ANGLO COAL

Mr John Hawkins
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Senate Economics Committee
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By email: economics.sen@aph.gov.au

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Dear Mr Hawkins,

Exposure Draft of the Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill

Anglo Coal welcomes the opportunity to comment on the Exposure Draft of the Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill. The Key points of our submission are:

1. The Bill is the world's first substantial legislation designed to facilitate the geological storage of Greenhouse gases, and is of global significance as a precedent for the legislation being developed in other countries. It may therefore have a bearing on the pace and scale of the deployment of Carbon Capture and Storage (CCS) world-wide, and consequently on the reduction of global Greenhouse gas emissions.

2. The geological settings that are prospective for petroleum resources also often host the most prospective storage resources. The most viable Australian offshore storage resources are located in areas subject to existing petroleum tenure, and the success of the legislation depends on how well it reconciles the protection of existing petroleum rights with the facilitation of storage.

3. It is inescapable that the Bill was originally crafted at a time when the protection of existing petroleum interests was seen as the priority objective, and the reduction of Greenhouse gas emissions was a subordinate consideration. The Bill is heavily biased toward the protection of petroleum interests and, while it nominally makes CCS possible, it does not reflect a determination to make it happen.

4. In its present form the Bill is sharply inconsistent with the priorities presented in the Government's *Carbon Pollution Reduction Scheme Green Paper.* The Green Paper accepts that there will be adverse commercial impacts on many sectors as an unavoidable consequence of pursuing the primary objective of emissions reductions, while the OPA Amendment Bill prevents emissions reduction occurring

through the deployment of CCS where there is any risk of adverse impact on existing petroleum interests.

5. We recommend the addition to the Bill of a clear statement of objectives, emphasizing the facilitation of CCS to reduce Greenhouse Gas emissions, to help establish balance between petroleum interests and the facilitation of storage, emphasising that determination by renaming it the Offshore Petroleum and Greenhouse Gas Storage Bill.

6. The negotiation of co-development agreements between overlapping tenement holders will be required for the regime to function successfully, and the Bill should provide a structure to facilitate that negotiation. It should be based on a level playing field of rights, obligations and access to data, and be backed by Ministerial powers to resolve deadlocks with regard to the public interest.

7. The Bill needs amendment to provide a clear predictable framework for investment, a key component of which will be a clear predictable framework for the determination of co-development impacts, taking into account potential beneficial impacts as well as negative impacts, with due regard to the probabilities associated with those impacts.

8. As it is presently drafted the Bill fails to adequately meet any of the criteria embodied in the Committee's terms of reference, and requires amendment to transform it into legislation that will facilitate, rather than impede, the deployment of CCS in Australia and world-wide. We are associated with and endorse the detailed recommendations in this regard made by Monash Energy, the Australian Coal Association and the Minerals Council of Australia.

Anglo Coal and Anglo American

Anglo Coal, and its parent company Anglo American plc, have been strong advocates of Carbon Capture and Storage (CCS) technology for many years, and have long urged governments around the world to develop the regulatory regimes necessary to facilitate the deployment of this vital means of reducing Greenhouse Gas emissions.

In our 2006 submission, with Monash Energy, to the Inquiry into Geosequestration Technology by the House Standing Committee on Science and Innovation, we included our comments on some of the key challenges and requirements for effective CCS regulatory development, and we will refer to that earlier submission in our comments here on the Draft Bill now before your Committee.

Monash Energy, which has progressed significantly since 2006 as a joint development of Anglo American and Shell Gas and Power, has presented your Committee with a separate submission which includes a comprehensive examination of the draft bill.

We strongly endorse the views expressed in the Monash Energy submission, and the analysis and submission provided jointly by the Australian Coal Association and the Minerals Council of Australia to which we also contributed our perspectives.

Rather than duplicating the detailed analyses that we are associated with through the submissions of Monash Energy, the Australian Coal Association and the Minerals Council of Australia, we have chosen here to provide a broad perspective of the Draft Bill, including its potential implications for the global deployment of CCS.

