

APPENDIX 15

Queensland Coal Mines and Advanced Projects July 2016

Queensland coal – mines and advanced projects

July 2016

Industry update

Resources

Queensland has a rich endowment of high-quality coal, with an inventory estimated at approximately 8.7 billion tonnes (Bt) (raw in-situ).

Metallurgical (coking and pulverised coal injection or PCI) coals account for approximately 8.7 Bt of the inventory, of which about 4 Bt are considered potentially suitable for open-cut mining.

Provinces

The Bowen Basin is situated in central Queensland and contains almost all of the State's hard coking coal. It is also supplying all of the metallurgical coal currently mined within Queensland. The basin also produces a wide range of thermal coal products, principally for export.

The Surat and Clarence-Moreton basins are in south-east Queensland and are the source of high-volatile thermal coals exported overseas.

The Tarong and Callide basins are composed of thermal coals mined in Queensland include those within the Tarong and Callide basins which are used in mine-mouth, coal-fired power stations for electricity generation.

Production

Saleable coal mined during 2014–2015 increased to 243.6 million tonnes (Mt) compared to previous financial year (228.9 Mt). This production was contributed to by 41 open cut mining operations which accounted for more than 80% of saleable production and 13 underground mines.

Export of 217.8 Mt, worth of coal estimated at \$23.5 billion (free-onboard basis), to more than 30 destinations overseas, with markets in Asia accounting for over 85% of sales. About \$1.61 billion (80%) of the royalties paid to the State in 2014–15 were attributed to coal sales.

Exports

Exports of 160.2 Mt metallurgical coal. Thermal coal export of 57.6 Mt used for electricity generation and in industrial processes. Domestic sales of thermal coal within Queensland amounted to 22.2 Mt.

China remained the State's most significant export destination with 52.9 Mt sold, comprising of about 38.1 Mt of metallurgical coal and 14.8 Mt of thermal coal. Exports to Japan totalled 49.8 Mt during 2014–15, comprising 30.4 Mt of metallurgical coal and 19.39 Mt of thermal coal. Other significant markets were India, Korea and Taiwan, which imported 34.6 Mt, 24.3 Mt and 11.0 Mt respectively from Queensland coal producers during 2014–15.

Projects

Caval Ridge open-cut mine, owned and operated by the BHP Billiton Mitsubishi Alliance, reached its nominal production capacity of around 5.5 Mt per annum of saleable coal, having made its first shipment of coal in April 2014.

Quick facts (2014–15)*

Saleable coal production

Open-cut	201.0 Mt
Underground	42.6 Mt
Total	243.6 Mt

Coal exports

Metallurgical	160.2 Mt
Thermal	57.6 Mt
Total	217.8 Mt

Operating coal mines

Open-cut	41
Underground	13
Total	54

*Note: These figures are based on the coal statistics downloaded from the coal statistics page of the department's website on 17th May 2016. These differ slightly from those previously, posted on the Department's website (effective 10th May 2016) and amended 11th May 2016 as the revised spreadsheet received by email from coal stats officer on 11th May 2016.

Grosvenor underground mining project in the Bowen basin effectively completed in May 2016, with commissioning of the longwall equipment. The mine will produce prime hard coking coal for export and has a planned annual production capacity of about 4.5 Mt of saleable coal.

Exploration

Coal exploration activity within Queensland, as measured by the number and coverage area of granted exploration tenure was 800 granted EPCs as at 30th June 2015 (compared with 980 at the end of the previous financial year) covering an area of about 193 000 km² – (down from about 270 000 km²).

During 2014–15, the Australian Bureau of Statistics (ABS) estimated coal exploration expenditure by private companies within Queensland at \$199.9 million compared with an estimated expenditure of \$324.2 million for the previous year (ABS 8412.0).

Despite the current downturn in the industry, proposals for other new coal mining projects are continuing. These include a number of very large scale thermal coal mines in the Galilee Basin.

