

### **Planning for Performance**

Standing Committee on Transport and Regional Services Integration of Regional Rail and Road Networks and their Interface with Ports Presentation, 31 January 2006















### **Key Messages**

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- 1. The Hunter Valley Coal Chain is critical to the economic health of Australia, NSW and the Newcastle region
- 2. Leadership by the private sector has seen substantial improvements in the operation of the coal chain to date
  - Coal exports have increased by 17% over the last three years with minimal additional infrastructure
  - Deadweight costs of demurrage (vessel queuing) have been dramatically reduced
- 3. More than 50% growth in thermal coal exports is forecast from the region over the next five to ten years
- 4. To ensure coal chain capacity is not a constraint to realising benefits of future export growth requires:
  - Continued universal commitment to the cooperative model so as to maximise asset utilisation and ensure efficient investment decision making
  - Coordinated timely investment in new track, train and port infrastructure
- 5. Government play a key role
  - As Federal and State Regulators (ACCC, this Committee, other Reviews, RLMC etc)
    - Facilitate Access Regimes that are supportive of timely investment in new infrastructure, and where required compel investment in critical infrastructure
    - Provide open and competitive access to monopoly infrastructure
    - Ensure critical land in the port is developed for new coal chain infrastructure in a timely fashion and in recognition of the rest of the coal chain
    - Facilitate timely evaluation and support of major projects (e.g EIS approval processes for port expansion)
  - As Shareholder (Fed Track Owner, NSW Port Owner, Qld Train Company Owner)
    - Ensure investment planning is conducted in cooperation with all other coal chain participants
    - Deliver promised investment in new track infrastructure in a timely fashion

## Hunter Valley Coal Chain: The Worlds Largest Coal Export Operation











- 30 Coal Mines
- 17 Major Owners
- 23 Load Points
- > 80 Different Brands of Coal
- 2 Above Rail Operators
- Approx. 29 Trains (750 trips/year/train)
- 2 Track Owner/Operators
- Haulage distances up to 350km
- 2 Coal Loading Terminals KCT & CCT
- 5 Dump Stations
- 1.5Mt of Working Stockyard
- 5 Ship Berths and Loaders
- Approx. 1000 vessels per year
- Average vessel size is 84kt
- Multiple cargoes and coal types
- Tidal constrained river port
- Approx. 34 End Buyers 12 Countries
- Around 85% exports to Japan, Korea & Taiwan

- Random demand for capacity (vessel arrivals)
- Turn of Arrival loading port
- J.I.T cargo assembly process
- 16 independent organisations required to move each tonne of coal: ownership is a mix of State and Fed Govt, statutory authorities and private sector

Q: How to maximise system throughput and drive efficient asset utilisation?

A: Plan and operate the system as though owned by a single shareholder



\$5 billion in export earnings in 2005 10,000 employees





- Provides centralised planning services on behalf of its members:
  - 1. Short term objective focus on maximising daily throughput
  - 2. Long term objective assist members with coordinated investment planning
- Established on a 'handshake' in 2003 as a trial between PWCS and Pacific National. Evolved into a cooperative organisation with formalised governance arrangements
- Membership includes all transport asset owners in the Hunter Valley and the newest operator, NCIG, have expressed intent to
  participate in the model
- 23 Employees seconded from member organisations
- \$5 million investment in state-of-the-art constraint based planning technology and models





**Capacity Master Plan Overview** 

- Every component of the coal chain is required to deliver new infrastructure if capacity is to increase.
- · Investment is dependent upon commercial arrangements underwriting the necessary expenditure
- The five to ten year plan is currently being remodelled given new developments in port and track infrastructure





- Additional track capacity to manage increased coal demand and support geographic diversification of mines, maintenance strategies
- VCS HORES
- Additional PWCS inbound capacity; stockpile capacity; outbound ship loading/berth capacity; maintenance strategies. NCIG 3<sup>rd</sup> Port



• More rolling stock, more efficient train configurations



Key load point upgrades by Producers

- Up to \$1.5 billion in investment to deliver >70Mtpa increase in capacity has been identified
- Additional exports valued at >\$3billion per annum are at stake

