

AustCoal Consulting Alliance Client Briefing

3 New South Wales Coal Export Forecast to 2015 - Forging alignment of mines, rail and port infrastructure

**A business intelligence report by
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Report 3 - NSW COAL EXPORT FORECAST TO 2015

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Accompanying reports;

Report 1 Australian Export Coal Forecast to 2015
 - Responding to strong Demand from China and India

Report 3 Queensland Coal Export Forecast to 2015
 - Dependant on critical export infrastructure

Overview

NSW coal exports have potential to grow from 107 Mtpa in 2009 to 200Mtpa in 2015.

Port of Newcastle - from 93 to 180 Mtpa and

Port Kembla - from 14 to 20Mtpa by 2015.

NSW Ports	Calendar Year Export Forecast Mt						
	2009	2010	2011	2012	2013	2014	2015
Port of Newcastle	93a	110	130	140	140	160	180
Port Kembla	14a	16	18	18	20	20	20
Total NSW	107a	126	148	158	160	180	200

This report examines mine expansions and new developments which have export entitlements or potential through Port of Newcastle and Port Kembla to 2015.

Despite the global financial crises the Port of Newcastle exported a record 93Mt and Port Kembla 14Mt in CY 2009.

The first stage of the NCIG export terminal was opened in May 2010 and expected to reach its full capacity of 30 million tonnes per annum by the end of 2010. The NCIG Board has given immediate go-ahead for the construction of the second stage of the export terminal to 53 million tonnes per year. This development will add another \$900 million to the \$1 billion already invested by NCIG in the Hunter Region.

Committed expansion of NCIG and PWCS will see Port of Newcastle export terminal capacity expand to 180 million tonnes per year by 2015. This will enable mine expansions and new mining developments in the Hunter Valley, Ulan, Newcastle and Gunnedah Basin coalfields to produce an additional 83Mtpa of saleable export coal by 2015.

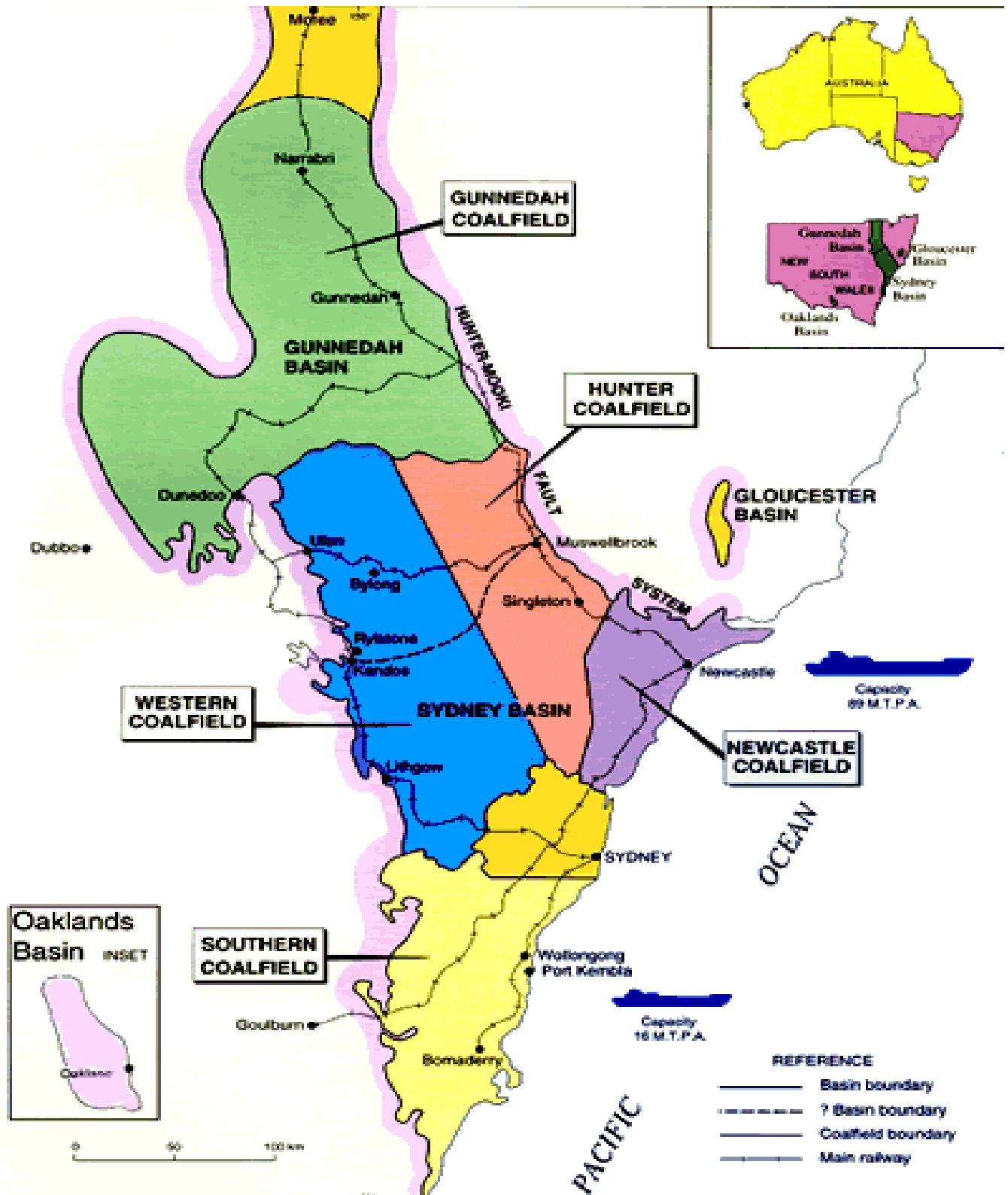
The worlds' major coal companies including BHP Billiton, Anglo American, Peabody, Vale and Xstrata have major investment in the NSW export coal industry.

