Developing Australia's Legislation and Regulatory Guidelines for CCS

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Background

- Australia has a federated system of government
- Australian Government has policy responsibility for offshore waters 3 nautical miles from the coastline
- States and Territories are responsible for day to day regulation of petroleum offshore activities
- Current process for petroleum activities within Commonwealth waters had been mirrored in State and Territory jurisdictions
- Much of Australia's potential storage capacity is in offshore sedimentary basins
Outline

• Key considerations in regulatory framework
• Establishing principles for regulation
• Developing the framework for a legislative model
  • A major challenge in developing the framework has been the management of interaction with the petroleum industry
• Filling in the details - guidelines and regulations
Key Considerations in Regulatory Framework

- Deliver a consistent transparent and flexible basis for regulation of CO$_2$ carbon capture and storage projects
- Potential to deliver investment certainty for carbon capture and storage projects
- Public confidence that CO$_2$ will be safely and effectively stored
- Public confidence that natural resource management, environmental impacts, health and safety issues addressed
- Increased research development and transfer of technology
- Consistency in the application and regulation of CO$_2$ carbon capture and storage technologies and processes
In November 2005, Ministers endorsed Regulatory Guiding Principles for Carbon Dioxide Capture and Geological Storage in Australia.

These principles served to highlight key considerations of any CCS regulatory regime:

- Assessment and Approvals
- Access and Property Rights
- Transportation
- Monitoring and Verification
- Post Closure Responsibilities
- Financial Issues
Legislative Model

- **Offshore Petroleum Act 2006** chosen due to:
  - Similarity between transportation, injection and storage of $\text{CO}_2$ and petroleum industry
  - Long standing and effective regulatory regime for offshore petroleum activity
  - Need to reflect co-existence and determinable rights between petroleum and CCS industry
  - National legislation to drive consistency across jurisdictions

- **Fundamentally mirrors existing petroleum regime**
  - Acreage Release Process
  - CCS Exploration Permit
  - CCS Retention Lease
  - CCS Injection Licence
Co-existence of Petroleum & CCS activities

- Many attractive storage sites may be located in petroleum provinces
- Fundamental to any CCS acreage release will be interaction with petroleum activities
- International experience demonstrates CCS and petroleum activities are co-existing
- Existing commercial CCS operations are within the “footprint” of oil and gas field production, with injection into deeper or shallower horizons, or down-dip of petroleum accumulation
Acreage release process

Geoscience Australia
Propose Acreage

States/NT
Propose Acreage

Industry Propose Acreage

PROPOSED CCS ACREAGE IS IN AREA WHERE THERE IS NO EXISTING PETROLEUM TITLE

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STAKEHOLDER CONSULTATION

ACREAGE RELEASED FOLLOWING JOINT AUTHORITY APPROVAL
Protection of Existing Petroleum Rights *(pre-amendment)*

- Extensive consultation process prior to release of offshore areas
- Approval of CCS activities subject to 'no significant impact test'
- Provision for just terms compensation
No Significant Impact Test

- *No Significant Impact* will be a pre-condition for approval to undertake an activity under any title

- Many geotechnical aspects will be drawn upon in making an assessment

- Undiscovered hydrocarbon potential will be one of the matters considered when deciding on an application for an injection licence

- No significant impact will need to be considered on a case-by-case basis
Post Amendment Title

- Post-amendment titles are petroleum exploration permits granted after the OPA CCS amendments and subsequent titles in the same series

- However, once granted an injection or production licence will have precedence and the competing activity will be subject to the 'no significant impact test,'

- Where the two activities cannot coexist simultaneously the regulator will apply a 'public interest test'
Need to use Catchment Area Management
Key future work to underpin the legislation

- Develop regulation to support the legislative framework, including
  - Guidelines and regulations to ensure that sites chosen for CCS are safe and effective
  - Guidelines and regulations to cover the operational phase
  - Regulations for monitoring and verification

- Building public confidence
  - Must show that CO$_2$ is safely and effectively stored underground and is not leaking out of the storage formation or into the atmosphere
Current status and next steps

• The legislation is due to be introduced into Parliament in the near future, after consultation with stakeholders on an exposure draft.

• The other major task is to develop the guidelines and regulations to underpin the regulation. This process has just commenced.
## Timeline

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<tr>
<th>Date</th>
<th>Item</th>
<th>Outcomes</th>
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<td><strong>September 2003</strong></td>
<td>To progress the issue of regulation for possible future CCS projects, the Ministerial Council on Mineral and Petroleum Resources (MCMPR) established a Regulatory Working Group</td>
<td>The Carbon Dioxide Geosequestration Regulatory Working Group is created</td>
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<td><strong>July 2004</strong></td>
<td>A set of draft regulatory guiding principles for CCS is developed by the Regulatory Working Group and presented to MCMPR Ministers for consideration.</td>
<td>It was determined that a regulation impact statement (RIS) was required and broader consultation was also deemed necessary.</td>
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<td><strong>December 2004</strong></td>
<td>A broader CCS Stakeholder Group (CCSSG) was established in December 2004 to provide specific expertise to the Regulatory Working Group.</td>
<td>The CCSSG considered legal, technical and financial advice commissioned by MCMPR, reviewed COAG RIS submissions and considered other comments received to revise the principles and RIS</td>
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<td><strong>June 2005</strong></td>
<td>A Final Report on CCS Regulation was submitted to MCMPR to be considered.</td>
<td>Australian Regulatory Guiding Principles endorsed in November 2005</td>
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<td><strong>October 2006</strong></td>
<td>Recommendations on the aspects of a CCS regulatory regime to MCMPR</td>
<td>Ministerial Council endorsement of proposed amendment of the Off-shore Petroleum Act to incorporate CCS</td>
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<td><strong>December 2006</strong></td>
<td>Ministers received recommendations in December 2006</td>
<td>Ministers approved the legislative framework for CCS</td>
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<td><strong>May 2007</strong></td>
<td>Finalisation of the Exposure Draft for CCS legislation</td>
<td>Draft legislation ready for stakeholder consultation phase</td>
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<td><strong>May-June 2007</strong></td>
<td>Stakeholder consultation on draft legislation</td>
<td>Identification of stakeholder issues and concerns in legislative framework.</td>
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<td><strong>3rd/4th Quarter 2007</strong></td>
<td>Introduction of Bill in Parliament</td>
<td>Establishment of legislation</td>
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<td><strong>2008</strong></td>
<td>Regulatory regime established.</td>
<td>Release of CCS acreage and granting of exploration permits.</td>
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I hope that this quick guide gives you some appreciation of where we are up to and where we are trying to go.

I would be happy to try and answer any questions you have.

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THANKYOU