



Submission

Greenhouse Gas Capture and Storage Legislation

Government of Western Australia
Department of Mines and Petroleum

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1.0 EXECUTIVE SUMMARY

Chevron Australia Pty Ltd (Chevron) welcomes the opportunity to provide this submission on regulation of greenhouse gas storage projects within Western Australia.

The use of greenhouse gas storage technologies are seen as one of the few opportunities by which a significant reduction in global greenhouse gas emissions can be achieved.

The oil and gas industry has considerable expertise in utilising and developing the technologies that are required for greenhouse gas storage. This is illustrated by the Chevron operated Gorgon Project in Western Australia which will set a new global benchmark in the commercial scale application of this technology.

Chevron supports the proposal for legislation to authorise the grant of titles dealing with exploration, retention and injection for greenhouse gas storage. This approach to managing subsurface rights has proved effective in regulating access to subsurface resources in the oil and gas industry for many decades. The legislation should provide interested parties with a process under which they can assess acreage for greenhouse gas storage and, where viable, develop and operate storage projects.

The ability to provide for the effective management of overlapping rights between greenhouse gas storage proponents and other land users is critical to the success of this piece of legislation. Chevron's Gorgon Project experience in designing a large scale greenhouse gas storage project below an existing oil field is a clear demonstration of how different rights holders can work collaboratively to deliver a mutually beneficial outcome without the need for complex regulatory intervention.

The imposition of fees, charges and royalties for injection projects would act as an economic disincentive for projects to move forward and be counter to the policy objective of driving deployment.

Chevron supports the approach adopted in the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Commonwealth) which provides an indemnification against future third party damages claims that might arise following site closure. This model strikes an appropriate balance between the management of risks that are the responsibility of the project proponent and providing community confidence that should a third party incur some form of loss or damage in the longer term, there is an avenue available by which to seek recourse.

Chevron does not support the proposal to levy a charge on project proponents to fund post-closure issues. Chevron believes it is in the interest of the community to ensure project proponents are clearly responsible for their site.

2.0 ABOUT CHEVRON

Chevron, through its subsidiaries and affiliates, operates across the entire energy supply spectrum. Its interests include exploring for, producing and transporting crude oil and natural gas, refining, marketing and distributing petroleum fuel. The corporation also generates electrical power and, designs and markets large-scale energy efficiency solutions.

Chevron is working toward commercialising the energy resources of the future, including bio-fuels and other renewable energy. It is the world's largest producer of geothermal energy and maintains one of the largest hydrogen transportation fuel infrastructures in the United States.

The corporation, which is based in San Ramon, California, employs approximately 62,000 people and its subsidiaries conduct business in over 100 countries.

In Australia, Chevron's Australian subsidiaries are the largest holder of Australia's natural gas resources. These include:

- A one sixth interest in the North West Shelf Venture;
- The sole proponent of the Wheatstone Project;
- An interest in the Browse LNG Project; and
- Operator and 50 per cent equity owner of the Gorgon Project.

Both the Gorgon and Wheatstone Projects will supply LNG to international markets and domestic gas to Australian markets.

2.1 The Gorgon Project

The Greater Gorgon Area gas resource represents approximately 25 per cent of natural gas discovered to date within Australia. Chevron and its joint venture participants, Australian subsidiaries of ExxonMobil and Shell, are working to develop this resource by establishing a major LNG processing centre on Barrow Island, approximately 60 km off the north-west coast of Western Australia.

Subject to government approval, the Gorgon Project will be the single largest investment ever undertaken in Australia. It will have a peak employment impact in Western Australia in the order of 10,000 jobs during the construction phase with more than 3,500 direct & indirect jobs sustained throughout the life of the Project. It will boost Australia's gross domestic product by \$64 billion and add approximately \$40 billion to government revenue through taxes and charges.

The Project will be one of most greenhouse gas efficient sources of LNG in the world. Central to achieving this outcome is the proposal to geologically store the carbon dioxide occurring naturally in the reservoir gas that would otherwise be vented to the atmosphere.

The carbon dioxide injection component of the Gorgon Project will position Western Australia as a world leader in the application of greenhouse gas storage technology. It will result in between 3.4 and 4.0 million tonnes of carbon dioxide being geologically stored each year and will be the world's largest application of this technology.

The Gorgon Joint Venturers have invested more than ten years and in excess of \$100 million in scientific research, field tests and engineering for the Carbon Dioxide Injection Project. They are committed to publicly disclosing monitoring data from the Project to encourage expeditious development of this important technology.

