Contents

1. Economic Impacts

2. Employment

3. Working Arrangements

4. Education & Training

5. Outlook & Future
### Top Australian Commodity Exports 2010/11

<table>
<thead>
<tr>
<th>Rank</th>
<th>Commodity</th>
<th>Value (A$Billion)</th>
<th>Cumulative Value (A$Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Iron Ore and Pellets</td>
<td>50.6</td>
<td>50.6</td>
</tr>
<tr>
<td>2</td>
<td>Coal</td>
<td>48.6</td>
<td>99.2</td>
</tr>
<tr>
<td>3</td>
<td>Gold</td>
<td>15.6</td>
<td>114.8</td>
</tr>
<tr>
<td>4</td>
<td>Crude Oil</td>
<td>11.2</td>
<td>126.0</td>
</tr>
<tr>
<td>5</td>
<td>Alumina/Aluminium</td>
<td>9.5</td>
<td>135.5</td>
</tr>
<tr>
<td>6</td>
<td>Copper</td>
<td>8.7</td>
<td>144.2</td>
</tr>
<tr>
<td>7</td>
<td>LNG</td>
<td>8.4</td>
<td>152.6</td>
</tr>
<tr>
<td>8</td>
<td>Wheat</td>
<td>4.7</td>
<td>157.3</td>
</tr>
<tr>
<td>9</td>
<td>Beef and Veal</td>
<td>4.2</td>
<td>161.5</td>
</tr>
<tr>
<td>10</td>
<td>Nickel</td>
<td>4.1</td>
<td>165.6</td>
</tr>
</tbody>
</table>

Source: ABARES: Australian Commodities December Quarter 2010: 2010-11 Forecast
Exports by Industry Sector

Contribution to Export Value: 2009-10

On a balance of payments basis, mineral resources accounted for 54.2% of exports of goods and services in 2009-10

Source: Australian Exports Fact Sheet, September 2010, ABARES Australian Commodities Statistical tables
Australian Mineral Export Markets

Export Markets 1999-2000

Export Markets 2009-10

Source: ABARES Australian Commodities Statistical Tables December Quarter 2010
Metals & Mining Sector Profile

- In excess of 600 Metals & Mining companies listed on the ASX
- Largest sector by number of companies and one third of all listings
- 400 new junior resource floats in the past five years
- 2nd largest sector by market capitalisation ~ $320 billion (23% of total)
- Was 10% of market capitalisation in late 1990s and early 2000s
Market Capitalisation by Industry Sector

Financials, 35%
Health Care, 4%
Industrials & Materials, 10%
Energy & Utilities, 11%
Metals & Mining, 23%
IT & Telco, 4%
Consumer, 13%
Metals & Mining Sector Performance

S&P/ASX 300 Metals and Mining vs S&P/ASX 300

Price Index Level

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

S&P/ASX 300 Metals & Mining
S&P/ASX 300
Gold Sector Performance

S&P/ASX All Ordinaries Gold vs S&P/ASX All Ordinaries

Price Index Level

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

S&P/ASX All Ordinaries Gold

S&P/ASX All Ordinaries

NEWCREST MINING LIMITED

9
Contents

1. Economic Impacts
2. Employment
3. Working Arrangements
4. Education & Training
5. Outlook & Future
Employment Growth

10-Year Employment Growth by Sector

Source: ABARES Australian Commodities December Quarters 2006 - 2010
Labour Demand

- By late 2010, planned capital expenditure in the minerals and energy sector had reached a record A$133 billion

- 72 advanced projects under construction or committed:
  - 26 energy projects
  - 25 minerals projects
  - 15 related infrastructure projects
  - 6 minerals processing projects

Source: ABARES
Labour Demand

- Pre-GFC peak minerals industry employment was 163,800 (Nov. 2008)
- November 2010, direct employment had rebounded to 187,200
- Minerals jobs are forecast to increase by 61,500 over the next 5 years
- Allowing for departures and retirements, the minerals industry will require an additional 77,500 people by 2015
- Engineers, geoscientists & traditional tradespeople will be critical

