

The Costs of Australia's New Coal Chains

– Are we being bound-up in chains?

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Reasons for rush for New coal chain Capacity

- Increased demand & very high prices
- Too little existing coal chain capacity
- Underperformance of some terminals and rail links
- Underperformance of some mines
- Periods of very high demurrage costs
- Lost export opportunities

Fig.1 PWCS Monthly Average Demurrage From Sept.2005 to Sept.2008

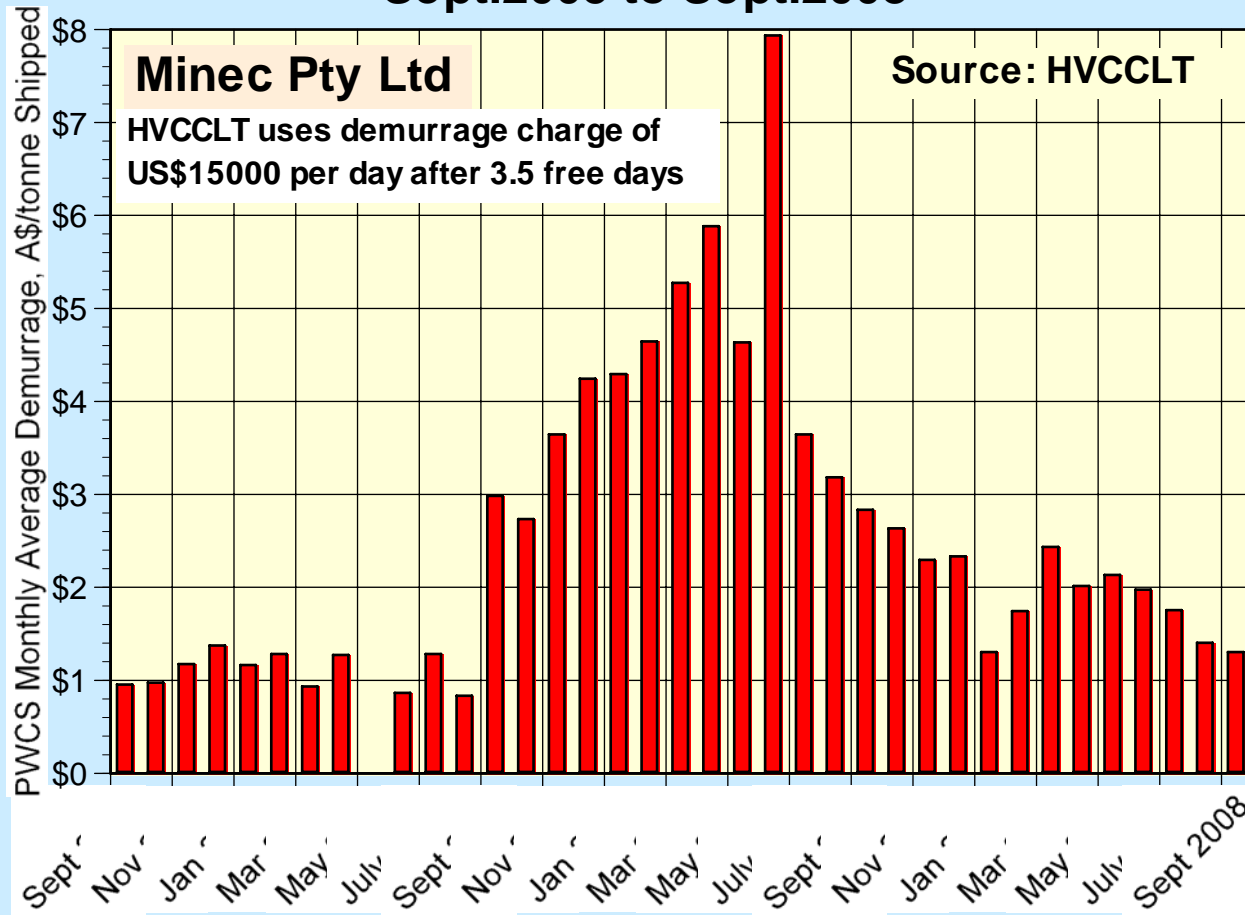
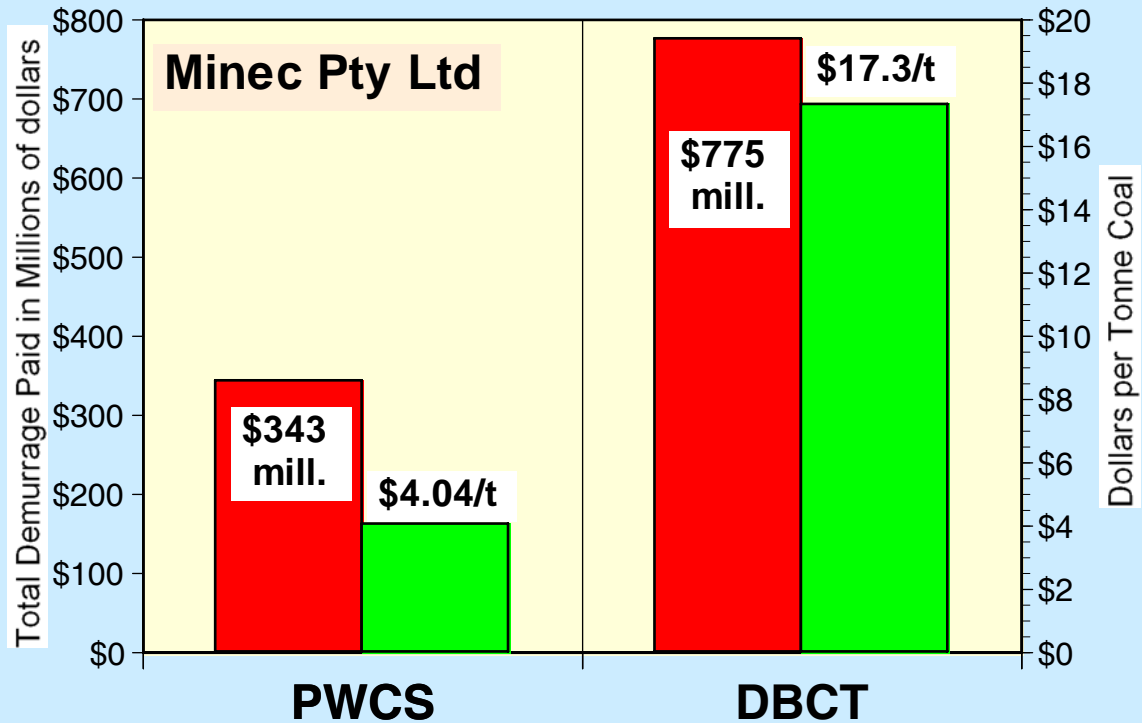
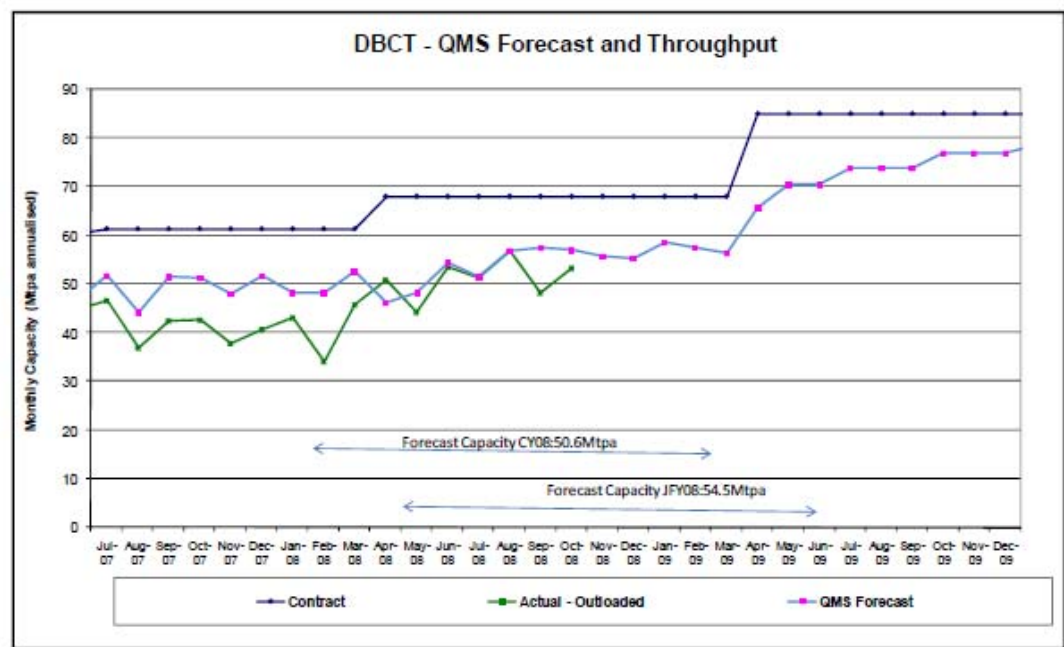