Significance of the Draft Bill

The global significance of the Draft Bill stems mainly from its status as the world's first attempt at comprehensive legislation specifically designed to regulate the geological storage of Greenhouse gases. Around the world all CO2 storage to date has been conducted in association with petroleum operations, under the authority of petroleum legislation, and the form which the Australian legislation finally takes when it is enacted will set a significant precedent for all of the other CCS regulatory regimes currently under development world-wide.

As the first substantial legislation of its kind the Bill has the potential to set precedents around the world as well as in the States and Territories of Australia, and its effectiveness as a facilitator of CCS may therefore have a bearing on the pace and scale of the deployment of CCS world-wide and on the associated reduction of GHG emissions to the atmosphere.

With the rapidly growing economies of China and India so dependant on coal for their energy it is inescapable that global reductions in atmospheric concentrations of GHG's in our life-times are closely linked to the widespread deployment of CCS. As former UK Prime Minister Tony Blair recently expressed it in his introduction to The Climate Group's "Breaking the Climate Deadlock":

"*The vast majority of new power stations in China and India will be coal-fired; not 'may be coal-fired'; will be. So developing carbon capture and storage technology is not optional, it is literally of the essence*".

For Australia it is also clear that the deployment of CCS will be necessary to sustain the viability of some key coal-producing communities in a carbon constrained world. The Latrobe Valley brown coal generators and industries for instance will become unsustainable without access to viable storage resources to enable the deployment of CCS in conjunction with brown coal utilization.

Storage and Petroleum Co-existence Provisions

In particular the Australian legislation is likely to influence the way other countries deal with the key issue of the interaction of CCS development with oil and gas exploration and production. As we noted in our 2006 submission, *"the geological settings that are prospective for oil and gas are also often the most prospective sites for CCS injection and storage"*.

While this geological reality is clearly evident in Australia, and particularly in the Gippsland Basin, it is also likely that, more often than not, the association of storage prospectivity with prior petroleum rights is a world-wide reality. The success with which

the Australian regime deals with the overlap of storage and petroleum rights is therefore likely to be of world-wide significance.

In our 2006 submission we gave the following broad prescription for success:

"Any new legislation to facilitate CCS development will need to ensure that existing petroleum rights are not prejudiced by CCS development, while ensuring that the national interest in reducing CO2 emissions is also recognised and that the regulatory regime provides a level playing field for CCS developers and petroleum producers. In practice this means that there needs to be a system of separate petroleum and CCS tenements, with provision for overlapping tenure and a process for developing co-development arrangements and for regulatory determination in the event that over-lapping tenement holders do not agree on voluntary arrangements. These kind of overlapping tenement provisions are by no means unique and have a working precedent in the coal and coal seam gas regulatory regime in Queensland."

Viewed against this prescription the Draft Bill is scrupulous in its protection of existing petroleum rights, but is weak in its delivery of the other key ingredients for success. It has very limited scope for recognition of the national interest in reducing CO2 emissions, and clearly does not provide a level playing field for CCS developers and petroleum producers.

While there appears to be recognition that co-development agreements between over-lapping tenement holders will be required for the regime to function successfully, there is no process prescribed in the Draft Bill for the development of those arrangements, nor is there provision for Ministerial determination in the event that over-lapping tenement holders do not agree on voluntary arrangements.

The Draft Bill fails to provide a clear basis for determination of conflicts arising in the event of competing petroleum and CCS priorities. As experience in Australia and elsewhere suggests, this is not a matter that should be left to Regulation.

There has always been an inherent risk that incorporating CCS regulation into existing petroleum legislation would tend to subordinate the facilitation of CCS and the reduction of Greenhouse Gas emissions to the interests of petroleum exploration and production – as we noted in 2006 *"While accepting that CCS is best dealt with by amending petroleum legislation administered by the petroleum regulator, care will need to be taken to ensure that in the process the rights of CCS tenement holders are not subordinated to those of petroleum tenement holders."*

That subordination tendency has clearly been evident the development of the Draft Bill, and in addition to now amending its provisions to more adequately provide for Ministerial determination based on national interest, to provide a level playing field for overlapping tenement holders, and to actively facilitate co-development agreements, we submit that the Bill should also include a clear statement of its objectives for both petroleum and storage regulation.

