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The Parliament of the Commonwealth of Australia

# Down Under: Greenhouse Gas Storage

**Review of the draft *Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill***

House of Representatives  
Standing Committee on Primary Industries and Resources

August 2008  
Canberra

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## Foreword

This new legislation sets the framework for the introduction of a GHG geological storage industry in Australia. Through the titles and rights established by the Bill, proponents will set up commercial operations to permanently store captured CO<sub>2</sub> under the seabed in offshore Commonwealth waters.

Throughout the course of the Committee's inquiry, one of the most contentious elements of the legislation has been the management of interactions between GHG storage proponents and pre-existing petroleum title holders. In particular, the protection afforded pre-existing petroleum title holders could frustrate the establishment of GHG storage activities, particularly in areas such as the Gippsland Basin. It was concluded by the Committee that while the Bill largely strikes an appropriate balance between the two industries, further refinements are necessary.

The need for the co-existence of petroleum and GHG storage activities became very clear to the Committee during our deliberations. Both endeavours are in the national interest, and certain key locations in Australia's offshore waters are prime sites for both activities.

The Committee concluded that the best solution would be for the legislation to include a mechanism that would encourage the co-existence of GHG and petroleum activities. The Committee therefore recommends the inclusion of a clause to provide the responsible Commonwealth Minister with the power to direct both parties to come to commercial agreements through negotiation in good faith.

CCS is a costly endeavour, and will require large financial outlay by any prospective proponent. The Committee felt that the legislation did not go far enough to promote investment into, and uptake of, GHG storage. We have suggested that financial incentives be considered by the Government as encouragement to those early investors in this new industry.

The Committee also identified the large role that the petroleum industry is likely to play in the uptake of GHG storage. We heard during the inquiry that petroleum companies currently hold most of the technical knowledge and expertise required to explore for and develop potential GHG storage sites. As such, they may be the best placed to facilitate early uptake of GHG storage. With this in mind, the Committee has recommended that petroleum incumbents be offered a chance to combine a GHG storage title with their production or exploration permits.

A GHG storage industry can only be successful both commercially and in the mitigation of CO<sub>2</sub> emissions if the technology to capture CO<sub>2</sub> is implemented widely. Since the majority of our emissions derive from the coal-fired energy generation sector, the Committee feels that this sector should begin making faster headway with regards to capture. It may be that industries reliant on carbon-intensive energy sources will only remain viable in the long-term if they invest in CCS technology.

Long term liability for CCS storage has also been identified as a significant issue during the course of the inquiry. The Committee is broadly sympathetic to the approach taken by the Bill on this issue, but felt that the transfer of long term liability from GHG operators to the Government could act as an incentive for proper management of GHG storage and strict adherence to site closure responsibilities.

The Committee would like to congratulate the Minister for Resources, Energy and Tourism, the Hon Martin Ferguson MP, for this pioneering legislation. This legislation sets the groundwork for the establishment of a national GHG storage industry in Australia. If we grasp the opportunity provided, it will allow us to lead the world in the implementation and development of CCS.

I would like to thank all those who contributed to this important inquiry through submissions and discussion with the Committee. I would also like to thank Committee members and the Secretariat staff for their efforts throughout the inquiry process.

The Hon Dick Adams MP  
Chair





## Membership of the Committee

Chair            The Hon Dick Adams MP

Deputy Chair   Mr Alby Schultz MP

Members        Mr James Bidgood MP

Mr Nick Champion MP

Mr John Forrest MP

Mr Barry Haase MP

Ms Kirsten Livermore MP

Mr Graham Perrett MP

Mr Sid Sidebottom MP

Mr Tony Windsor MP

## Committee Secretariat

Secretary	Ms Janet Holmes (to 20 June 2008) Mr Richard Selth (from 3 July 2008)
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## Terms of reference

The Committee will review the provisions of the draft *Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill*.

Specifically, the Committee will ascertain whether the Bill:

- a) Establishes legal certainty for access and property rights for the injection and long-term storage of greenhouse gases (GHGs) in offshore Commonwealth waters;
- b) Provides a regulatory regime which will enable management of GHG injection and storage activities in a manner which responds to community and industry concerns;
- c) Provides a predictable and transparent system to manage the interaction between GHG injection and storage operators with pre-existing and co-existing rights, including, but not limited to, those of petroleum and fishing operators, should these come into conflict;
- d) Promotes certainty for investment in injection and storage activities; and
- e) Establishes a legislative framework that provides a model that could be adopted on a national basis.





