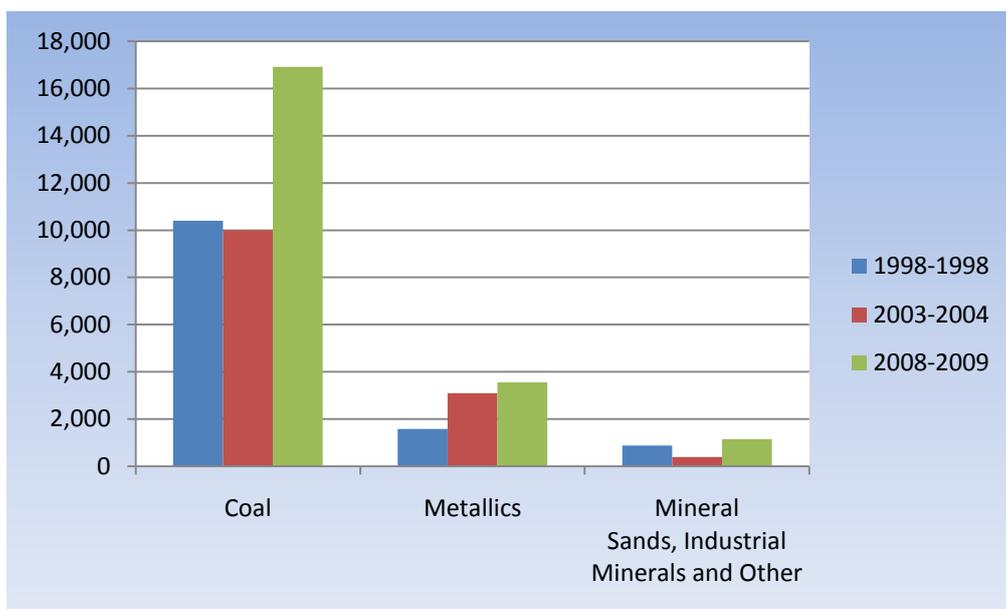
<sup>11</sup> "Other" includes exploration leases

In the following two figures the categories: "Mineral Sands", "Industrial Minerals" and "Other" have been grouped for charting purposes.

**Employment in NSW, by principal mining activity, June 1998 – June 1999 to June 2008 – June 2009**



**Employment in NSW, by principal mining activity, June 1998 – June 1999, June 2003 – June 2004 and June 2008 – June 2009**



Source: NSW Government Industry and Investment, *NSW Minerals Industry Annual, 2010*

## Employment in NSW coal mines

Underground and open cut coal mining in NSW have been equally important in providing employment during the period 2004–2005 to 2010–2011, with both showing an upwards trend.

### Employment in NSW coal mines, 2004–2005 to 2010–2011

	Underground	Open Cut	Total
2004-2005	5,620	5,670	11,290
2005-2006	6,541	6,117	12,658
2006-2007	6,792	6,600	13,392
2007-2008	7,469	7,918	15,387
2008-2009	8,478	8,436	16,914
2009-2010	8,768	10,341	19,109
2010-2011	9,776	11,350	21,126

Source: NSW Minerals Council, [Key Industry Statistics, 2011](#)

Between 2000 and 2010, the average age of NSW coal mine employees working in open cut and underground mines decreased.

### Average age of NSW coal mine employees, December 2000 – December 2010

	Underground	Open Cut	All Mines
2000	44.0	42.0	43.2
2001	44.2	42.6	43.5
2002	44.1	42.8	43.5
2003	44.1	42.8	43.5
2004	43.6	43.2	43.4
2005	43.1	42.2	42.7
2006	42.3	41.7	42.0
2007	42.6	42.1	42.4
2008	41.5	41.0	41.3
2009	42.0	40.9	41.5
2010	41.7	39.9	40.7

Source: NSW Minerals Council, [Key Industry Statistics, 2011](#)