Further information:

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www.dnrm.qld.gov.au

Note: Coal statistics quoted in this brochure compiled by the Department of Natural Resources and Mines, for fiscal year 2014–15.



Table 1: Queensland coal – New coal mines under construction or recently completed

Name	Resource (Mt)	Coal type	Project overview	Principal contact
Eagle Downs Bowen Basin	100–500	●	Underground longwall mine – up to 7 Mt/a – Construction on hold - site on care and maintenance. Aquila Resources Limited de-listed on ASX July 2014 following acquisition by consortium comprising Baosteel Resources Australia Pty Ltd and Aurizon Operations Limited www.eagledowns.com.au www.aquilarresources.com.au	Eagle Downs Coal Management Pty Ltd ph: +61 7 3020 4200 Aquila Resources Limited ph: +61 7 3229 5630
Grosvenor Bowen Basin	100–500	●	Underground longwall mine – up to 4.5 Mt/a – Construction reached effective completion with commissioning of longwall equipment May 2016 www.angloamerican.com.au	Anglo American Metallurgical Coal Pty Ltd ph: +61 7 3834 1333

Table 2: Queensland coal – Advanced export coal projects (Mining Lease either granted or under application)

Name	Resource (Mt)	Coal type	Project overview	Principal contact
Alpha Galilee Basin	>1000	●	Open-cut and underground longwall mines – 30 Mt/a www.gvkhancockcoal.com	Hancock Coal Pty Ltd/GVK Resources (Singapore) PTE Ltd ph: +61 7 3003 5500
Broughton Bowen Basin	10–100	● ●	Open-cut mine – ~2 Mt/a saleable coal	U&D Mining Industry (Australia) Pty Ltd ph: +61 7 3188 9101
Bluff Bowen Basin	>10	●	Open-cut mine ~ 1.4 Mt/a run-of-mine (ROM) – Carabella Resources Ltd de-listed on ASX Feb 2014 following acquisition by Wealth Mining Pty Ltd (China Kingho Energy Group)	Carabella Resources Pty Ltd
Byerwen Bowen Basin	>500	●	Open-cut and underground mines – up to 10 Mt/a www.qcoal.com.au	Byerwen Coal Pty Ltd/QCoal Pty Ltd ph: +61 7 3002 2900
Carmichael Coal Mine & Rail Project Galilee Basin	>1000	●	Open-cut mine(s) – up to 60 Mt/a www.adanimining.com	Adani Mining Pty Ltd ph: +61 7 3223 4800
China Stone Galilee Basin	>1000	●	Open-cut and underground mines – up to 38 Mt/a saleable www.macmines.com	Mac Mines Austasia Pty Ltd ph: +61 7 3221 4856
