BREE's list of major minerals and energy projects

Note: Projects that are under construction or committed are shown in the blue shaded areas. Less advanced projects are shown in the yellow shaded areas.

m	α .	T	G: ·	Expected	N G	Capital	Employmen	
Project Black coal — mining	Company b projects — NS	Location W	Status c	Startup	New Capacity	Expend. e	t f	
Austar underground (stage 3)	Yancoal Australia	6 km SW of Cessnock	Expansion, under construction	2014	2 Mt ROM coking	\$250m	60 275	C O
Bengalla expansion (stage 1)	Wesfarmers / Rio Tinto	Muswellbrook	Expansion, under construction	mid 2012	1.5 Mt ROM	US\$184m (A\$180m)		
Boggabri opencut	Idemitsu Kosan	17 km NE of Boggabri	Expansion, under construction	2014	3.3 Mt thermal	\$400m	150 500	C O
Hunter Valley Operations Expansion	Rio Tinto / Mitsubishi	24 km N of Singleton	Expansion, under construction	2012	6 Mt thermal and semi soft coking	US\$260m (A\$255m)		
Metropolitan longwall	Peabody Energy	30 km N of Wollongong	Expansion, under construction	2013	1 Mt hard coking	US\$70m (A\$69m)	50	C
Mount Arthur (RX1)	BHP Billiton	5 km SW of Muswellbrook	New project, under construction	2013	4 Mt thermal (ROM)	\$US400m (A\$392m)	300	0
Narrabri Coal Project (stage 2)	Whitehaven	20 km SE of Narrabri	Expansion, under construction	2012	4.5 Mt thermal	\$300m	80 65	0
NRE No. 1 Colliery (preliminary works project)	Gujarat NRE Coking Coal	8 km N of Wollongong	Expansion, under construction	2015	nil (mine upgrade)	\$122m	13	C
Ravensworth North	Xstrata	18 km NW of Singleton	Expansion, under construction	2013	8 Mt thermal and semi soft	US\$1.4b (A\$1.37b)	550 500	0
Ulan West	Xstrata	Mudgee	Expansion, under construction	2014	7 Mt thermal	US\$1.1b (A\$1.08b)	270 350	0
Appin Area 9	BHP Billiton	Wollongong	Expansion, feasibility study under way	2016	4 Mt coking	na		
Bengalla expansion (stage 2)	Wesfarmers / Rio Tinto	Muswellbrook	Expansion, feasibility study under way	na	1.4 Mt ROM	na		
Bulga optimisation	Xstrata	12 km S of Singleton	Expansion, feasibility study under way	2013	5 Mt thermal	na		
Coalpac consolidation (Cullen Valley and Invincible mines)	Coalpac	25km NW of Lithgow	Expansion, govt approval under way	2015	3.5 Mt thermal	na		
Cobbora	Macquarie Generation / Delta	22 km SW of Dunedoo	New project, EIS under way	2015	12 Mt thermal	\$1.3b	930 516	(
Drayton South	Anglo Coal Australia	13 km S of Muswellbrook	Expansion, feasibility study under way	2016	7 Mt thermal and semi- soft coking	na	500 59	(
Duralie Extension project	Gloucester Coal	20 km S of Stratford	Expansion, EIS under way	2014	1.6 Mt thermal and coking	na	135	(
Maules Creek	Aston Resources	360 km NW of Newscastle	New project, EIS under way	2013	10.8 Mt semi-soft coking and thermal	\$651m		
Moolarben (stage 2)	Yancoal Australia	40 km SE of Mudgee	Expansion, EIS under way	na	10 Mt	\$120m	122	(
Mount Pleasant Project	Rio Tinto / Mitsubishi	6 km NW of Muswellbrook	New project, feasibility study	na	10.5 Mt thermal	\$1.3b	700 300	(
								(

NRE No. 1 Colliery	Gujarat NRE Coking Coal	8 km N of Wollongong	Expansion, awaiting govt approval	2014	increase to 3.2 Mt coking coal	\$250m	65 350	C O
South East opencut	Yancoal Australia	14 km NW of Singleton	Expansion, govt approval not granted,	na	3 Mt thermal	\$290m	100 160	c o
Tarrawonga	Whitehaven	15 km NE of Boggabir	Expansion, EIS under way	na	1 Mt	\$65m		
United (open cut)	Xstrata	16 km W of Singleton	Expansion, feasibility study under way	na	4 Mt	na		
United (underground)	Xstrata	16 km W of Singleton	Expansion, feasibility study under way	na	3 Mt	na		
Vickery	Whitehaven	20 km SE of Boggabri	New project, feasibility study under way	late 2013	4.5 Mt ROM	na		
Wallarah underground longwall	Korea Resources Corp / Sojitz Corp	NW of Wyong	New project, govt approval not granted,	na	5 Mt thermal	\$700m	2989 300	C O
Wambo	Peabody Energy	30 km W of Singleton	Expansion, feasibility study under way	2014	3 Mt thermal and semi- soft coking	na		
Warkworth extension	Rio Tinto	15 km SW of Singleton	Expansion, feasibility study under way	2017	nil (continuation of mining operations)	\$629m	148	0
Watermark	Shenhua Energy	near Gunnedah	New project, govt approval under way	na	10 Mt thermal (ROM)	na		
West Wallsend Colliery	Xstrata / Oceanic Coal Australia	Lake Macquarie	Expansion, EIS under way	na	5.5 Mt ROM	na	394	0
Wongawilli Colliery	Gujarat NRE Coking Coal	12 km W of Port Kembla	Expansion, awaiting govt approval	2016	2-3 Mt coking coal	\$82m	15 250	C O

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Desired	G	Location	64-4	Expected	N C	Capital	Employmen t f	
Project Black coal — minin	Company b		Status c	Startup	New Capacity	Expend. e	ιı	
Broadmeadow (mine	BHP Billiton	30 km N of	Expansion, under	2013	0.4 Mt coking	US\$900m		
life extension)	Mitsubishi Alliance (BMA)	Moranbah	construction	2013	or me coming	(A\$882m)		
Burton	Peabody Energy	150 km SW of Mackay	Expansion, under construction	late 2012	2-3 Mt hard coking	na		
Caval Ridge / Peak Downs expansion	BHP Billiton Mitsubishi	20 km SW of Moranbah	New project, under construction	2014	8 Mt coking	US\$4.2b (A\$4.1b)	1200 500	C O
Curragh Mine	Wesfarmers	200 km W of Rockhampton	Expansion, under construction	mid 2012	increase to 8.5 Mt	\$286m		
Daunia	BHP Billiton Mitsubishi	25 km SE of Moranbah	New project, under construction	2013	4.5 Mt coking	US\$1.6b (A\$1.55b)	450 300	C O
Eagle Downs (Peak Downs East underground)	Aquila Resources / Vale	20 km SE of Moranbah	New project, under construction	2016	4.5 Mt coking	\$1.25b		
Ensham bord and pillar underground mine	Ensham Resources	40 km NE of Emerald	Expansion, under construction	mid 2012	1.7 Mt thermal	\$166m	80 160	C O
Grosvenor underground	Anglo Coal Australia	8 km N of Moranbah	New project, under construction	2013	5 Mt hard coking	US\$1.7b (A\$1.66b)	500 450	C O
Kestrel	Rio Tinto	51 km NE of Emerald	Expansion, under construction	2013	1.3 Mt coking	US\$2b (A\$1.96b)		
Lake Vermont	Jellinbah Resources	60 Km SE of Moranbah	Expansion, under construction	2013	4 Mt	\$200m	1500 100	C O
Millennium expansion	Peabody Energy	22 km E of Moranbah	Expansion, under construction	2013	1-2 Mt coking	US\$275m (A\$270m)	160	С