## MINERAL INCOME AND ROYALTIES

### Mining income

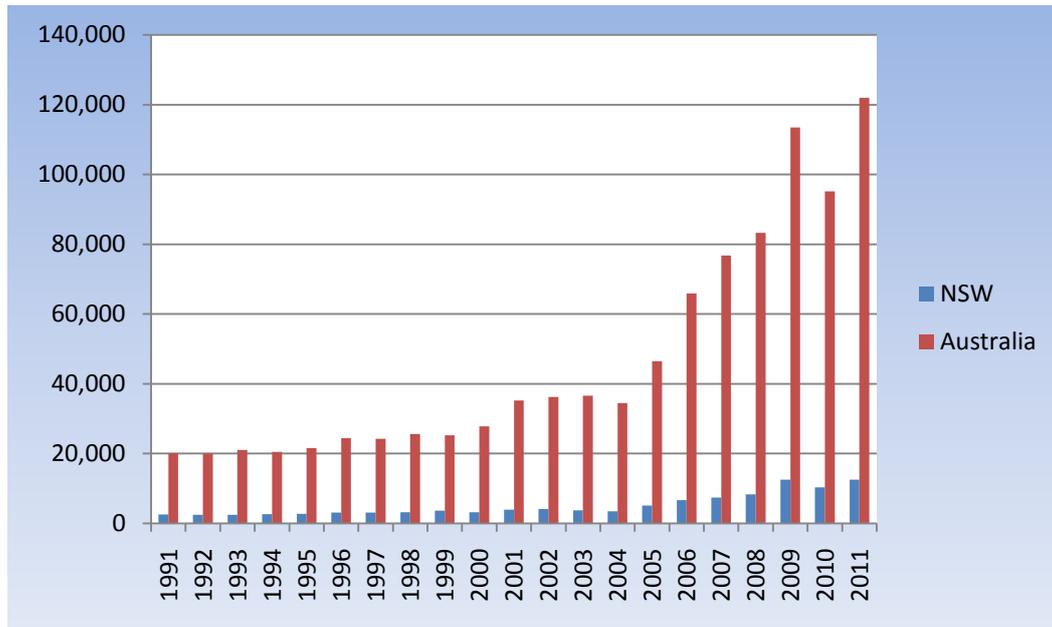
Between 1991 and 2011, income generated from mining in NSW increased by almost 400%. In the 5 years between 2007 and 2011, income from mining in NSW increased by almost 70%. In 2011, 10% of the total income from mining in Australia came from NSW. Mining income figures are based on Total Factor Income, as described by the [Australian Bureau of Statistics](#). Total Factor Income includes gross operating surplus, gross mixed income and employee compensation.

Income from mining, in NSW and Australia, June 1991 to June 2011 (\$m)

	Mining income NSW	Mining income Australia	Mining income NSW as a % of mining income Australia
1991	2,535	20,140	12.6
1992	2,434	20,063	12.1
1993	2,448	21,031	11.6
1994	2,678	20,513	13.1
1995	2,757	21,606	12.8
1996	3,096	24,414	12.7
1997	3,105	24,229	12.8
1998	3,228	25,627	12.6
1999	3,667	25,280	14.5
2000	3,190	27,860	11.5
2001	3,960	35,184	11.3
2002	4,119	36,281	11.4
2003	3,746	36,558	10.2
2004	3,495	34,535	10.1
2005	5,107	46,528	11.0
2006	6,652	65,899	10.1
2007	7,451	76,789	9.7
2008	8,315	83,304	10.0
2009	12,569	113,507	11.1
2010	10,297	95,197	10.8
2011	12,500	122,019	10.2

Source: ABS, [Australian National Accounts, State Accounts 2010-11](#), 5220.0, November 2011

