



The Chamber of Minerals and Energy of WA

Staffing the Resources Supercycle

Presented by Reg Howard-Smith

Engineering Tomorrow's Engineers

Wednesday 30 January 2008

What We Do

Vision

That the resources sector be recognized as a highly valued and strongly supported member of the Western Australian community

- Includes:
 - License to Operate
 - Environmental Protection
 - Sustainable Development
- In order to achieve this, CME strives to:
 - Represent industry member views;
 - Industry voice to government;
 - Coordinate member collaboration; and
 - Community education.



Perth, Western Australia

Western Australian Resources Sector

In 2006/07, Western Australia's resources sector accounted for:

- \$53.4 billion in production value
- 88% of total export income for WA
- Around 30% of WA's Gross State Product
- \$2.1 billion in State royalties
- Direct employment of 61,709
- Direct and indirect employment around 243,750
- More than \$96 billion of resources projects are either underway or planned in WA
- 2006/2007 annual large company salaries rose 6.8% in WA compared to 4.6% for the rest of Australia



Photo courtesy of Roche Mining

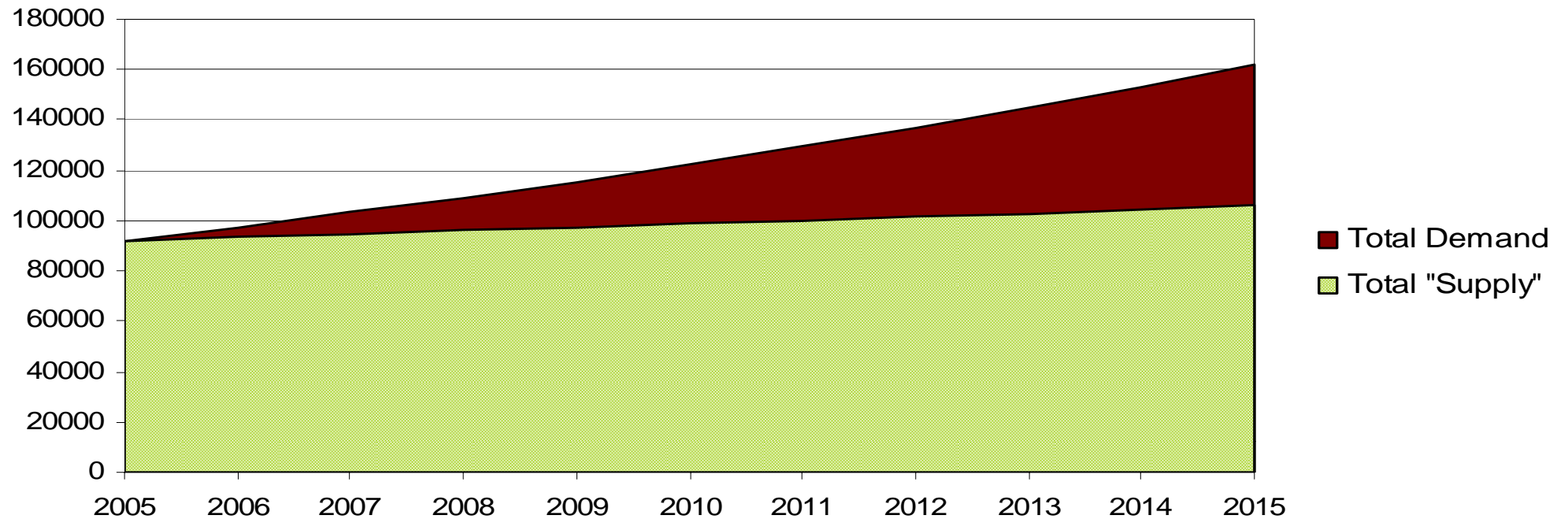
Source: DoIR 2006 and AIM National Salary Survey 2007

Skills Shortage

Staffing the Supercycle CME Report

Gap between Demand and "Supply" (number of persons)

2005 mining employment 92,117 vs 2015 mining employment 162,275 (up 76%)



Skills Shortage

State Training Board 2007 Report
Beyond the Resources Boom found in
their base case economic model that:

- Employment growth for top performing occupations will average 1.79% per year between 2006-2016
- Growth for Building and Engineering Professionals is expected to grow 2% in that same time
- Natural and Physical Science professionals is expected to grow 2%



Photo provided by HWE Mining

Exploring Solutions

Attracting Labour

- Existing labour pools
- Alternative labour pools in Australia
 - Women
 - Remote communities
 - Indigenous groups
 - Mature age
- Migration
 - WA is a migrant state
 - Nearly 2/3 of 2% growth in WA in 2006 from international and interstate migration
 - Availability from traditional markets (eg. UK, South Africa, New Zealand) tightening
 - Should consider non traditional markets such as Asia