Comet Ridge Bowen Basin	<20	●	Open-cut mine – ~ 200 000 t saleable (~1.6 Mt/a ROM Fairhill Formation coal seams) www.acaciacoal.com.au	Acacia Coal Limited ph: 1300 222 625 (within Australia)
Drake Bowen Basin	100–500	●	Open-cut mine – up to 6 Mt/a www.qcoal.com.au	Drake Coal Pty Ltd/QCoal Pty Ltd ph: +61 7 3002 2900
Galilee Coal Project Galilee Basin	>1000	●	Open-cut and underground mines – ~40 Mt/a (Sometimes referred to as the 'China First' coal project) www.waratahcoal.com	Waratah Coal Pty Ltd ph: +61 7 3233 0800
Kevin's Corner Galilee Basin	500–1000	●	Underground longwall and open-cut mines – 30 Mt/a www.gvkhancockcoal.com	GVK Resources (Singapore) PTE Ltd through Hancock Galilee Pty Ltd ph: +61 7 3003 5500
Lenton/New Lenton Bowen Basin	10–100	●	Open-cut and underground mines www.newhopecoal.com.au	New Hope Corporation Limited ph: +61 7 3418 0500
Meteor Downs South Bowen Basin	10–100	●	Open-cut mine – 1.5 Mt/a www.udmining.com.au	U&D Mining Industry (Australia) Pty Ltd ph: +61 7 3188 9101
Minyango Bowen Basin	100–500	●	Underground mine – multi longwall with bord and pillar – up to 7 Mt/a saleable www.caledon.com.au	Caledon Resources ph: +61 7 3309 3100
Moorlands Bowen Basin	100–500	●	Open-cut mine - 1.7 Mt/a saleable www.cuestacoal.com.au	Cuesta Coal Limited ph: +61 2 9284 5900
Moranbah South Bowen Basin	100–500	●	Underground mine – multi longwall with bord and pillar – up to 14 Mt/a saleable www.angloamerican.com.au	Anglo American Metallurgical Coal Pty Ltd ph: +61 7 3834 1333
New Acland Mine expansion Clarence Moreton Basin	500–1000	●	Open-cut mine expansion – 4.8 Mt/a to 7.5 Mt/a (scope revised November 2012) www.newhopecoal.com.au	New Hope Corporation Limited ph: +61 7 3418 0500
Red Hill Bowen Basin		●	Planned extension to longwall panels at Broadmeadow underground and possible establishment of a new underground mine	BHP Billiton Mitsubishi Alliance ph: +61 7 3329 2600
Rolleston Coal Mine expansion Bowen Basin	100–500	●	Open-cut mine expansion – to range up to 15 Mt/a to 20 Mt/a www.xstratacoal.com www.rollestoncoalexpansion.com.au	Glencore Coal Pty Limited (Glencore plc) ph: +61 2 6570 2416
South Galilee Galilee Basin	>1000	●	Open-cut and underground mines – feasibility studies continuing, 15 Mt/a www.southgalilee.com.au	Alpha Coal Management Pty Ltd ph: +61 7 3006 1850

