



Submission No:	.....30.....
Date Received:	.....9-7-08.....
Secretary:	..... <i>[Signature]</i> .....

The Shell Companies in Australia  
GPO Box 872K  
Melbourne VIC 3001  
Australia  
Tel +61 3 8823 4000  
Fax +61 3 8823 4109  
Internet <http://www.shell.com.au>

30 June 2008

**Attention:** The Hon Dick Adams MP

House of Representatives Standing Committee  
on Primary Industries and Resources  
PO Box 6021  
Parliament House  
CANBERRA ACT 2600

Dear Sir,

**Inquiry into the Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill**

Shell welcomes the opportunity to provide submissions in relation to the inquiry by the House of Representatives Standing Committee on Primary Industry and Resources (Committee) into the exposure draft of the Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill (Bill).

**Introduction :**

Shell believes that well-balanced legislation is necessary to facilitate the geosequestration of greenhouse gases and that geosequestration will be important in contributing to a reduction in Australia's net greenhouse gas emissions.

Shell is investing heavily in CCS and is working to facilitate its development and wide-scale deployment internationally on both a regulatory and technical level. This includes working with regulators, research institutions, national geological services, energy companies, other stakeholders and the community, in order to promote CCS. In particular, we are actively engaged in joint studies and research programmes with emerging economies, such as China and India, whose support is crucial to achieving rapid large-scale emissions reductions. In the Australian context, Shell is engaged in several significant projects involving the use of CCS. These include :

- the Gorgon Project in Western Australia. This will produce and process gas from a number of offshore fields for sale as LNG overseas and natural gas within Australia. CO<sub>2</sub> removed from the gas will be injected into saline aquifers beneath the surface. When developed, this will be the largest CCS project of its type in the world;
- the Monash Energy and ZeroGen clean coal projects in Victoria and Queensland respectively. The Monash Energy Project plans to convert brown coal from the Latrobe Valley into clean transport fuel, while the ZeroGen Project will convert coal into hydrogen-rich gas that will be used to produce electricity. Both projects plan to inject CO<sub>2</sub> generated as part of the industrial process into the subsurface; and

- the Cooperative Research Centre for Greenhouse Technologies (CO2CRC) Otway Basin pilot project (OBPP). This involves the compression, transport and sequestration of CO<sub>2</sub> in a depleted natural gas reservoir. The OBPP is the world's largest research and CCS demonstration project. It provides technical information on CSS processes, technologies and monitoring and verification, in order to inform public policy and industry decision-makers and strengthen community understanding of CCS.

#### Comments :

Shell supports the legislative framework, which is important for promoting CCS activities. This is a major step forward.

There are two key areas of the proposed legislation that Shell believes could be improved to make CCS more feasible and attractive. These two key areas are long-term liability and third party access, which are discussed in some detail below.

#### Long-term Liability :

The Bill is silent on long-term liability in respect of stored GHG. The Regulatory Impact Statement (RIS) makes it clear that it is not the Commonwealth's intention to assume long-term liability and that liability will be determined in accordance with the common law. The question of long-term liability is a vexed one. Shell notes the contention under the RIS, that any assumption of long-term liability effectively equates to an indirect subsidy by the Commonwealth and, moreover, that the extent of any liabilities accepted is also likely to be highly uncertain.

While the assumption of long-term liability may amount to a subsidy, in Shell's view this is an investment that should be made by the Commonwealth in order to lower barriers to CCS and to ensure investors have adequate incentives to invest the considerable sums required to undertake CCS.

Accordingly, Shell's strong preference is for all liability to be transferred to the Commonwealth (and for the party undertaking CCS to be released in full) at such time as the site closure certificate is issued. Shell believes that the transfer of long-term liability to the Commonwealth is in the public interest, given that only States can manage effectively liabilities that extend for hundreds of years. The 2005 IPCC CCS report states that the potential risk of leakage diminishes over time (as the forms of CO<sub>2</sub> trapping mechanism become more stable, and plume migration ceases or is reduced). This means that the residual liability associated with storage sites should diminish over time following cessation of injection operations.