Photograph Courtesy of Newmont Asia Pacific

Exploring Solutions

Retaining Labour

- Incentives
 - Pay
 - Labourers in mining industry: Starting around \$65,000 source: www.miningcareers.com
 - Flexible work place
 - Career development

Training and Up skilling

- Developing training resources
- On site training
- Collaboration with training organizations (TAFE, universities, etc.)
- Working with state and federal government



Photograph Courtesy of Newmont Asia Pacific

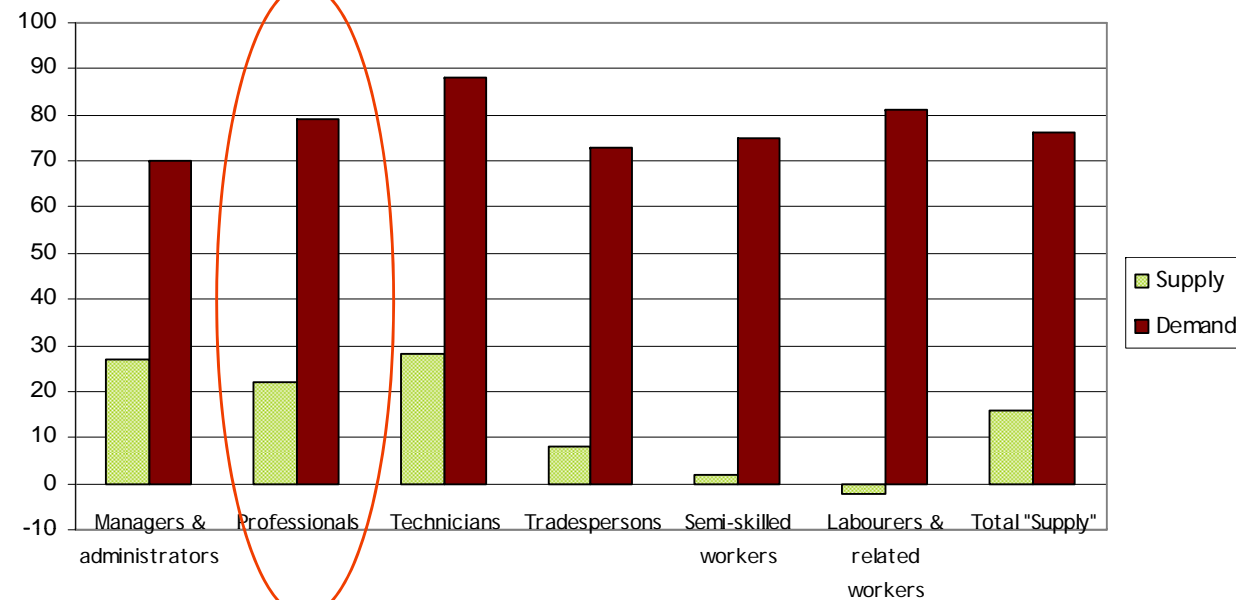
Skills Shortage: specific occupations

- Labour shortages exist in the following categories: *Managers and administrators, Professionals, Technicians, Tradespersons, Semi-skilled workers, Labourers & related workers*

- Projected growth rate for the six major occupational categories is 15.6% from 2005-2015

- Projected growth in demand is 76.2% for the same six occupations from 2005-2015

Minerals Labour Shortages by Occupation
(percentage increase 2005-2015)



Skills Shortage: Engineers

CME Initiatives to encourages Engineering as a career path at all levels:

- Teaching resources for Teachers
- Teacher Tours
- Enriching Science Unlocking Resources Working Group (Partnership with education organizations)
- MaTRIX (Minerals and Technology Research Institute of Excellence)



Photo Courtesy of HWE

Skills Shortage: Engineers

- MoU with Curtin University of Technology
- Indigenous Cadetship program
- Engineering Summer School
- Engineers from Abroad
 - Advocacy of Offshore Student Graduate Engineering Visa - inclusion of Sarawak Curtin Campus
 - Marketing the WA resources sector to students abroad
 - Advocating changes to student visas that now place overseas graduates that have studied in WA on the par with students from South Australia in relation to permanent residency