### Income from mining, in NSW and Australia, June 1991 to June 2011



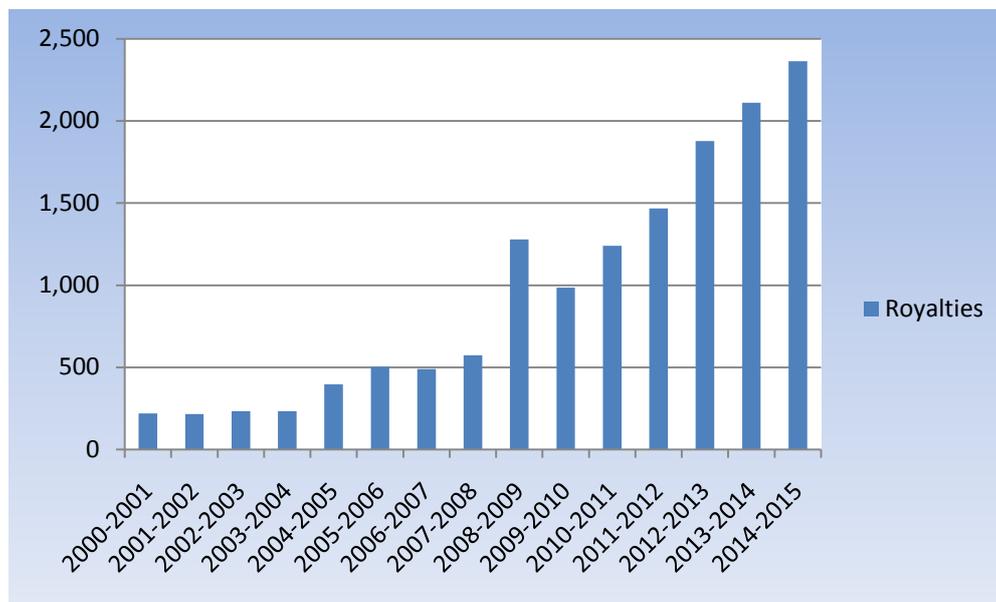
### Mining royalties

Royalties collected from minerals in NSW have shown an upwards trend during the period 2000–2001 and 2011–2012, with a significant spike occurring in 2008–2009.

### Royalties collected from minerals in NSW, 2000–2001 to 2014–2015 (\$m)<sup>12</sup>

	Royalties
2000-2001	220
2001-2002	216
2002-2003	233
2003-2004	233
2004-2005	396
2005-2006	504
2006-2007	489
2007-2008	573
2008-2009	1,280
2009-2010	985
2010-2011	1,240
2011-2012	1,486
2012-2013 <sup>(b)</sup>	1,878
2013-2014 <sup>(f)</sup>	2,112
2014-2015 <sup>(f)</sup>	2,363

<sup>12</sup> Forecast figures sourced from NSW Treasury, *NSW Budget Statement 2012-13*, [Budget Paper No.2](#), 2012, Chapter 5-4. (b) refers to budget, (f) refers to forecast.

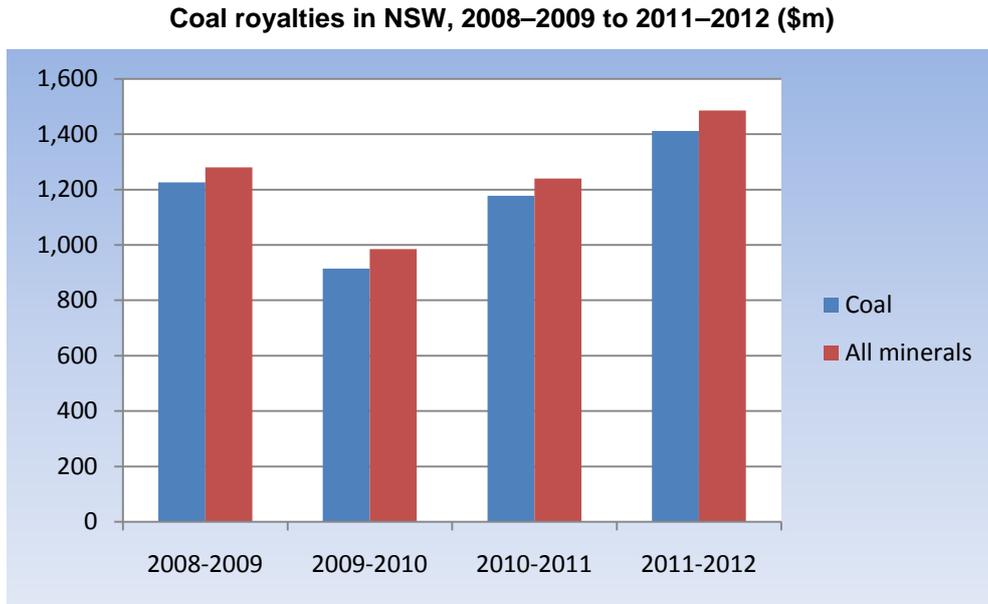
**Royalties collected from minerals in NSW, 2000–2001 to 2014–2015 (\$m)**