Actryus	Bandanna Energy	40 km SE of Emerald	New project, EIS under way	2013	5 Mt thermal (ROM)	na	300 150	C O
Alpha Coal Project	GVK / Hancock Coal	120 km SW of Clermont	New project, EIS under way	2015	30 Mt thermal	\$7.5b (inc. mine, port and rail)	2500 1600	C O
Baralaba expansion	Cockatoo Coal	150 km W of Gladstone	Expansion, feasibility study under way	2014	3.5 Mt of PCI and thermal	\$350m		
Belvedere underground	Aquila Resources / Vale	160 km W of Gladstone	New project, on hold	2016	7 Mt hard coking	\$2.8b	500 500	C O
Bundi Coal Project	MetroCoal	20 km SW of Wandoan	New project, feasibility study under way	2017	5 Mt thermal	na		
Byerwen Coal Project	QCoal / JFE Steel Corporation	100 km S of Collinsville	New project, feasibility study under way	2014	10 Mt coking	na		
Carmichael Coal Project	Adani	160 km NW of Clermont	New project, EIS under way	2014	up to 60 Mt of thermal	\$6.8b		
China First Coal project (Waratah	Waratah Coal	450 km W of Rockhampton	New project, awaiting govt	na	up to 40 Mt thermal	\$8b	6000 1500	C O
Codrilla	Copabella & Moorvale Joint Venture	62 km SE of Moranbah	New project, EIS under way	2015	2.5 Mt PCI	na		
Collinsville open cut	Xstrata	77 km S of Collinsville	Expansion, prefeasibility study under way	2013	6 Mt	na		
Colton	New Hope Coal / Northern Energy	11km N of Maryborough	New project, EIS under way	2014	0.5 Mt coking	\$84m	100 100	C O
Curragh North	Wesfarmers	200 km W of Rockhampton	Expansion, feasibility study under way	2014	1.5 Mt coking	na		
Dawson South (stage 2)	Anglo Coal Australia / Mitsui	15 km NW of Theodore	Expansion, EIS under way	na	5–7 Mt thermal (ROM)	na		
Denham	Peabody Energy	160 km W of Mackay	New project, feasibility study under way	2014	5-6 Mt coking	na		
Dingo West	Bandanna Energy	150 km SW of Rockhampton	New project, feasibility study completed	2013	1 Mt PCI	\$134m		
Drake Coal project	Q Coal	17 km S of Collinsville	New project, EIS under way	na	6 Mt	na		
Eaglefield Expansion	Peabody Energy	36 km N of Moranbah	Expansion, feasibility study under way	2013	5.2 Mt coking (ROM)	na	650 700	C O
Elimatta	New Hope Coal / Northern Energy	30 km W of Wandoan	New project, EIS under way	2016	5 Mt thermal	\$580m		
Ellensfield coal mine project	Nebo Central Coal / Vale	175 km W of Mackay	New project, EIS under way	na	4.5 Mt thermal and coking	na		
Foxleigh Plains Project	Anglo Coal Australia	12 km SE of Middlemount	Expansion, EIS under way	na	3.2 Mt PCI	na	90	0
Golden Triangle Complex	Bandanna Energy	150 km NW of Moura	New project, EIS under way	2014	20 Mt thermal	na		
Hail Creek expansion	Rio Tinto	120 km SW of Mackay	Expansion, prefeasibility study under way	na	2.5 Mt hard coking	na		
Jellinbah East	Jellinbah Resources	90 km E of Emerald	Expansion, prefeasibility study under way	2014	1-2 Mt coking	\$50-100m		

Kevin's Corner	GVK	Galilee Basin	New project, feasibility study under way	na	30 Mt thermal	na	2500	С
Middlemount (stage 2)	Macarthur Coal / Noble	6 km SW of Middlemount	Expansion, EIS under way	2013	3.6 Mt semi-hard coking and PCI	\$500m (includes stage 1 and 2)		
Minyango	Caledon Resources	15 km N of Cook	New project, feasibility study under way	2014	4.5 Mt thermal and coking	\$750m		
Monto coal mine (stage 1)	Macarthur Coal / Noble	120 km S of Gladstone	New project, feasibility study under way	na	1.2 Mt thermal	\$35m		
Monto coal mine (stage 2)	Macarthur Coal / Noble	120 km S of Gladstone	Expansion, prefeasibility study under way	na	10 Mt	na		
Moranbah South project	Anglo Coal Australia / Exxaro	4 km S of Moranbah	New project, prefeasibility study under way	2017	14 Mt coking	na	1200	С
New Acland (stage 3)	New Hope Coal	150 km W of Brisbane	Expansion, EIS under way	2014	5.2 Mt thermal coal	na		
New Lenton	New Hope Coal	20 km E of Moranbah	New project, feasibility study under way	2014	3.5 Mt coking	na		
Norwood Coal Mine	MetroCoal	30 km SW of Wandoan	New project, feasibility study under way	2017	6.5 Mt thermal (ROM)	na		
Oaky Creek (phase 2)	Xstrata	90 km NE of Emerald	Expansion, prefeasibility study under way	2015	2 Mt coking	na		
Olive Downs North	Macarthur Coal / CITIC / Sojitz / Marubeni	30 km S of Coppabella	New project, feasibility study under way	2014	1 Mt coking	na		
Orion Downs	Endocoal	60 km SE of Emerald	New project, prefeasibility study under way	2014	2.5 Mt thermal	\$65m		
Rolleston open cut	Xstrata	275 W of Gladstone	Expansion, feasibility study under way	2014	6 Mt thermal	na		
Sarum	Xstrata	20 km S of Collinsville	New project, EIS under way	2014	4 Mt	na		
South Galilee Coal Project	Bandanna Energy	150 km NE of Blackall	New project, prefeasibility study completed	2015	13.6 Mt	na	1280	0
Springsure Creek	Bandanna Energy	36 km SE of Emerald	New project, feasibility study under way	na	11 Mt thermal (ROM)	\$1.1b		
Talwood Coking Coal Project	Aquila Resources	45 km N of Moranbah	New project, prefeasibility study under way	2014	4.4 Mt PCI and thermal (ROM)	na		
The Range Project	Stanmore Coal	24 km SE of Wandoan	New project, prefeasibility study under way	2015	5 Mt thermal	\$500m	500	0
Vermont East/Wilunga	Macarthur Coal / CITIC	75 km NE of Clermont	New project, prefeasibility study completed	2014	4 Mt ROM	na		
Wandoan opencut (phase 1)	Xstrata / Itochu / Sumisho Coal	60 km N of Miles	New project, govt approval received	2015	22 Mt thermal	na	1375 844	C O
Washpool coal project	Aquila Resources	260 km W of Rockhamption	New project, EIS under way	2014	2.6 Mt coking	\$368m	400 300	C O

Wilkie Creek	Peabody Energy	40 km W of Dalby	Expansion, EIS under way	2013	7.7 Mt thermal	na			
Winchester South	Rio Tinto	40 km S of Moranbah	New project, prefeasibility study under way	na	4 Mt of coking and thermal	na			
Wonbindi	Cockatoo Coal	180 km W of Gladstone	New project, prefeasibility study under way	na	3 Mt PCI and thermal	na			
Wongai Project	Aust-Pac Capital	150km NW of Cooktown	New project, govt approval under way	2016	1.5 Mt coking	\$500m	250 200	C O	
Woori	Cockatoo Coal	19 km S of Wandoan	New project, feasibility study under way	2013	3-3.5 Mt thermal coal	na			

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Project Black coal — minin	Company b g projects — WA	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Duchess Paradise	Rey Resources	150 km SE of Derby	New project, feasibility study under way	2014	2.5 Mt thermal	\$199m	300	0

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Project	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Black coal — infrast	ructure projects	s — NSW						
Kooragang Island project 145	Port Waratah Coal Services	Newcastle	Expansion, under construction	late 2012	Capacity increase of 12 Mt to 145 Mt	\$227m		
Minimbah Bank Third Rail Line (stage 2)	Australian Rail and Track Corporation	Maitland to Minimbah (23km)	Expansion, under construction	2012	na	\$363m	250	С
NCIG export terminal (Newcastle Coal Infrastructure Group) (stage 2)	NCIG	Newcastle	Expansion, under construction	2013	23 Mtpa	\$900m	600	C
NCIG export terminal (Newcastle Coal Infrastructure Group) (stage 3)	NCIG	Newcastle	Expansion, under construction	2014	13 Mtpa	\$1b		
Nundah Bank 3rd Road (rail)	Australian Rail and Track Corporation	Singleton to Muswellbrook	Expansion, under construction	2013	na	\$80m	50	С
Kooragang Island T4	Port Waratah Coal Services	Newcastle	Expansion, prefeasibility study completed	2015	120 Mtpa	up to \$5b		
Liverpool Range rail project	Australian Rail and Track Corporation	Willow Tree to Murrurundi (30 km)	Expansion, feasibility study completed	2014	28-35 Mtpa	\$284m	150	C
Muswellbrook Junction	Australian Rail and Track Corporation	Muswellbrook	Expansion, feasibility study under way	2013	na	\$40m		
Port Holding Roads (stage 1 and 2)	Australian Rail and Track Corporation	Newcastle	Expansion, feasibility study under way	2013	na	\$90m	50	C

Project Black coal — infrasti	Company b	Location ts — Qld	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Blackwater System Power upgrade	QR National	Blackwater	Expansion, under construction	late 2012	9 Mtpa	\$195m		
Goonyella to Abbot Pt (rail) (X50)	QR National	North Goonyella to Newlands (70 km)	Expansion, under construction	mid 2012	50 Mtpa	\$1.1b	700	C