As operator of the Project, Chevron has worked closely with the Western Australian Government on the regulatory arrangements under the *Barrow Island Act 2003 (WA)* for the injection and storage of carbon dioxide. As a result, Chevron is uniquely positioned to provide considered and informed comment on the regulation of greenhouse gas storage in the State.

2.2 Chevron's Interest in Greenhouse Gas Storage Legislation

As a significant explorer and producer of oil and gas in Australia, Chevron has an interest in any changes to the regulatory framework that underpin the petroleum industry in Western Australia.

Chevron also has an interest in the development of a workable legislative framework for the underground storage of greenhouse gases which would provide options for the further reduction of emissions from the corporation's Western Australian operations.

2.2.1 Managing overlapping oil and gas rights

The geological formations in which oil and gas are found share many attributes with those suitable for the underground storage of greenhouse gases.

Chevron is confident that oil and gas exploration and production can co-exist in close proximity with underground storage of greenhouse gases, provided the rights of each proponent are clearly understood and respected. Chevron's Gorgon experience in designing a large scale greenhouse gas storage project below an existing oil field is a clear demonstration of how different rights holders can work collaboratively to deliver a mutually beneficial outcome without the need for excessive regulatory intervention.

Where there is a requirement for greenhouse gas storage to co-exist in proximity to oil and gas operations, the issues faced by these co-existing projects will be very site specific. Where overlapping rights exist, the parties are most likely the best placed to resolve these issues through commercial agreement. Regulation in this area should be restricted to measures aimed at facilitating commercial agreement, for example, a requirement to negotiate in good faith.

Given the importance of oil and gas exploration and production to both the State and the national economies¹, attention will need to be paid to ensuring the future interaction of greenhouse gas storage sites do not become an impediment to the development of Western Australia's oil and gas resources.

2.2.2 Effective regulation of greenhouse gas storage

The purpose of greenhouse gas storage legislation should be to provide interested parties with a process under which they can assess acreage for greenhouse gas storage and, where viable, develop and operate storage projects.

There are some aspects of greenhouse gas storage that are best regulated by other legislation, either State or Federal. Environmental approvals are currently regulated under the *Environmental Protection Act 1986 (WA)* and where applicable the

¹ Oil and gas industry expenditure on exploration in Western Australia (including offshore Commonwealth waters) was \$2.175 billion in financial year 07-08 and \$2.128 billion in the first nine months of the 08-09 financial year; Source Australian Bureau of Statistics, Mineral and Petroleum Exploration, Report 8412.0.March 2009

Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth). Based on experience of the Gorgon Project, Chevron considers that this legislation is well placed to regulate the environmental impacts of greenhouse gas storage projects.

Chevron broadly supports the introduction of a well designed emissions trading scheme as Australia's primary policy response for regulating greenhouse gas emissions. The price on emissions established by such a scheme should be left to drive lowest cost emissions abatement across the Australian economy. Any legislation that mandated the uptake of greenhouse gas storage, would undermine the efficient functioning of an emissions trading scheme and would not be supported by Chevron.

3.0 COMMENTS ON THE PRELIMINARY DRAFTING INSTRUCTIONS

Chevron supports a nationally consistent approach to the regulation of greenhouse gas storage and is concerned that a number of Australian States have adopted different approaches to regulating particular aspects of greenhouse gas storage within their respective jurisdictions. A lack of consistency between Australian governments will increase compliance costs for industry and is a disincentive to further investment in this technology.

Since 2004, Chevron has actively engaged State and Commonwealth Governments on the regulation of greenhouse gas storage in Australia through its membership of the Geo-Sequestration Regulatory Reference Group. This Reference Group assisted in the development of the Australian Regulatory Guiding Principles for Carbon Dioxide Capture and Geological Storage.

Chevron also contributed to the work on amendments to the *Offshore Petroleum Act 2006 (Commonwealth)* and supporting regulations to allow for greenhouse gas storage in Commonwealth offshore waters.

Chevron encourages the Western Australian Government to consider the legislative model being applied by the Commonwealth Government in the *Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Commonwealth)* and, wherever possible, mirror the approach taken in that Act.