The emergence of China as a major strategic investor in NSW will lead to further export growth. Yanzhou Coals' \$3.5billion acquisition of Felix Resources and the successful tender by China Shenhua Energy Coal for the Watermark Coal exploration area south of Gunnedah, confirms the strategic intent of China to acquire coal resources in NSW.

Studies are progressing for operational improvements and infrastructure expansion of Port Kembla Coal Terminal to 25Mtpa to provide additional export capacity for mines in the Southern and Western coalfields.

This report highlights the success HVCCC has achieved in coordinating planning and operations of mine loading points, rail and port infrastructure operations to maximise coal chain operating performance, during an extended period of ongoing major rail and port terminal projects.

NSW Coalfields



1 PORT OF NEWCASTLE

1.1 Overview of Hunter Valley Coal Chain

Hunter Valley Coal Chain

Producers

- 35 coal mines
- 14 producers
- 27 load points
- 80 different brands of coal

Rail

- 3 above rail operators
- 29 trains (15,000 trips per year)
- 2 track owners/operators
- haulage distances up to 450km
- Very concentrated network

Coal Terminals

- 1000 vessels per year
- 84kt average vessel size
- multiple cargoes and coal types
- tidal constrained river port
- 9 vessel agents

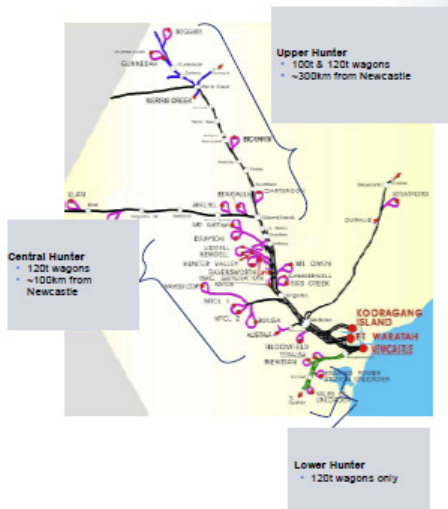
Coal Importers

- 34 end buyers
- 12 countries
- 85% exports to Japan, Korea and Taiwan

Port Operation

- Turn of arrival loading port (14day rule)
- Combination of JIT cargo assembly (PWCS) and dedicated stockpiles (NCIG)
- 18 independent organisations required to load each tonne of coal
- Only two weeks visibility of vessel arrival and which mines will supply coal
- Highly variable volumes
- Average 5 days cargo assembly build time