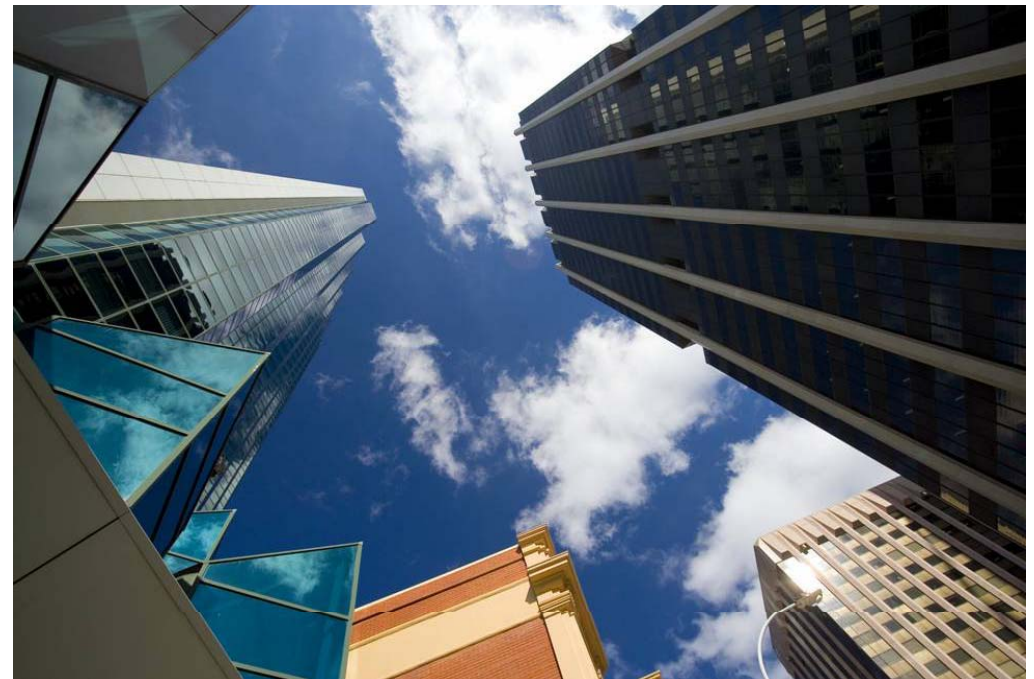


Photo Courtesy of Agnew Mining

Skills Shortage: Partnerships

Collaboration is key to addressing the skills shortage

- Education organizations, professionals, and Industry have the opportunity to work together to identify, promote, and fill positions required for the continued growth of the resources sector with mutual benefits for all
- Trends that show less interest in degrees in engineering make initiatives such as Engineering Tomorrow's Engineers timely and extremely important
- Now is the time to form key partnerships to deliver the needed outcomes



Expanding Horizons 2007

Outlook to 2015

- 50-75% output growth for sector in next ten years
- Employment: Need 42,000+ additional employees to 2015
- Increased value-adding R&D and production across sector
- Continuous improvement in safety and environmental performance
- Maximising our resources wealth by adding skills, intellectual capability and investment
- Exposure to world-class operations and research facilities resulting in fast growth in the mining services and technology sector every year
- Growth of services to the resources sector
- Role of WA as a global resources province

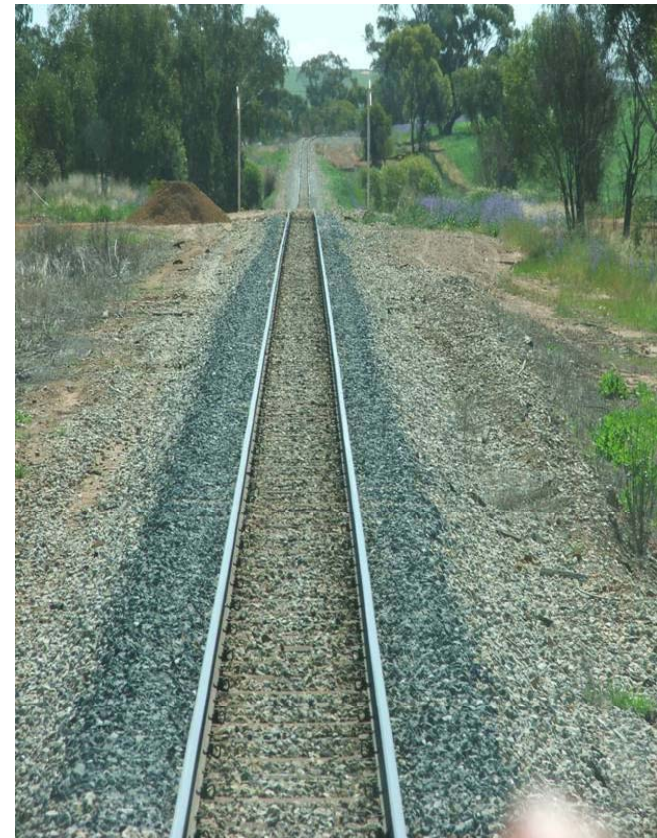


Photo courtesy of WESTNET RAIL



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