Shell has learned, through discussions with leading international insurance brokers and carriers, that the long-term liabilities around CO<sub>2</sub> storage would not be insurable, due to such factors as a lack of actuarial data and the long-term nature of the risk (most policies are annual but environmental liability insurances would stretch to a 10 year period at most). Currently the insurance market does not offer coverage for sub-surface risks, such as loss or damage to a hydrocarbon reservoir and they see CO<sub>2</sub> storage sites in a similar light. There is too much uncertainty for a prudent underwriter to determine an appropriate premium. Additional challenges posed by the long-term nature of the risk, include insurer security over the period, and adequacy of limits, as inflation erodes the value of an insurance policy limit over time.

#### Third Party Access :

The Bill anticipates that the regulations may establish a regime for third party access to an identified GHG storage formation. Shell disagrees with this position for three reasons:

- Upstream petroleum assets (except pipelines, on certain conditions) are currently exempt from Part IIIA of the Trade Practices Act 1974 (Cth) and third party access, if effected, could introduce a further layer of project risk for both petroleum developments involving CCS and standalone CCS projects.

- A GHG storage formation is a finite resource. Requiring third party access to a storage formation will reduce its available capacity to the titleholder and will reduce the economic value of the asset.
- Provision of third party access discourages potential CCS proponents from discovering their own GHG storage formations, leading potentially to a reduction in the number of GHG storage formations known to the industry as a whole.

#### **Minimising Regulatory Uncertainty :**

Shell also believes that there is considerable uncertainty associated with the discretionary power vested in the Minister and the current absence of supporting regulation. Resolving this uncertainty should not delay the legislative process. The continuation of the good dialogue between the government and industry will help to increase understanding and certainty over time, which will be important in facilitating CCS activity.

#### **Injection Licence re a Petroleum Production Licence :**

The Reader's Guide at paragraph 6.22 invites comment on the scope of S.249CQ and S.249CR concerning:

- (i) circumstances in which a petroleum production licensee should be able to obtain an injection licence on a non competitive basis over block(s) in the production licence area, and
- (ii) whether there should be any restriction on the sourcing by that petroleum production licensee of the greenhouse gas for injection.

Shell strongly supports maintenance of the existing rights of petroleum titleholders to undertake enhanced oil recovery as part of the existing licence conditions. However, we consider there are a number of further subtleties in this respect :

- It is not clear from the Bill whether the ability to undertake enhanced oil recovery will be affected where it is not currently part of the production licence conditions, or where a PL is applied for after the Bill comes into force (which is derived from a pre-commencement petroleum title). We believe strongly that the right of a production licence holder (whether current or future) to undertake enhanced oil recovery should not be affected in any way by the Bill, because it constitutes an entirely separate activity to that which the Bill is seeking to facilitate.
- Enhanced oil recovery is an inherent production technique, and pre-commencement and post-commencement petroleum titles should be permitted to undertake EOR regardless of the source of the CO<sub>2</sub> or methane.
- Given that CCS could be integral to petroleum development, and production licences are envisaged / assumed to allow disposal of CO<sub>2</sub> or methane, CCS should be facilitated under the following circumstances:
- if the GHG storage formation to be used is created from the extraction of petroleum; and
- the GHG is sourced directly from that same petroleum licence or associated title (part of an integrated development).

#### **Other Supporting Measures :**

Shell is a strong advocate for CCS, but we stress that CCS is not currently commercially viable, while carbon markets do not deliver sufficient incentives to make long-term private investment in CCS attractive. Although Shell supports the Commonwealth's efforts to put in place a regulatory framework to facilitate CCS, it is highly likely a range of other measures will be required to ensure widespread uptake, and use of, CCS, including :

- recognition of CCS as a form of abatement under the proposed Australian Emissions Trading Scheme (on a like for like basis);
- funding assistance (e.g. bolstered Low Emissions Technology Demonstration Fund);

- public education, particularly raising community understanding of CCS and dispelling some of the negative perceptions about the technology;
- robust tax incentives, including PRRT deductibility where CCS costs form part of upstream development costs and R&D tax benefits; and
- further funding of public / private research initiatives (i.e. CO<sub>2</sub>CRC).

We encourage the Commonwealth to consider such measures and consult with the petroleum sector and CCS stakeholders on how best they might be implemented.

Yours sincerely

A handwritten signature in black ink, appearing to read "Russell R Caplan". The signature is written in a cursive, flowing style.

Russell R Caplan  
Chairman