1. Addressing the transfer of long-term liability

1.1 Inadequate transfer of liability

In our view, long-term stewardship (and therefore liability) should rest with a long-term entity such as the State. Without prejudice to any existing common law claims against the CCS proponent at the time when long-term stewardship (and therefore liability) transfers to the State, this transfer should include full indemnification of the CCS proponent for all potential common law liabilities associated with properly-conducted CCS activities and the continued presence of the carbon dioxide.

As the Bill is drafted, it asks the GHGS proponent to accept a liability that is quantified neither in time, scale or scope. The proponent will weigh this against the alternative liability associated with releasing CO2 to atmosphere and paying the cost of carbon, a liability which can be immediately quantified and discharged.

Recommendation 1.1: The Bill should be amended to ensure full transfer of liability to the State post-closure.

1.2 Inadequate definition of site closure

The criteria for achieving a site closing certificate need to be clearly spelled out both to allow a proponent to have certainty of their pathway to achieving closure and to prevent inadequate meeting of site closure requirements e.g. if a proponent ceases injection for 5 years, they lose their ability to inject but this clearly does not equate to site closure. The Minister should not have discretion to deny a site closure certificate once these criteria have been met.

Recommendation 1.2: Criteria by which the Minister will grant the site closure certificate should be published.

1.3 Lack of certainty of monitoring and verification requirements

Under the proposed draft, the proponent does not find out what monitoring, measurement and verification he will be required to pay for until site closure. This is potentially an open-ended liability, which, coupled with the requirement to provide security of unknown form and amount, will result in significant cost uncertainty for the developer and will unnecessarily increase the cost of storage.

Recommendation 1.3: The Bill should be amended to ensure that a developer is aware of his post closure obligations before injection commences so that those costs can be priced into the development.

2 **Protecting petroleum rights**

2.1 Lack of clarity on Significant Risk of a Significant Adverse Impact

Pre-commencement petroleum titles and post-commencement petroleum production licenses are adequately protected only to the extent that the Significant Risk of a Significant Adverse Impact test applies. Therefore, it is essential that Parliament provides clarity on the definition of Significant Risk of a Significant Adverse Impact during the legislative process, by the publication of Regulations and the publication of policy guidelines.

Recommendation 2.1: Publish a definition of Significant Risk of a Significant Adverse Impact during the parliamentary process so that the impact of the Bill on petroleum rights can be fully considered.

2.2 Providing interim certainty to production license holders

Even with publication of regulations and guidelines, there will be substantial operational uncertainty on the practical application of the Significant Risk of a Significant Adverse Impact test until a body of precedent has been established.

We understand that there is no intention to gazette exiting production licenses during this period, but unless this is made formal there will be substantial uncertainty for production license holders.

Recommendation 2.2: Minister to clarify that there is no intention to gazette production license areas until the Significant Risk of a Significant Adverse Impact test is understood e.g. for at least 5 years.

2.3 Impact of 'declaration' on costs of petroleum appraisal

As drafted, the Minister has the power to impose conditions, for example, on the standard of wells in petroleum permits that have been 'declared'. This is likely to add costs, risks and time to petroleum activity. Therefore, as much clarity as possible about the prospects for declaration should be provided at the time of gazettal of any permit. There should be no power to retrospectively apply higher standards to activities that were conducted prior to declaration.

Recommendation 2.3: It should be clarified that the impact of any 'declaration' will not be applied retrospectively to any work that has already been committed to or undertaken.

3 Maintaining momentum for GHGS integrated with petroleum projects

3.1 Inadequate flexibility in defining 'most deserving bidder'

Although the Bill is silent on the definition of 'most deserving' for the purpose of awarding acreage, the Australian Government Solicitor's notes state that a work program alone is the criterion. This is a direct analogue with existing petroleum legislation, but the circumstances are different and require different treatment.

The petroleum industry is highly developed throughout its value chain, with deep and competitive industrial sectors in all aspects. A bidder for exploration acreage need not have any ability to develop, produce, ship, refine, distribute or market the hydrocarbon because there are so many others who can. The Government therefore has no regard to their ability in these sectors and can focus solely on the exploration work program.