Table 2: Queensland coal – Advanced export coal projects (*Mining Lease either granted or under application*)

Name	Resource (Mt)	Coal type	Project overview	Principal contact
Springsure Creek Bowen Basin	100–500	●	Underground mine – multi longwall – up to 5.5 Mt/a ROM planned with first longwall. Bandanna Energy Limited went into voluntary administration, September 2014 www.bandannaenergy.com.au www.springsurecreekproject.com.au	Bandanna Energy Limited ph: +61 7 3041 4400
Taraborah Bowen Basin	10–100	●	Open-cut mine initially ~ 2.5 Mt/a ROM www.taraborah.com.au	Shenhui International Group Pty Ltd ph: +61 7 8006 4746

● coking coal ● PCI coal ● thermal coal

Figure 1: Queensland coal exports by type

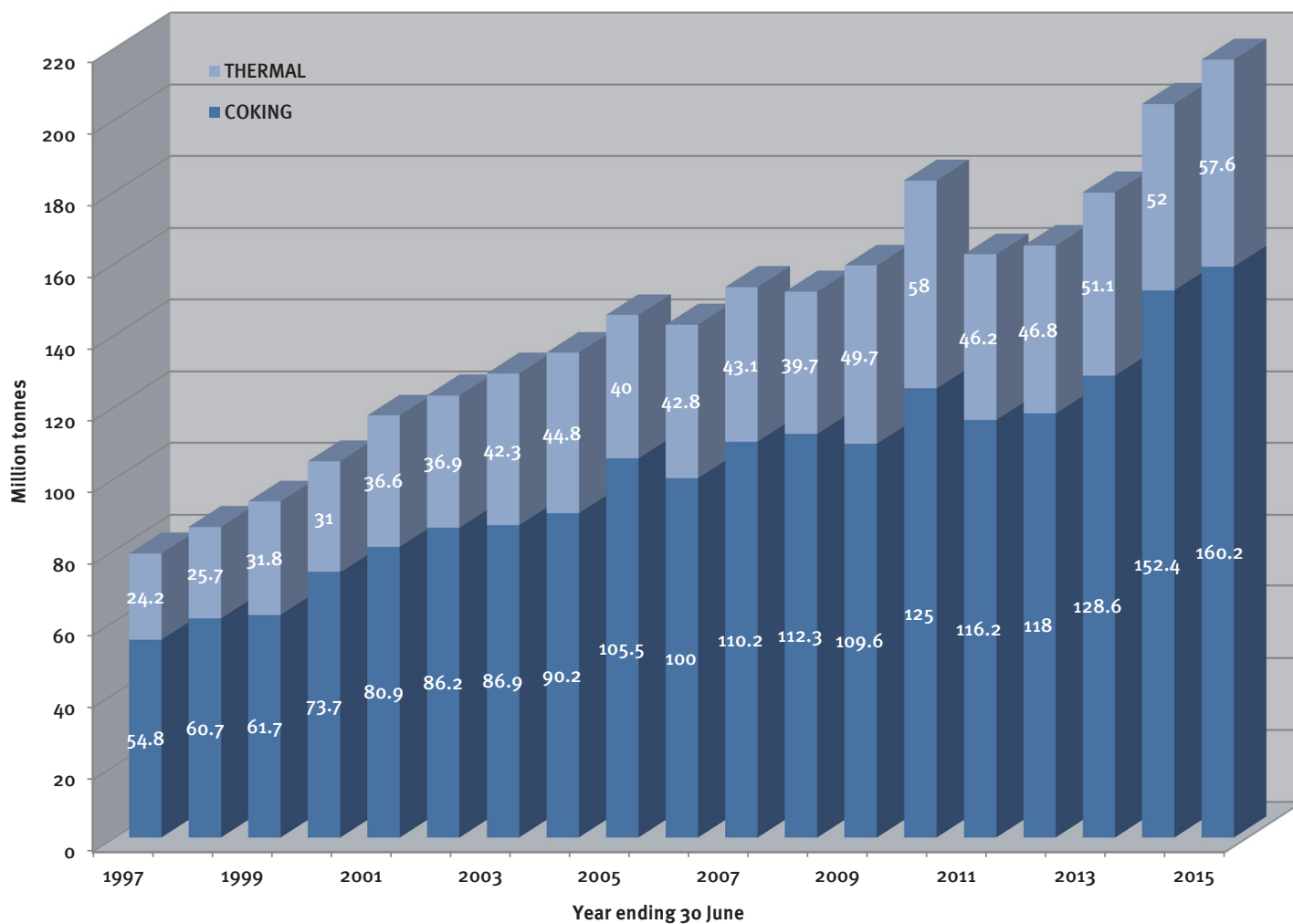


Photo: Queensland Government Image Library

Figure 2: Queensland coal – Central Queensland map

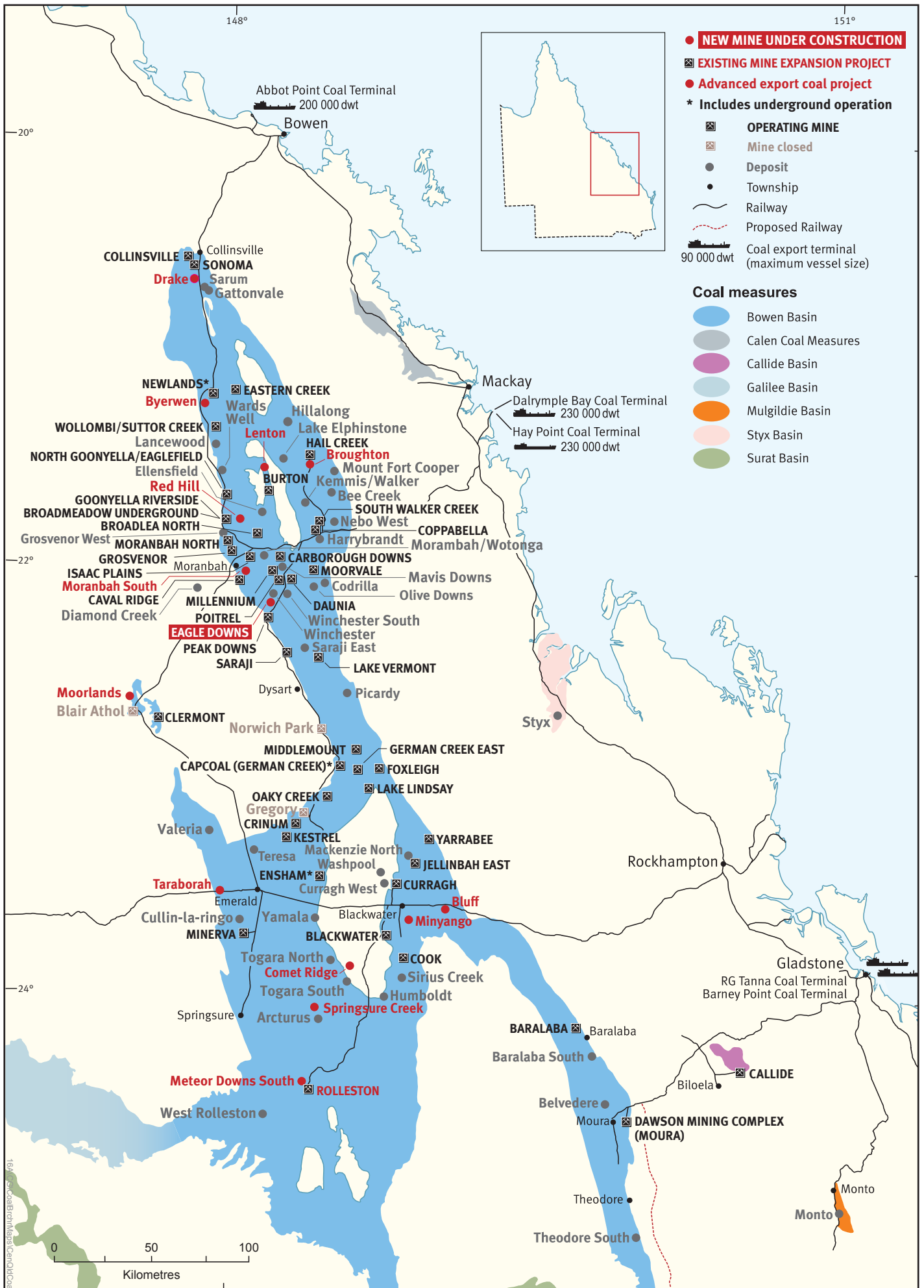


Figure 3: Queensland coal – Western-central Queensland map



Figure 4: Queensland coal – South-east Queensland map

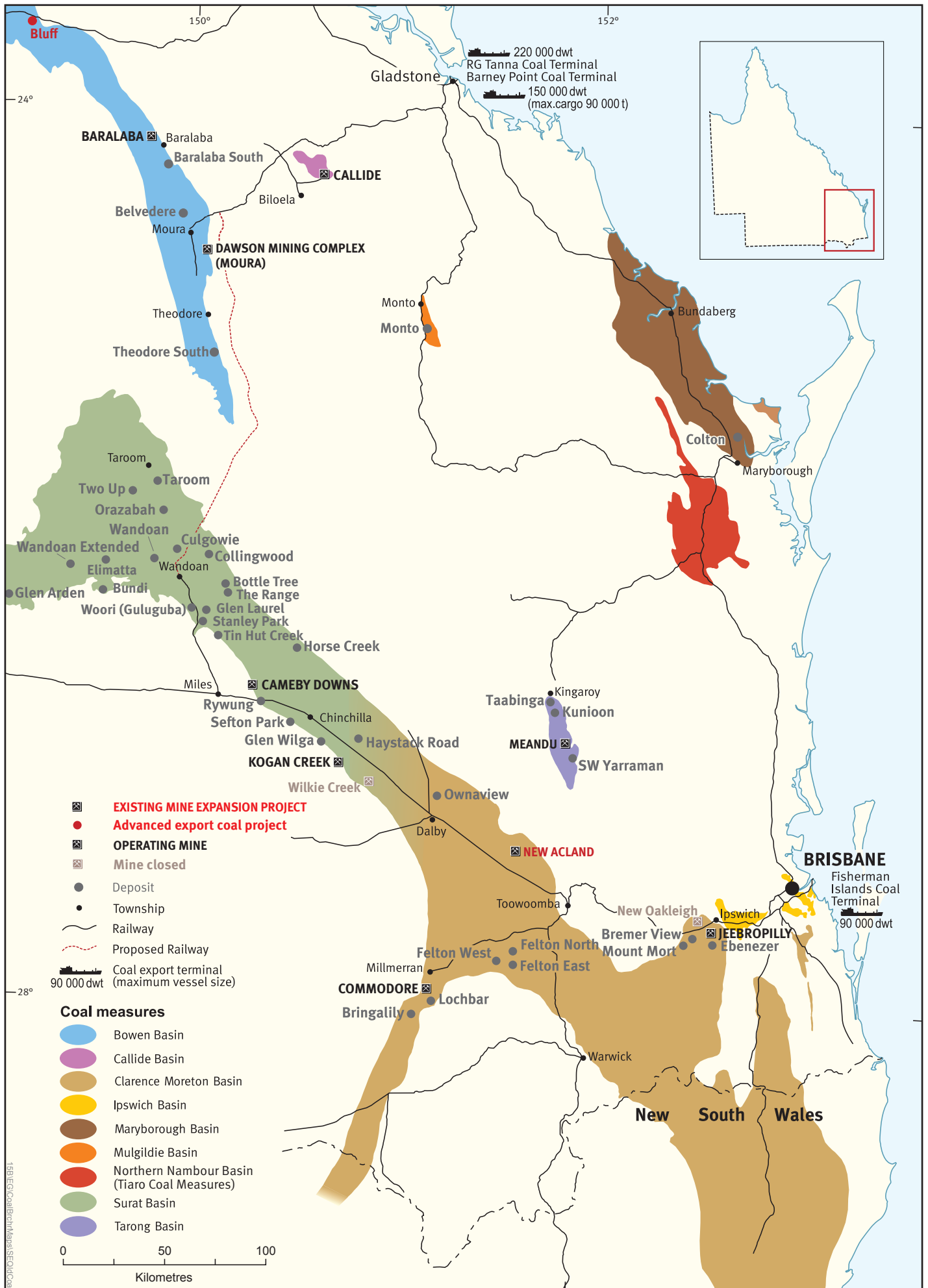


