

Maximising Asset Utilisation in Australian Coal Chains

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AustCoal Consulting Alliance

Hunter Valley Coalfields Conference

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We will examine plans to maximise asset utilisation in Australia's Coal Export Infrastructure with particular focus on coal chains under stress:

- **DBCT - Goonyella Coal Chain**
- **PWCS - Hunter Valley Coal Chain**

We will focus on:

- **ACCC Capacity Ballancing Systems**
- **Longer Term Solutions**

- 1. Coal Industry Forecast Demand exceeds Export Coal Chain Capacity at least until 2012.**
- 2. In Queensland the focus will be on maximising hard coking coal export volumes to maximise revenue.**
- 3. Indonesia has been the beneficiary of constraints in exporting thermal coal from Port of Newcastle**
- 4. There is a need for Pragmatic Solutions**

Australian Export Coal Forecast

	2000 actual	2007 actual	2012 forecast > my ?	2025 forecast ABARE
Coking	101mt	134mt	175mt >200mt	210mt
Thermal	86mt	112mt	160mt >200mt	225mt
Total	197mt	246mt	335mt >400mt	435mt high scenario

Indonesia has benefited!

	2000 actual	2007 actual	2012 forecast	2025 forecast ABARE
Coking	101mt	134mt	175mt	210mt
Thermal Indonesia	86mt 57mt	112mt 175mt +118mt	160mt > 245?	225mt
Total	197mt	246mt	335mt	435mt high scenario

QLD Export Terminal Capacity

Location	2007 capacity		2008 capacity	2012 Planned capacity
	Mtpa	(actual)	Mtpa	Mtpa
Abbot Point	15	(11.7)	21	21 > 50 study
DBCT	59	(44.8)	70 > 80 end 08	89 from 2009
Hay Point	44	(39.6)	44	44 > 55 study
RG Tanner	68	(53.4)	68	68
Barney Point	7	(7)	7	7
Wiggins Island				25 by 2012 70-85 potential
Fisherman Islands	6	(5.2)	6	8
Total Terminal Capacity	199	(161.7)	216 226 end 2008	262 by 2012 362 potential

- **Port and rail congestion in the Goonyella coal chain has impacted on contracted throughput through DBCT.**
- **38.16 Mt lost contract throughput over last 5 years results in:**
 - **Lost Sales Revenue**
 - **Increased Operating Costs**
 - **Demurrage costs to producers**
 - **Weakening of Customer Credibility**

Actual coal throughput verses contracted throughput at DBCT – submission to ACCC

	2002/03	2003/04	2004/05	2005/06	2006/07
Contract Mtpa	45.62	52.82	56.82	59.37	60.42
Actual Mtpa	43.06	43.56	50.26	50.33	49.68
Contract Shortfall Mtpa	2.56	9.26	6.56	9.04	10.74

Goonyella Coal Chain Capacity Review by Stephan O'Donnell released 30/7/2007 made three key recommendations:

- 1. Creation of a central coordination role to oversee activities across the coal chain.***
- 2. QR to commence a purchasing process for additional locomotives and carriages to meet projected coal haulage volumes.***
- 3. A business improvement program to be commenced across the supply chain, starting immediately with QR.***

Stephen O'Donnell noted in his final report on the Goonyella Coal Chain 14/1/2008;

“As long as the desired export volume exceeds the capacity of the port and rail system some capacity balancing system will have to prevail for at least the next 3 years until the completion of the Jilalan upgrade and commissioning of sufficient rolling stock to meet demand”

- **Ross Dunning has been appointed in the central coordination role for Queensland's coal supply chain**
- **A Dalrymple Bay Coal Chain Board has been established with Seamus French CEO of Anglo Coal Australia appointed as chair**
“A memorandum of understanding defining a new, positive structure and approach to the Dalrymple Bay Coal Chain is being signed off by each member of the Board and service providers such as QR and Babcock and Brown Infrastructure.” S French 14/1/08

ACCC vessel queue management system QMS

- ***“The QMS essentially rations the amount of coal each producer can export through the terminal on a pro rata basis so that the overall amount handled by the terminal better matches the amount that can be delivered by the coal chain. The QMS is designed to address the imbalance between the demand for coal loading services at the terminal and the capacity of the Goonyella coal chain”***