In 2011-12, the NSW Government collected approximately \$1,412 million in royalties from coal mining. Royalties in 2010-2011 were \$528 million lower than expected due to the higher than expected value of the Australian dollar, supply chain issues in Newcastle and reduced Japanese demand.

**Coal royalties in NSW, 2008–2009 to 2011–2012 (\$m)**

	Coal	All minerals
2008-2009	1,226	1,280
2009-2010	915	985
2010-2011	1,178	1,240
2011-2012	1,412 <sup>13</sup>	1,486

<sup>13</sup> Estimated from the NSW Treasury, *NSW Budget Statement 2012-13*, [Budget Paper No.2](#), 2012, Chapter 5-4



Source: NSW Treasury, *NSW Budget Statement 2012-13*, [Budget Paper No.2](#), 2012, Chapter 5-4

## MAJOR MINING PROJECTS IN NSW, INCLUDING OWNERSHIP OF MINING LEASE ENTITLEMENTS

In 2011, 0.48% of the land in NSW was held by coal and mineral production titles. This compares with 22% of NSW which was held by coal and mineral exploration titles. The area of NSW held by petroleum titles could not be ascertained.

### Area of NSW under coal and mineral titles, 2011 (ha)<sup>14</sup>

	Area	% of NSW land area
Area of NSW	802,596	100
Area of privately held coal and mineral exploration titles	176,893	22
Area of coal and mineral production titles	3,864	0.48

Source: NSW Minerals Council, [Key Industry Statistics, 2011](#)

## Thermal and metallurgical coal mining projects in NSW

In July 2012 there were 33 thermal and metallurgical coal mining projects across NSW, in various stages of construction.

### Metallurgical coal mining projects in NSW (current and planned)

Advanced metallurgical coal mining projects				
Number of projects	Status	Total new capacity (Mt)	Investment cost	Total construction Jobs
3	Expansion, under construction	2.0	441	123
Less advanced metallurgical coal mining projects				
Number of projects	Status	Total new capacity (Mt)	Investment cost	Total construction Jobs
1	Expansion, feasibility study under way	4	n/a	n/a
2	Expansion, awaiting govt approval	5.7	332	80

<sup>14</sup> There are no coal and mineral production titles held by Government

**Thermal coal mining projects in NSW (current and planned)**

<b>Advanced thermal coal mining projects</b>				
<b>Number of projects</b>	<b>Status</b>	<b>Total new capacity (Mt)</b>	<b>Investment cost</b>	<b>Total construction Jobs</b>
6	Expansion, under construction	1.5	3,585	1,050
1	New project, under construction	4.0	392	300
<b>Less advanced thermal coal mining projects</b>				
<b>Number of projects</b>	<b>Status</b>	<b>Total new capacity (Mt)</b>	<b>Investment cost</b>	<b>Total construction Jobs</b>
7	Expansion, feasibility study under way	23.4	629	648
4	Expansion, EIS under way	18.1	185	651
2	New project, EIS under way	22.8	1,951	930
3	New project, feasibility study under way	18.5	1,740	900
1	Expansion, govt approval under way	3.5	n/a	n/a
1	Expansion, govt approval not granted, appeal under way	3.0	290	100
1	New project, govt approval not granted, second EIS under way	5.0	700	2,989
1	New project, govt approval under way	10.0	n/a	n/a

Source: Australian Government Bureau of Resources and Energy Economics, [Australian Bulk Commodity Exports and Infrastructure-Outlook to 2025](#)

## Coal Seam Gas projects in NSW

As a form of petroleum, coal seam gas (CSG) exploration takes place under petroleum titles. There were 4 coal seam gas projects, at various stages of development, in NSW in 2009. At May 2012 two of these, Camden and Narrabri, were producing coal seam gas.