3.1 Terminology

The scope of the proposed Western Australian legislation appears to deal only with the transportation and underground storage of greenhouse gases. As the capture components of the carbon capture and storage process chain are not envisaged to be regulated by this legislation, Chevron propose that the terminology be revised to reflect the language used in the Commonwealth Act, notably "Greenhouse Gas Storage" as it better reflects the nature and scope of the legislation.

3.1.1 Greenhouse gas composition

Consideration will need to be given to how best to define a greenhouse gas. As a result of gas separation or treatment, incidental substances will be injected along with the targeted greenhouse gases. For example, the gas stream the Gorgon Project proposes to inject contains minor concentrations of methane, hydrogen sulphide, benzene and toluene.

A balance is required to enable the injection of greenhouse gases containing incidental substances without allowing the proposed legislation to be used as a mechanism to dispose of non greenhouse gas pollutants.

3.2 Incorporation into the *Petroleum and Geothermal Energy Resources Act 1967 (WA)*

Subject to the need expressed earlier, to maintain existing oil and gas industry rights, Chevron supports in principle the proposal to incorporate the greenhouse gas storage provisions into the *Petroleum and Geothermal Energy Resources Act 1967 (WA)*.

Using the gas storage provisions of this Act may provide a stop gap method for greenhouse gas storage. However, use of these provisions for any other purpose than the short-term or temporary storage of natural gas is inappropriate. As greenhouse gas storage requires particular attention to site selection and appraisal, operational management, site closure and post closure responsibilities, Chevron recommends against using the gas storage provisions as a short cut to enable the regulation of greenhouse gas storage.

3.3 Objects of the Legislation

Chevron agrees with the legislative objectives as proposed in the preliminary drafting instructions.

However, the objectives do not make clear that the use of greenhouse gases for enhanced oil recovery, whether sourced from within or external to a production lease, are to be regulated under the petroleum provisions of the proposed Act, as opposed to the greenhouse gas storage provisions.

The principle purpose of injecting greenhouse gases should determine which parts of the Act are used to regulate a particular activity. If the principle purpose is for enhanced oil recovery, the activity should be regulated as a petroleum activity. If the principle purpose is the permanent underground storage of greenhouse gases, the activity should be regulated as a greenhouse gas storage operation.

The one exception to this principle should be where greenhouse gas storage is undertaken as an integral part of an integrated oil and gas production operation. Such an activity could be regulated under the existing petroleum legislation and, in order to ensure no diminution of existing rights, should continue to be regulated as a petroleum operation. This ensures a single point of regulation for the integrated activity, preserving an existing title right and mirroring the approach in the *Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Commonwealth)*.

3.4 Crown Ownership of Storage Formations and Injected Greenhouse Gases

The question of ownership and transfer of ownership of injected greenhouse gases has been an active topic of discussion throughout the greenhouse gas storage industry over the past decade. Much of the interest in this topic appears to be driven by the experience in the onshore United States where subsurface rights are owned by individuals or corporations. Caution is needed in seeking to apply options developed in the United States to jurisdictions that do not share the same underlying legal framework.

Australia has a long standing legal framework that vests ownership of the subsurface in the Crown. Generally the Crown provides rights, through granting of licences, for individuals to exploit a particular resource contained in the subsurface, be it minerals, fluids or pore space.

Chevron does not see any reason to vary this long standing approach to managing subsurface rights and is concerned by the proposal contained in the drafting instructions for any injected greenhouse gas to remain the property of the greenhouse gas title holder until the relevant titles have been surrendered or cancelled. While this model has been adopted in Queensland, there are a number of practical difficulties with this approach.

- From the point at which the greenhouse gases are injected, they will potentially interact with fluids and minerals in the subsurface. For example, when carbon dioxide is injected into the reservoir, a portion will immediately dissolve into the formation water. It is uncertain how the proposed ownership arrangements would apply when carbon dioxide (which is the proposed to be the property of the site title holder) is dissolved in the formation water (which is the property of the Crown).
- Dependant upon the chemistry of the water, a number of chemical reactions can occur which in turn may result in the chemical precipitation of new minerals. The proposal that the site proponent retains ownership of the injected carbon dioxide is unworkable when it is considered that at least some molecules of carbon dioxide will be broken down into their constituent ions and that these ions will likely re-combine with other ions in the formation water to form new molecular compounds. It is difficult to see how property can be assigned to the parts of the injected carbon dioxide once they are chemically transformed into other compounds in the subsurface.
- It is possible that formation water that is displaced by the injected greenhouse gas may migrate through the subsurface and potentially impinge on the rights enjoyed by others. If it is considered important to specify that ownership of the injected greenhouse gas resides with the storage site operator, it follows that ownership of any displaced formation water should also reside with the site operator. It is not clear how this would be determined.

