Resourcing the Olympic Dam Expansion

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BHP Billiton Base Metals

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Structure driven by customer needs

Petroleum

Aluminium

Base Metals

Carbon Steel Materials

Diamonds & Spec Prod

Energy Coal

Stainless Steel Materials

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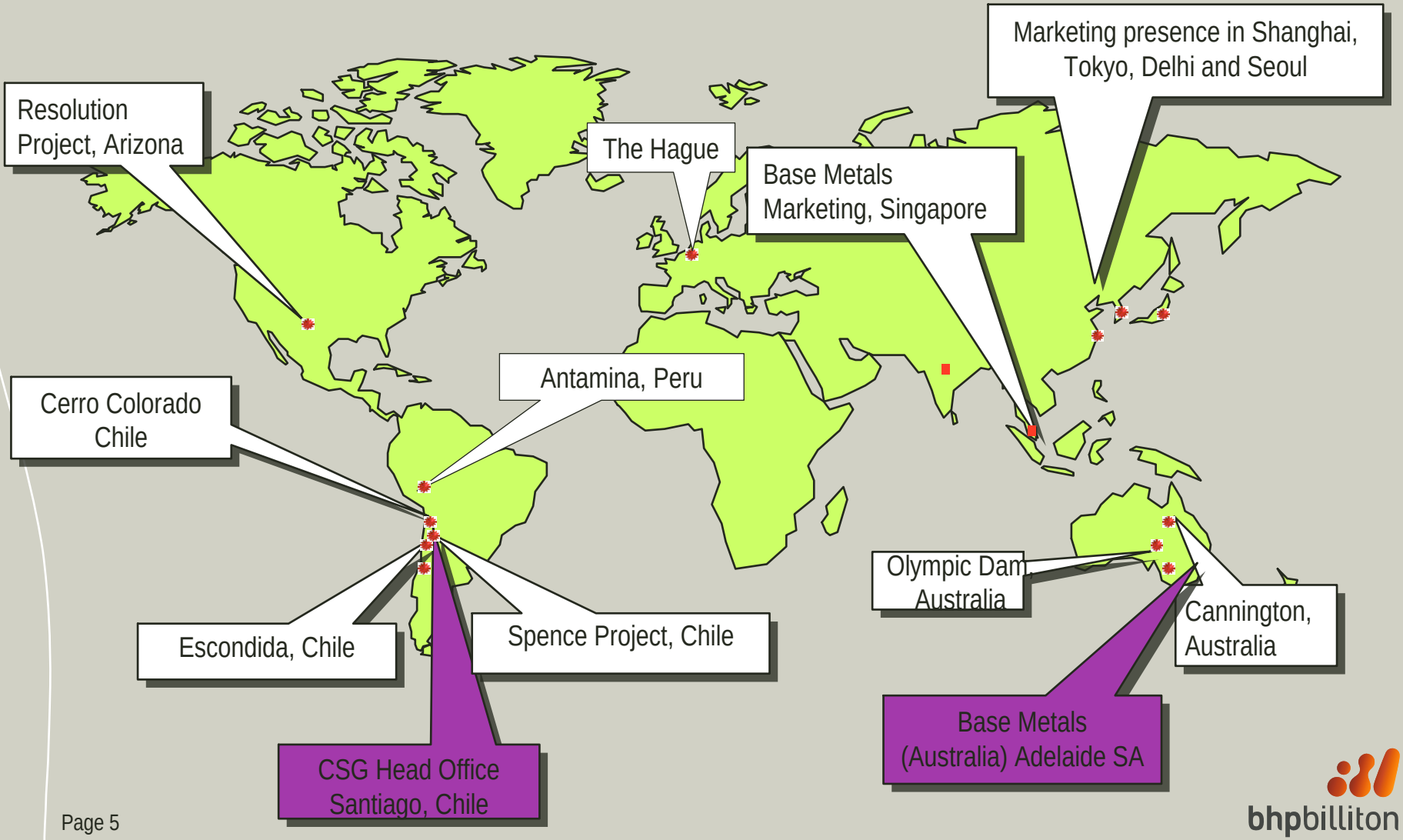
Base Metals CSG - A Global Footprint



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Olympic Dam & The Expansion Project