1.3 Hunter Valley Coal Chain



- The Hunter Valley Coal Chain comprises over 350km of track varying from single lines with passing loops to dual and quad track closer to the port
- Hunter Valley coal demand expected to remain robust, with export coal forecast to double within the next ten years.
- In Newcastle the current coal export port (PWCS) is expanding and a new coal export port (Newcastle Coal Infrastructure Group) is scheduled to commence operations in 2010/11 at 30Mtpa capacity, increasing to ~66Mtpa at completion of the Stage 2 expansion project
- Port Capacity Growth coming online in Newcastle over the next 6-12 months is unprecedented, providing more than 40Mtpa of additional port capacity.
- ARTC has significant track growth projects underway to support this growth at port.
- Brownfield and Greenfield mine expansions are underway.

1.2 Hunter Valley Coal Chain Coordinator Limited (HVCCC)

www.hvccc.com.au

HVCCLT was established as a trial in 2003 and operated on a premise of cooperation between the members which were the major service providers to the industry.

HVCCC was incorporated in 2009 with appointment of an independent chairman and CEO. Membership has been expanded to include all current Hunter Valley Coal Chain Producers as well as all major service providers in the Hunter Valley including:

- NPC
- PWCS
- NCIG
- ARTC
- NSW RailCorp
- Pacific National
- QRNational

HVCCC now provides a 'system wide' forum for pursuing operational improvements and making efficient decisions about future investment in infrastructure.

- 1 Short term objective – focus on maximising daily capacity and throughput
2. Long term objective – assist members with investment planning

1.3 Port of Newcastle

www.newportcorp.com.au

The Port of Newcastle is owned and operated by Newcastle Port Corporation (NPC) which was established as a NSW Statutory State Owned Corporation in July 1995. Port land on Kooragang Island is owned by the State Government. A large part of Kooragang Island is next to wetlands which constrains development on the island.

1.4 Port of Newcastle has development approval to Export 211Mtpa

The NSW Government granted development approval in April 2007 which provides for total exports through the Port of Newcastle of 211Mtpa.

Port Waratah Coal Services (PWCS)

Expansion of Kooragang Coal Terminal from 77 to 120Mtpa

Carrington Coal Terminal currently 25Mtpa

Newcastle Coal Infrastructure Group (NCIG)

New Coal Terminal 66Mtpa

Total Port of Newcastle Export Capacity 211Mtpa

In November 2008 the NSW Minister for Ports announced that a new Terminal 4 on Kooragang Island will be built with a ultimate capacity of 90Mtpa, giving a longer term, 2015 to 2020 capacity for PWCS of up to 235Mtpa. PWCS has stated that the timing of T4 is dependent on Producer Demand Commitments confirmed in Take-or-Pay Contracts.

1.5 Port of Newcastle Committed Expansion Projects

NSW Terminal Name Plate Capacity	Calendar Year Capacity Mt						
	2009	2010	2011	2012	2013	2014	2015?
PWCS name plate	102a	113c	113	133	133	133	>145da
NCIG name plate		>30c	30	30	>51c	51	> 66da
Total Terminal Capacity	102a	>143	143	163	>184	184	>211da
HVCC throughput	93a						

a – actual
c – committed
> - expanding to
p – planned
da – development approval

1.6 Port of Newcastle Forecast Coal Exports to 2015

Export Forecast to 2015 estimates total export supply potential through Port of Newcastle to 2015 from a base of 93Mt in 2009. This growth forecast is driven by strong demand, mainly from China, Japan, Taiwan and Korea. The realisation of this forecast is dependent on Coal Chain Capacity which requires alignment of mine, rail track and rail haulage capacity with development of Export Terminal Capacity.