Fig.2 Total and Unit Demurrage Paid by PWCS and DBCT in 2007



Infrastructure

- Performance of DBCT and the coal chain continues to improve
- Currently in line with estimated 50Mt throughput capacity for CY2008
- Loading rates over short periods of time have increased significantly during the quarter
- There is mounting evidence that some coal producers are struggling to deliver sufficient coal to the terminal to meet their allocation levels



A leading independent Australian coal company

Fig.4 Australian Possible Coal Terminal Capacity 2008 to 2023

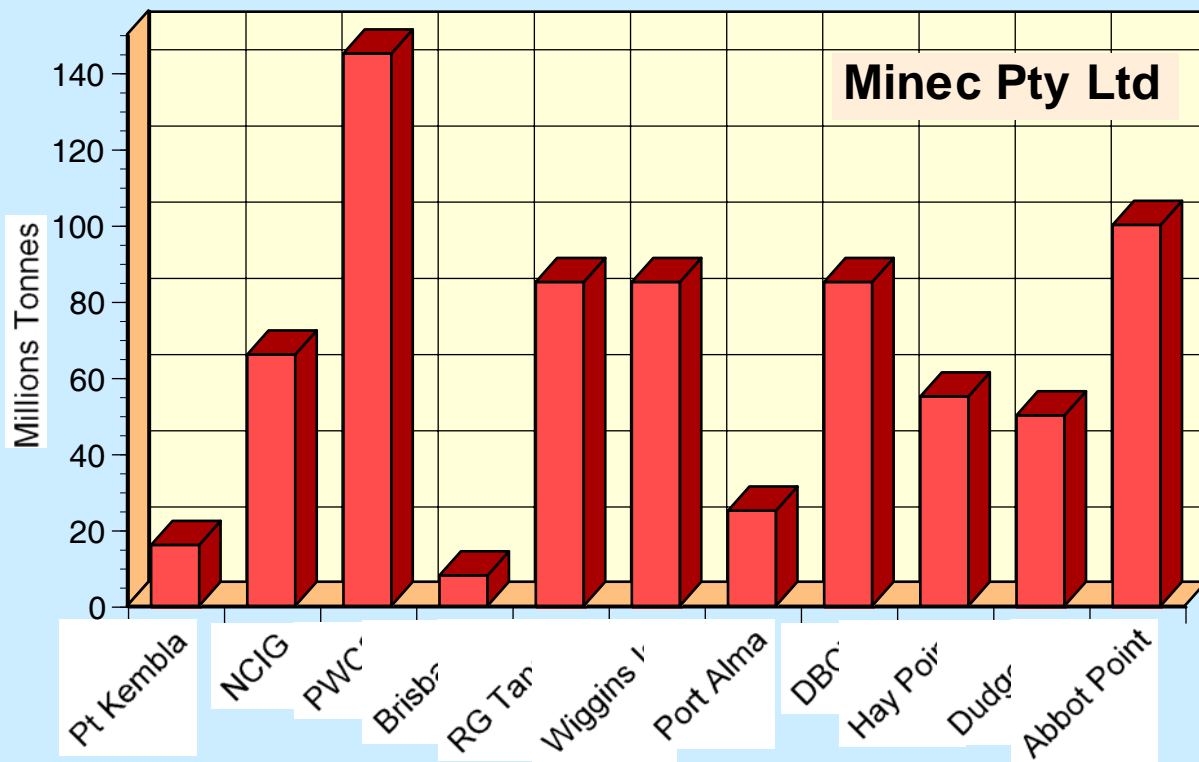
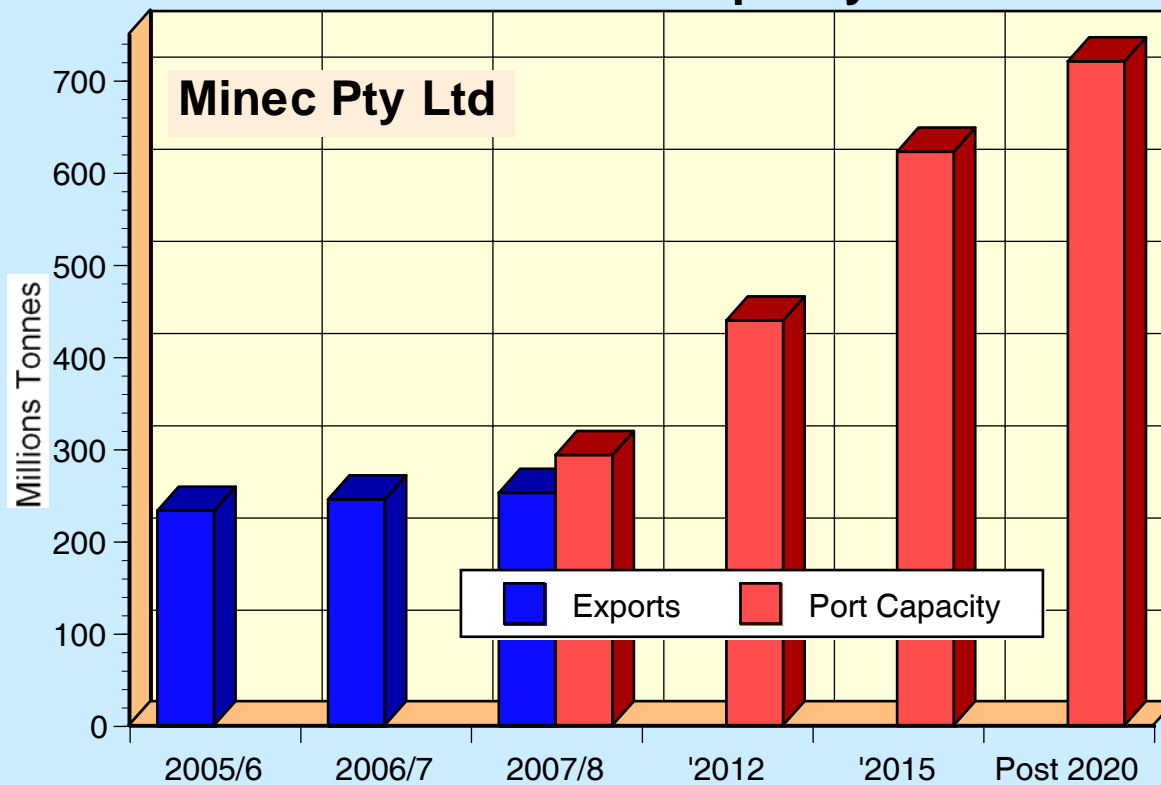