In 2009 there was 2,983 petajoules (PJ) of 'proven and probable' CSG in NSW. This figure represents the best estimate of commercially recoverable CSG. However, total CSG reserves in NSW may be as high as 155,000 PJ.

**Coal seam gas reserves in NSW, 2009 (PJ)**

Gas basin	Proved and Probable	Proved, Probable and Possible
Clarence-Moreton	461	1,655
Gloucester	721	895
Gunnedah	1,636	149,740
Sydney	165	(included with Gunnedah)
<b>Total</b>	<b>2,983</b>	<b>152,290</b>

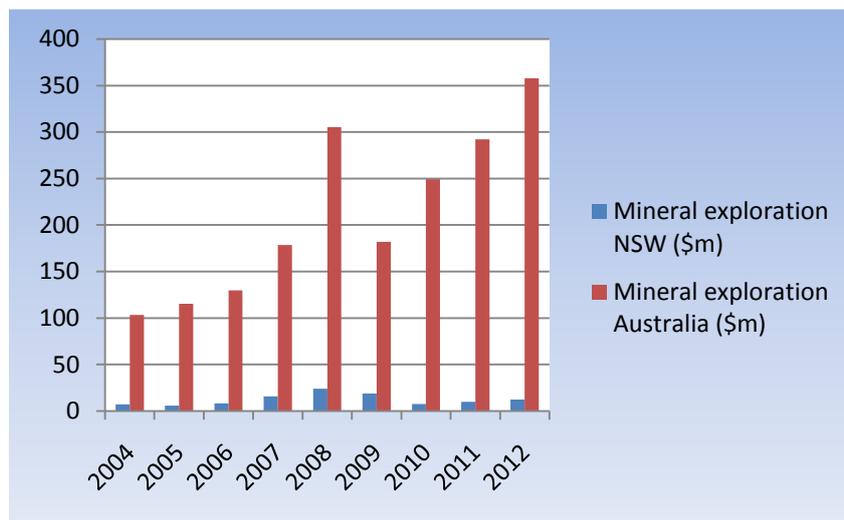
Source: NSW Legislative Council General Purpose Standing Committee No.5 Inquiry into Coal Seam Gas, [NSW Government Submission](#), September 2011

## MINERAL EXPLORATION

Between June 2004 and June 2012, total quarterly expenditure on mineral exploration (excluding petroleum), in NSW, increased by approximately 70%. Total quarterly expenditure on mineral exploration in NSW, as a percentage of total expenditure in Australia, halved between June 2004 and June 2012.

**Total quarterly expenditure on mineral exploration (excluding petroleum), in NSW and Australia, June 2004 – June 2012 (\$m)**

	Mineral exploration NSW	Mineral exploration Australia	Exploration NSW as a % of Australia
2004	7.2	103.3	7.0
2005	5.8	115.2	5.0
2006	8.4	129.7	6.5
2007	15.7	178.7	8.8
2008	24.2	305.4	7.9
2009	19	182.1	10.4
2010	7.5	249.2	3.0
2011	9.9	292.1	3.4
2012	12.2	357.7	3.4



Source: ABS, [Mineral and Petroleum Exploration, Australia, June 2012](#), 8412.0, June 2012

The following table outlines the quarterly expenditure on mineral exploration in NSW, for selected minerals, between June 2004 and June 2012. Those minerals where nil exploration expenditure was recorded, for NSW, have been excluded from the analysis. They include iron ore, mineral sands, uranium and diamonds, as listed by the [ABS](#).