	Calendar Year Forecast Exports Mt						
	2009	2010	2011	2012	2013	2014	2015
Producer forecasts	113	127	159	190	226	230	250
PWCS	93a	100	113	133	133	133	>145?
NCIG		10	30	30	>51	51	>66?
HVCC model capacity (1)	94.5		140				
HVCC throughput (BB)	93a	110	130	140	140	160	180

a – actual HVCC throughput is currently constrained by train capacity

Note 1 - HVCCLT declared capacity for 2009 was 94.6Mt
- HVCCC Simulation Model Assumptions and Requirement to deliver coal chain throughput of 140Mtpa in 2011 is identified in table over page.

Note BB - PWCS and NCIG expansions and ARTC track works are brownfield developments with project / operational impacts in an already complex and overloaded system with potential for significant system downtime.

BB conservative forecast factors in Coal Chain System operational constraints to reduce name plate Terminal Capacity throughput by 10-15%.

1.7 HVCCC Simulation Model Assumptions and Requirement to Deliver Coal Chain Throughput of 140Mtpa in 2011

The following table from - HVCCC Summary Version of System Assumptions -140Mtpa dated February 2010, sets out the total prerequisite infrastructure upgrade required to achieve a Delivered Coal Chain Capacity of 140Mtpa in 2011. (PWCS 110Mtpa: NCIG 30Mtpa)

Total Infrastructure Requirements to Achieve 140Mtpa in 2011

	Prerequisite Infrastructure	Timing
Track	Full Muswellbrook – Antiene Upgrading Minimbah Bank 3 rd Track 10 Gunnedah Paths 20 Ulan Paths	Complete Available Q3 2010 Available Available Q3 2010
Terminal	KCT Project 3Exp	Complete November 2009
Trains	44 Train Consists - Base starting case 40 trains + 1x72/82 and 3x42 Wagon Consists	Additional 4 train consists required for 140Mtpa by 1 January 2011
Load Points	Improvements required to 9 Load Points (within a total of 27 Load Points)	Required by January 2011 (Refer Note 1)
Port Operations	8 available manned tugs Adequate pilots and linesman	Available Q4 2010 Available
KCT Refuelling	50% reduction in refuelling event impacts on KCT departure roads, with no train maintenance delays	Required by 1 January 2011 (Refer Note 2)

Note 1 Hunter Valley Coal Chain Master Plan, Phase 1 to 140Mtpa (v2) dated November 2008, noted that “The need to increase overall load point washed coal capacity by around 3% is an emerging issue as throughput reaches and exceeds 140Mtpa. By 140Mtpa, poor load point performance can no longer be offset by additional trains.

The reduced throughput will be a result of load points experiencing extended periods of negative washed coal stocks as throughput increases.

The impact of failure to invest in load point performance is quantified to be in excess of \$350 million in terms of demurrage and lost revenue.

Note 2 - Pacific National intends to develop the Greta Train Support Facility, which includes new facilities and infrastructure required to re-fuel and maintain trains and change crews.

1.8 Port Waratah Coal Services (PWCS)

PWCS owns and operates Kooragang Coal Terminal (KCT) and Carrington Coal Terminal (CCT) with name plate capacity of 102Mtpa - KCT 77Mtpa and CCT 25Mtpa.

Despite the global financial crises the Port Waratah Coal Services loaded a record 97 million tonnes in FY 2009 (93 million tonnes in CY2009).

PWCS Ownership

PWCS is an unlisted public company owned by the Hunter Valley Coal Industry (70%) and Japanese Coal Customers (30%).

PWCS Effective Ownership

Coal & Allied	30.0%
Japanese Importers	29.6%
Bloomfield Group	3.5%
Newcastle Coal Shippers	36.9%

<u>Newcastle Coal Shippers</u>		<u>Effective</u>
Xstrata Coal	37.1%	13.7%
Coal & Allied	22.7%	8.3%
Anglo Coal	20.0%	7.4%
PWCS	9.0%	3.3%
Bloomfield Group	2.8%	1.0%
BHP Billiton	1.7%	0.6%
Other	6.7%	2.5%

Board of Directors

Newcastle Coal Shippers	
Bloomfield Group	4
Coal & Allied	3
(Including independent Chairman)	
Japanese Trading, Power and Cement	<u>3</u>
Total	10

