

CARBON CAPTURE AND STORAGE

Government Action to Support and Nurture CCS

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Developing a CCS industry in Australia

Key issues in the development
of a legal framework

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Development of a CCS Industry

Legal and regulatory certainty

Public acceptance and confidence

Financial issues

International engagement

Technology and technical issues





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Legal and Regulatory Frameworks

Australian experience

- Key considerations in regulatory framework
- Establishing principles for regulation

International Organisations





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Key Considerations in a Regulatory Framework

Consistency, transparency and flexibility to be the basics for regulation of CO₂ capture and storage projects

Deliver investment certainty for carbon capture and storage projects

Public confidence that CO₂ 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





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Ministerial Council on Mineral and Petroleum Resources Regulatory guidelines

September 2003	MCMPR established a Regulatory Working Group to progress regulation for future CCS projects
October 2004	A COAG Regulation Impact Statement (RIS) on the draft guiding regulatory principles was released for comment with a total of 22 submissions received. Submissions are publicly available on the DITR website at www.industry.gov.au/ccs
December 2004	A broader CCS Stakeholder Group (CCSSG) was established in December 2004 to provide specific expertise (legal, technical and financial issues) to the Regulatory Working Group.
November 2005	MCMPR endorsed <i>Regulatory Guiding Principles for Carbon Dioxide Capture and Geological Storage</i>





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Regulatory Guiding Principles for CCS

The principles cover the following:

Assessment and Approvals

Access and Property Rights

Transportation

Monitoring and Verification

Post Closure Responsibilities

Financial Issues





Guiding principles – detailed look

ASSESSMENT AND APPROVALS PROCESS

- Assessment and approvals processes should be consistent with agreed national protocols and guidelines.
- Existing legislation and regulations relating to CCS should be identified and modified and augmented where necessary.

ACCESS AND PROPERTY RIGHTS

- Surface and subsurface rights for CCS should provide certainty to rights-holders of their entitlements and obligations.
- These rights should be based on established legislative and regulatory arrangements, custom and practice and accommodate the likely evolution of multi-user CCS infrastructure and facilities.
- In granting rights to inject the CCS stream into subsurface formations, governments should give due consideration to land use planning issues that may arise as a consequence.





LIABILITY AND POST-CLOSURE RESPONSIBILITIES

- Current regulatory principles and common law should continue to apply to liability issues for all stages of CCS projects.
- Governments' overall consideration of post-closure storage of CCS streams must aim to minimise exposure to health, environmental and financial risks for project operators, governments and future generations.

FINANCIAL ISSUES

- For all stages of a CCS project, wherever practical, established legislative, regulatory and accounting processes should be used in preference to introducing new regulations.
- The income from, capital and operating costs associated with a CCS project should be treated in the same way as for any other business venture for taxation purposes.
- Regulation should recognise the potential for post-closure liabilities for CCS activities and consider appropriate financial instruments to assist in the management of such risk.





TRANSPORTATION ISSUES

- Regulation relating to the transport of a CCS stream should be consistent where possible, using agreed national protocols and guidelines.

MONITORING AND VERIFICATION

- Regulation should provide for appropriate monitoring and verification requirements enabling the generation of clear, comprehensive, timely, accurate and publicly accessible information that can be used to effectively and responsibly manage environmental, health, safety and economic risks.
- Regulation should provide a framework to establish, to an appropriate level of accuracy the quantity, composition and location of gas captured, transported, injected and stored and the net abatement of emissions. This should include identification and accounting of leakage.