Fig.5 Australian Coal Exports to 2007/08 and Possible Coal Terminal Capacity 2008 to 2023



Data sources Include

- Queensland Coal Infrastructure issues, Ed Ebert, Assist.Coordinator General, Qld Dept Infrastructure & Planning, Aust-Japan Conference, 17 Oct 08, Sydney
- Jonathon Vandervort, HVCCLT, Creating an Intergrated Supply Chain – the case of the Hunter Valley, July 08
- Waratah Coal releases
- Aust.Coal Report (Barlow Jonker), Oct.2008
- Gladstone Port Authority

Fig. 6 NSW Possible Coal Terminal Capacity; 2008 to Post 2023

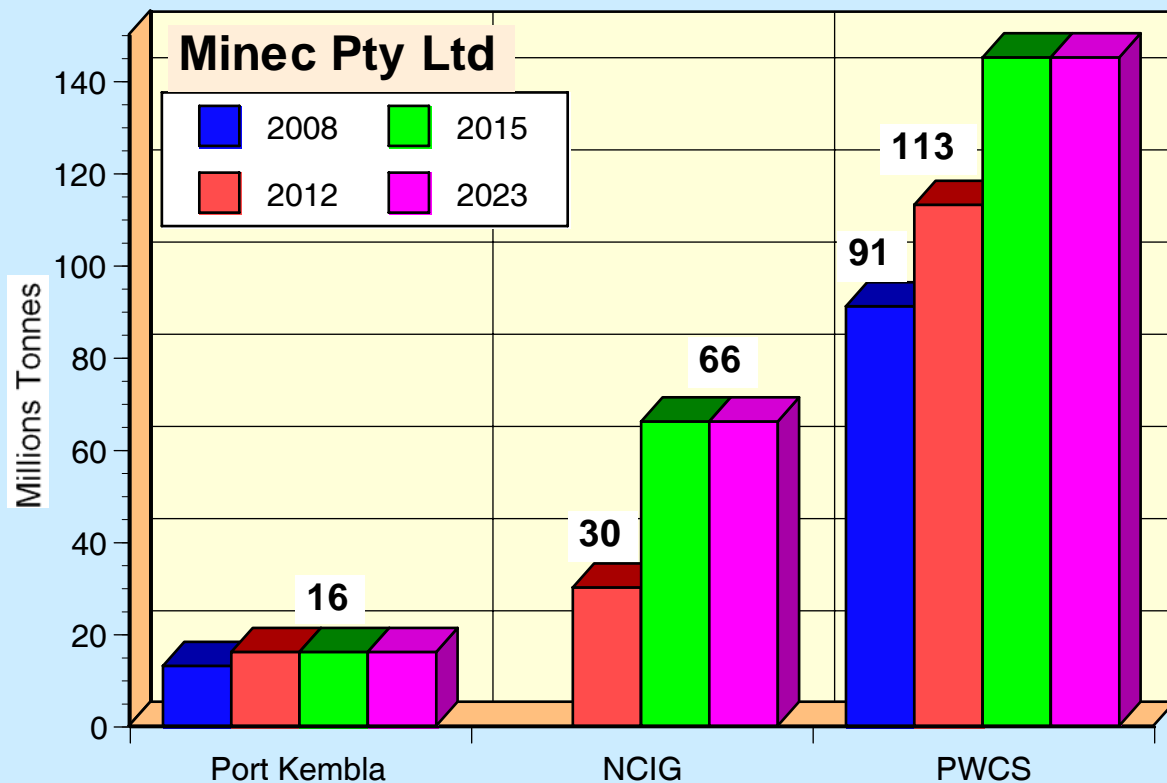
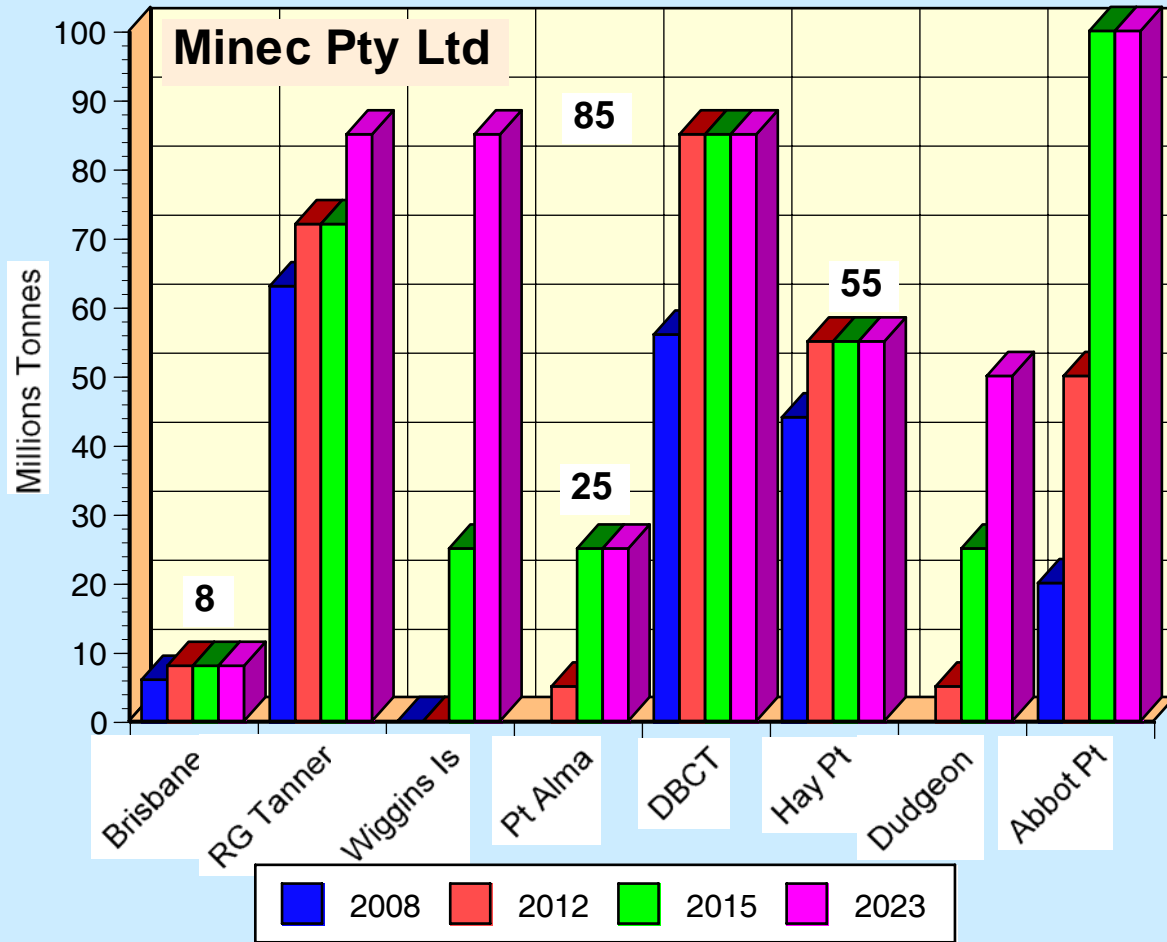