PWCS Throughput

	<u>% of Throughput</u>
<u>Major Shippers</u>	
Xstrata Coal	29%
Coal & Allied	20%
Noble Resources	8%
BHP Billiton	7%
Energy Coal Marketing	<u>7%</u>
	71%
<u>Shippers with 2-4%</u>	
Anglo Coal	
Ashton Coal	
Glencore International	
Idemitsu Australia	
Integra Coal	
Peabody Coaltrade	
Peabody Pacific	
Whitehaven Coal	
<u>Shippers with 1% or less</u>	
Austar Coal	
Bloomfield Collieries	
Centennial Coal	
Constellation Energy	
EFD Trading	
Gloucester Coal	
J Aron and Company	
Macquarie Bank	
Sojitz Corporation	
Vitol Australia	
	<u>100%</u>

PWCS Current Common User Operation

PWCS leases the land from the NSW Government under the provisions of an agreement that states that the Port is to be maintained as a 'common user facility'.

Any party who wishes to use the facility to load coal may do so on the basis of a Coal Handling Services Agreement (CHSA). The CHSA defines the terms by which PWCS will provide a user with coal handling services including the receiving and unloading of coal, storage and loading of coal onto vessels for export. PWCS has an agreed set price for coal handling services and all users pay a standard loading fee which is set to cover capital and operating costs.

PWCS operates as a cargo assembly facility. For instance, a producer may require a stockpile to be built from trains with different coals or ships loaded with coals from different stockpiles or mines or directly from trains. Large stockpiles take longer to assemble, particularly from smaller mines, and this has the effect of constraining available stockpiles for other users. These issues are exacerbated as train cycle time increases with longer rail distances from mines in Gunnedah and Ulan regions to PWCS.

In September 2010, PWCS advised that it is presently receiving less coal than it can load on a month-by-month basis, resulting in unacceptably long vessel queues and high demurrage costs for the industry. The average number of vessels in the queue since January 2010 has been 46.

Under provisions of the Long Term Contractual Framework initiated on 1 January 2010, PWCS has secured Coal Producer contracts for 106.7 million tonnes in 2010. However PWCS is only forecast to load approximately 97 million tonnes in 2010 because of a range of factors including Coal Chain reliability issues and bad weather.

PWCS forecast of 97 million tonnes is 85.8% of current name plate capacity of 113Mtpa and PWCS has proposed a Vessel Application Review Process to address the current mismatch between the amount of coal PWCS is contractually obliged to load onto vessels, and the amount of coal that can be delivered to PWCS by rail.

Applications for vessels to be loaded may be rescheduled whenever it is deemed that there is insufficient Coal Chain capacity to deliver coal to PWCS to suite vessel arrivals, or if Coal Producers do not have adequate contractual arrangements.

PWCS believes the Vessel Application Review Process may create clearer parameters on how rail infrastructure and rolling stock capacity can grow in alignment with terminal capacity.

PWCS Expansion

The most recent Project 3Exp lifted name plate capacity of Kooragang Coal Terminal (KCT) and Carrington Coal Terminal (CCT) from 102 to 113Mtpa at a cost of A\$485million.

In February 2010, PWCS Board approved a \$670 million 20Mtpa expansion of KCT to lift name plate capacity of PWCS from 113 to 133Mtpa. The works are scheduled to be completed by the end of 2011 in order for PWCS to meet its contractual obligation of handling 123.6 million tonnes in 2012.

This expansion is underpinned by Take-or-Pay contracts with producers in accordance with provisions of the Newcastle's Long Term Contractual Framework Arrangements, which came into effect on 1 January 2010.

In June 2010 PWCS secured NSW Government approval for Stage 4 project to provide 'sprint capacity' to respond to and recover from inevitable Coal Chain supply disruptions caused by bad weather and maintenance outages. This planned expansion is within the Kooragang Terminal Master Plan to provide name plate capacity of 145Mtpa in accordance with NSW Government approval granted in April 2007.