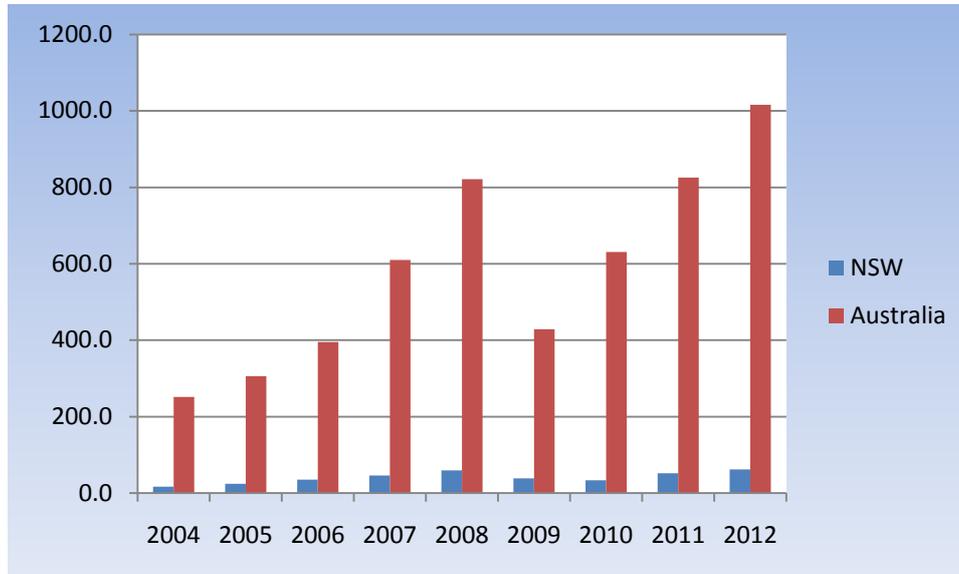
Quarterly expenditure on mineral exploration by mineral sought, in NSW and Australia, June 2004 to June 2012 (\$m)<sup>15</sup>

	Copper	Silver, lead, zinc	Nickel, cobalt	Selected base metals	Gold	Coal	Other minerals	Total
<b>Expenditure NSW</b>								
2004	1.5	1.9	0.1	3.5	5.8	3.1	0.7	16.6
2005	2.5	1.4	0.1	3.9	6.2	8.9	1.2	24.2
2006	4.8	n/a	n/a	7.6	6.6	15.3	1.1	35.4
2007	6.4	7.0	0.8	14.1	6.8	9.1	1.7	45.9
2008	7.5	6.0	0.8	14.3	11.5	19.4	n/a	59.5
2009	1.3	1.9	0.1	3.3	5.9	23.4	2.6	38.5
2010	4.0	n/a	n/a	6.8	12.5	8.7	1.6	33.6
2011	7.4	n/a	n/a	14.8	10.9	15.5	2.9	51.5
2012	n/a	7.4	n/a	15.6	15.2	18.6	4.8	61.6
<b>Expenditure Australia</b>								
2004	13.8	11.5	31.5	56.8	116.1	19.2	2.8	251.7
2005	22.4	8.6	44.1	75.1	103.1	45.7	6.8	305.8
2006	46.7	25.5	36.0	108.2	110.5	49.7	18.3	394.9
2007	77.1	45.5	57.9	180.5	123.0	88.8	37.5	610.3
2008	93.3	39.1	86.5	219.0	173.9	146.6	62.7	821.1
2009	18.0	7.9	45.2	71.1	98.8	138.6	48.9	428.5
2010	63.7	15.9	56.4	135.9	165.7	150.8	42.4	630.8
2011	101.5	19.8	71.6	192.9	178.2	214.7	46.6	825.3
2012	120.4	21.4	78.4	220.2	215.0	336.2	24.7	1,016.3

Source: ABS, [Mineral and Petroleum Exploration, Australia, June 2012](#), 8412.0, June 2012

<sup>15</sup> Selected base metals include copper, silver, lead-zinc, nickel and cobalt. n/a refers to values not available for publication

**Quarterly expenditure on mineral exploration, in NSW and Australia, June 2004 to June 2012 (\$m)**



Source: ABS, [Mineral and Petroleum Exploration, Australia, June 2012](#), 8412.0, June 2012 and NSW Minerals Council, [Key Industry Statistics, 2011](#)

There has been a substantial increase in expenditure on petroleum exploration in NSW over the past 3 years. Between 2009 and 2010 expenditure increased almost tenfold. Despite the recent increase, total expenditure on petroleum exploration in NSW remains relatively low compared to national expenditure.