Table 3 : Queensland coal – Operating mines 2014–15

Name	Saleable (t) 2014–15	Coal type	Comments	Mine/Site contact
• Anglo American ph: +61 7 3834 1333 www.angloamerican.com www.angloamerican.com.au (Australian operations)				
Callide and Boundary Hill Callide Basin	8 129 429	● ● ●	● Anglo American plc announced (January 2016) agreement to sell its 100% equity in the mine to Batchfire Resources Pty Ltd	Callide Mine ph: +61 7 4990 1611
Dawson (formerly Moura) Bowen Basin	8 148 072	● ● ●	● ●	Dawson Mining Complex Reception ph: +61 7 4990 9700
Foxleigh Bowen Basin	3 097 926	● ● ●	● ● Anglo American plc announced (April 2016) agreement to sell its 70% interest in the mine to a consortium led by Taurus Fund Management.	Foxleigh Mine ph: +61 7 4985 9000
German Creek – Grasstree* Bowen Basin	6 281 913	● ● ●	●	Capcoal Operations ph: +61 7 4985 0200
German Creek – Lake Lindsay Bowen Basin	4 801 460	● ● ●	● ● ●	Capcoal Operations ph: +61 7 4985 0200
German Creek – Open-cut Bowen Basin	264 082	● ● ●	● ● ●	c/- Capcoal Operations ph: +61 7 4985 0200