Fig. 7 Qld Possible Coal Terminal Capacity; 2008 to Post 2023



Alternative Infrastructure Options Study



Data Sources – Assumptions for Cost Analysis

- Minec Australian Coal Supply Cost Model
- Ed Ebert 17 Oct 2008
- NCIG press releases
- Waratah Coal press releases
- ACR, Oct 2008
- DWAC: 10% for existing rail & port operations, NCIG (financed Stage 1 Dec 07), QPA-QR facilities & Pt Alma (Xstrata); Waratah Coal no cash flow thus 12.5%; NCIG Stage 2 10% as will have cash flow from Stage 1 & BHPB – but may have problems due to financial crisis.

Fig. 8 Expected Total Cost per Tonne Capacity for NSW Port & Rail by Terminal; 2008 to 2023

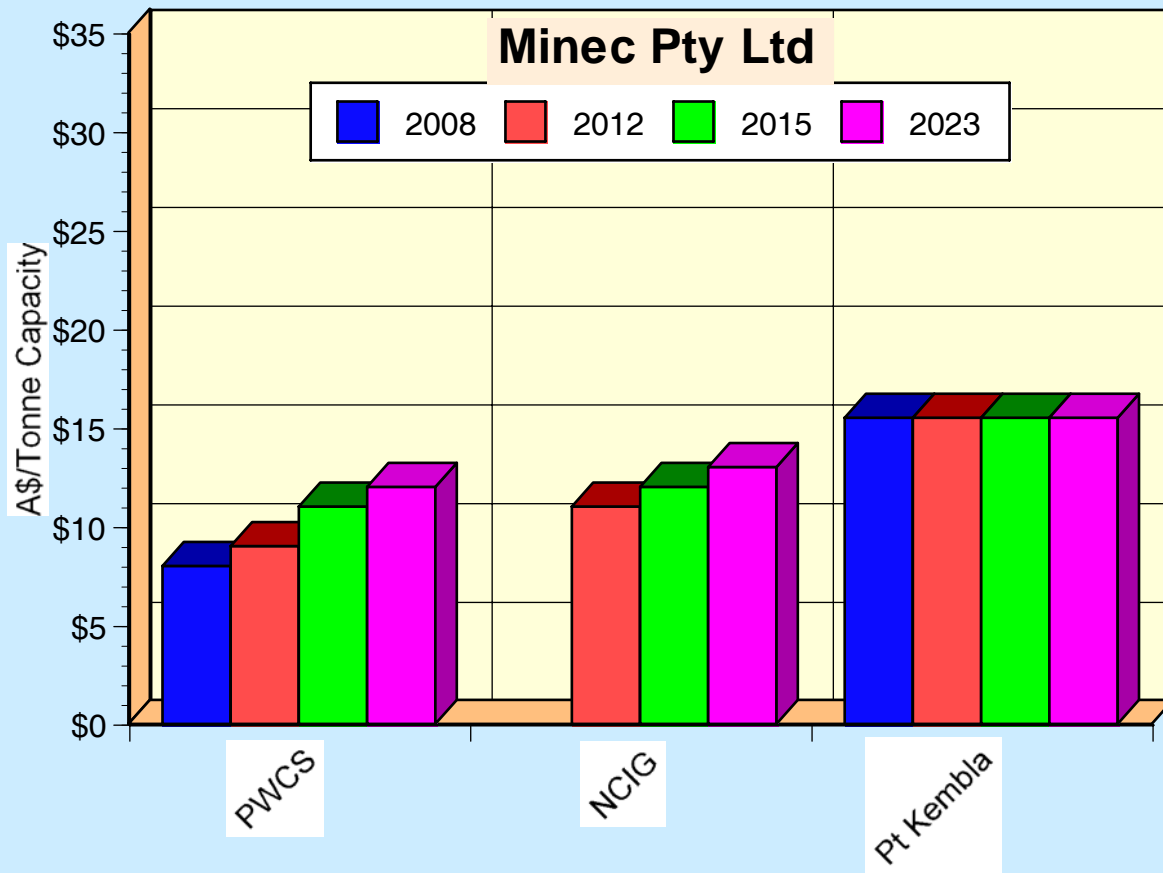


Fig. 9 Expected Total Cost per Tonne Capacity for Qld Port & Rail by Terminal; 2008 to 2023

