The Case for Socially Responsible Mining

Lessons from Australia

Ready for Take Off Conference

Ian Satchwell

17 September 2013
Abbot embraces free trade and foreign investment

Tony Abbot has put investment and free trade at the centre of the Coalition’s agenda to reignite economic growth.
The Australian, 17 September 2013

Boost foreigners’ profits, says Robb

The minister designated “Australia’s ambassador for jobs”, Andrew Robb, wants to boost the profits of foreign investors as a key to striking much-delayed free trade deals…and tapping into $150 billion of potential foreign investment.

Australian Financial Review 17 September 2013

Attracting international investment is key to boosting economic growth in sectors such as resources, manufacturing and agriculture

The Australian, 17 September 2013
Overview

- 150 years of mining experience
- Australia has done well from mining
- We’ve made mistakes...
- ...but we have learned much
- “Grow the pie” strategies
- Economic reform and infrastructure partnerships
- Investment attraction, efficient approvals, certain fiscal regime
- Partnerships approaches, delivery of returns for all
- Using mining to facilitate broad-based economic growth
- Generating strong social licence to operate
What is socially responsible mining?

Corporate social responsibility ‘plus’

+ 

Good governance
(government, industry & community)

+ 

Sustainable, broad-based returns
Australia is well located to supply Asia with mineral and energy products.
Australia’s engineering and construction challenge – the largest investment wave since the 1800s gold rushes*

WA & NT projects to 2016: USD220 billion+

WA & NT projects to 2016: USD220 billion+

Offshore petroleum basins

Pilbara Region
LNG, iron ore, infrastructure

Mid West Region
Iron ore, gold, uranium, nickel,

South West Region
Alumina, mineral sands, gold

Goldfields Region
Gold, nickel, iron ore

Queensland projects to 2016: USD100 billion+

Bowen, Surat and Galilee Basins
Coal, CSG, LNG

Gladstone and North West Economic Triangle
Base metals, bauxite-alumina

LNG, mining

South Australia projects to 2016 USD10 billion+

South Australia projects to 2016 USD10 billion+

Gold, nickel, iron ore

LNG, mining

Copper, uranium, mineral sands, petroleum

*Reserve Bank, Australia
Western Australia case: investment will result in decades of increased production with lower volatility

Historic and forecast production value* for WA’s key resources

Source: ACIL Tasman analysis

* At ten year average prices
Mining and related sectors in Australia are bigger than most people realise

Gross Value Added – resource economy 2011-12
Share of nominal GVA, financial year
(has more than doubled in past 10 years)

Resource extraction
Resource-related

Total

Resource economy accounts for 18% of GVA
• 11.5% directly from extraction and processing
• 6.5% from other sectors providing inputs

Resource employment by industry 2011-12
Share of total employment, financial year

Resource economy accounts for 10% of employment
• 3.25% directly from extraction and processing
• 6.75% from other sectors providing inputs

Source: Rayner and Bishop, Reserve Bank of Australia February 2013
It’s not only about mining: other growth drivers

1. Corporate shift to Australia

2. Service and technology hub

3. Trade & foreign investment

4. Agriculture and food sector growth
Growing mining is important, but so is growing other sectors

Australian exports 1998 – 2012

Investment in Australia 1960 – 2010

Growth in real value-added by sector, 2000-2012 (%)
Western Australia case: Employment growth – more than just mining jobs

Employment growth by industry sector 2010-2020

Australian mining employment multiplier is 3 – 4

Major focus is on education and training

Source: CCIWA: Building Western Australia’s Workforce for Tomorrow, June 2010
Taking a broad view: indirect and induced benefits from mining

**Economic output**

Direct from mining
- Purchasing expenditure for local goods and services
- Payments to employees

Local manufacturer or service provider

Indirect
- Subsequent backward expenditure for local goods and services along the supply chain
- Income of supply chain employees
- Taxes paid by suppliers to the Government

Induced
- Household consumption as direct and indirect employees spend their income within the local economy

Local dealer
- Income of dealer’s employees
- Taxes paid by dealer to the Government

Household consumption as direct and indirect employees spend their income within the local economy

In Australia, for every $1 of mining revenue, 40¢ is spent on goods and services: Reserve Bank

Adapted from Saipem 2011
Strong pre-competitive geoscience underpinnings
Australian exploration projects – strong base of grassroots; but few make it to feasibility

Number of exploration projects by stage of development

Source: Geoscience Australia, 2011-12
Australian engagement in African pre-competitive geoscience

- Exploration GIS for Western Africa
- Atlas of mineral deposits in Western Africa
- Exploration GIS for Central Africa
Growth of Mining Equipment, Technology and Services (METS) – additional way of thinking about value-adding

METS output is growing at 15 to 20% a year

- 4% of national output in 2002-03
- 8.4% in 2011-12

METS contribution to GDP

- 6.7% in 2010-11
- Est. 9.4% in 2012-13

Many METS are knowledge- and technology-intensive

Source: Australian Treasury and Ed Shan / Minerals Council of Australia
METS is now a very important industry sector

$ REVENUE FROM THE MINERALS AND MINING BUSINESS

$ 90 BILLION

SIZE OF COMPANIES’ REVENUES ($M, FY11-12)

$500m+ 10.5%
$100m–$499m 12.1%
$30m–$99m 14.7%
$5m–$29m 30%
$2m–$4.9m 13.4%
< $2m 16.4%
Not reported 3%

TOTAL NO. OF AUSTRALIAN EMPLOYEES FROM COMPANIES SURVEYED

386,000

MINING LIFECYCLE

PERCENTAGE OF BUSINESSES INVOLVED IN EACH PHASE OF THE MINING LIFECYCLE

78.2% Operations
17.1% Feasibility
18.5% Remediation
59.2% Design & Construction
22.1% Exploration

MOST METS COMPANIES WERE ESTABLISHED IN THE LAST...