Moranbah North* Bowen Basin	5 418 688	● ● ●	●	
Grosvenor* Bowen Basin	121 818	● ● ●	● Roadway development underground commenced August 2014 Longwall equipment commissioned May 2016	
• BHP Billiton Mitsubishi Alliance - BHP Billiton Mitsui Coal Pty Ltd ph: +61 7 3329 2600 www.bhpbilliton.com				
Blackwater Bowen Basin	13 387 290	● ● ●	● ●	Blackwater Mine ph: +61 7 4980 5666
Broadmeadow* Bowen Basin (production included in Goonyella Riverside)	-	● ● ●	●	Broadmeadow Underground Mine ph: +61 7 4940 4347
Caval Ridge Bowen Basin	6 292 387	● ● ●	●	Caval Ridge Mine ph: +61 7 4847 3000
Daunia Bowen Basin	4 755 875	● ● ●	● ● ●	Daunia Mine ph: +61 7 4841 1700
Goonyella Riverside Bowen Basin (production includes Broadmeadow underground)	16 905 895	● ● ●	●	Goonyella Riverside Mine ph: +61 7 4940 4333
Crinum* Bowen Basin	6 586 063	● ● ●	● Gregory open-cut ceased production October 2012 (economic grounds) BHP Billiton announced (July 2015) intention to cease production from Crinum in first quarter of calendar 2016	Gregory Crinum Mine ph: +61 7 4982 8100