PWCS are undertaking pre feasibility work for T4 with an ultimate capacity of 90Mtpa, giving a long term, 2015 to 2020 conceptual capacity for PWCS of up to 235Mtpa. PWCS has stated that the timing of T4 is dependent on Producer Demand commitments confirmed in Take-or-Pay contracts.

1.9 Newcastle Coal Infrastructure Group (NCIG)

The 30Mtpa Stage 1 of the Newcastle Coal Infrastructure Group (NCIG) loader loaded first coal in April 2010 and will be fully operational by 2011 at an estimated cost of A\$922 million.

NCIG Participants include:

Peabody Energy Australia Coal (acquired Excel Coal Limited)

BHP Billiton – through Hunter Valley Energy Coal Limited

Centennial Coal Company Limited

Donaldson Coal Pty Limited

Felix Resources Limited (formerly White Mining Limited) now owned by Yanzhou Coal

Whitehaven Coal Mining Limited

In a fundamental difference to PWCS the stage 1 NCIG terminal development provides for throughput entitlement in accordance with percentage shareholding.

NCIG Expansion

In August 2010 the NCIG Board approved development of the \$900 million second stage of NCIG terminal to a capacity of 53Mtpa to be completed in FY2012-13.

Under provisions of a port access agreement brokered by ACCC, NCIG is obliged to offer 12Mtpa of capacity in the 53Mtpa stage 2 development to non-NCIG participants under 10 year ship-or-pay contracts.

NCIG Throughput Entitlement in accordance with Shareholding Mtpa

	<u>Ownership</u>	<u>Stage 1 30Mtpa</u>	<u>Stage 2 53Mtpa 41Mtpa + 12Mtpa</u>
BHP Billiton	35.5%	10.65	14.56
Peabody Coal	17.7%	5.31	7.25
Yanzhou Coal	15.3%	4.59	6.27
Donaldson (Noble)	11.6%	3.48	4.75
Whitehaven	11.1%	2.33	4.55
Centennial (1)	8.9%	2.67	3.65
Non NCIG			12
- Anglo, Rio Tinto, Xstrata under 10 year ship-or-pay contracts			

Note (1) Centennial Coal gave undertakings to Xstrata with respect to its shareholding in NCIG at the time of the sale of Anvil Hill project to Xstrata, meaning Centennial is required to make port capacity in NCIG available for exports from Anvil Hill, which Xstrata now calls Mangoola Project.

2.0 PORT KEMBLA

PKCT Ownership

PKCT is operated by six equal partners, all coal producers on the Southern and Western coalfields, who lease the Terminal from the NSW Government. The partners are:

- BHP Billiton Illawarra Coal
- Centennial Coal
- Gujarat NRE
- Peabody
- Tahmoor Coal (Xstrata Coal)
- Xstrata Coal

BHP Billiton manages the Terminal on behalf of the consortium.

PKCT Throughput

PKCT exported 14.244 million tonnes in CY2009 comprising 7.296 million tonnes of thermal coal and 6.948 million tonnes of metallurgical coal. KCT also exported 400,000 tonnes of metallurgical coke.

PKCT Expansion

PKCT receives coal by road and rail in approximately equal tonnage.

Studies are progressing to expand PKCT capacity from 18 to 25Mtpa in two phases.

Phase 1 - 18 to 21Mtpa by 2012 – operational improvements

Phase 2 – 21 to 25Mtpa by 2015 - infrastructure expansion

A feasibility study for the Maldon to Dombarton and Port Kembla to rail link is also being progressed. There is 14km double track from Port Kembla to Dombarton and a 35km partly completed link including the Avon tunnel between Dombarton and Maldon.

The contract for the Avon tunnel was cancelled by the NSW Government in 1998 on the basis that the line was not economically viable with mine closures at that time in the region.