GSE 140 (rail)	QR National	Bowen Basin to Mackay	Expansion, under construction	2014	11 Mtpa	\$185m		
Hay Point Coal Terminal (phase 3)	BHP Billiton Mitsubishi Alliance (BMA)	20 km S of Mackay	Expansion, under construction	2014	Port capacity increase from 44 Mtpa to 55 Mtpa	US\$2.5b (A\$2.4b) excl. pre FID funding		
Wiggins Island Coal Terminal (stage 1)	Wiggins Island Coal Export Terminal	Gladstone	New project, under construction	2014	27 Mtpa	\$2.4b	800	С
Wiggins Island rail project	QR National	Gladstone	New project, under construction	2015	27 Mtpa	\$900m		
Abbot Point Coal T2	BHP Billiton	Bowen	Expansion, EIS under way	2016	60 Mtpa	na		
Abbot Point Coal T3	GVK	Bowen	Expansion, EIS under way	na	60 Mtpa	na		
Abbot Point Coal Terminal T4-9 expansion	various consortia	Bowen	Expansion, on hold	na	180 Mtpa	na		
Abbot Point T0	Adani	Bowen	Expansion, EIS under way	2017	25 Mtpa (2014) further 10 Mtpa (2017)	na		
Balaclava Island coal terminal	Xstrata	50 km N of Gladstone	New project, EIS under way	2015	35 Mtpa	\$1.5b	800 100	C O
Dudgeon Point	NQBP / Adani	40 km N of Mackay	New project, EIS under way	2017	180 Mtpa	\$10-12b		
Fitzroy Terminal	Mitchell Group	50 km S of Rockhampton	New project, EIS under way	2015	up to 22 Mtpa	\$1.2b (22 Mtpa)	350 195	C O
Moura Link - Aldoga Rail	QR National	Moura/Surat to Mount Larcom	New project, EIS completed	2013	na	\$1b	350 550	C O
Surat Basin Rail (Southern Missing Link)	Queensland Rail / ATEC / Xstrata Coal	Wandoan to Theodore (210 km)	New project, feasibility study under way	2015	42 Mtpa haulage capacity ultimately	na	1500	C
Tenement to Terminal (3TL)	Metro Coal / 3TL	Gladstone	New project, EIS under way	2017	25-50 Mtpa	na		
Wiggins Island Coal Terminal (stage 2)	Wiggins Island Coal Export	Gladstone	New project, EIS under way	2016	27 Mtpa	na	600 225	C O
Wiggins Island Coal Terminal (stage 3)	Wiggins Island Coal Export	Gladstone	New project, EIS under way	2020	27 Mtpa	na	480 300	C O

Project	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Coal seam gas	1							
Blackwater/Norwich Park CSG project	Bow Energy	Bowen Basin, Qld	New project, EIS under way	2015	na	na		
Camden Gas Project (stage 2)	AGL	Camden, NSW	Expansion, on hold	na	12 PJ pa	\$35m	35 3	C O
Camden Gas Project (stage 3)	AGL	Camden, NSW	Expansion, on hold	na	na	\$100m	60	C O
Casino project	Metgasco	Casino, NSW	New project, on hold	na	18 PJ pa	na	150 100	C O
Gloucester Coal Seam gas project	AGL	Hunter Valley, NSW	New project, on hold	2016	15-25 PJ pa	\$200m	100-150 30-40	C O
Narrabri coal seam gas project	Eastern Star Gas / Santos	Narrabri, NSW	New project, on hold	na	20 PJ pa (initally) (150 PJ pa ultimately)	\$1.3b	500 200	C O
Surat Gas Project	Arrow Energy	Surat Basin, Qld	New project, EIS under way	2016-18	180-360 PJ pa	na		

Project Petroleum — oil and	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Australia Pacific LNG		Surat/Bowen basins/Gladstone, Qld	New project, under construction	2016	4.5 Mt LNG	US\$14b (A\$13.7b)	6000 1000	C O
Balnaves	Apache Energy / KUFPEC	NW of Dampier, WA	New project, under construction	2014	30 kbpd	US\$438m (A\$429m)		
BassGas (Yolla Mid Life Enhancement)	Origin/AWE/ Calenergy Gas	Bass Strait, Tas	Expansion, under construction	late 2012	field life extension	\$460m		
Coniston (tie back to Van Gogh)	Apache Energy / Inpex	50 km N of Exmouth, Carnarvon Basin, WA	Expansion, under construction	2013	22 kbpd	US\$537m (A\$526m)		
Fletcher-Finucan	Santos / Kufpec / Nippon Oil / Tap Oil	Carnarvon Basin, WA	New project, under construction	2013	12 kbpd	\$490m		
Gladstone LNG project	Santos / Petronas / Total / Kogas	Gladstone, Qld	New project, under construction	2015	7.8 Mt LNG	US\$16b (A\$15.6b)	5000 1000	C O
Gorgon LNG	Chevron / Shell / ExxonMobil	Barrow Island, WA	New project, under construction	2015	15 Mt LNG, 110 PJ pa domestic gas	\$43b	3000 600	C O
Greater Western Flank	Woodside Energy / BHP Billiton / BP / Chevron / Shell / Japan Australia LNG	Carnarvon Basin, WA	Expansion, under construction	2016	nil (maintain throughput at NWS)	US\$2.4b (A\$2.35b)		
Ichthys gasfield (incl Darwin LNG plant)	Inpex Holdings / Total	Browse Basin (440 km N of	New project, under construction	2017	8.4 Mt LNG, 100 kbpd condensates, 1.6	US\$34b (A\$33.3b)	4000 700	C O
Kipper gas project (stage 1)	Esso / BHP Billiton / Santos	42 km offshore Gippsland, Vic	New project, under construction	2012	30 PJ pa gas, 10 kbpd condensate	US\$1.8b (A\$1.77b)		
Macedon	BHP Billiton / Apache Energy	100 km W of Onslow, WA	New project, under construction	2013	75 PJ pa gas	US\$1.5b (A\$1.47b)	300	C
Montara/Skua oilfield	PTTEP	Timor Sea, 650 km W of Darwin, NT	New project, under construction	late 2012	35 kbpd oil	US\$700m (A\$686m)		
NWS North Rankin B	Woodside Energy / BHP Billiton / BP / Chevron / Shell / Japan Australia LNG	150 km NW of Dampier, Carnarvon Basin, WA	Expansion, under construction	2013	967 PJ pa gas	\$5.1b (A\$5b)		
Prelude (floating LNG)	Shell	Browse Basin, WA	New project, under construction	2016	3.6 Mtpa LNG, 32 kbpd condensate, 0.4 Mtpa LPG	na	350	o
Queensland Curtis LNG project	BG Group	Gladstone, Qld	New project, under construction	2014	8.5 Mt LNG	US\$20.4b (A\$20b)	5000 1000	C O
Spar	Apache Energy / Santos	120 km N of Onslow, WA	New project, under construction	2013	18 PJ pa	US\$120m (A\$118m)		
Turrum	ExxonMobil / BHP Billiton	Bass Strait, Vic	New project, under construction	2013	11 kbpd condensate, 77 PJ pa gas	US\$2.7b (A\$2.64b)		
Wheatstone LNG	Chevron / Apache / KUFPEK / Shell	145 km NW of Dampier,	New project, under construction	2016	8.9 Mt LNG	US\$29b (A\$28.4b)	5000 400	C O
Arrow Energy LNG	Shell / Petro China	Gladstone, Qld	New project, FEED studies under way	2017	8 Mt of LNG	na	2500-3000 200-300	C O
Australia Pacific LNG	APLNG (Origin / ConocoPhillips/ Sinopec)	Surat/Bowen basins/Gladstone, Qld	New project, awaiting FID	2017	4.5 Mt LNG	US\$6b (A\$5.89b)		