ACCC 3/3/2008

ACCC view on long term solutions

- **ACCC noted that some progress has been made towards implementing the recommendations in the O'Donnell Review**
“Going forward, the ACCC considers that the contractual framework that underpins the functions of the Goonyella coal chain needs to better reflect the operational realities and provide sufficient certainty to underwrite necessary investment”

ACCC 3/3/2008

HVCC is the world's largest and most complex coal export operation with:

- **17 coal companies operating 30 coal mines**
- **2 rail operators – Pacific National & QR**
- **2 track owners – ARTC & RailCorp**
- **2 existing coal terminals KCT & CCT operated by PWCS**
- **Approx 1000 vessels per year averaging 84kt capacity through Port of Newcastle**
- + **3rd loading terminal to be operated by NCIG**

The interdependence of the coal mines, rail loading points, rail track, rail operations and coal loading terminals was recognised by the formation of the Hunter Valley Coal Chain Logistics Team (HVCCLT) to coordinate planning and operation of the coal chain.

After extensive consultation HVCCLT provides an annual Declared Capacity for the HVCC which is reviewed quarterly

Declared Coal Chain System Capacity factors in planned unavailability for maintenance and construction and allowances for unplanned system losses.

Declared Capacity in 2007 was 90.5Mt

Actual Capacity in 2007 was 84.8Mt

- Primarily due to system capacity loss of 2.5Mt due to a 'once in a century' flooding in the Hunter Valley**

Newcastle Export Terminals

Location	2008Mtpa capacity	2012Mtpa capacity	Devopm't Consent
PWCS	77 KCT <u>25</u> CCT	88 KCT <u>25</u> CCT	120 KCT <u>25</u> CCT
Total	102	113	145
NCIG		30	66
Total Port Capacity	102 (97 HVCC)	143 committed	211 planned

Producers Export Demand Exceeds Committed Terminal Capacity (ARTC)

Newcastle	2007	2008	2009	2010	2011	2012
Export Demand Mtpa	107	118	133	151	166	177
Terminal Capacity Mtpa	102	102	102	113	143	143
Shortfall Mtpa	(5)	(16)	(31)	(38)	(23)	(33)

“The ACCC has always considered that queue management systems are appropriate as short term transitional management systems only.

While the CBS has effectively been in place in operation in the Port of Newcastle since March 2004, industry and governments have failed to adequately address ongoing capacity issues within a reasonable time”

ACCC in proposing to authorise a CBS for PWCS to December 2008

“The ACCC has become increasingly concerned that the underlying coal chain issues are not being addressed and that foreshadowed capacity expansions alone will not solve the problem.

These underlying issues include the common user provisions of PWCS’s Kooragang Lease, (which require PWCS to accommodate every shipper of coal) which appear to be restricting its ability to enter into long term binding contracts to underpin investment, and service providers contracting based on assessments of individual capacity without reference to the coal chain as a whole.”

ACCC 3/3/2008

A former NSW Premier has been appointed to examine HVCC infrastructure flaws and oversee the development of a new model of coal export allocations.

“There are inherent and historical flaws in the HVCC that extend from the waterside loaders right up the valley to the train load points. There is an urgent need to create a commercial framework that stimulates investment that encourages stakeholders to work in an aligned manner.”

Graham Davidson GM PWCS in welcoming Mr Greiner’s appointment 4/1/2008

Newcastle coal producers exported 84.8Mt in 2007

Anglo Coal

Austar

Coal & Allied

Bloomfield Collieries

Gloucester Coal

Idemitsu Australia

Integra Coal

Resource Pacific

Xstrata Coal

BHP Billiton

Centennial Coal

Donaldson Coal

Felix – White Mining

Peabody Pacific

Whitehaven Coal

(members of NCIG)

Closing the Gap Between Producers Demand and HVCC Capacity

Newcastle	2007	2008	2009	2010	2012	2014
Producers Demand Mtpa	107	116	133	151	177	186
HVCC Capacity Shortfall Mtpa	84.8	95 (21)	?	?	?	?

Development consent is in place for 211Mtpa Export Capacity at PWCS & NCIG

- 1. Fast track KCT to 120Mt & NCIG to 66Mt**
- 2. Needs alignment of Take or Pay Contracts for Rail and Export Terminal**
- 3. This will require removal of 'common user' KCT Lease provision by State Government**
- 4. International Customers must be willing to enter into long term volume commitments with annual price review or JV equity arrangements to guarantee supply security**

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