## List of abbreviations

ACA	Australian Coal Association
AEC	Australian Energy Company
AETS	Australian Emissions Trading Scheme
AMPTO	Association of Marine Park Tourism Operators
ANEDO	Australian Network of Environmental Defender's Offices
APPEA	Australian Petroleum Production and Exploration Association
CCS	Carbon Capture and Storage
CEO	Chief Executive Officer
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> CRC	Cooperative Research Centre for Greenhouse Gas Technologies
<i>CPD</i>	<i>Commonwealth Parliamentary Debates</i>
CRC	Cooperative Research Centre
CSG	Coal Seam Gas
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DA	Designated Authority
DRET	Department of Resources, Energy and Tourism
E&P	Exploration and Production

EHR	Enhanced Hydrocarbon Recovery
EPA	Environment Protection Authority, Victoria
ESAA	Energy Supply Association of Australia
ESD	Ecologically Sustainable Development
ETS	Emissions Trading Scheme
GHG	Greenhouse Gas
GHGS	Greenhouse Gas Substance
GHGS AP	Greenhouse Gas Substance Assessment Permit
GHGS HL	Greenhouse Gas Substance Holding Lease
GHGS IL	Greenhouse Gas Substance Injection Licence
IPCC	Intergovernmental Panel on Climate Change
JA	Joint Authority
LNG	Liquefied Natural Gas
MCA	Minerals Council of Australia
MCMPR	Ministerial Council on Mineral and Petroleum Resources
ML	Mining Lease
MMV	Monitoring, Measuring and Verification
NOPSA	National Offshore Petroleum Safety Authority
OCS	Offshore Constitutional Settlement 1979
OPA	<i>Offshore Petroleum Act 2006</i>
P&G Act	<i>Petroleum and Gas (Production and Safety) Act 2004, Queensland</i>
PEP	Petroleum Exploration Permit
PIRSA	Department of Primary Industries and Resources, South Australia

PPL	Petroleum Production Licence
PRL	Petroleum Retention Lease
PRRT	Petroleum Resource Rent Tax
PSLA	<i>Petroleum (Submerged Lands) Act 1967</i>
RCM	Responsible Commonwealth Minister
SCC	Site Closing Certificate
SPCCS	Special Report on Carbon dioxide Capture and Storage
SROSAI	Significant Risk of Significant Adverse Impact
WA	Western Australia







# List of recommendations

## 1 General

### Recommendation 1

The Committee recommends the inclusion within the Bill of an objects clause, providing that the legislation:

- provide greenhouse gas injection and storage proponents with the certainty needed to bring forward investment; and
- preserve pre-existing rights of the petroleum industry as far as is practicable to minimise sovereign risk to existing titleholders' investment in Australia's offshore resources.

### Recommendation 2

The Committee recommends that the responsible Commonwealth Minister utilise established formal consultation pathways to consult with State Governments, industry and environmental organisations, with a view to achieving national consistency in the administration of GHG storage legislation.

## 2 Access and property rights

### Recommendation 3

The Committee recommends that no acreage be automatically excluded from consideration for selection on the grounds of pre-existing petroleum activities.

#### Recommendation 4

The Committee recommends that the process for identifying and short-listing acreage for release should be transparent and systematic, and should consider the views and submissions of all relevant stakeholders.

#### Recommendation 5

The Committee recommends that the criteria established for assessing work bid applications facilitates the uptake of CCS activities while maintaining transparency and consistency.

#### Recommendation 6

The Committee recommends that the legislation be amended to allow for a GHG assessment permit holder to apply for a single right of renewal for a maximum three years duration.

#### Recommendation 7

The Committee recommends that the GHG injection and storage rights conferred under s.137 of the *Offshore Petroleum Act 2006* be maintained where practical.

#### Recommendation 8

The Committee recommends that the Government review the *Offshore Petroleum Act* and proposed amendments to provide for the development of integrated petroleum projects, including the injection and storage of GHG from multiple sources into a single storage formation.

### 3 Managing interactions

#### Recommendation 9

The Committee recommends that the Bill be amended to provide for the responsible Commonwealth Minister to direct the parties to negotiate in good faith where there are potential or actual overlapping GHG storage and petroleum titles, under both pre-commencement and post-commencement petroleum titles; and that the responsible Commonwealth Minister be empowered to direct an outcome.

#### Recommendation 10

The Committee recommends that the regulations and guidelines attendant upon the legislation are released for stakeholder and public comment as a matter of urgency.

## 4 Investment certainty

### Recommendation 11

The Committee recommends that incumbent petroleum operators be offered a one-off opportunity to incorporate a GHG assessment permit over their exploration or production licence, with the condition that they must demonstrate utilisation of this permit within five years, or surrender it.

### Recommendation 12

The Committee recommends that those proponents who can demonstrate a readily available CO<sub>2</sub> stream for imminent injection receive preferential consideration when assessing bids for GHG acreage allocation.

### Recommendation 13

The Committee recommends that the Government consider further financial incentives for the earliest movers in this new industry, and that these incentives be made public at the earliest opportunity.

### Recommendation 14

The Committee recommends that a process for the formal transfer of long term liability from a GHG operator to the Government be established within the proposed legislation, such transfer to be conditional upon strict adherence to prescribed site closure criteria.

## 5 GHG storage

### Recommendation 15

The Committee recommends that general criteria for achieving a site closing certificate be established and published as part of the implementation of the legislation.

### Recommendation 16

The Committee recommends that non-fixed closure timeframes as currently prescribed within the proposed legislation be used in preference to alternative models such as fixed term closure periods.

### Recommendation 17

The Committee recommends that community and stakeholder engagement strategies be considered as part of any GHG storage activity.

### Recommendation 18

The Committee recommends consideration be given to making monitoring data associated with GHG storage project publicly available.

### Recommendation 19

The Committee recommends the use of consultative pathways to provide feedback on the wider community's concerns to the responsible Commonwealth Minister.

