



Australian Government
Department of Resources,
Energy and Tourism

Overview of Australia's low emissions coal technology policies



Australia-Japan Coal Workshop
10 March 2011



Presented by:

Margaret Sewell
Clean Energy Division



Australian Government
Department of Resources,
Energy and Tourism

Greenhouse commitments

- Australia is committed to emission reduction targets
 - By 2020: 5 % below 2000 levels
 - By 2050: 60% below 2000 levels.
- These targets are a major challenge given our heavy reliance on coal
 - Coal 80% of electricity and 32% of emissions
 - Reliance on coal will decline but will continue to be the major source of power
 - Improvements in generating efficiency important
 - But carbon capture and storage (CCS) essential to achieve major cuts in emissions
 - Responsibilities as a major international energy supplier.





Australian Government

Department of Resources,
Energy and Tourism

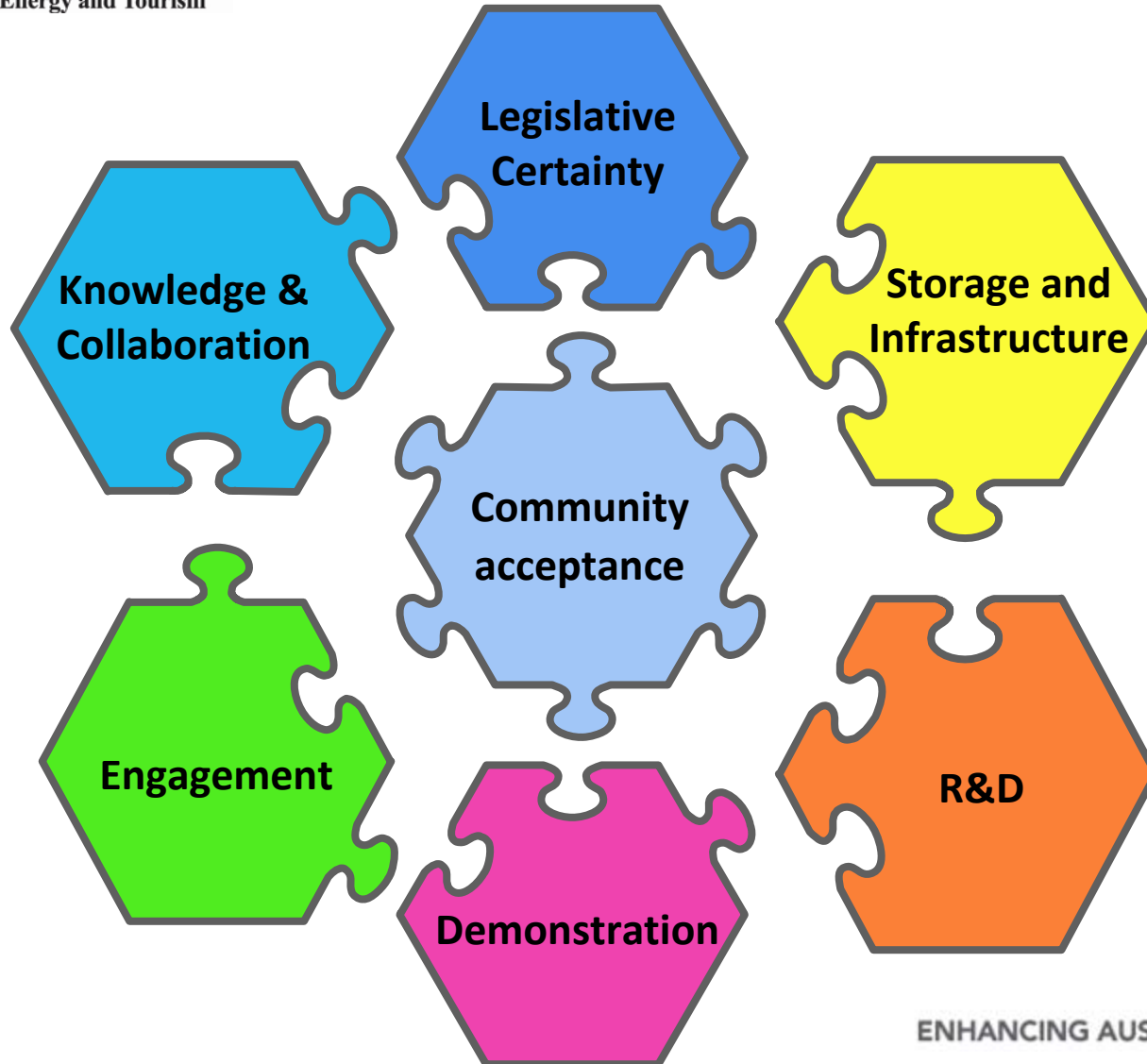
CCS Initiatives

- National Low Emissions Coal Initiative (\$385 m)
 - Government and stakeholders building a national strategy
 - National Low Emissions Coal R&D
 - National Carbon Mapping and Infrastructure Plan
 - Medium scale demonstration projects
- CCS Flagship Program (\$1.85 b)
- Global CCS Institute (\$305 m)
- CCS-Ready and emission standards for new coal fired power stations





CCS – pieces of the puzzle





Demonstration Projects

Pilot Projects

- Otway pilot storage project
- PCC Pilots - Loy Lang, Munmorah, Tarong, Hazelwood, China

Medium Scale Demonstrations

- Proposed PCC demonstration projects
- Oxyfuel retrofit at Callide A
- Nippon Steel Engineering ECOPRO

Large Scale

- CCS Flagships Program
 - Wandoan: IGCC + CCS
 - Zerogen: IGCC + CCS
 - Collie South West Hub
 - CarbonNet Hub
- Gorgon LNG Project
- HRL IDGCC





Australian Government

Department of Resources,
Energy and Tourism

Issues for consideration

Research and Project Collaboration

- Storage including enhanced coal bed methane
- Callide Oxyfuel Project
- Flagship Projects
- Refined black coal
- Lignite projects

Policy Collaboration

- CCS-Ready
- Clean Development Mechanism and Joint Implementation
- Community attitudes to CCS
- Carbon pricing

International Collaboration

- GCCSI/APEC/Clean Energy Ministers
- Three way collaboration with China

Agency Collaboration

- RET-METI
- AICHI Agreement – JCOAL, CSIRO, ACARP, ACALET
- Research alliances
- Knowledge sharing