However, the GHGS industry has not yet reached this level of maturity. A competent work program is not a sufficient measure of a bidder's ability to progress a development, and the Government will need to take, initially at least, a broader view of a bidder's competencies if they want to maximize the prospect of GHGS projects proceeding.

We believe that the reason the Australian Government Solicitor has made this interpretation of 'most deserving' is because there is precedent in the petroleum industry that consideration of broader aspects of a bid is challengeable in court. Therefore it is essential that Parliament gives clear guidance that it needs broader criteria to be considered to ensure correct legal interpretations.

Two obvious examples which would be taken into account are:

- whether a bidder has a source of CO2; and
- whether the bidder has a credible business plan across the GHGS value chain.

In the first few years of implementation of this legislation, there should be a bias towards industry development, and full support given to those players who can deliver CO2 with the highest level of business and technical capability.

Recommendation 3.1: Parliament to clarify the definition of 'most deserving' is wider than a work program and includes for example, availability of CO2 source and a credible business plan across the GHGS value chain.

3.2 Lack of flexibility for petroleum projects to store associated CO2

In practice, there are two types of project which are likely to be developed in the near term under the proposed legislative framework: one involves CO2 from an emission source such as a power station, i.e. with no link to a petroleum project, and the other is CO2 from an emission source which is an integral part of an associated petroleum operation such as an LNG plant.

As drafted, the Bill seeks to facilitate the latter by enabling a production license holder to acquire an injection license in the same area in order to inject and store their CO2. However, this is limited in a number of ways.

Firstly, it is not clear whether CO2 injection is limited to reservoir CO2 or CO2 from processing e.g. liquefaction and comment is sought on this.

Recommendation 3.2.1: There should be no restriction on the source of CO2 so as to encourage the greatest uptake of GHGS

Secondly, only being able to proceed from a production license to an injection license has a number of adverse consequences:

- i) This would prevent a proponent from having security of tenure for any work that they practically need to do during the retention lease phase of their petroleum license. Security could be achieved by gazetting the acreage openly and bidding for it, however in the absence of action on Recommendation 3.1, as the Bill stands, there is an unacceptable risk that the bidder may not be successful.
- ii) An injection license has a 5 year duration but there may be very valid technical reasons why a legitimate proponent cannot commence injection activity within 5 years, particularly if they are planning to inject into an hydrocarbon reservoir which must be depleted first.

A legitimate CCS proponent at a petroleum facility is therefore caught in double jeopardy. They cannot appraise their acreage for the purpose of GHGS until they have a permit, they can't get an injection permit until they get to a production license and even once this has been awarded, they are limited to 5 years. Meanwhile the proffered remedy of applying for an assessment permit in open competition is a highly risky one, under the Australian Government Solicitor's interpretation of 'most deserving' bids.

We therefore recommend below that a retention lease holder or a production license holder should be able to move on a non-competitive basis to either an injection license or an assessment permit. However we recognize that this represents the uncompetitive allocation of a new property right and therefore it must be bounded by tight conditions.

Firstly, a retention lease holder should only be able to convert to a GHGS permit (either injection or assessment) where the Minister is satisfied that there is no other feasible GHGS option likely to be developed in the next 5 years i.e. that there is no practical diminution of competition. Consideration also needs to be given as to whether this ability should be given a sunset clause i.e. as part of a transitional arrangement for the introduction of this new legislative framework.

Secondly, the only grounds that the Minister may grant an assessment permit instead of an injection license should be technical e.g. the need for in excess of 5 years for further appraisal or the need for more than 5 years worth of depletion activity, or other such legitimate technical grounds.

Recommendation 3.2.2: Whilst we agree that a production license can be converted to an injection license as a right, we believe that a retention lease should also be able to convert, but not as a right and subject to the Minister being satisfied of certain conditions. These conditions relate to ensuring there is no diminution of practical competition for the acreage.

Recommendation 3.2.3: In addition to the right to convert a production license to an injection license, we believe that a production license or retention lease holder should be able to convert to an assessment permit, but not as a right and subject to the Minister being satisfied of certain conditions. These conditions relate to there being a legitimate technical requirement for greater flexibility than is offered by an injection license.

We are also concerned that if there is a gap between the commencement of this Act and our successfully securing a GHGS permit in some form, then our current work to appraise options for storing CO2 at the Browse Basin might need to be suspended. We do not believe that this is the intent of the Bill and a remedy should be made.