3.0 NEW SOUTH WALES COAL EXPORTS

3.1 Port of Newcastle Coal Shippers Major Operating Export Mines and Saleable Production FY2008-09

Company	Mine (Coal Basin)	Open Cut (OC) Underground (UG) Saleable Production 2008-09	Coal Type Metallurgical - bold
Anglo Coal	Drayton (Hunter Coalfield)	OC 4.273	Thermal
BHP Billiton (1)	Mt Arthur Operations (Hunter Coalfield)	OC 11.774	Thermal
Bloomfield Collieries	Bloomfield (Newcastle Coalfield)	OC 0.492	SHCC / Thermal
	Rix's Creek (Hunter Coalfield)	OC 1.133	SHCC / Thermal
Centennial Coal (1)	Newstan (Newcastle Coalfield)	UG 1.265 last prod April 2009	SSCC / Thermal
Coal & Allied	Hunter Valley Operations	OC 10.462	SSCC / Thermal
	Mt Thorley Warkworth	OC 8.260	SSCC / Thermal
	Bengalla (Hunter Coalfield)	OC 5.413	Thermal
Donaldson Coal (1)	Donaldson	OC 0.903	Thermal
	Able (Newcastle Coalfield)	UG 0.119 from Dec 08	Thermal
Gloucester Coal	Stratford (Newcastle Coalfield)	OC 0.639	SHCC / Thermal
Idemitsu	Muswellbrook (Hunter Coalfield)	OC 1.150	Thermal
	Boggabri (Gunnedah Coalfield)	OC 1.440	Thermal
Peabody Energy (1)	Wambo	OC 2.228	Thermal
	North Wambo (Hunter Coalfield)	UG 2.044	Thermal
	Wilpinjong (Western Coalfield)	OC 6.952	Thermal
Vale (Integra Coal)	Camberwell	OC 2.176	SSCC / Thermal
	Glennies Creek (Hunter Coalfield)	OC & UG 1.362	SHCC
Whitehaven Coal (1)	Whitehaven	OC 0.176	SSCC / PCI
	Werris Creek	OC 1.107	PCI / Thermal
	Tarrawonga (Gunnedah Coalfield)	OC 1.577	PCI / Thermal
Xstrata	Cumnock South	OC 0.379 to Dec 08	SSCC
	Beltana No 1/ Bulga	UG 3.526 OC 5.079	SSCC / Thermal SSCC / Thermal
	United	UG 2.040	SSCC / PCI
	Liddell	OC 3.047	SSCC / Thermal
	Mt Owen/ Ravensworth East	OC 8.288	SSCC / Thermal
	Ravensworth/ Narama	OC 3.999	Thermal domestic
	Ravensworth/ Newpac (Hunter Coalfield)	UG 1.932	SSCC
	Ulan	OC 0.002 to July 08	Thermal
	(Western Coalfield)	UG 6.525	Thermal
	West Wallsend (Newcastle Coalfield)	UG 2.022	SSCC
Yanzhou Felix Resources (1)	Ashton (Hunter Coalfield)	UG 1.993 OC 1.216	SSCC / Thermal SSCC / Thermal
Austar Coal	Austar (Newcastle Coalfield)	UG 1.317	SHCC
Total Metallurgical Coal Exports through PWCS		18.545 Mt in CY 2009	
Total Thermal Coal Exports through PWCS		74.375 Mt in CY 2009	

Note (1) NCIG Participants

3.2 Port of Newcastle Coal Shippers Advanced Export Coal Projects in FY 2009-2010 - Mining Lease Granted or under Application