Bonaparte LNG (floating)	Santos / GDF Suez	Bonaparte Basin, NT	New project, prefeasibility study under way	2018	2 Mt LNG	na		
Browse LNG	Woodside Energy	60 km N of	New project, FEED	2017	12 Mt LNG	na		
Condensate processing facility	Darwin Clean Fuels	Darwin, NT	New project, feasibility study	2015	processing 60 kbpd of condensate to produce		300 90	C O
Crux liquids project	Shell / Nexus Energy / Osaka gas	Timor Sea, 600 km N of Broome; 700 km W of Darwin, NT	New project, FEED studies completed	na	39 kbpd condensate at peak	US\$1.3b (A\$1.25b)		
Fisherman's Landing LNG project (train 1)	LNG Ltd	Gladstone, Qld	New project, FEED studies underway, environmental approval received	na	1.5 Mt LNG	US\$1.1b (A\$1.08b)		
Fisherman's Landing LNG project (train 2)	LNG Ltd	Gladstone, Qld	Expansion, FEED studies underway, environmental approval received	na	1.5 Mt LNG	US\$1.1b (A\$1.08b)		
Gorgon LNG T4	Chevron / Shell / ExxonMobil	Barrow Island, WA	Expansion, EIS under way	na	5 Mt LNG	na		
Kipper gas project (stage 2)	Esso / BHP Billiton / Santos	42 km offshore Gippsland, Vic	Expansion, feasibility study under way	2016	27 PJ pa	na		
Pluto (train 2 and 3)	Woodside Energy	Carnarvon Basin/ Burrup Peninsula, WA	Expansion, FEED studies completed	na	2 x 4.3 Mt LNG	na		
PTTEP (floating LNG)	PTTEP	Timor Sea, 680km W of Darwin, NT	New project, pre- FEED, seeking government approvals	na	2 Mt LNG	na		
Scarborough Gas	ExxonMobil /	280 km NW of	New project,	na	6 Mt LNG	na		
Sunrise Gas project	Woodside Energy / ConocoPhillips /	Timor Sea, 500 km NW of	New project, govt approval under way	na	4.1 Mtpa of LNG, 29 kbpd condensate	na	1000 100	C O
Tassie Shoal methanol project	MEO Australia	Timor Sea, 275 km NW of	New project, prefeasibility study	na	Phase 1: 1.75 Mt; Phase 2: 1.75 Mt	na	500 110	C O
Timor Sea LNG project	MEO Australia	Timor Sea, 275 km NW of	New project, prefeasibility study	na	3 Mt LNG	US\$2.1b (A\$2.06b)	500 110	C O
West Seahorse	3D Oil	Bass Strait, Vic	New project, FEED studies under way	na	na	US\$80m (A\$78m)		

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Project	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Petroleum — gas pij	peline projects			•		•		
Goldfields pipeline expansion	Australian Pipeline Group	Pilbara, WA	Expansion, under construction	2014	16 PJ pa	\$150m		
Moomba to Sydney	Australian Pipeline Group	Moomba (SA) to Sydney (NSW), NSW	Expansion, under construction	2013	na	\$100m		
Roma to Brisbane	Australian Pipeline	Roma to Brisbane	Expansion, under	2012	10 PJ pa	\$50m		
Central Queensland gas pipeline	Arrow Energy / AGL	Moranbah to Gladstone (440	New project, govt approval received	na	20–50 PJ pa	\$475m	250 10	C O
Dampier-Bunbury gas pipeline (DBNGP) expansion (stage 5C)	DBP	Dampier to Bunbury, WA	Expansion, feasibility study under way	na	100 PJ pa (total)	\$800m		
Gloucester Coal Seam Gas pipeline	AGL	Gloucester to Hexham (98 km), NSW	New project, EIS under way	na	15-22 PJ pa	\$50-80m	100	С

Great Northern Pipeline	Buru Energy	Broome to Port Hedland (550 km), WA	New project, pre FEED studies under way	na	up to 90 PJ pa	\$500m			
Lions Way pipeline	Metgasco	Casino to Ipswich	New project, EIS	na	27 PJ pa	\$120m	50-60	C	
Newstead to Bulla Park pipeline	Australian Pipeline Group	Newstead (Qld) to Bulla park	New project, feasibility study	na	na	\$500m	350 4-6	C O	
Queensland–Hunter gas pipeline	Hunter Gas Pipeline	Wallumbilla (Qld) to Newcastle	New project, govt approval received	na	85 PJ pa	\$900m	600 25	C O	
Surat Basin to	Arrow Energy	Surat Basin to	New project,	2016-17	180-360 PJ pa	\$600m			
Wellington Power Station Pipeline	ERM Power	Young to Wellington, NSW	New project, govt approval received	2014	na	\$200m	60 5	C O	

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			_	Expected		Capital	Employmen	
Project	Company b	Location	Status c	Startup	New Capacity	Expend. e	t f	
Uranium								
Bigrlyi	Energy Metals / Paladin Energy	329 km NW of Alice Springs, NT	New project, prefeasibility study completed	na	0.6 kt U3O8, 0.55 kt V2O5	\$270m		
Four Mile	Quasar Resources	550 km N of	New project, on hold	na	2.3 kt U3O8	\$210m		
Kintyre	Cameco / Mitsuibishi	90 km south of Telfer, WA	New project, prefeasibility study	na	2.7-3.6 kt U3O8	na	600 250	C O
Lake Maitland	Mega Uranium / JAURD / Itochu	130 km SE of Wiluna, WA	New project, prefeasibility study	2013	1 kt U3O8	na	450 180	C O
Mulga Rock	Energy and Minerals Australia	250 km NE of Kalgoorlie, WA	New project, prefeasibility study completed	2014	1.2 kt U3O8	\$260m		
Valhalla	Summit Resources / Paladin Resources	25 km N of Mt Isa, Qld	New project, on hold	na	2.7 kt U3O8 initially; 4.1 kt U3O8 eventually	\$400m		
Westmoreland	Laramide	156 km NW of	New project, on hold	na	1.36 kt U3O8	\$317m		
Wiluna Uranium Project	Toro Energy	17 km SE of Wiluna, WA	New project, EIS under way	late 2013	0.8 kt U3O8	\$280m	350 170	C O
Yeelirrie	BHP Billiton	500 km N of Kalgoorlie, WA	New project, on hold	na	3.5 kt U3O8	na	650 300	C O

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Mining projects -	– minerals a							
Project Bauxite	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Bauxite Hills	Cape Alumina	95 km N of Weipa, Qld	New project, prefeasibility study completed	2014	2 Mt intially, 10 Mt ultimately	\$200-250m (initally)		
North Bindoon	Bauxite	Darling Range,	New project,	na	2 Mt bauxite	na		
Pisolite Hills	Cape Alumina	45 km N of Weipa, Qld	New project, on hold	na	7 Mt bauxite	na	500 350	C O
South of Embley project	Rio Tinto Alcan	45 km SW of Weipa, Qld	Expansion, EIS under way	2014	22.5 Mt bauxite	US\$1.45b (A\$1.42b)	630 500	C O

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Project Copper	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
DeGrussa	Sandfire	900 km NE of	New project, under	late 2012	77 kt Cu, 36 koz Au	\$390m	250	C
Ernest Henry underground	Xstrata	near Cloncurry, Qld	Expansion, under construction	2013	50 kt Cu, 70 koz Au	\$589m	330 400	C O
Rocklands Copper	CuDeco	NW of Cloncurry,	New project, under	2012	3 Mt of ore	\$250m		

Cloncurry Copper project	Xstrata	near Cloncurry, Qld	New project, feasibility study / EIS	na	25 kt Cu, 19 koz Au	\$200m	200 70	C O
Copper Hill project	Golden Cross Resources	5 km N of Molong, NSW	New project, scoping study completed	na	2 Mtpa throughput	\$155m	250	0
Einasleigh Copper project	Kagara	65 km SE of Georgetown, Qld	New project, feasibility study completed	2014	15 kt Cu, 3500 oz Au, 500 koz Ag	\$108m		
Hillside	Rex Minerals	Yorke Peninsula, SA	New project, prefeasibility study under way	na	100 kt Cu	\$700-900m		
Jervois	Kentor Gold	250 km NE Alice Springs, NT	New project, feasability study under way	na	16 - 26 kt Cu	\$234m- \$310m		
Kalkaroo	Havilah Resources	91 km NW of Broken Hill, SA	New project, on hold	na	25 kt Cu, 75 koz Au	\$360m		
Little Eva	Altona Mining	60 km NW of Cloncurry, Qld	New project, feasibility study under way	na	34 kt Cu, 15 koz Au	na		
Mount Elliot	Ivanhoe Australia	39 km S of Osborne, Qld	Expansion, prefeasibility study under way	2016-17	108 kt Cu, 152 koz Au (life of mine)	\$95m		
Mt Dore	Ivanhoe Australia	52 km S of Osborne, Qld	New project, feasibility study under way	2014	19 kt Cu cathode	\$83m		
Mutooroo	Havilah Resources	60 km SW of Broken Hill, SA	New project, govt approval under way	na	10 kt of Cu, 1.2 kt of Co, 550 ktpa H2SO4	\$75m		
Northparkes (step change expansion)	Rio Tinto	27 km NW of Parkes, NSW	Expansion, govt approval under way	2015	90 kt of Cu	na		
Olympic Dam optimisation	BHP Billiton	Roxby Downs, SA	Expansion, EIS under way	na	3 Mt ore throughput	na		
Olympic Dam project	BHP Billiton	Roxby Downs, SA	Expansion, EIS under way	na	570 kt Cu, 14.5 kt U3O8, 700 koz Au, 2.1 Moz Ag	na	10000	С
Pilbara VMS Province Project	Venturex Resources	120 km SW of Port Hedland, WA	New project, feasibility study under way	2014	20 kt of Cu, 40 kt of Zn, 3.5 kt Pb, 700 koz Ag			
White Range	QMC	75 km SW of Cloncurry, Qld	New project, feasibility study under way	na	na	na		
Woodlawn Retreatment Project	t TriAusMin	30 km S of Goulburn, NSW	Redevelopment, awaiting govt approval	2014	1.5 Mtpa throughput	\$93m		