Recommendation 3.2.4: As an interim measure, special transitional arrangements should be in force to ensure that it is not illegal to continue GHGS activity which lies within existing petroleum license areas and is linked to proposed LNG schemes, but for which there has not yet been a consideration of GHGS permits.

3.3 Spatial extent of storage formations likely to be larger than associated production licenses

The Bill appears to be drafted so that the GHGS formation and associated licenses which a production license holder can apply for need to be wholly within the production license. In practice, this is unlikely to be the case, because production licenses are typically as small as they can possibly be whereas an injection license will need to be large enough to cover the entire storage formation and likely migration pathway i.e. almost certainly bigger than a production license.

Recommendation 3.3: We propose that if a production license holder wishes to inject into a formation that extends outside of the existing production license, and which is not covered by any other permit, lease or license (GHG or petroleum), then the Minister should be able to grant this spatial extension.

4. Facilitating GHGS projects through greater flexibility

4.1 Allocating acreage in order to promote legitimate GHGS projects on a fair and competitive basis

As detailed in section 3.1, because of the emerging nature of the GHGS industry, the narrow interpretation of 'most deserving' stipulated by the Australian Government Solicitor is not in practice the most suitable approach to encouraging the development of the industry, at least initially.

One of the consequences of the narrow interpretation is that it opens up scope for speculators to sit on acreage with no capacity to fully execute a GHGS project because the Australian Government Solicitor's interpretation of 'most deserving' makes no assessment of their capacity. The draft Bill attempts to remedy this by limiting the flexibility of timing and renewal of permits, so that any incapable proponents that had secured acreage on the basis of a work program but who are unable to progress beyond it will quickly lose their permit. However, this same risk is borne by legitimate CCS proponents who must also operate within the same limited time frame even if it is not technically appropriate.

For example, if an assessment permit holder completes a 6 year work program but concludes that additional appraisal is required before a GHGS formation can be declared, the Minister has no scope to grant them that, and if they are unable to proceed to an injection license then all work must cease. This is also demonstrated by the Minister's inability to approve more than 2 holding leases or to allow a period of more than 5 years before injection commences under an injection license.

This is much less flexible than in the petroleum industry, despite the fact that the CCS industry is emerging and the technical challenges are less well understood. We understand that the Government wishes to take a firm approach to license timing to prevent proponents unfairly sitting upon opportunities and not progressing them, however, greater flexibility would be possible if the Minister had taken a broader view of the 'most deserving' criteria at the time of the award of the project.

Recommendation 4.1: The Bill must give greater scope for the Minister to award extensions to permits beyond the rigid timelines currently proposed.

4.2 Impact of accidental identification of hydrocarbon resources

In areas with pre-commencement hydrocarbon titles, the Minister can cancel or suspend injection for all or part of the injection license indefinitely if there is a new discovery of petroleum which the Minister considers is commercially viable or likely to become commercially viable in the GHGS assessment area.

In post-commencement areas, the Minister has power to decide whether or not any accidental hydrocarbon discovery takes precedence over existing GHGS activity i.e. our understanding is that the Minister could stop GHGS activity and subsequently release the area for hydrocarbon exploration and production. This introduces an unreasonable level of uncertainty for the GHGS operator. The GHGS may have been operating for many years and have made a substantial investment (underpinned by an agreed Site Plan), only to be instructed to cease because of the unexpected discovery of hydrocarbons. **Recommendation 4.2:** There should be a Statue of Limitations after which an operating GHGS project is no longer vulnerable to being directed to cease work. Consideration should be given to whether the approval of a site plan is the appropriate time for this Statute to be enforced.

4.3 Impact of Third Party access on investment stability

As drafted, the Bill provides for the establishment of a third party access regime, not only to pipelines but also to the storage formation and infrastructure (wells or equipment) for the purpose of effective resource utilization. The commercial risks of undertaking a GHGS project at least in the emerging years of this industry are very high and the prospect that investments could be made available to a third party on terms that have not been clarified could be a significant deterrent to investment. Other Acts already have third party access provision and there is no need to repeat them here.

Recommendation 4.3: Third party access provision should be struck from the Bill and dealt with by other general purpose legislation.

END OF SUBMISSION