# Capacity Master Plan - Status

Key Initiatives – Phases I	Estimated Capacity	Avail' By	Status as 1 December 2005
<ul> <li>Additional train consists (PN &amp; QRN)</li> <li>Integrated Planning System (HVCCLT)</li> <li>Additional effective path combinations for M-A Sector (ARTC)</li> <li>Minimbah and Nundah Bank headway reduction - 80 km/h (ARTC)</li> </ul>	87 Mtpa	Q1 2006	<ul> <li>Actions identified to access additional wagons and paths.</li> <li>80 km/h speed requirements being assessed by ARTC</li> </ul>
<ul> <li>All of 87Mtpa plus;</li> <li>Sandgate Grade Separation (ARTC)</li> <li>Full track duplication Antiene - Muswellbrook &amp; Yard rationalisation (ARTC)</li> <li>Ulan CTC (ARTC)</li> <li>Part Gunnedah and Ulan Section track upgrades (ARTC)</li> <li>Lower Hunter Signal Box Rationalisation (ARTC)</li> <li>Construct Half Pad D and Stacker at KCT, Stage 3D (PWCS)</li> <li>Wambo Coal Terminal (Wambo Mine)</li> <li>Key load point upgrades (RTCA &amp; Xstrata)</li> </ul>	100 Mtpa	Q4 2007	<ul> <li>Sandgate construction commenced</li> <li>ARTC reviewing its Hunter Valley Corridor Strategy</li> <li>PWCS Stage 3D expansion commenced April 2005</li> <li>Wambo Coal Terminal commenced February 2005</li> <li>RTCA and Xstrata LP upgrades approved.</li> </ul>
Key Initiatives – Phases II	Estimated Capacity	Avail' By	Status as 1 December 2005
<ul> <li>All of 100Mtpa plus;</li> <li>Minimbah/Nundah Bank headway – re-signalling and/or 3<sup>rd</sup> track (ARTC)</li> <li>Complete Gunnedah and Ulan Section track upgrades (ARTC)</li> <li>Full Bi-Di signalling Maitland to Minimbah (ARTC)</li> <li>Upgrade all inbound streams and construct 4<sup>th</sup> Berth at KCT (PWCS)</li> <li>3 to 4 additional train consists</li> <li>Further key load point upgrades</li> </ul>	110 Mtpa	Q4 2008	<ul> <li>ARTC reviewing its Hunter Valley Corridor Strategy</li> <li>Further expansion at KCT has PWCS Board concept endorsement, detail design studies have commenced</li> <li>Preliminary modelling by HVCCLT commenced</li> </ul>
<ul> <li>All of 110Mtpa plus;</li> <li>Extend Pads C &amp; D at KCT to full length (PWCS)</li> <li>3 to 4 additional train consists</li> <li>Further key load point upgrades</li> </ul>	120 Mtpa	Q3 2009	Further expansion at KCT has PWCS Board concept endorsement, detail design studies have commenced
Key Initiatives – Phase III	Estimated Capacity	Avail' By	Status as 1 December 2005
All of 120Mtpa plus; • Construct 3 <sup>rd</sup> Port expansion (NCIG) • Whittingham Branch line grade separation (ARTC) • Full mainline Bi-Di signalling • 4 additional train consists • Key load point upgrades	150 Mtpa	2010/11	<ul> <li>Detail design study commenced by NCIG</li> <li>ARTC reviewing its Hunter Valley Corridor Strategy</li> <li>Preliminary modelling by HVCCLT commenced</li> </ul>

# A coordinated commitment to investment is required



Infrastructure	Investment Status	Commercial Drivers / Incentives to Act	Role of Government
Shiploading	<ul> <li>PWCS running to time on delivery of 102Mtpa shiploading capacity by late 2007. Spending \$6 million in planning 120Mtpa expansion</li> <li>NCIG mobilising construction</li> </ul>	PWCS is industry owned. Natural incentive for shareholders to invest to meet their needs as customers – I.e. incentives of shareholders and exporters is aligned	<ul> <li>Ensure timely approval processes to support investment in new infrastructure. E.g. development consents, EIS approval processes</li> <li>Ensure govt land around Newcastle</li> </ul>
	of 30Mtpa, \$500m investment in new terminal	NCIG also industry owned	Harbour is developed for use by the coal industry (in process with NCIG)
Trains	<ul> <li>New competitor (QRNational) commenced in 2005 adding 4 train consists</li> <li>Pacific National delivered additional locomotives and wagons in 2005 in response to customer demand</li> </ul>	Above Rail is a competitive market with both participants responding to customer demands for additional capacity.	Ensure fair and equitable access to track infrastructure
Track	<ul> <li>Flyover to separate passenger and coal trains at Sandgate commenced</li> <li>Hunter Valley Investment Strategy under internal review by ARTC</li> </ul>	Monopoly government owned infrastructure provider	<ul> <li>Deliver on commitments to ensure track is not a constraint to the 2007 capacity being constructed by other participants</li> <li>Finalise Hunter Valley strategy and invest in coordination with other coal chain participants to support capacity increases beyond 2007</li> </ul>

Government's Role – as Submitted to DoTaRS Investigation in March 2005

HVCCLT is supportive of developing a policy regime that encourages investment in a coordinated fashion. We have identified the following areas where Government policy decisions and actions may be supportive of achieving future goals:

Involve the Coal Industry in the development of recommendations and policy decisions.

#### State Government:

- Facilitate EIS approval processes to enable more timely investment decisions.
- Ensure Kooragang Island land is reserved for use by the coal industry and that any decision to award a contract takes into account the coal chain capacity impacts of the successful bid.
- Ensure any operator of a third terminal utilises the planning services of HVCCLT for coordination of rail, train and port planning. A single point of coordination for planning Hunter Valley coal transport operations is fundamental and critical to maximizing capacity of the infrastructure.

#### **Federal Government:**

- Develop supportive Access Regimes that promote rapid investment and positive coal chain capacity outcomes. Future access regimes must:
  - Ensure pricing outcomes do not constrain investment decisions.
  - Encourage monopoly providers to operate their assets in a manner that is consistent with maximising system capacity and throughput by working with the HVCCLT. This includes recognising the Hunter Valley rail network as primarily a coal transport network as opposed to a passenger network.
  - Encourage, and if required, mandate, investment in new capacity that is essential to achievement of the integrated capital plan and meeting industry demand.
- Provide shareholder support to investment plans in rail infrastructure identified by ARTC and RIC. Work with the coal industry to
  minimise the temporary impact of construction.
- Ensure continued operation of the CBS consistent with the findings and Draft Determination of the ACCC.
- Support the introduction of fair and equitable system rules to encourage behaviours aimed at maximising system capacity.
- Assist to facilitate dialogue between Australia's major trading partners to improve coal chain logistics.



# **Supplementary Material**

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