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Project	Company b	Location	Status c	Expected	New Capacity	Capital	Employmen	
Gold								
Cadia East	Newcrest	21 km SSW of Orange, NSW	Expansion, under construction	late 2012	700 000-800 000oz Au and 100kt Cu	\$1.9b	1300 800	C O
Cosmo Deeps	Crocodile Gold	150km S of Darwin, NT	New project, under construction	late 2012	100 000 oz	na		
Duketon (Garden Well)	Regis Resources	95km N of Laverton, WA	Expansion, under construction	2012	180 000 oz	\$109m		
HBJ (SKO expansion	Alacer Gold	30 km S of	Expansion,	2013	100 000 oz	\$25m		
Mt Carlton (Silver Hill)	Evolution Mining	45 Km NW of Collinsville, Qld	New project, under construction	2013	95 000 oz Au, 1.7Moz Ag, 2.4 kt Cu	\$145m	150 150	C O
Murchison	Silver Lake	600 km NE of Perth, WA	New project, under construction	2014	100 000oz	\$65m		

Murchison	Kentor Gold	50 km S of Meekatharra, WA	Redevelopment, under construction	2012	24 000 oz Au	\$15m		
Nullagine Gold project	Millenium Minerals	10 km S of Nullagine, WA	New project, under construction	late 2012	82 000 oz (peak production)	\$87m		
Tanami project	Newmont	600 km NW of	Expansion, under	2015	60 000 - 90 000 oz	\$450m		
Tropicana Joint Venture Project	AngloGold Ashanti/	230 km SE of Laverton, WA	New project, under construction	2013	470 000 - 490 000 oz	\$690-740m	550 450	C O
Agate Creek	Renison Consolidated	80 km S of Georgetown, Qld	New project, feasibility study	2013	100 000 oz	\$60m	100-120 80–90	C O
Andy Well	Doray Minerals	45 km N of Meekatharra, WA	New project, feasibility study under way	2013	na	\$55m	100	0
Aphrodite	Aphrodite	65 km N of Kalgoorlie, WA	New project, scoping study completed	na	84 000 oz Au	\$244m		
Barlee	Beacon Minerals	200km N of Southern Cross, WA	New project, feasibility study under way	na	50 000 oz	\$30m		
Bullabulling	Bullabing Gold	65km SW of Kalgoorlie, WA	Redevelopment, feasibility study under way	2015	230 000 oz	\$366m		
Bundarra	SR Mining	60 km N of Leonora, WA	Expansion, on hold	na	91 500 oz (over life of project)	\$25m		
Carosue Dam (Red October)	Saracen Minerals	110 km NE of Kalgoorlie, WA	Expansion, feasibility study under way	2013	130 000 - 140 000 oz	\$40m	20 100	C O
Central Murchison	Westgold Resources	W of Cue, WA	Redevelopment, feasibility study under way	2016	120 000 oz	\$100m		
Central Tanami	Tanami Gold	400 km W of	Redevelopment, on	na	70 000oz	\$35m		
Charters Towers	Citigold	Charters Towers, Qld	Expansion, awaiting final investment	na	310 000oz	\$230m	110 380	C O
Chillagoe (Mungana / Red Dome)	Mungana Gold Mines	16 km NW of Chillagoe, Qld	New project, feasibility study under way	na	100 000 oz Au, 10 kt Cu, 1.5Moz Ag	na		
Cowal	Barrick Gold	40 km NE of West Wyalong, NSW	Expansion, prefeasibility study under way	na	400 000 oz (over life of mine)	\$58m	30	0
Edna May underground	Catalpa Resources	Westonia, WA	Expansion, feasibility study under way	2013	50 000 oz	na		
Gullewa (Deflector gold- copper project)	Mutiny Gold	200 km E of Geraldton, WA	New project, feasibility study under way	na	50 000 oz Au, 2kt Cu, 35Koz Ag	\$52m		
Hera	YTC Resources	Nymagee, NSW	New project, awaiting govt approval	na	50 000 oz Au	\$73.5m	50	0
Leonora Gold project	Navigator Resources	30 km NE of Leonora, WA	New project, feasibility study under way	na	53 000 oz	\$35m		
LKK	Carrick Gold	90 km NE of	New project,	na	100 000 oz	na		
Majors Creek	Cortona Resources	12 km S of Braidwood, NSW	New project, govt approval received	2013	50 000 oz	\$42m	100 80	C O
Marda	Southern Cross Goldfields	75km N of Southern Cross, WA	New project, feasibility study under way	2013	31 000 oz	\$55m		

Meekatharra	Reed Resources	S of Meekatharra, WA	Redevelopment, awaiting financing	2012	95 000 oz	\$36m		
Moorilda	Alkane / Newmont	35 km SE of	New project,	2015	na	na		
Mount Morgan tailings project	Norton Gold Fields	38 km SW of Rockhampton,	New project, feasibility study	na	25 000 oz Au	\$30-60m	80 50	C O
Mt Todd	Vista Gold	56 Km NW of Katherine, NT	Expansion, feasibility study under way	na	240 000 oz	US\$676m (A\$663m)	220	0
Norseman Gold project	Matsa Resources	20 km S of Norseman, WA	New project, on hold	na	100 000 oz	\$65m		
Nullagine (Blue Spec)	Northwest Resources	26 km NE of Nullagine, WA	New project, prefeasibility study under way	2013	45 000 - 50 000oz	na		
Paddington	Norton Goldfields	40 km N of	Expansion, feasibility	2013	55 000 oz	\$28m		
Phillips River	Phillips River	18 km SE of Ravensthorpe, WA	New project, on hold	na	360 000 oz Ag, 30 000oz Au, 3.5kt Cu, 2.1 Kt Pb, 2.8kt Zn	\$133m	80–120 80-100	C 0
Ravenswood (Sarsfield open pit)	Resolute Mining	65km E of Charters Towers, Qld	Expansion, feasibility study under way	2013	70 000 oz	\$72m		
Rover 1	Westgold	75km SW of	New project, govt	na	na	na		
Tomingley (Wyoming) gold project	Alkane Exploration	52 km N of Parkes, NSW	New project, awaiting govt	2013	50 000 oz	\$95m	150 70	C O
Tunkilla	Mungana Gold Mines	600km N of Adelaide, SA	New project, feasibility study under way	2015	80 000 oz	\$114m		

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Project	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Iron Ore - mining pr								
Chichester Hub (55- 95Mtpa)	Fortescue Metals Group	Pilbara, WA	Expansion, under construction	late 2012	40 Mt	US\$1.1b (A\$1.08b)		
Hamersley Iron Brockman 4 project (Stage 2)	Rio Tinto	Pilbara, WA	Expansion, under construction	2013	18 Mt	US\$1.1b (A\$1.08b) (inc West Turner Syncline)		
Hope Downs 4	Rio Tinto/Hancock Prospecting	30 km N of Newman, WA	New project, under construction	2013	15 Mt	US\$2.1b (A\$2.0b)		
Horizon 1 (Phase A)	Atlas Iron	Pilbara, WA	New project, under construction	2013	4-5 Mt	\$252m		
Jimblebar mine and	BHP Billiton	Pilbara, WA	New project, under	2014	35 Mt	US\$3.4b		
Karara Project	Gindalbie Metals/Ansteel	220 km E of Geraldton, WA	New project, under construction	late 2012	8 Mt magnetite concentrate, 2 Mt	\$2.6b	500 130	C O
Koolyanobbing	Cliffs Natural Resources	420 km NE of Perth, WA	Expansion, under construction	late 2012	2.5 Mt	\$320m		
Marandoo	Rio Tinto	Pilbara, WA	Expansion, under construction	2014	mine life extension	US\$1.1b (A\$1.08b)		
Nammuldi expansion	Rio Tinto	Pilbara, WA	Expansion, under construction	2014	26 Mt	US\$2.2b (A\$2.16b)		
Orebody 24	BHP Billiton	Pilbara, WA	Expansion, under	late 2012	mine life extension	US\$822m		
Peculiar Knob	Onesteel	90 km SE of Coober Pedy, SA	New project, under construction	late 2012	4 Mt hematite ore	\$170m	180 300	C O
Sino Iron Project	CITIC Pacific Mining	Cape Preston, WA	New project, under construction	late 2012	28 Mt (concentrates and pellets in total)	\$6.1b	4500 800	C O