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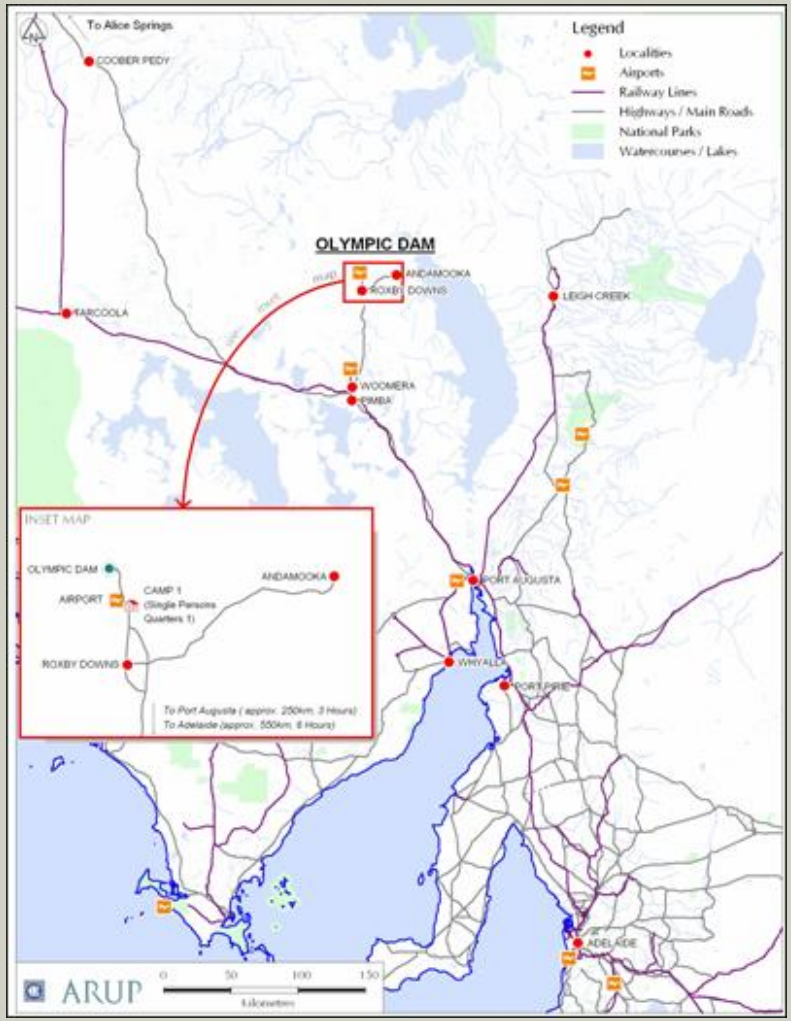
Olympic Dam – Current Status

- Australia's largest underground mine
- Current Production Capacity
  - mining up to 10 mtpa
  - copper – 200,000 tpa
  - uranium oxide – 4,500 tpa
- Mineral Resource

Classification	tonnes (million)	Cu %	U308 kg/tonne	Au g/tonne
Measured	**680**	**1.5**	**0.5**	**0.5**
Indicated	**1,360**	**1.1**	**0.4**	**0.4**
Inferred	**2,390**	**0.9**	**0.3**	**0.5**
Total	**4,430**	**1.1**	**0.4**	**0.5**



The information in this report that relates to Mineral Resources is based on information compiled by Stuart Hayward who is a Member of the Australian Institute of Geoscientists.

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Olympic Dam - looking West

Olympic Dam the bigger picture looking the other way

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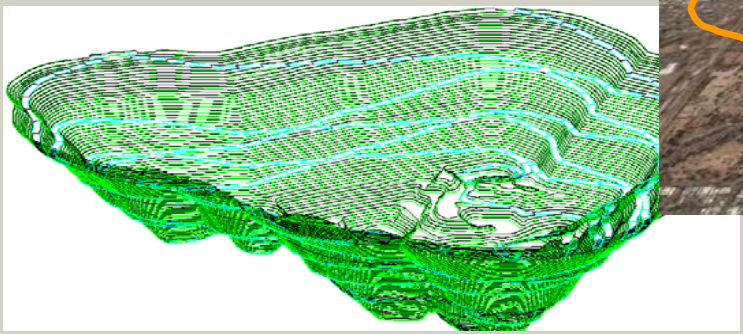
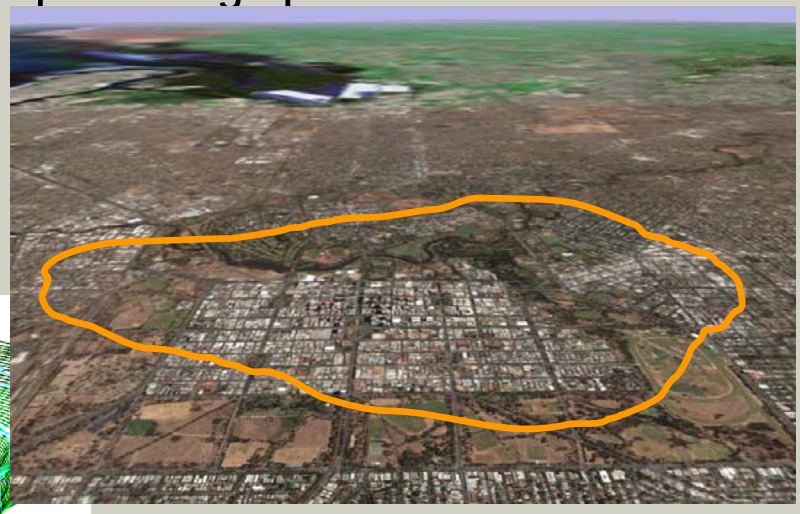
Olympic Dam – Expansion Potential