It is likely that the reason the drafting instructions propose clarifying ownership of the injected greenhouse gas substance is to simplify issues around liability. As the drafting instructions correctly suggest, ownership of the injected greenhouse gas may have little direct impact on any legal liabilities that might arise from these projects. Consequently, Chevron proposes that the established legal principle of subsurface ownership being vested in the Crown should be maintained and that once injected, any greenhouse gases become part of the subsurface.

3.5 Proposed Titles/Authorities

Chevron supports the proposal for the legislation to authorise the grant of titles dealing with exploration, retention and injection for greenhouse gas storage. This approach to managing subsurface rights has proved effective in regulating access to subsurface resources in the oil and gas industry for many decades.

Further clarification should be provided as to the processes for granting the proposed titles and how the conditions which will attach to those titles are proposed to be managed. For example the preliminary drafting instructions did not outline the duration of a particular title and renewal options, which will attach to proposed titles.

Chevron supports maintaining consistency with title provisions in the *Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Commonwealth)* with the exception of the maximum time allowed for an exploration permit. The Commonwealth Act underestimates the time that may be required to explore for and appraise a greenhouse gas storage site. Provision should be made for the renewal of exploration permits provided appropriate steps are being undertaken to fully assess the resource potential of the exploration area.

3.5.1 Release of acreage / Assessment and approval process

Chevron supports the proposal for the release of greenhouse gas storage exploration acreage in a manner that mirrors the release of Western Australian petroleum and geothermal acreage.

An important additional consideration, which does not apply to petroleum or geothermal exploration, is the need to ensure the interests of bidders who have potential access to a viable source of greenhouse gases for injection are treated appropriately. This will likely require published bid assessment criteria to go beyond assessing the proposed work program and includes the proponent's access to a suitable supply of greenhouse gases for injection.

3.6 Effect on Pre Existing Petroleum and Geothermal Titles

An important consideration in attracting investment is the degree to which any rights once granted can be lessened through future government action. The preliminary drafting instructions provide some level of insight as to how co-existing title rights might be managed through processes such as consultation and the separate approval of field activities. Further detail is required in order to assess how these arrangements might be applied in practice.

Chevron supports the proposal to allow overlapping title rights. While the drafting instructions discuss the coexistence of greenhouse gas storage rights with those of petroleum and geothermal operators, there is no reason this principle cannot be extended to other title rights such as pastoral leases, mining leases, etc.

Chevron's experience on Barrow Island has shown that it is possible for petroleum rights and carbon dioxide injection rights to co-exist. Critical to this has been the ability for the two rights holders to work together and develop a contractual model which governs the interaction between the two interested parties. Chevron proposes that the greenhouse gas storage legislation seeks to facilitate this style of commercial negotiation between the co-existing rights holders as opposed to prescribing how the co-existing rights are managed.

It is critical that governments do not unilaterally withdraw title rights once these rights have been granted. This is highlighted by the existing rights that explorers enjoy in relation to the development of any discovered resource. While this may not be a statutory right, the custom and practice in Australia, is that having lawfully discovered a resource the explorer will be allowed to exploit it.

Should explorers for petroleum, geothermal or greenhouse gas storage resources all discover a resource in close proximity to one another and all wish to develop their resource at about the same time, additional clarity is required to determine how government will manage the conflicting requirements of these projects.

3.7 Transportation of Greenhouse Gases

Chevron supports the proposal to amend the existing Petroleum Pipelines Act 1969 (WA) to allow for the transportation of greenhouse gases. As discussed earlier, attention will need to be given to defining greenhouse gases to ensure unintended barriers are not placed on the gases that can be transported via pipelines.

3.8 Monitoring and Verification

Monitoring of greenhouse gas storage sites will be an important component of any storage project as it has a critical role in ensuring appropriate reservoir management and containment security.

The proposed legislative amendments need to ensure monitoring related to the management of the greenhouse gas storage site is clearly differentiated from monitoring of any environmental impacts resulting from site operations or from an unintended release of greenhouse gas. Monitoring of environmental impacts is best left to the established processes defined in the *Environmental Protection Act 1986 (WA)* and the *Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)*.