Solomon Hub (stage I)	Fortescue Metals	Pilbara, WA	New project, under	2013	60 Mt	US\$2.7b		
Western Turner Syncline II	Group Rio Tinto	30 km W of Tom Price, WA	construction Expansion, under construction	2013	9 Mt	(A\$ 2.65b) incl. in Brockman 4		
Wilcherry Hill (stage 1)	Ironclad Mining/Tafford Resources	100 km W of Port Augusta, SA	New project, under construction	late 2012	2 Mt DSO	\$26m	80	0
Balla Balla project (phase I)	Forge Resources	90 km E of Karratha, WA	New project, govt approval received	2013	6 Mt iron concentrates, 280 kt TiO2	\$1.3b		
Balla Balla project (phase II)	Forge Resources	90 km E of Karratha, WA	New project, feasibility study under way	2016	4 Mt iron concentrates, 190 kt TiO2, 7 kt FeV	\$720m		
Balmoral South magnetite project (stage 1)	Australasian Resources	100 km NE of Onslow, WA	New project, feasibility study under review	2017	12 Mt (5 Mt iron concentrate, 7 Mt pellets)	\$3.3b		
Balmoral South magnetite project (stage 2)	Australasian Resources	100 km NE of Onslow, WA	Expansion, feasibility study under review	na	12 Mt (5 Mt iron concentrate, 7 Mt pellets)	na		
Cape Lambert magnetite project	MCC Mining	20 km E of Karatha, WA	New project, government approval	2015	15 Mt concentrates	\$3.7b	3000 1000	C O
East Pilbara Project (Robertson Range and Davidson Creek)	Atlas Iron	Pilbara, WA	New project, feasibility study under way	2014	15 Mt	\$960m		
Eradu Iron Project	Ferrowest	14 km E of	New project,	2014	1 Mt pig iron	\$720m		
Extension Hill magnetite project	Asia Iron Holdings	330 km SE of Geraldton, WA	New project, govt approval received	2014	10 Mt magnetite concentrates	\$2.9b	2000 500	C O
Hardey	Aquila Resources	180 km SW of Pannawonica, WA	New project, prefeasibility study completed	2016	10 Mt	\$1.6b		
Hawks Nest Magnetite Project	Onesteel	115 km S of Coober Pedy, SA	New project, feasibility study under way	2016	6-10 Mt concentrates	\$1b	200	0
Hawsons	Carpentaria Exploration	60 km SW of Broken Hill,	New project, feasibility study	na	5 Mt initally (20Mt ultimately)	\$2.9b		
Irvine Island	Pluton Resources	Irvine Island, WA	New project, feasibility study	2014	17 Mt	\$700m	500 200	C O
Jack Hills project (stage 2)	Crosslands Resources	380 km NE of Geraldton, WA	Expansion, feasibility study under way	2014-15	25-35 Mt	\$2b	450 350	C O
Jinidi	BHP Billiton	Pilbara, WA	New project, feasibility study under way	2014-15	up to 60 Mt	na		
Karara Project	Gindalbie Metals/Ansteel	220 km E of Geraldton, WA	Expansion, feasibility study under way	2015	6 Mt	na		
Marillana	Brockman Resources	100 km NW of Newman, WA	New project, feasibility study completed	2014	17-20 Mt hematite	\$1.9b (incl. 80 km rail spur)		
Mount Ida	Jupiter Mines	230 km NW of Kalgoolie, WA	New project, feasibility study under way	na	10 Mt magnetite	\$1.6b		
Mount Mason	Jupiter Mines	230 km NW of Kalgoolie, WA	New project, feasibility study under way	2013	1.5 Mt (DSO)	\$65m		
Mt Webber	Atlas Iron	Pilbara, WA	New project,	2014	6 Mt	\$420m		
Parker Range iron ore project	Cazaly Resources	300 km W of Perth, WA	New project, environmental	2013	6 Mt	\$164m	750 159	C O

Pilbara Project	Flinders Mines	70 km NW of	New project,	2014	15 Mt	na		
Ridley Magnetite project	Atlas Iron	75 km E of Port Hedland, WA	New project, prefeasibility study	na	15 Mt	\$2.8b	1100 750	C O
Roper River Iron Ore project	Sherwin Iron	325 km SE of Darwin, NT	New project, feasibility study under way	na	4-5 Mt	\$95-180m		
Roy Hill	Hancock Prospecting	Pilbara, WA	New project, early works under way	2014	55 Mt (lump and fines)	na	2500	C
Solomon Hub (stage II)	Fortescue Metals	Pilbara, WA	Expansion, feasibility	na	50 Mt	na		
Southdown Magnetite iron ore project	Grange Resources / Sojitz	90 km NE of Albany, WA	New project, feasibility study	2014	10 Mt concentrates	\$2.9b	2000 600	C O
Weld Range	Sinosteel Midwest	370 km N of Geraldton, WA	New project, on hold	na	15 Mt hematite	\$2b	1020 850	C O
West Pilbara	Aquila Resources / AMCI	Pilbara, WA	New project, feasibility study completed	na	30 Mt hematite	\$5.8b (incl. infrastructu re)		
Wilcherry Hill (stage 2)	Ironclad Mining/Tafford Resources	100 km W of Port Augusta, SA	Expansion, prefeasibility study completed	2014	2-3 Mt concentrates	\$300m		
Wiluna West (stage 1-3)	Golden West	40 km W of	New project,	2016	7-10 Mt hematite	na		
Yandicoogina	Rio Tinto/Hammersley	Pilbara, WA	Expansion, govt approval under way	2013	na	na	800 200	C O
Yilgarn iron ore project (stage 2) (Carina)	Mineral Resources	60 km N of Koolyanobbing, WA	New project, feasibility study under way	2013	5 Mt hematite	\$120-130m		
Yogi Mine Project	Ferrowest	14 km E of Yalgoo, WA	New project, prefeasibility study under way	na	4.5 Mt (1.5 Mt DSO, 3 Mt magnetite)	na		

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Project	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Iron Ore - infrastruc	cture projects			•		•		
Cape Lambert port and rail expansion	Rio Tinto / Robe River	40 km N of Karratha, WA	Expansion, under construction	late 2013	53 Mtpa (to 133Mtpa)	US\$3.1b (A\$3.07b)		
Port (55 - 155 Mtpa)	Fortescue Metals Group	Port Hedland, WA	Expansion, under construction	2013	100 Mtpa	US\$2.4b (A\$2.35b)		
Rail (55 - 155 Mtpa)	Fortescue Metals Group	Pilbara, WA	Expansion, under construction	2013	100 Mtpa	US\$2.2b (A\$2.16b)		
WAIO Inner Harbour	BHP Billiton	Port Hedland, WA	Expansion, under construction	late 2012	increase to 220 Mtpa	US\$2.2b (A\$2.19b)		
WAIO optimisation (port blending and rail yards)	BHP Billiton	Port Hedland, WA	Expansion, under construction	2014	optimisation and efficency gains	US\$1.65b (A\$1.6b)		
Anketell Point port	Fortescue Metals Group / MCC / Aquila	Pilbara, WA	New project, EIS under way	na	30 - 145 Mtpa (initally), up to 350 Mtpa (ultimately)	\$4b		
Cape Lambert port expansion	Rio Tinto / Robe River	40 km N of Karratha, WA	Expansion, feasibility study under way	late 2015	70 Mtpa (to 203Mtpa)	US\$3.2b (A\$3.14b)		
Darwin iron ore berth	Darwin Ports	Darwin, NT	Expansion, feasibility study under way	2013	5-6 Mtpa	\$300m		
Esperance Port	Esperance Port	Esperance, WA	Expansion, feasibility	na	20 Mtpa (to 30 Mtpa)	\$300m		
Oakajee Port & Rail infrastructure	Oakajee Port and Rail (Murchison	20 km N of Geraldton, WA	New project, feasibility study	na	45 Mtpa initally, 100 Mtpa ultimately	\$5.9b	2500 250	C O

Pilbara Independent Rail	QR National / Atlas Iron	Pilbara, WA	New project, feasibility study under way	2015	na	na		
Port Bonython	Spencer Gulf Port Link	Whyalla, SA	New project, EIS under way	2017	up to 50 Mtpa	\$600-700m	400	C
Port Spence (Sheep Hill)	Centrex Metals / WISCO	20 km N of Tumby Bay, SA	New project, feasibility study under way	2014-15	18Mtpa	\$250m		
South West Creek Development	North West Infrastructure	Port Hedland, WA	Expansion, feasibility study under way	2017	50 Mtpa	\$2.7b		
WAIO Outer Harbour	BHP Billiton	Port Hedland, WA	New project, feasibility study under way	2016	100 Mtpa (200 Mtpa ultimately)	na		