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Recent Developments

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- Amendments to the *Offshore Petroleum Act 2006* to provide tenure and access to offshore acreage for GHG injection and storage
- Discussion Paper – *Implementing an Australian Regulatory Framework for Carbon Capture and Geological storage Version 1.8*

South Australia – Green Paper

http://www.pir.sa.gov.au/petroleum/legislation/proposed_amendments

Queensland – Discussion Paper

<http://www.nrw.qld.gov.au/mines/legislation/index.html>

WA – Gorgon *Barrow Island Act 2003 (WA)*





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MCMPR Current Activities - CCS

Australian Government, State and Northern Territory Ministers responsible for minerals and petroleum met in Melbourne in August 2007 for the 7th Meeting of the Ministerial Council on Mineral and Petroleum Resources (MCMPR).

Ministers agreed that:

- there was a need to consider and develop a national regulatory and management framework for the onshore and offshore environment, based on the agreed principles.
- the Carbon Capture and Storage Working Group will report on the scope of a national framework for the regulation and management of offshore and onshore CCS and consider other issues, including the feasibility of a network of common user pipelines.

DITR is working with State and Territory Governments to develop a terms of reference, work plan and an issues paper.

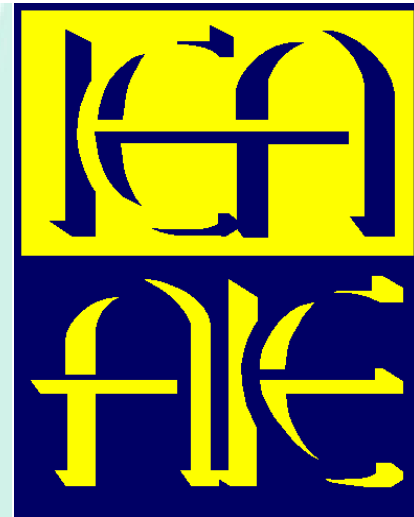




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International Organisations





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International collaboration

1st Workshop on Legal Aspects of Storing CO₂ (July 2004, Paris) and IEA publication
Legal Aspects of Storing CO₂ (2005)

2nd Workshop on Legal Aspects of Storing CO₂ (October 2006, Paris)

Five priority areas of work were identified:

- National legal and regulatory frameworks
- Intellectual property
- International environment protection instruments
- Creating a level playing field for CCS
- Public awareness





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G8-IEA-CSLF

G8 Leaders agreed to work to accelerate the development and commercialisation of Carbon Capture and Storage technology by:

... inviting the International Energy Agency to work with the Carbon Sequestration Leadership Forum to hold a workshop on short-term opportunities for CCS in the fossil fuel sector; including from enhanced oil recovery and CO₂ removal from natural gas production.

IEA and CSLF are running three workshops to facilitate the G8 goal of accelerating the near-term opportunities for CCS development and deployment.

San Francisco, California (August 2006) - Defined the Issues

Oslo, Norway (June 2007) – Assessed the specific issues

Calgary, Canada (November 2007) – Develop recommendations





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HIGH PRIORITY ISSUES IDENTIFIED IN SAN FRANCISCO WORKSHOP

Technical Issues:

- Address long-term liabilities.
- Facilitate commercialisation through the provision of incentives, insurability and reasonable permitting processes.
- Accelerate capture technology RD&D.

Commercial and Financial Issues:

- Create value for CO₂ and a global market.
- Governments need to create a framework for business value.

Legal and Regulatory Issues:

- Establish regulatory framework.
- Develop monitoring and remediation procedures.

Public Awareness Issues:

- Prioritise key messages on CCS and prepare communication strategy.
- Ensure effective education and outreach activities with early CCS demonstration projects.

International Mechanisms Issues:

- Need an economic incentive for CO₂ capture and storage.
- Ensure an effective international framework to support CCS development





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Implications for Australia

Need to provide legal and regulatory certainty to enable CCS projects to proceed is universally recognised.

Australia is well advanced in the development of legislation although legal framework are only one of the pieces required to make CCS happen.

The priority given to CCS legislation will be determined by the incoming government

- The Government and the Opposition both recognise the importance of CCS regulation as an enabling step.

Australia's regulatory guiding principles provide a sound basis for the development of CCS legislation.





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