



A new application for TA

Assessing technologies in the Australian mining & minerals industry

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MINERALS DOWN UNDER FLAGSHIP

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The goals of Minerals Down Under

Delivering science and technology options to unlock new mineral resources in Australia - creating impact in three key areas



Growing Australia's
resource base



Increasing productivity



Reducing environmental
footprint

iron | copper | nickel | lead | zinc | uranium | gold | aluminium | magnesium

But what about sustainability?

- How can mining contribute to the transition to a sustainable society?

Defining governance

- “The interactions among structures, processes and traditions that determine how power and responsibilities are exercised, how decisions are taken, and how citizens or other stakeholders have their say” (Graham et al. 2003)

Emerging challenges

- Changing social and political landscape around mining in Australia
- Emergence of controversial mining technologies
- Thinking about technology as:
 - An interface between mining and society
 - A potential site of democratisation



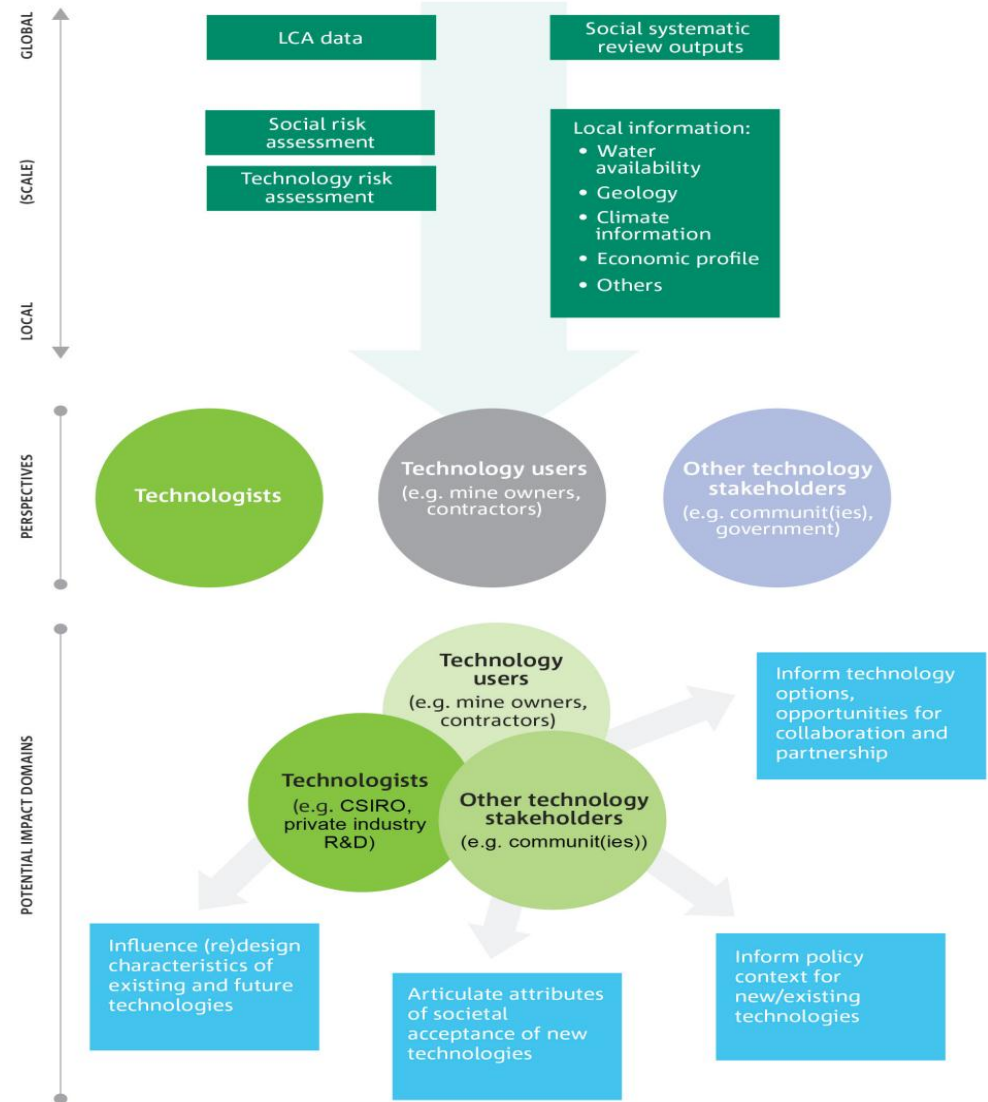
Farmer
Camden, NSW

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FL0077

 **APPEA**
THE VOICE OF AUSTRALIA'S OIL AND GAS INDUSTRY

Integrated TA Framework for Mining Context

- Inform technology (re)design within R&D organisations
- Inform technology options in new and existing mines
- Inform policy development and approaches to regulation of existing and new technology
- Enable communities to develop and articulate the attributes that will underpin acceptance of new technology/mining practices



Thank you

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References and images

Slide 1 image – Santos GLNG City of Lights (Brisbane Festival, 2012)

<http://www.brisbanefestival.com.au/events/view/santos-glng-city-of-lights>

Slide 3 quote – Graham J, Amos, B and Plumptre, T (2003) *Governance principles for protected areas in the 21st century*. Ottawa: Institute on Governance, Parks Canada and the Canadian International Development Agency.

Slide 4 images – Shed in New South Wales (supplied by Cameron Huddlestone-Holmes, 2012)

Australian Petroleum Production & Exploration Association advertising campaign (APPEA, 2011)

<http://wewantcsg.com.au/media/press>

Slide 5 image – from Lacey, J and Moffat, K (2012) *A Framework for Technology Assessment in the Minerals Down Under Flagship: Integrating life cycle assessment and social analysis of mining technologies*. Brisbane: CSIRO.

<http://www.csiro.au/en/Organisation-Structure/Flagships/Minerals-Down-Under-Flagship/mineral-futures/Project-tech-assesment.aspx>