Project	Company b	Location	Status c	Expected	New Capacity	Capital	Employmen	
Lead-zinc-silver								
George Fisher mine	Xstrata	Mt Isa, Qld	Expansion, under construction	2013	1 Mt of ores and concentrates	\$310m (inc \$36m surface crusher)	250 120	C 0
Lady Loretta	Xstrata	140 km N of Mt Isa, Qld	New project, under construction	late 2013	126 kt Zn, 40 kt Pb	\$246m	230 230	C O
Potosi (stages 2 and 3)	Perilya	Broken Hill, NSW	Expansion, under construction	early 2013	45 kt Zn, Pb	\$58m		
Admiral Bay	Kagara	250 km S of Broome, WA	New project, prefeasibility study completed	na	846 kt Zn, 1 Mt Pb, 18.97 moz Ag	\$997m		
Bowden's project	Kingsgate	30 km SE of Mudgee, NSW	New project, feasibility study under way	na	na	na		
Browns Sulphide project (expansion of Browns Oxide project)	Compass Resources / Hunan Nonferrous metals	7 km NW of Batchelor, NT	Expansion, on hold	na	230 kt Pb, 35 kt Zn, 20 kt Cu, 5 kt Ni-Co	\$600- 1000m		
Dugald River	Minerals and Metals Group	87 km NE of Mt Isa, Qld	New project, awaiting govt	2014	200 kt Zn, 25 kt Pb, 1 moz Ag	US\$850- 950m	850 550	c o
Flinders Zinc project (Reliance deposit)	Perilya	520 km N of Adelaide, SA	New project, feasibility study under way	na	na	na		
Kempfield	Argent Minerals	80 km SE of Orange, NSW	New project, feasibility study under way	late 2013	82.8 kt Zn, 25.5 kt Pb, 20.8 moz Ag, 0.336 moz Au (life of	\$100m		
Koongie Zinc Copper Project	Anglo Australian	20 km SW of Halls Creek, WA	New project, feasibility study under way	na	43 kt Zn, 33 kt Cu, 7 koz Au, 296 koz Ag (life of mine)	\$59m		
Lennard Shelf	Meridian Minerals	80 km SE of Fitzroy Crossing,	Redevelopment, on hold	na	49 kt Zn, 68 kt Pb	\$219m	350 120	C O
McArthur River (phase 3)	Xstrata	900 km SE of Darwin, NT	Expansion, feasibility study under way	2014	800 kt Zn-Pb in concentrate	\$270m	900 735	C O
North Mine Deeps	Perilya	Broken Hill, NSW	New project, feasibility study under way	na	na	na		
Sorby Hills Lead-Silver Project	Kimberley Metals	50 km N of Kununurra, WA	New project, feasibility study	mid 2013	7.4 Moz Ag, 140 kt Pb, 13 kt Zn	\$100m		
Sulfur Springs Project	Venturex Resources	160 km SE of Pt Hedland, WA	New project, feasibility study	2013	50 kt Zn, 20 kt Cu, 0.5 Mt Pyrite	\$236m	176 160	C O

Webbs Silver Project	Silver Mines	Near Emmaville, NSW	New project, prefeasibility study under way	na	5.2 moz Ag, 1.3 kt Cu, 4 kt Pb, 6.2 kt Zn	\$65m
Woodlawn Retreatment Project	TriAusMin	near Tarago, NSW	Redevelopment, FEED study & EIS under way	2013	151 kt Zn, 27 kt Pb, 25 kt Cu, 36 koz Au, 4 moz Ag (life of project)	US\$66m (A\$65m)

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Project Mineral Sands	Company b	Location	Status c	Expected	New Capacity	Capital	Employmen	
Coburn	Gunson Resources	250 km N of Geraldton, WA	New project, under construction	na	90 kt ilmenite, 40 kt zircon, 9 kt rutile, 7 kt leucoxene	\$180m	200 120	C O
Cyclone	Diatreme Resources	Eucla Basin, WA	New project, prefeasibility study	2015	65 kt zircon, 10 kt HiTi87, 46 kt HiTi67	\$223m		
Donald	Astron Limited	66 km NE of Horsham, Vic	New project, feasibility study under way	na	70 kt zircon, 106 kt ilmenite, 73 kt leucoxene	\$282m	100–120 75	C O
Dongara	Tiwest JV (50% Tronox / 50% Exxaro)	Eneabba, WA	New project, prefeasibility study completed	2015	200 kt ilmenite, 30 kt rutile, 30 kt zircon	na		
Keysbrook	Matilda Zircon	70 km S of Perth, WA	New project, govt approval under way	2013	80 kt of zircon and leucoxene	\$20m	30	o
Prungle	Bemax Resources	90 km E of Mildura, NSW	New project, on hold	na	45 kt rutile, 30 kt zircon, 120 kt ilmenite	na		
Twelve Mile	Bemax Resources	210 km SE of Broken Hill, NSW	New project, on hold	na	250 kt heavy mineral concentrates	na		
Urquhart Point	Metallica Minerals	5km SW of Weipa, QLD	New project, feasibility study under way	2013	na	na		
WIM 150 zircon/ titanium project	Australian Zircon	25 km SE of Horsham, Vic	New project, on hold	2015	140 kt zircon	na		

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Project	Company b	Location	Status c	Expected	New Capacity	Capital	Employmen	
Nickel								
Barnes Hill	Proto Resources and Investments /	4 km W of Beaconsfield, Tas	New project, feasibility study	na	4.4 kt Ni	\$98m	100 40	C O
Canegrass	Nickelore	70 km NE of Kalgoorlie, WA	New project, prefeasibility study under way	na	20 kt Ni, 1.4 kt Co	\$865m		
Cosmos Project	Xstrata Nickel	50 km N of	Expansion, feasibility	na	10 kt Ni	US\$150m		
Diggers South	Western Areas	100 km S of Southern Cross,	New project, feasibility study	na	5-6 kt Ni	A\$100m	65 65	C O
Gladstone Nickel project (stage 1)	Gladstone Pacific Nickel	Mine 20 km S of Marborough;	New project, environmental	2015	63 kt Ni, 6.2 kt Co	US\$4.2b (A\$4.12b)	2600 530	C O
Gladstone Nickel	Gladstone Pacific	Gladstone, Qld	Expansion,	2018	57 kt Ni, 5.8 kt Co	na	1750	C
Kalgoorlie Nickel project	Heron Resources	85 km N of Kalgoorlie, WA	New project, on hold	na	36.7 kt Ni, 3 kt Co	\$2b	1000 300	C O
Lucky Break	Metallica Minerals / Metals Finance	140 km W of Townsville, Qld	New project, feasibility study	2013	0.66 kt Ni	\$15m	70 25	C O
Marlborough Heap Leach project	Gladstone Pacific Nickel	20 km S of Marborough, Qld	New project, prefeasibility study under way	2013	24 kt Ni, 1.5 kt Co	na		

Mt Windarra (phase 1 and 2)	Poseidon Nickel	Near Laverton, WA	Refurbishment and expansion, feasibility study under way	2013	10 kt Ni	US\$55m (A\$54m)		
New Morning/ Daybreak	Western Areas	130 km S of Southern Cross,	New project, prefeasibility study	na	4 kt Ni	\$40m	65 65	C O
NiWest Nickel Laterite Heap Leach project	GME Resources	50 km NE of Leonora, WA	New project, feasibility study under way	2013	30 kt Ni, 1.4 kt Co	US\$680m (A\$667m)		
Nornico - (stage 1) (Greenvale deposit)	Metallica Minerals	250 km NW of Townsville, Qld	New project, scoping study under way	2015	6 kt Ni, 0.5 kt Co, 40- 75 t Sc	US\$491m (A\$481m)		
Perseverance Deeps	BHP Billiton	10 km N of Leinster, WA	Expansion, on hold	na	nil (maintain Nickel West system capacity)	US\$500m (A\$490m)		
Sherlock Bay	Australasian Resources / Metals Australia	100 km E of Karratha, WA	New project, prefeasibility study under way	na	9 kt Ni	\$34m		
Wingellina	Metals X	900 km of NE of	New project, EIS	na	40 kt Ni, 3 kt Co	US\$1.9b		
Yerilla	Heron Resources / Shanshan Ningbo	150 km NE of Kalgoorlie, WA	New project, feasibility study	na	na	na	600 150	c o

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Project	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Rare earths				~ ····· ··· · ·	one capacity	F		
Mt Weld (phase 2)	Lynas Corp	30km S of	Expansion, feasibility	na	11 kt rare earth oxides	\$170m		
Nolans Bore	Arafura Resources	135 km N of Alice Springs, NT	New project, feasibility study	2013	20 kt rare earth oxides	\$250m	300 150	C O

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Project Tin	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Mt Garnet	Consolidated Tin Mines	near Mt Garnet, Qld	New project, prefeasibility study under way	na	5 kt Sn	\$124m		
Mt Lindsay	Venture Minerals	100 km SW of Burnie, Tas	New project, feasibility study under way	2013	8 kt Sn, 7 kt WO3, 7- 8 kt magnetite	\$162m	160	0
Renison Expansion Project (Rentails)	Metals X	15 km NE of Zeehan, Tas	Expansion, feasibility study under way	na	5 kt Sn metal, 2 kt Cu	\$200m		