- Olympic Dam's uranium represents about 40% of known world uranium resources in the ground
- Resource is large enough to support a significant increase in annual production
- Pre-feasibility study for options up to 500,000 tpa copper (15,000 tpa uranium)- requiring ~40 mtpa open-pit mining operation





Phases of the expansion project

Concept	understand what might be possible
Pre-feasibility	rigorously examine development alternatives and analytically select a preferred development plan
Feasibility	refine and optimise the single go-forward case
Execution	construct and commission
Operation	ramp-up to full scale production

Olympic Dam – Pre-Feasibility Work

- Ore resource delineation
- Mine planning – open pit preferred option
- Ore processing options
- Major infrastructure (water, power, rail, township expansion) in a remote and arid area

Olympic Dam – Expansion Schedule

- Pre-Feasibility tollgate – end 2007
- Feasibility tollgate – early 2009
- Execution Phase – 2009 – 2013
- Operation of Expanded Facilities – from end 2013

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Olympic Dam – Government Approvals

- Environmental Impact Statement published in 2007 – to seek approvals from Federal and South Australian Governments – extensive public consultation already underway
- Indenture Agreement with South Australian Government – sets regulatory regime and provides legislative certainty to encourage long term investment – re-negotiation during 2007

Olympic Dam Expansion Summary

- Perhaps the largest Pre Feasibility plus Feasibility study undertaken in the mining industry
- Required by scale and complexity of proposed expansion
- Plans need to be well developed and understood before seeking final BHP Billiton and government approvals – includes investment evaluation and customer commitment.
- Successful execution will transform this world class orebody into a world class mining and mineral processing operation

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Resourcing & Workforce Planning

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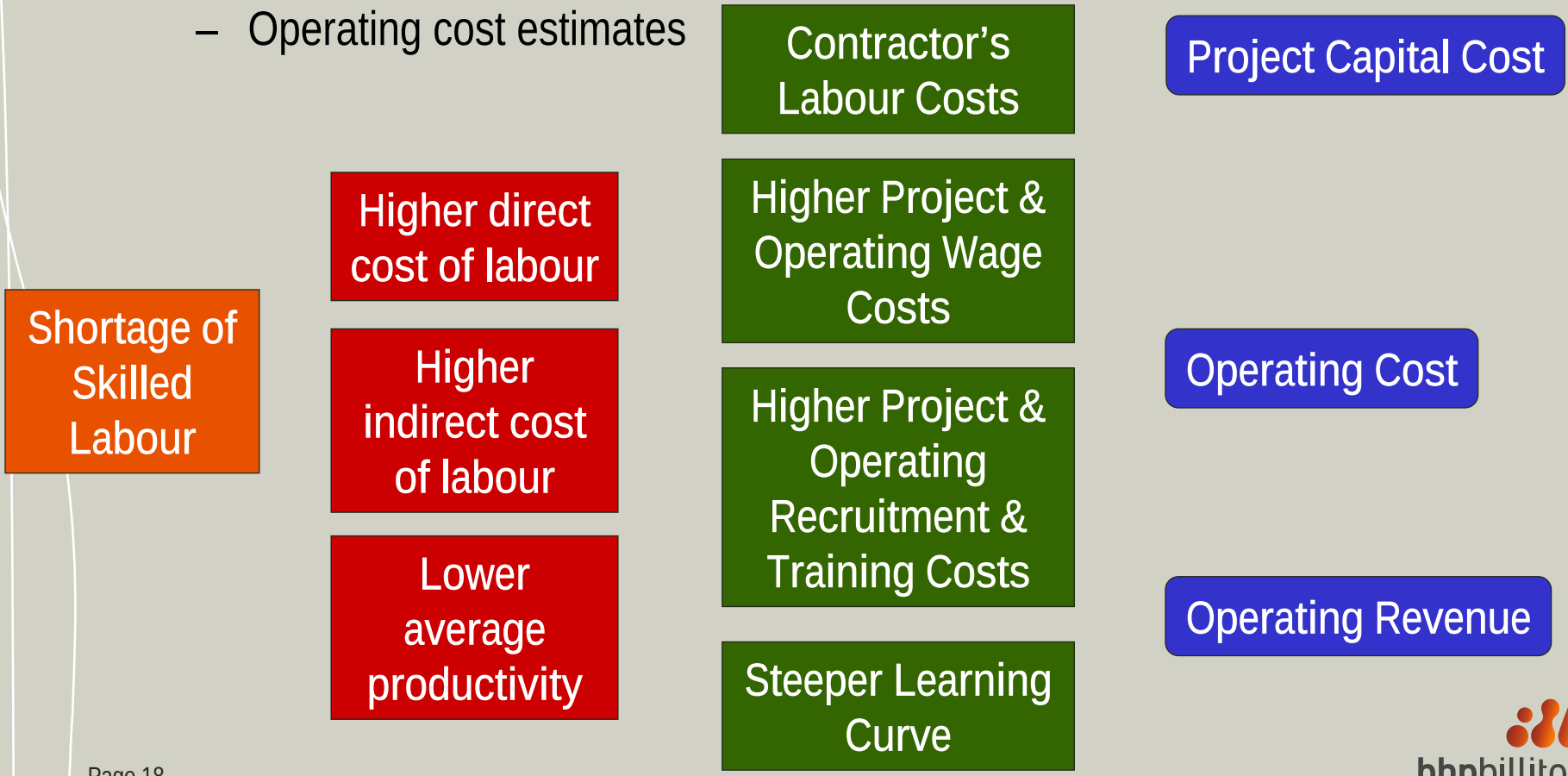
Australian Mining Industry Labour Market Outlook