**Quarterly expenditure on petroleum exploration, in NSW and Australia, March 2007 to March 2012 (\$m)**

	NSW	Australia	NSW as a % of Australia
2007	4.4	460.3	1.0
2008	9.0	709.4	1.3
2009	4.4	998.6	0.4
2010	39.5	863.5	4.6
2011	23.8	766.1	3.1
2012	23.1	596.0	3.9

Source: ABS, [Mineral and Petroleum Exploration, Australia, June 2012](#), 8412.0, June 2012

## MINING SAFETY STATISTICS

The majority of the fatalities that occurred in the NSW minerals industry, between 1999–2000 and 2010–2011, occurred in the coal industry. In 2010–2011 one fatality was recorded in the NSW minerals industry overall.

### Number of fatalities in the NSW minerals industry, 1999–2000 to 2010–2011

	Coal	Metalliferous	Extractive	Total
2000-2001	2	0	1	3
2001-2002	1	0	0	1
2002-2003	0	1	0	1
2003-2004	3	0	0	3
2004-2005	0	0	1	1
2005-2006	0	0	0	0
2006-2007	1	1	0	2
2007-2008	0	0	0	0
2008-2009	3	0	0	3
2009-2010	0	0	0	0
2010-2011	1	0	0	1

Source: NSW Minerals Council, [Key Industry Statistics, 2011](#) and NSW Government Trade and Investment, *NSW Coal Industry Profile, 2010*

Between 2000–2001 and 2010–2011, lost time injury frequency rates in the NSW minerals industry declined by well over 300%. Lost-time injury frequency rate refers to the number of lost-time injuries per million employee hours worked. Figures for 2010–2011 are preliminary only.

### Lost time injury frequency rates in the NSW minerals industry, 1999–2000 to 2010–2011

	Coal	Metalliferous	Extractive	All NSW mining
2000-2001	33.00	17.62	6.27	23.80
2001-2002	27.00	9.63	20.45	23.12
2002-2003	23.00	9.68	26.54	20.52
2003-2004	22.00	6.55	30.18	17.57
2004-2005	18.00	4.28	9.00	13.85
2005-2006	15.20	4.55	8.30	12.46
2006-2007	16.30	5.99	6.98	13.19
2007-2008	8.27	4.45	5.67	7.26
2008-2009	8.19	3.35	12.11	7.57
2009-2010	7.13	4.36	11.10	6.88
2010-2011	5.83	2.54	10.23	5.46

Source: NSW Minerals Council, [Key Industry Statistics, 2011](#) and NSW Government Trade and Investment, *NSW Coal Industry Profile, 2010*

Between 1999–2000 and 2010–2011, the number of serious bodily injuries in all NSW mining, decreased by 27%. The majority of incidences that resulted in serious bodily injuries, in the NSW minerals industry between 1999–2000 and 2010–2011, occurred in the coal industry.

**Serious bodily injuries in the NSW minerals industry, 1999–2000 to 2010–2011**

	Coal	Metalliferous	Extractive	All NSW mining
2000-2001	40	11	3	54
2001-2002	36	8	7	51
2002-2003	37	4	7	48
2003-2004	48	12	7	67
2004-2005	34	6	2	42
2005-2006	35	14	4	53
2006-2007	32	17	10	59
2007-2008	26	5	2	33
2008-2009	28	10	5	43
2009-2010	32	5	3	40
2010-2011	28	6	3	37

Source: NSW Minerals Council, [Key Industry Statistics, 2011](#) and NSW Government Trade and Investment, *NSW Coal Industry Profile, 2010*

## MINING BUSINESSES

The number of mining-related businesses in NSW, based on ABS defined "Industry Classes", remained relatively stable in 2009–2010.<sup>16</sup> The most noticeable numeric change occurred in those businesses involved in mineral exploration.