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Project	Company b	Location	Status c	Expected	New Capacity	Capital	Employmen	
Vanadium								
Barrambie vanadium	Reed Resources	64 km NW of	New project,	2014	6.3 kt ferrovanadium,	\$489m	400	C
project		Sandstone, WA	feasibility study		11.2 kt V2O5		250	O

Project	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Other commodities								
Ammonium nitrate	Incitec Pivot	Port Hedland,	New project, under	2012	100 kt amonium	\$40m		
Argyle underground development	Rio Tinto	130 km SW of Kununurra, WA	Expansion, under construction	2013	nil	US\$1.6b (A\$1.57b)	250 500	C O
CSBP expansion	Wesfarmers	Kwinana, WA	Expansion, under construction	2014	260 kt amonium nitrate	\$550m		
Gemco Phase 2 Expansion	BHP Billiton / Samancor Manganese	Groote Eylandt, NT	Expansion, under construction	2013	600 kt manganese ore	US\$279m (A\$274m)		

Moranbah Ammonium Nitrate Project	Incitec Pivot	Moranbah, Qld	New project, under construction	2012	330 kt ammonium nitrate	\$935m		
Mt Marion Lithium Project	Reed Resources / Mineral Resources	40 km south west of Kalgoorlie, WA	New project, under construction	na	200 kt of spodumene concentrate	\$40m		
Anduramba Molybdenum	Archer Rsources	150 km W of Brisbane, Qld	New project, on hold	na	950 t Mo, 0.14 kt Cu	\$86m	55	0
Big Hill Tungsten	Hazelwood	220 km NW of	New project,	2013	6 kt W	\$112m		
Burrup ammonium nitrate plant	Orica / Yarra / Apache	Burrup Peninsula, WA	New project, awaiting govt	2013	330 kt ammonium nitrate	\$600m	600 65	С О
Dampier Nitrogen project (ammonia/urea/ ammonium nitrate)	Incitec Pivot	Burrup Peninsula, WA	New project, feasibility study under way	2014	272 kt ammonia, 235 kt ammonium nitrate	na	400 65	C O
Dolphin Tungsten Project	King Island Scheelite	King Island, Tas	Redevelopment, feasibility study	2014	3500 tonnes WO3 in concentrates	\$133m	150 100	C O
Dubbo Zirconia project	Alkane Resources	Toongi, 20 km S of Dubbo, NSW	New project, feasibility study	2014	15 kt zirconium, 7 kt rare earths	\$893m	300 60	C O
Kingsgate Molybdenum	· Auzex Resources	20 km E of Glen	New project,	na	800 tonnes (NH4)	\$81m		
Kooragang Island ammonium nitrate	Orica	Newcastle, NSW	Expansion, feasibility study under way	2015	320 kt of ammonium nitrate	\$600-750m	250 70	C O
Merlin Molybdenum- Rhenium deposit (Cloncurry Project)	Ivanhoe Australia	52 km S of Osborne, Qld	New project, feasibility study under way	2014	5kt Mo, 7.2t Re	\$337m		
Molyhil (tungsten)	Thor Mining	218 km NE of Alice Springs, NT	New project, feasibility study	na	2.2 kt W, 1.3 kt Mo	\$69m	100 70	C O
Mount Carbine	Carbine Tungsten	120 km NW of	New project,	2014	220 000 mtu W	\$50m	49	o
Paradise Phosphate project	Legend International Holdings	5 km S of Mt Isa, Qld	New project, feasibility study completed	Stage 1: 2013; Stage 2: 2017	600 -1200 kt ammonium phosphate, 15 kt AIF3	US\$1.8b (A\$1.74b)	1060 296	C O
Spinifex Ridge molybdenum/copper	Moly Mines	50 km NE of Marble Bar, WA	New project, on hold	na	4.7 kt Mo, 5.9 kt Cu (in concentrates)	US\$500m (A\$490m)	400 375	c o
Watershed Tungsten project	Vital Metals	150 km NW of Cairns, Qld	New project, feasibility study under way	2014	195 000 mtu of WO3 concentrates	na		
Wonarah Phosphate Rock Project	Minemakers	240 km E of Tennant Creek, NT	New project, feasibility study under way	2017	1 Mt P2O5	US\$387m (A\$379m)		

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Energy processin	g facilities							
Project Petroleum	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Arckaringa Coal-to- Liquids	Altona Resources / CNOOC	Arckaringa Basin, SA	New project, feasibility study under way	na	10 mmbbl of liquid fuels	na	780	0
Micro LNG plant	BOC	Condamine, Qld	New project,	na	20 kt LNG	\$100m		
Newcastle gas storage facility	AGL	Tomago, NSW	New project, EIS under way	2013	70 kt LNG processing, 30 kt	\$300m	300 15	C O
Port Bonython Fuel storage	Stuart Petroleum	Port Bonython, SA	New project, govt approval received	na	na	\$60m	20 20	C O
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Minerals processing facilities Project Location Status c Expected New Capacity Capital Employmen Company b Alumina Yarwun alumina refinery expansion Rio Tinto Alcan Gladstone, Qld Expansion, under 2012 2000 kt US\$2.3b 1200 300 (A\$2.26b) construction

Alumina refinery	Bauxite Resources/Yankua		New project, scoping study under way	na	1100 kt	na	1500 550	C O
Wagerup refinery expansion	Alcoa / Alumina	130 km S of Perth, WA	Expansion, on hold	na	2100 kt	na	2000 250	C O

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Project Aluminium	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f	
Boyne Island Smelters Major Sustaining Projects	Rio Tinto Alcan	25 km S of Gladstone, Qld	Upgrade, under construction	2012	nil (Reduction Lines 1&2 Optimisation and erection of carbon bake furnace 4)	\$685m	450	С

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Project Copper	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f
Olympic Dam Smelter expansion	BHP Billiton	Roxby Downs, SA	Expansion, prefeasibility study under way	2018	115 kt	na	

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Project	Company b	Location	Status c	Expected	New Capacity	Capital	Employmen	
Rare earths								
Rare Earths Complex	Arafura Resources	Whyalla, SA	New project, feasibility study	2013	20 kt rare earth oxides, 500 kt	\$1b	1000 300	C O

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Project	Company b	Location	Status c	Expected	New Capacity	Capital	Employmen	
Crude iron and steel								
Gladstone Steel Plant	Boulder Steel	Gladstone, Qld	New project, EIS	2014	5 Mt billets	\$1.4b	2000	C
Project (stage 1)			under way				1278	0

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Project Magnesium	Company b	Location	Status c	Expected Startup	New Capacity	Capital Expend. e	Employmen t f
Hazelwood magnesium project	Latrobe Magnesium	150 km E of Melbourne, Vic	New project, feasibility study under way	na	5 kt of magnesium ingots	\$20m	

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a Includes projects expected to commence production over the medium term and for which capital expenditure is expected to exceed \$40 million (except for gold projects, for which the expenditure threshold is \$15 million). b Principal operating companies. c Type of project and stage of development – categories of the former include: 'new project' and 'expansion'; categories of the latter include: 'feasibility study under way', 'feasibility study completed', 'committed' and 'under construction'. d Annual incremental capacity expected in terms of contained metal or product; for example, zinc content in zinc concentrates production or salable coal in coal produced. For oil and condensate kbd ('000 barrels a day) and gas (terajoules a day) and liquid petroleum gas LPG (Mt). e Total capital expenditure as reported by the company in current dollars. Includes cost of development, plant and equipment. f Reported employment. Where possible, project employment has been shown at both the construction phase (shown as 'C' against the employment numbers below) and in the operational phase (shown as 'O').

Glossary of terms

$(NH_4)_2MoO_4$	diammonium molybdate	Mo	molybdenum
Ag	silver	Moz	million ounces
Al	aluminium	Mt	million tonnes
Au	gold	Mtpa	million tonnes per annum
Ba	barium	Ni	nickel
Bi	bismuth	oz	ounces
CaCl	calcium chloride	pa	per annum
Co	cobalt	Pb	lead

Cu	copper	PJ	petajoules
DSO	direct shipping ore	ROM	run of mine
EIS	Environmental impact statement	S	sulphur
Fe	iron	SiO_2	silicon dioxide
FEED	front end engineering and design	Sn	tin
FeV	iron vanadium	TiO_2	titanium dioxide
H_2SO_4	sulfuric acid	TJ	terajoules
kbpd	thousand barrels per day	U_3O_8	uranium oxide
koz	thousand ounces	V_2O_5	vanadium oxide
kt	thousand tonnes	\mathbf{w}	tungsten
LNG	liquefied natural gas	WO_3	tungsten trioxide
LPG	liquefied petroleum gas	Zn	zinc