30 YEARS

46% OF COMPANIES WORK IN MORE THAN ONE PHASE, MAKING THEM EXTREMELY FLEXIBLE
SUPPLY CHAIN
WHERE METS SUPPLIERS ARE LOCATED (%)
- Local (<25km)
- Regional (25–200km)
- State/Territory
- Australia
- Imported

24% sourced locally

NO. OF SUPPLIERS TO METS COMPANIES SURVEYED
23,000

22% of suppliers are offshore
METS firms are exporting, equipment, technology and knowledge – developed from 150 years of mining.
Proponents involved in Australian projects *encouraged* to adopt Australian Industry Participation Plans (AIPPs)

Most mining and petroleum projects have AIPPs
- Cover construction and operation
- Take in national, regional and local content
- Include Indigenous content
- Encompass skills, materials and services inputs
- Link-up purchasers and suppliers via Industry Capability Networks

Optimising local content – Australian Industry Participation
Australian Industry Participation in Western Australia resource projects

- Proportional spending on the construction phase of oil & gas projects (but not mining) has shifted towards overseas suppliers over the last 30 years
- But there continues to be a very high level of Australian industry participation
- CME/APPEA Local Content Study (2011)\(^1\):

<table>
<thead>
<tr>
<th>Sector</th>
<th>Construction</th>
<th>Operations</th>
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</thead>
<tbody>
<tr>
<td>Mining</td>
<td>86%</td>
<td>95%</td>
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<tr>
<td>Oil &amp; Gas</td>
<td>58%</td>
<td>83%</td>
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- WA State Government Local Content Report – November 2011\(^2\)

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<th>Operations</th>
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<tr>
<td>Mining, Oil &amp; Gas</td>
<td>74%</td>
<td>100%</td>
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- Publically announced local contracts July 2011 to March 2012 = A$15.5 billion\(^3\)

Sources:
1: CME/APPEA Local Content Study 2011
3: Media Statement, 8 March 2012, Minister for Commerce, Hon Simon O’Brien
Challenge 1: Market volatility and uncertainty

Annual zinc prices and stocks

Annual nickel prices and stocks

Annual copper prices and stocks

Annual aluminium prices and stocks

China growth rates and patterns of growth? Demand from rest of Asia?

Source: BREE and LME
Margins and returns from mining are now in decline

Gold industry example: Costs up; Returns down

Costs rising at ~12%

Yields down 5%

Exploration budgets up 20%

New Discoveries down 7%

Note: Cost per tonne is the weighted average of 8 major gold producers by total ore mined; average grade is the weighted average of 8 major gold producers by total ore mined; Major gold producers: AngloGold Ashanti, Barrick, Harmony, Kinross, Goldcorp, Gold Fields, Newmont and Newcrest.
Source: Gold Fields company data; annual reports, Condemned to Excellence report (IAMGOLD Corporation, Dec 2012)
Challenge 2: competitiveness of Australian mines - cash operating costs: percent of production by cost curve quartile

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2012</th>
<th>2008</th>
<th>2012</th>
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<tr>
<td>Copper</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>1.76</td>
<td>2.14</td>
<td>0.47</td>
<td>0.48</td>
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<td>37%</td>
<td>48%</td>
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<td>31%</td>
<td>42%</td>
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<td>47%</td>
<td>21%</td>
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<td>32%</td>
<td>39%</td>
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<tr>
<td>11%</td>
<td>25%</td>
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<td>38%</td>
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<tr>
<td>6%</td>
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<tr>
<td>Nickel</td>
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<td>6%</td>
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<td></td>
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<tr>
<td>19%</td>
<td></td>
<td></td>
<td>39%</td>
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Source: AME; Brook Hunt
Multi-factor productivity growth rates, (per cent) over time intervals, Australian mining, 1989–90 to 2009–10
Challenge 3: Infrastructure provision
Infrastructure Australia approach

Priorities

• Identifying, prioritising and investing in infrastructure that delivers real economic, social and environmental benefits

• Creating new opportunities to fund and finance infrastructure
**People are Australia’s most important asset**
Focus on attracting, developing and retaining high-quality talent, rather than a singular focus on hard infrastructure

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<th>Education and training institutions: key infrastructure assets</th>
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<tbody>
<tr>
<td>• Crucial to dealing with challenges and opportunities of the 21st Century</td>
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<td>• Advanced education integrated with research</td>
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<th>Complementary to traditional infrastructure</th>
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<tr>
<td>• Knowledge-intensive and knowledge creating</td>
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<tr>
<td>• Adaptable and capable to deal with uncertainty and to engage with the emerging new global economy</td>
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<td>• e.g. WesTrac, SKM Learning Centre, GE Energy Learning Centre; University centres (Rio Tinto, BHP, Chevron, Shell)</td>
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<tr>
<td>• Workers trained will move to other projects inside/ outside, taking skill set and culture with them</td>
</tr>
</tbody>
</table>

**Integrated policy on industry, education and training**
It’s for the people: building strong community benefits, understanding and support