**Number of mining-related businesses in NSW, by type, 2009–2010**

Business/Industry Class	Number operating at start of period	Number operating at end of period	Change number	% change start of period compared to end of period
Coal Mining	153	151	-2	-1
Oil and Gas Extraction	65	76	11	14
Iron Ore Mining	19	10	-9	-90
Bauxite Mining	9	0	-9	n/a
Copper Ore Mining	11	12	1	8
Gold Ore Mining	59	66	7	11
Mineral Sand Mining	25	34	9	26
Nickel Ore Mining	3	3	0	0
Silver-Lead-Zinc Ore Mining	9	12	3	25
Other Metal Ore Mining	20	32	12	38
Gravel and Sand Quarrying	105	112	7	6
Other Construction Material Mining	222	219	-3	-1
Other Non-Metallic Mineral Mining and Quarrying	228	214	-14	-7
Petroleum Exploration	68	76	8	11
Mineral Exploration	233	263	30	11
Other Mining Support Services	255	249	-6	-2
<b>Total</b>	<b>1484</b>	<b>1529</b>	<b>45</b>	<b>3</b>

Source: ABS, [Counts of Australian Businesses, including Entries and Exits, Jun 2007 to Jun 2011](#), 8165.0, January 2012 and ABS, [Year Book Australia, 2012](#), 1301.0, May 2012

<sup>16</sup> Each business has been classified by the ABS to a single ANZSIC 2006 industry class. The industry class allocated is the one which provides the main source of income, which is generally based on a description provided by the individual business

In the period 2010–2011, the most noticeable numeric change occurred in those businesses involved in coal mining and mineral exploration.

**Number of mining-related businesses in NSW, by type, 2010–2011**

<b>Business/Industry Class</b>	<b>Number operating at start of period</b>	<b>Number operating at end of period</b>	<b>Change number</b>	<b>% change start of period compared to end of period</b>
Coal Mining	151	183	32	17
Oil and Gas Extraction	76	66	-10	-15
Iron Ore Mining	10	15	5	33
Copper Ore Mining	12	19	7	37
Gold Ore Mining	66	59	-7	-12
Mineral Sand Mining	34	35	1	3
Nickel Ore Mining	3	0	-3	n/a
Silver-Lead-Zinc Ore Mining	12	9	-3	-33
Other Metal Ore Mining	32	28	-4	-14
Gravel and Sand Quarrying	112	111	-1	-1
Other Construction Material Mining	219	217	-2	-1
Other Non-Metallic Mineral Mining and Quarrying	214	212	-2	-1
Petroleum Exploration	76	91	15	16
Mineral Exploration	263	306	43	14
Other Mining Support Services	249	258	9	3
<b>Total</b>	<b>1529</b>	<b>1609</b>	<b>80</b>	<b>5</b>

Source: ABS, [Counts of Australian Businesses, including Entries and Exits, Jun 2007 to Jun 2011](#), 8165.0, January 2012 and ABS, [Year Book Australia, 2012](#), 1301.0, May 2012

## GLOSSARY

The following definitions are those used by the Australian Bureau of Statistics, unless otherwise stated.

***Employed:*** All persons aged 15 years and over who, during the reference week: worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (comprising employees, employers and own account workers); or worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or were employees who had a job but were not at work and were: away from work for less than four weeks up to the end of the reference week; or away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or away from work as a standard work or shift arrangement; or on strike or locked out; or on workers' compensation and expected to return to their job; or were employers or own account workers, who had a job, business or farm, but were not at work.

***Total factor income:*** [Total factor income](#) refers to income which includes gross operating surplus, gross mixed income and employee compensation.