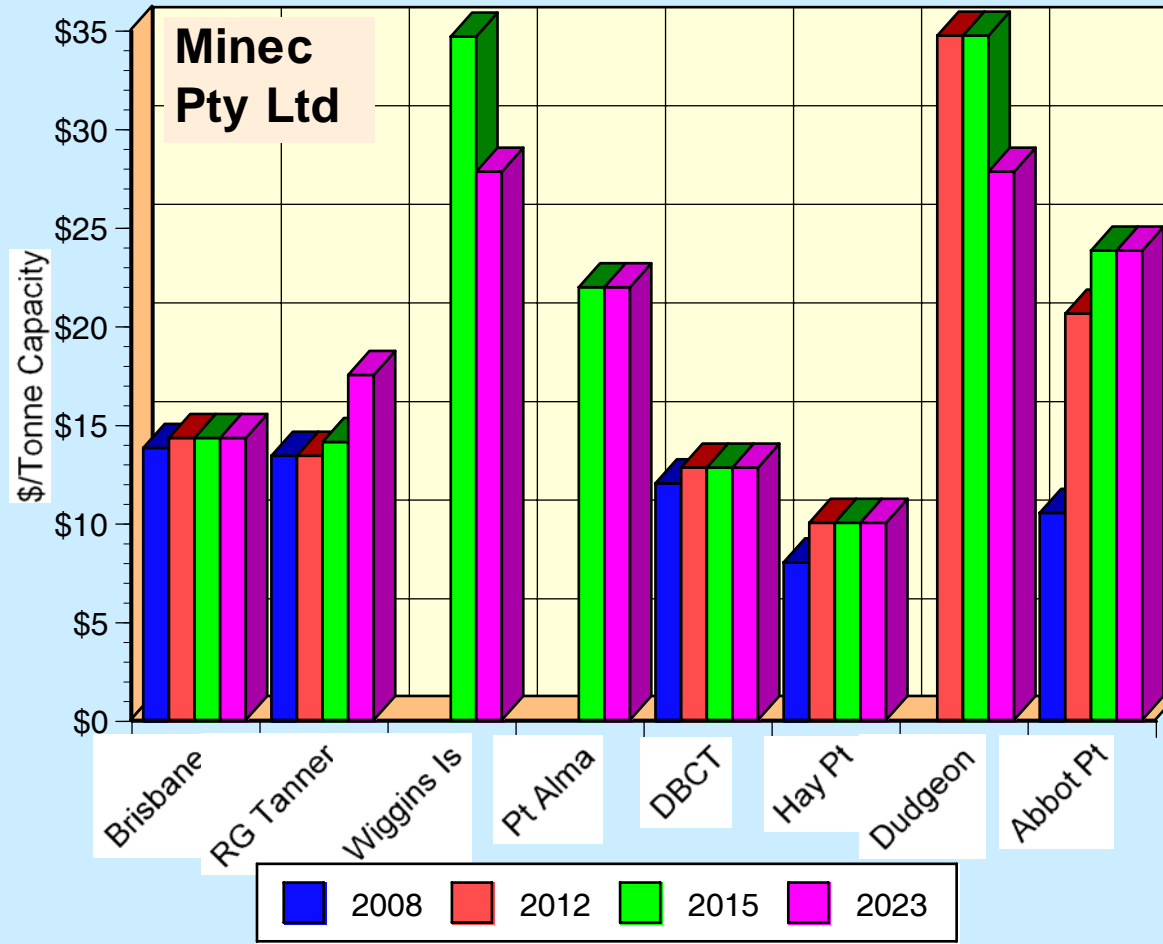


Fig. 10 Port and Rail Charges for NSW Systems, 2008 to 2023

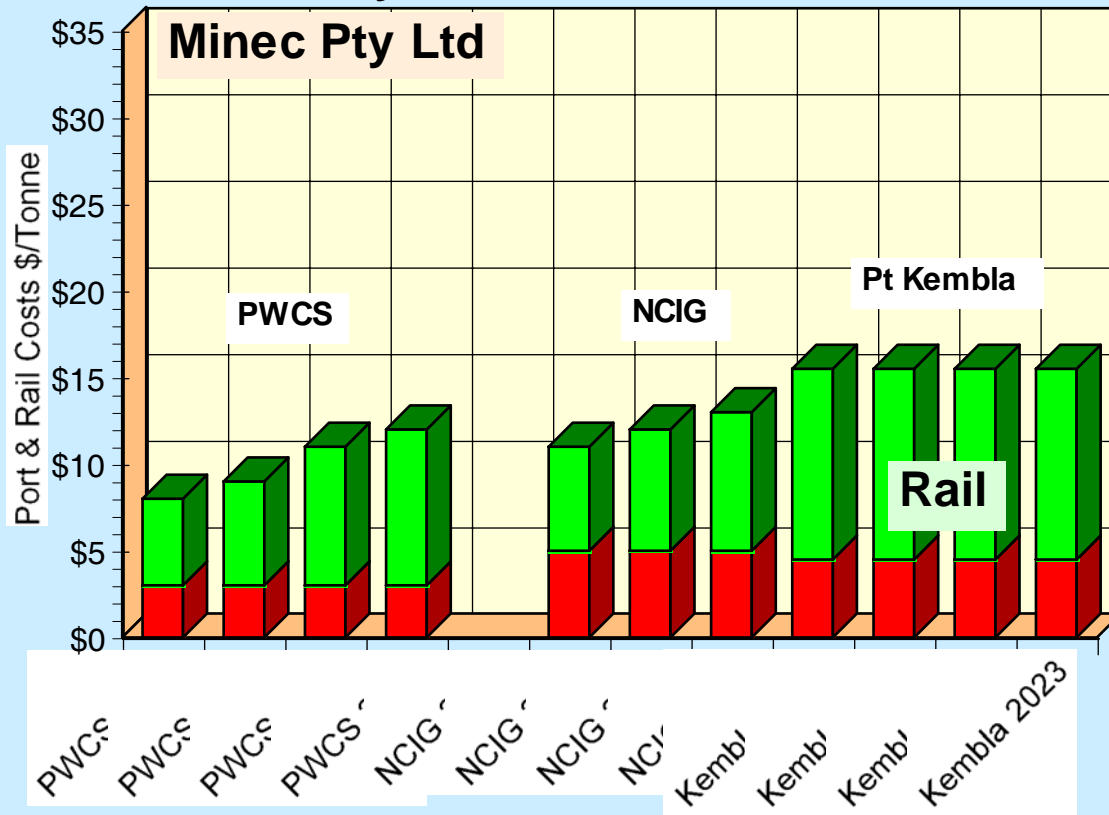


Fig. 11 Port and Rail Charges for Old QLD Systems, 2008 to 2023

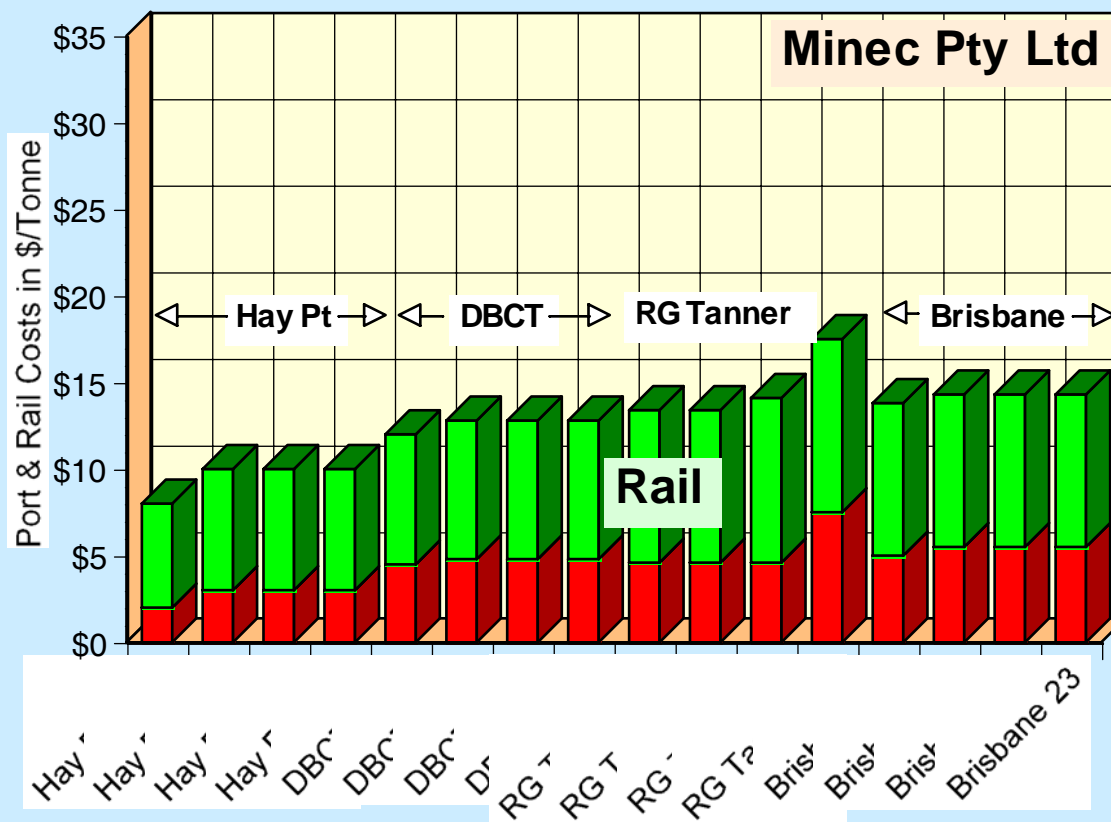
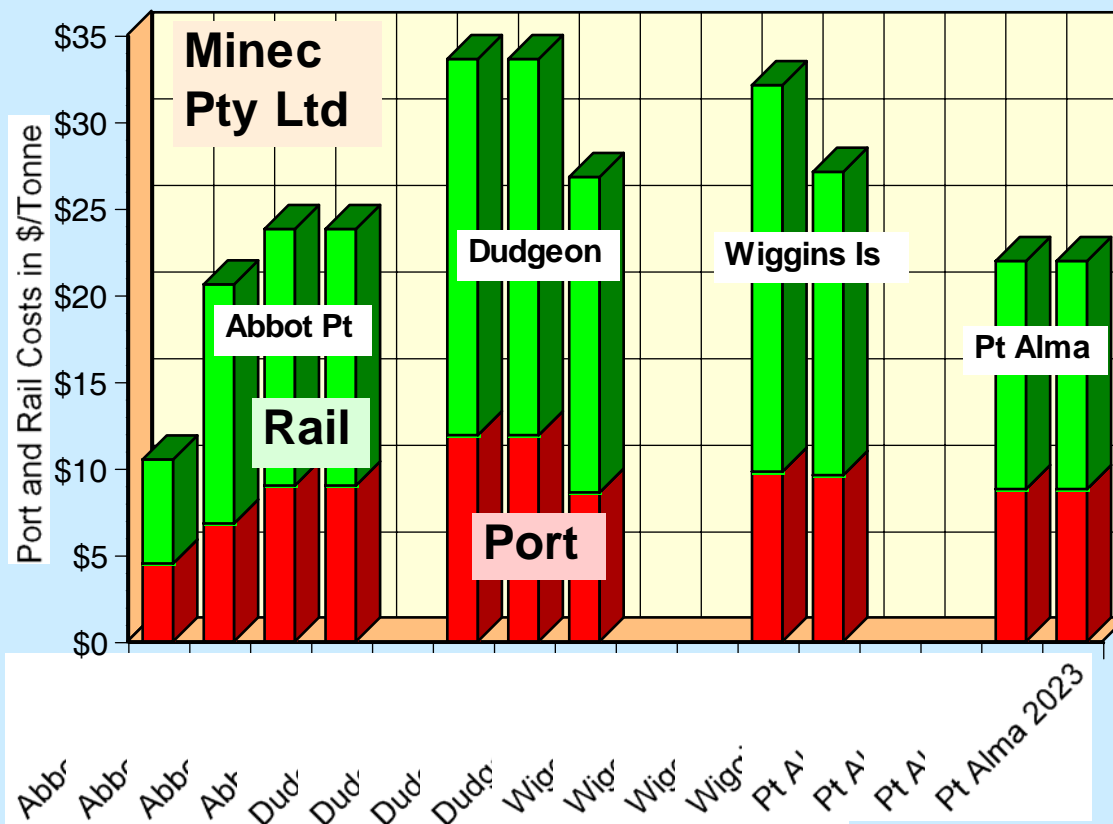


Fig. 12 Port and Rail Charges for New QLD Systems, 2008 to 2023



Conclusions

- Existing coal chains cost ~ A\$10-15/t.
- New coal chains will cost A\$22-\$35/t.
- Rail ~2/3rds total cost of each chain.
- Do we need 710mtpa capacity?
- Can Galilee coal go to expanded Abbot Pt or DBCT (could easily expand by 50+mtpa and/or Wiggins Is)?
- Galilee-Dudgeon & Surat-Wiggins chains reduce costs with more tonnes but probably still > Abbot Pt (that appears to increase costs with more tonnes).
- Can we rationalise the Qld coal chains? – NSW seems basically OK.

The little Aussie battler to the rescue!

- Analysts write down coal stocks due to threat of recession and falling US prices. But:
- At $A\$1.0 = US\0.95 , $US\$125 = A\$131.5/t$,
- At $A\$1.0 = US\0.70 , $US\$92 = A\131.5 ,
- At $A\$1.0 = US\0.65 , $US\$85.5 = A\131.5 ,
- At $A\$1.0 = US\0.60 , $US\$79 = A\131.5 .
- Still lot \$\$\$ to be made from Aussie coal!
- **We need more mines, rail and ports but lets be clever, not stampeeded.**
- Lets not be bound up in chains!

Thankyou for your attention

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- **World Coal Outlook Seminar, 25
Nov.2008**