Australian Resources and Energy

Department of Resources, Energy and Tourism

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OVERVIEW

– Global copper industry
– Australian copper resource base
– Export outlook and new Australian copper projects
– Existing resources, projects and copper resource life
– Questions?
World Refined Copper Production

RESOURCES in 2009
- Total copper resources of 124 Mt
  including 23 Mt of reserves
- 90 years of resource life

PRODUCTION in 2009-10*
- 3.3 Mt of ores & concentrates
  - 0.83 Mt contained copper
  - 0.39 Mt refined copper

EXPLORATION in 2009-10*
- A$202 million

EXPORTS in 2009-10*
- 1.93 Mt of copper concentrate
  - 0.27 Mt refined copper
- Asia major destination
  - China, Japan, Korea, India
  main markets

* Year ending 30 June 2010

# Economic Demonstrated Resources divided by production
### Australia’s copper exports

![Graph showing copper exports from 2000-01 to 2010-11](chart.png)

### Australian Copper Industry Structure

<table>
<thead>
<tr>
<th>Top Six Australian Copper Concentrate Producers*</th>
<th>2009 (t)</th>
<th>2010 (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xstrata (CY)</td>
<td>197 509</td>
<td>232 300</td>
</tr>
<tr>
<td>BHP Billiton (FY)</td>
<td>194 000</td>
<td>103 300</td>
</tr>
<tr>
<td>Oz Minerals (CY)</td>
<td>96 310</td>
<td>112 171</td>
</tr>
<tr>
<td>Newcrest Mining (FY)</td>
<td>89 877</td>
<td>86 816</td>
</tr>
<tr>
<td>Aditya Birla (year to March)</td>
<td>70 111</td>
<td>57 093</td>
</tr>
<tr>
<td>Straits Resources (FY)</td>
<td>20 847</td>
<td>24 111</td>
</tr>
</tbody>
</table>

*Source: Company announcements/news reports

Copper mine, not all mines shown
Major Copper Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Company</th>
<th>State</th>
<th>Start up</th>
<th>Capacity</th>
<th>Capex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antaka</td>
<td>OZ Minerals</td>
<td>SA</td>
<td>2011</td>
<td>25 kt</td>
<td>$135m</td>
</tr>
<tr>
<td>(Prominent Hill underground)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ernest Henry</td>
<td>Xstrata</td>
<td>QLD</td>
<td>2013</td>
<td>50 kt</td>
<td>$602m</td>
</tr>
<tr>
<td>underground</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kanmantoo</td>
<td>Hillgrove</td>
<td>SA</td>
<td>2011</td>
<td>17 kt</td>
<td>$107m</td>
</tr>
<tr>
<td>Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: ABARES, Major development projects – October 2010 listing

Australia’s Copper Resources
Examples of Recent Copper Discoveries (Drill Intersections)

- **Yeneena BM1**: 4m @ 5.45% Cu (Advanced Exploration)
- **Flamingo**: 11m @ 4.87% Cu, 0.62g/t Au, 1.51g/t Ag (Advanced Exploration)
- **Red Bore**: 17m @ 11.7% Cu, 1.73g/t Au (Exploration)
- **Rocklands**: 100.7m @ 3.45% Cu, 1096ppm Co, 0.43g/t Au (Feasibility)
- **DeGrussa**: 10.4m @ 7.8% Cu, 3.25g/t Au (Feasibility)
- **Hillside**: 15m @ 2.2% Cu, 0.7g/t Au (Feasibility)
- **Culingeria**: 61m @ 0.4% Cu, 0.33g/t Au (Advanced Exploration)
- **Roaring 41 South**: 5m @ 0.9% Cu, 0.1g/t Au (Exploration)
- **Kanmantoo**: 5m @ 2.5% Cu, 0.80g/t Au (Feasibility)
- **Hillside**: 15m @ 2.2% Cu, 0.7g/t Au (Feasibility)
- **Kanmantoo**: 5m @ 2.5% Cu, 0.80g/t Au (Feasibility)
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**Australia's Copper Exploration Prospects**

**Exploration prospects**: 1600+

Owner/Operating companies: 460

> Copper is a target commodity but may not be the primary target

Source: Intierra

Source: Rex Minerals Ltd; Core from Hillside deposit, South Australia

Source: Intierra
POLICY ISSUES

– Land access
  • Social licence to operate
  • Agriculture / native title / defence
  • NIMBY / BANANA
– Skills shortage
– Infrastructure
– Foreign investment

Thank you

Questions?

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Department of Resources, Energy & Tourism Website: www.ret.gov.au

Geoscience Australia Website: www.ga.gov.au

Australian Bureau of Agricultural and Resource Economics and Sciences Website: www.abares.gov.au