Chevron supports the proposal to use an approved "Site Plan" to cover the operations and techniques to be used by the site operator to monitor a storage site and to integrate the monitoring results with a project's uncertainty management and risk mitigation plans. This should enable the unique attributes of each site to be evaluated and fit for purpose monitoring and a site specific uncertainty management and risk mitigation plan to be developed.

The proposed legislation and any supporting regulations should also avoid prescribing particular monitoring techniques. Rather, legislation and regulation should set out the broad objectives required for monitoring programs.

Monitoring should focus on acquiring timely data about the performance of the injected greenhouse gases in the reservoir so as to enable comparisons with the predicted behaviour. Should deviation from the predicted behaviour be identified, further study may need to be undertaken and, if required, changes to the operation made to ensure the likelihood of containment failure remains within acceptable limits.

The availability of an ever increasing range of monitoring technologies will require storage site proponents to assess each in the context of its application as to how it will aid in the understanding of reservoir performance and enable the proponent to actively manage the reservoir. Monitoring that does not provide an insight into the behaviour of the injected greenhouse gases is of questionable value. Simply because a particular technology has been deployed at one site does not mean that it should be deployed at all sites.

The preliminary drafting instructions indicate the contents of the Site Plan will "verify" the behaviour of the injected greenhouse gases over the "life of a project". The use of such terms requires careful consideration. Firstly, the common use of the term verify may imply a higher level of knowledge about the behaviour of the injected greenhouse gas in the reservoir than is actually available. Secondly, the use of the term life of project requires clarification and should be restricted to the duration of the injection licence.

3.9 Submission and Release of Data

Chevron supports applying the provisions relating to the release of data currently applicable to petroleum and geothermal titles to the proposed greenhouse gas storage titles. The ability of explorers to access geologic data on the "open file" facilitates early phase exploration and reduces duplication of exploration effort, thereby lowering costs to industry.

3.10 Security/Fees/Royalties

The use of greenhouse gas storage technologies are seen as one of the few opportunities by which a significant reduction in global greenhouse gas emissions can be achieved. This requires policy settings to drive the earliest and most widespread deployment of these technologies. As the imposition of fees, charges and royalties acts as an economic disincentive for projects to move forward, the imposition of such charges would appear to run counter to the policy objective of driving deployment.

3.10.1 Securities

The requirement for project insurance is a feature of a number of natural resource extraction laws. In principle, Chevron does not object to the inclusion of similar provisions in the proposed Western Australian greenhouse gas storage laws but is concerned that the requirement to obtain insurance will be applied without reference to the unique risk management issues of individual projects.

While such insurance provisions are a feature of other resource extraction laws, many companies with a demonstrated financial capability rely on self insurance, as they have the financial resources to be able to absorb the costs associated with the occurrence of a particular unplanned event.

In applying these insurance provisions, Government should maintain a flexible and realistic approach. Any requirement for project insurance should be assessed against the levels of risk faced by the project and the ability (or more correctly, the inability) of the project proponents to absorb such levels of risk. Insurance should only be required where the risk is tangible, the proponent does not have the capacity to absorb that risk and where insurance is readily available.

The degree to which insurance products are available is also a relevant consideration. As this is an emerging technology, general greenhouse gas storage insurance is not yet a widely available product. Requiring project proponents to take out insurance without an established market for such products is likely to force proponents to pay unrealistically high premiums for potentially limited cover. This would result in an unnecessary increase in project costs and be a further disincentive to the deployment of the technology.

Chevron does not support an approach whereby project proponents are required to carry a prescribed level of insurance without reference to the attributes of the project or the financial capacity of the proponent to absorb the risk.

3.10.2 Fees

In principle, Chevron supports government regulatory cost recovery through the imposition of fees and charges on the relevant industry. However, in the case of greenhouse gas storage, the policy motivation to promote the early deployment runs counter to the imposition of government fees and charges.

While the proposal to levy fees and charges similar to petroleum and geothermal operations appears reasonable, government should consider if lessening these charges might encourage the early uptake of the technology.

Chevron does not support the levying of fees (based on tonnes of greenhouse gas injected) to fund long-term monitoring and well intervention. Where there is a requirement for ongoing monitoring or well intervention, these are best managed by the project proponent.

3.10.3 Royalties

Chevron supports the proposal that royalties on the injection of greenhouse gases should not be imposed.