A clear statement of objectives, including the facilitation of CCS development, will be an important step toward the restoration of balance in the Draft Bill, and we further suggest

that the Committee recommend highlighting that intended balance by renaming the legislation to give equal standing to storage and petroleum – as the Offshore Petroleum and Greenhouse Gas Storage Bill.

Significant Risk of a Significant Adverse Impact

A provision of the Draft Bill which goes to the heart of its practical ability to facilitate CCS development, and to give CCS proponents the certainty they need to underpin major investments in storage exploration and characterisation, is the Significant Risk of a Significant Adverse Impact test. It is this test and its application which determine whether storage rights can be granted over existing petroleum tenements at each stage of the storage tenure and approvals progression chain.

The concepts of Significant Risk and Significant Adverse Impact are ill-defined in the Draft Bill – which is where they should be clearly defined if the regime is to give CCS proponents the certainty they require for major investment. There may be clearer definition in the Draft Regulations, but those have not yet been released for scrutiny or comment.

In its consideration of this key provision we remind the Committee that the impacts of storage operations on petroleum operations in the same region may well be beneficial. As we noted in our 2006 submission:

"Nor is the co-development of CCS injection and petroleum production unique or necessarily in conflict. Enhanced oil recovery by injecting CO2 into a producing reservoir is widely practiced in North America, and the Weyburn CCS project in Canada is an example oil production and CCS co-development. One of the other larger CCS projects, In Salah, involves CCS injection immediately down-dip of a producing gas field – and into the same reservoir. Whilst there will always be a need to ensure that CO2 injected for CCS purposes does not prejudice oil and gas production, there will be a general tendency for the increased reservoir pressure associated with CO2 injection to improve oil and gas production."

Although the way impact is dealt with in the Draft Bill is far from clear, it appears that it is not intended to take beneficial impacts into account at all, and that the key determinant is any possible significant adverse impact, no matter how improbable. If that evident intent was carried through into the Act, it would mean that a CCS injection operation that was clearly likely to provide a net benefit to petroleum production, would not be approved if there was even a remote chance of any significant adverse impact.

While it might be argued that any incumbent petroleum tenement holder would be unlikely to oppose a storage proposal that would benefit their petroleum production, the Committee should bear in mind that petroleum tenement holders may be supplying gas to the onshore domestic energy market in direct competition with the proponents of coal-based storage.

In our view the Significant Risk of a Significant Adverse Impact test as currently presented may constitute a defacto veto right for incumbent petroleum tenement

As it is presently drafted the Bill does little to encourage the deployment of CCS. On the contrary it is our view that, without amendment, it is likely to significantly impede the offshore deployment of CCS in Australia, and to the extent that it influences the development of legislation in other countries it is likely to impede the deployment of CCS world-wide.

These outcomes are clearly inconsistent with the Australian Government's stance on climate change and on the urgent need for global reductions in Greenhouse gas emissions. It is inescapable that the Draft Bill was crafted at a time when the protection of existing petroleum interests was seen as the priority objective, and whilst the Bill nominally makes CCS possible it does not reflect a determination to make it happen.

Key Amendments

We support the detailed amendments proposed by Monash Energy, the Australian Coal Association and the Minerals Council of Australia. In a more general sense the essential need is clearly to:

- Include an objects clause to establish that, in addition to petroleum-related objectives, the legislation places equal importance on the objective of facilitating the deployment of CCS – and highlighting that determination by renaming the Act to become the Offshore Petroleum and Greenhouse Gas Storage Act.

- Provide a structure to facilitate the negotiation of co-development agreements between overlapping tenement holders based on a level playing field of procedural rights and obligations and access to data, and backed by Ministerial powers to resolve deadlocks with regard to the public interest – including the sustainable development in the nation's coal resources and the reduction of Greenhouse gas emissions.

- Provide a clear and predictable framework for CCS investment, a key component of which will be a clear and predictable framework for the determination of co-development impacts, taking into account potential beneficial impacts as well as negative impacts, and with due regard to the probabilities associated with those impacts.

Anglo Coal is available to appear before the Senate Economics Committee to discuss this submission.

Yours sincerely

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