Peak Downs Bowen Basin	10 057 840	● ● ●	●	Peak Downs Mine ph: +61 7 4968 8233
Poitrel Bowen Basin	3 465 230	● ● ●	● ● ● BHP Billiton Mitsui Coal Pty Ltd	Poitrel Mine ph: +61 7 4840 0770
Saraji Bowen Basin	9 010 721	● ● ●	●	Saraji Mine ph: +61 7 4968 9595
South Walker Creek Bowen Basin	5 180 097	● ● ●	● ● ● BHP Billiton Mitsui Coal Pty Ltd	South Walker Creek Mine ph: +61 7 4949 4500
• New Hope Corporation Limited ph: +61 7 3418 0500 www.newhopecoal.com.au				
Jeebropilly Clarence Moreton Basin	664 217	● ● ●	●	Jeebropilly Mine ph: +61 7 5461 9200
New Acland Clarence Moreton Basin	5 123 453	● ● ●	●	New Acland Coal Pty Ltd ph: +61 7 4694 8888
• Peabody Energy Australia Pty Ltd ph: +61 7 3225 5500 www.peabodyenergy.com				
Burton Bowen Basin	1 198 373	● ● ●	● ●	
Coppabella Bowen Basin	4 085 742	● ● ●	● ●	
Middlemount Bowen Basin	3 998 865	● ● ●	● ●	
Millennium Bowen Basin	3 736 759	● ● ●	● ● ●	
Moorvale Bowen Basin	3 057 330	● ● ●	● ●	
North Goonyella*, Eaglefield Bowen Basin	2 599 445	● ● ●	●	