As discussed earlier, the proposed legislation would provide access to a subsurface resource (the pore space) owned by the Crown. While it could be argued that some fee or royalty should be payable to the Crown in return for that access, this needs to be considered in light the important public policy driver to promote early and widespread deployment of the technology. In foregoing revenue from royalties on greenhouse gas storage sites, government is providing a benefit to the community through reduced greenhouse gas emissions.

Unlike most activities that create economic wealth through the exploitation of a resource owned by the Crown, greenhouse gas storage is unlikely to be a profitable enterprise until such time as there is a significant price placed on greenhouse gas emissions. Any consideration of the imposition of royalties in advance of an emissions price driving commercial deployment of these technologies, will negatively impact on the uptake of the technology.

3.11 Surrender/Post Closure Responsibilities/Long Term Liability

Chevron supports surrender of the Greenhouse Gas Injection Licence once:

- Future land use objectives defined at the time of project approval have been met;
- Residual risk of leakage and any resulting liabilities are acceptably low; and
- Ongoing costs associated with the site are acceptably low or are otherwise appropriately managed.

It is unlikely that such criteria could be met immediately after the cessation of injection operations. Chevron envisages that project proponents would maintain direct responsibility for the site during a “post injection” period, during which, traditional facility decommissioning and site rehabilitation activities would occur along with ongoing monitoring. Once it has been determined that the residual risks of the site are acceptably low, site closure could be achieved with the surrender of the injection licence.

Having satisfied the criteria that the residual risk of leakage is acceptably low, ongoing monitoring activities would be minimal such that they could be accommodated by government. However, the third criteria accommodates a circumstance where government is comfortable with the surrender of the title but considers there is a need for some ongoing monitoring costs to be funded by the project proponent.

3.11.1 Surrender

Chevron supports the proposal that surrender of the injection title can occur once the Minister is satisfied the risks associated with the injected greenhouse gas have been reduced to as low as practicable. We would support further clarification in the legislation or regulations as to how such a test would be determined.

3.11.2 Post Closure Responsibility

Chevron interprets the Post Closure period to be the period following surrender of the greenhouse injection title. Following surrender, the project proponent would no longer have statutory responsibilities under the greenhouse gas storage legislation for the site, but may have ongoing responsibilities under more generally applicable legislation and under the common law.

3.11.3 Long Term Liabilities

There are several options available to government in relation to the management of long-term liabilities. While government does not generally indemnify industry, there has been much written about the need for government to assume long-term liability in relation to greenhouse gas storage in order to reassure the community that matters will be appropriately dealt with should they arise in the longer term.

The assumption of long-term liability by government removes a barrier to deployment as seen by many proponents. This needs to be balanced against community concerns that project proponents should be held accountable for their actions should their project fail.

Chevron supports the approach adopted in the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Commonwealth) which provides an indemnification against future third party damages claims that might arise following site closure. This model strikes an appropriate balance between the management of risks that are the responsibility of the project proponent and providing community confidence that should a third party incur some form of loss or damage in the longer term, there is an avenue available by which to seek recourse.

Chevron does not support the proposal to levy a charge on project proponents to fund post-closure issues. There are practical difficulties in transparently determining the level of such charges and that having paid such a levy, a project proponent may feel that it can seek a transfer of long-term liability at an earlier point than might otherwise be anticipated. Chevron believes it is in the interest of the community to ensure project proponents are clearly responsible for their site and the transfer of liabilities to government only occurs at the appropriate time. The *Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Commonwealth)* provides such an outcome and this approach should be adopted in the Western Australian legislation.

4.0 CONCLUSION

Chevron welcomes the opportunity to comment at this preliminary stage in the drafting of greenhouse gas storage legislation for Western Australia. We support the proposal to include legislative provisions in the *Petroleum and Geothermal Energy Resources Act 1967 (WA)*.

Chevron is supportive of many of the proposals contained in the preliminary drafting instructions but note that greater clarity is required around matters such as:

- The duration and conditions pertaining to the greenhouse gas storage titles.
- The interaction between these proposed laws and other laws that will be used to regulate activities associated with the storage site. For example, differentiation between storage site based monitoring and monitoring for environmental impacts.
- The criteria and process for determining site closure.
- How co-existing rights are proposed to be managed.

Chevron does not support attempts to prescribe the ownership of the greenhouse gas once injected into the subsurface and recommends the Western Australian Government adopt the process contained in the *Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Commonwealth)* in relation to the management of long term liabilities.

Chevron looks forward to continued engagement with the Western Australian Government in relation to the further development of this legislation.