- Industry needs 70,000 more people in 2015 than it has now
- Largest shortages will be in trades and semi skilled personnel
- Projected economy wide labour force growth in these categories will be slowest.
- Challenge of attracting people to skills shortage professional areas is "strategically critical"
- Additional demand will be focussed:
  - WA 42,000
  - QLD 15,000
  - NSW 5,000
  - SA 5,000
- Fastest growth projected between 2006 and 2010.
- Shortages will continue to worsen

Source: National Institute of labour Studies, "Staffing the Supercycle: Labour Force Outlook in the Minerals Sector, 2005 to 2015", August 2006

Resourcing in the Study Context

- Variables in project evaluation
  - Initial project expenditure estimate
  - Ongoing revenue forecasts
  - Operating cost estimates



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Owner's Task in three stages

1. Recruit a team to conduct the studies
   - Professionals and support staff (~250)
   - Approximately 50% complete with majority complete by Dec 2006
2. Recruit a workforce to complete mine development prestrip
   - Operators (~1,000) and maintainers (~700) and their supervision
   - Commence ramp-up in 2008
3. Recruit a workforce to operate and maintain expanded processing plant
   - Operators and maintainers and their supervision (~1,500)
   - Commence long lead time training as early as 2009
   - Commence commissioning 2014

2nd Task - Workforce Planning for the Operations Ramp-Up

- Estimate Demand
  1. Identify all facilities and operations
  2. Identify the drivers for labour in each
  3. Agree organisation design parameters
  4. Design organisation structures
  5. Aggregate demand by useful descriptors
- Test Supply
  - Review literature
  - Learn from the experience of others
  - Expressions of interest by geographic area
  - Estimate labour & skill gaps

Contractors' Tasks

- Challenge
  - Recruit workforces to fabricate, build and install the infrastructure and processing facilities
  - Trades, semi-skilled and unskilled labour from 2008 to 2013
- Estimate Demand
  - Estimates of requirements will emerge from engineering studies currently underway
  - Availability of fabrication and construction labour could affect scheduling or construction method
  - Project pipeline will affect availability (majority of this workforce not required until 2010 – 2013)

Where to from here?

- Clearly we are facing a skills shortage
- It is likely that we also face a labour shortage
- Response must be to grow the supply or bid up the price
  - As price increases projects are stopped (WA)
- Training and education are essential for medium term growth
  - BHP Billiton will use its existing operations to commence training for its requirements particularly apprentices for trades
  - BHP Billiton will integrate training plans with operational development plans as a part of the pre-feasibility study
  - BHP Billiton will invest in scholarships, bursaries, vacation programs and graduate schemes to attract graduate mining professionals
- Response in Summary
  - Training
  - Education
  - Marketing

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