* Underground coal mine

● coking coal ● PCI coal ● thermal coal

** Includes production from underground operation

*** Includes production from Drake

Table 3 : Queensland coal – Operating mines 2014–15

Name	Saleable (t) 2014–15	Coal type	Comments	Mine/Site contact
• Rio Tinto Coal Australia Pty Limited ph: +61 7 3361 4200 www.riotinto.com www.riotintocoalaustralia.com.au (Australian operations)				
Hail Creek Bowen Basin	9 502 986	●		Hail Creek Mine ph: +61 7 4940 5711
Kestrel* Bowen Basin	3 379 838	●		
• Vale Australia Pty Ltd ph: +61 7 3136 0500 www.vale.com/australia				
Carborough Downs* Bowen Basin	2 820 349	● ●		Carborough Downs Mine ph: +61 7 4958 0800
• Glencore plc ph: +61 2 6570 2416 www.glencore.com (Global) Glencore Coal Pty Limited www.xstratacoal.com (Australia coal operations)				
Clermont Bowen Basin	12 251 401	●		Clermont Mine ph: +61 7 4980 2500
Collinsville Bowen Basin	3 444 439	● ●		Collinsville Mine ph: +61 7 4785 4580
Newlands Bowen Basin – Northern Underground*, Wollombi, Eastern Creek, Suttor Creek open-cut operations	6 657 776	● ● ●		Newlands Reception ph: +61 7 4940 5200
Oaky Creek Bowen Basin – Oaky Creek No.1*, Oaky North* mines	6 489 484	●		Oaky Creek Reception ph: +61 7 4984 7200
Rolleston Bowen Basin	10 517 938	●		Rolleston Mine ph: +61 7 4988 9101
• Yancoal Australia Ltd ph: +61 7 2 8583 5300 www.yancoal.com.au				
Cameby Downs Surat Basin	1 525 083	●		Cameby Downs Mine ph: +61 7 4665 8600
Yarrabee Bowen Basin	3 058 317	● ●		Yarrabee Mine ph: +61 7 4982 7730
• Other companies operating coal mines in Queensland				
Baralaba Bowen Basin	774 219	● ●	Cockatoo Coal Pty Ltd www.cockatoocoal.com.au	Baralaba Mine ph: +61 7 4837 6600
Commodore Clarence Moreton Basin	3 527 723	●	Millmerran Operating Company Pty Ltd www.intergen.com	Commodore Mine ph: +61 7 4612 0503
Cook* Bowen Basin	577 999	● ●	Caledon Coal Pty Ltd www.caledon.com.au	Cook Mine ph: +61 7 4986 1500
Curragh Bowen Basin	12 244 395	● ● ●	Wesfarmers Resources Limited www.wesresources.com.au	Curragh Mine ph: +61 7 4986 9211
Ensham** Bowen Basin	3 733 425	●	Ensham Resources Pty Ltd www.idemitsu.com.au Includes production from Ensham underground	Ensham Mine ph: +61 7 4987 3601
Isaac Plains Bowen Basin	1 196 746	● ●	Stanmore Coal Limited www.stanmorecoal.com.au Coal production ceased January 2015 (economic grounds) under previous ownership. Sale of mine to Stanmore Coal Limited (announced 30 July 2015) finalised Q4 2015. Mine re-commenced production April 2016 under new ownership at a reduced rate of ~1.1 Mt/a of saleable coal	Isaac Plains Mine ph: +61 7 4816 7400
Jellinbah East Bowen Basin	4 532 332	● ● ●	Jellinbah Mining Pty Ltd www.jellinbah.com.au	Jellinbah East Mine ph: +61 7 4980 1000
Kogan Creek Surat Basin	2 660 646	●	CS Energy Ltd www.csenergy.com.au	Kogan Creek Mine ph: +61 7 4665 2177
Lake Vermont Bowen Basin	8 388 484	● ● ●	Jellinbah Group www.jellinbah.com.au	Lake Vermont Mine ph: +61 7 4968 4716
Meandu Tarong Basin	3 429 513	●	Stanwell Corporation Limited www.stanwell.com	Meandu Mine ph: +61 7 4160 7211
Minerva Bowen Basin	2 437 431	●	Sojitz Corporation www.sojitz.com	Minerva Mine ph: +61 7 4984 1999
Sonoma*** Bowen Basin	4 157 503	● ●	QCoal Pty Ltd www.qcoal.com.au	Sonoma Mine ph: +61 7 4785 4800
Total	243 676 997			

* Underground coal mine

● coking coal ● PCI coal ● thermal coal

** Includes production from underground operation

*** Includes production from Drake