Source: National Resource Sector Employment Taskforce Report
Contents

1. Economic Impacts
2. Employment
3. Working Arrangements
4. Education & Training
5. Outlook & Future
Shift Duration

12 hour shifts remain the most common in the industry

Source: CMEWA - Survey of Current Roster and Shift Practices 2010
Changing Roster Arrangements

Source: CMEWA - Survey of Current Roster and Shift Practices 2010

Percentage of Employees

<table>
<thead>
<tr>
<th>Roster Category</th>
<th>2003</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Even time or lower</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Even time up to 2:1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 &amp; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;2:1 up to 3:1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 &amp; 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;3:1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: CMEWA - Survey of Current Roster and Shift Practices 2010
Fly/Drive-in Fly/Drive-out Arrangements

Originated in the late 1940s in the offshore oil sector

Last mining town constructed in Aus was Olympic Dam in the 1980s

Since the mid-1980s FIFO arrangements more prevalent:
  - global competitive pressures
  - skills shortage
  - lifestyle expectations

59% of minerals industry workforce are on FIFO or DIDO rosters

Increase of 40% in the past seven years from 42% in 2003

Sources: Chamber of Minerals and Energy Western Australia
Contents

1. Economic Impacts
2. Employment
3. Working Arrangements
4. Education & Training
5. Outlook & Future
## Graduate Salary Comparison

<table>
<thead>
<tr>
<th>Sub-Sector</th>
<th>Average Salary ($k p.a.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>$52</td>
</tr>
<tr>
<td>Construction, Building, Architecture</td>
<td>$61</td>
</tr>
<tr>
<td>Engineering</td>
<td>$73</td>
</tr>
<tr>
<td>IT &amp; Telecommunications</td>
<td>$44</td>
</tr>
<tr>
<td>Marketing</td>
<td>$43</td>
</tr>
<tr>
<td>Minerals Industry</td>
<td>$80</td>
</tr>
</tbody>
</table>

Sources: McDonalds Gold and General Mining Industry Remuneration Report; MyCareer website
Education & Training

- Australia produced 211 mining engineering graduates in 2010
- 1,200 mining engineers will graduate over the next 5 years
- Forecast shortfall in mining engineers of 1,700 over this period
Apprenticeship Training

- Apprenticeship system introduced in Australia early in the 19th century in response to demand for trades skills
- The number of apprentices generally increased throughout the 1970s and 1980s and peaked at 175,500 in 1989
- Numbers fell during the early 1990s – down to 111,200 in 1993
- Between 1995 and 1999 apprentices in trade-related activities increased from 99,800 to 112,700
Minerals Industry Apprentices and Trainees

Source: NCVER Data

"Minerals" is based on ANZSIC 2006, including mining division (ex oil and gas) plus basic ferrous and non-ferrous manufacturing.
Retention of Apprentices & Trainees

Cancellations & Withdrawals as a % of Commencements

Source: NCVER Data

*Minerals' is based on ANZSIC 2006, including mining division (ex oil and gas) plus basic ferrous and non-ferrous manufacturing.
“As the baby boomer generation moves towards retirement, Australia will experience a shortfall of workers aged 15-44. It is predicted that workers aged 45 and over will provide up to 85% of workforce growth in the next decade.”

“Employers will need to provide mature age employees with the necessary training to ensure they are able to maintain relevant skills and to ‘up-skill’ in order to meet emerging skills requirements,”

Peter McMullin, the Chair of ACCI’s EET Committee commenting on a recently released study titled *It’s Not About Age*
Contents

1. Economic Impacts
2. Employment
3. Working Arrangements
4. Education & Training
5. Outlook & Future
Outlook

- The minerals and energy sectors account for the largest component of Australia’s export value

- Times of high commodity margins provide the opportunity for developing training capacity & building ongoing people development flexibility

- Successfully addressing the skills shortage is a key challenge to future delivery and ongoing growth

- This requires innovative approaches to addressing employment and training requirements
The Future

Response to Remote Operations

- standardised technology and operating practices
- whole of business visibility & transparency of information
- off-site operations centres for routine functions and monitoring
- centralised experts supporting people in the field
- access to unique skills & experience for non-standard activities

People Development and Retention

- development through “whole of career” training
- mixture of residential and FIFO opportunities
- greater opportunity provided for family education & employment
- encourage remote site visitation
- regulatory framework for flexible leave & employment profiles