Company	Mine Expansion/ New Project (Coal Basin)	Open Cut (OC) Underground (UG) Reserves (Mt June 2008)	Planned Production (Mtpa ROM)	Coal Type Metallurgical - bold
Anglo Coal	Saddler's Creek Project (Hunter Coalfield)	OC 483.3	4.0 replace Drayton	
BHP Billiton (1)	Mount Arthur Expansion Consolidation Project (Hunter Coalfield)	OC 851 Resources UG 1,396 Resources	to 28 +8.0	Thermal Thermal
Coal & Allied	Mt Pleasant New Project (Hunter Coalfield)	OC 485.7	10.5	Thermal
Bloomfield Collieries	Bickham Proposal	OC 36.3 Resources	2.5	Thermal
Centennial Coal (1)	Newstan Lochiel Proposal (Newcastle Coalfield)	UG 58.3	3.2	SSCC / Thermal
Donaldson Coal (1)	Donaldson Expansion Able Expansion (Newcastle Coalfield)	OC 11.0 UG 55.0	to 2.5 to 3.6	Thermal Thermal
Gloucester Coal	Duralie Extension (Gunnedah Coalfield)	OC 23.3	to 3	SHCC / Thermal
Idemitsu	Boggabri Expansion (Gunnedah Basin)	OC 650.0	to 5.0	Thermal
Kores Australia	Wallarrah No2 Proposal (Newcastle Coalfield)	UG 1,209 Resources	5.0	
Peabody Energy (1)	Wilpinjong Expansion (Western Coalfield)	OC 251.0	to 11.0 from 2012	Thermal
Whitehaven Coal (1)	East Boggabri Belmont (Roglen) Project Sunnyside Project	OC 10.8 OC 6.3 Resources	1.5Mtpa 1.5 1.0	Thermal Thermal Thermal
Narrabri North Project	UG Stage 1 CM (Gunnedah Coalfield)	UG Stage 2 longwall	first coal June 2010 Thermal 6.0 from 2012	PCI / Thermal
Xstrata	Mangoola New Project (Hunter Coalfield)	OC 138.0	8.0 from 2012	Thermal
Yanzhou Austar Coal	Austar expansion (Newcastle Coalfield)	UG 51.0	to 3.6	SHCC
Felix (1) Resources	Moolarben New Project (Western Coalfield)	OC 309.3 Resources UG 198.0 Resources	8.0 from 2012 12.0 from 2012	Thermal Thermal

Note (1) NCIG Participants

Two very large projects are in the early exploration and planning phase and could produce an additional 30Mtpa ROM of Thermal Coal.
BHP Billiton Caroono Proposal and
Shenhua China Watermark Proposal

Planned longer term coal production in the order of 200Mtpa is the driver for the Hunter Valley Coal Chain Master Plan.

3.3 Port Kembla Coal Shippers Major Operating Export Mines and Saleable Production FY2008-09

Company	Mine (Coal Basin)	Open Cut (OC) Underground (UG) Saleable Production (Mtpa) 2008-09	Total Exports (Mtpa)	Coal Type Metallurgical - bold
BHP Billiton	Appin West Cliff Dendrobium (Southern Coalfield)	UG 1.878 UG 2.425 UG 1.966		Bulli HCC Bulli HCC Illawarra HCC blend
Gujarat	NRE No1 NRE Wongawilli (Southern Coalfield)	UG 0.684 UG 0.184 from Feb 08		ROM Coking ROM Coking
Peabody Energy Coal	Metropolitan (Southern Coalfield)	UG 1.465		HCC & SHCC
Xstrata Coal	Tahmoor (Southern Coalfield)	UG 1.514		HCC
Wallerawang Collieries	Baal Bone (*Western Coalfield)	UG 1.236		SSCC/ PCI
Centennial	Charbon Clarence Springvale (*Western Coalfield)	OC 0.470 UG 0.533 UG 1.911 UG 3.154		Thermal Thermal PCI / Thermal Thermal
Total Metallurgical Coal Exports through Port Kembla		6.948Mt in CY 2009		
Total Thermal Coal Exports through Port Kembla		7.296Mt in CY 2009		

Note * - rail haulage to Port Kembla is in the order of 275km

3.4 Port Kembla Coal Shippers Advanced Export Coal Projects in FY 2009-2010 - Mining Lease Granted or under Application

Company	Mine Expansion/ New Project (Coal Basin)	Open Cut (OC) Underground (UG) Reserves (Mt June 2008)	Planned Production (Mtpa ROM)	Coal Type Metallurgical - bold
Gujarat	NRE No1 & Wongawilli Longwall Projects	UG	6.0 from 2014	
Peabody Energy Coal	Metropolitan Expansion (Southern Coalfield)	UG 43.7	+1.0 from 2014	HCC & SHCC
Anglo Coal Sale to POSCO	Sutton Forrest (Southern Coalfield)	115		

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