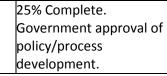
December 2018 Quarterly Update to Part 2 of the Implementation Plan.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
5.1	That prior to the grant of any further exploration approvals, the Government mandates an enforceable code of practice setting out minimum requirements for the decommissioning of any onshore shale gas wells in the NT. The development of this code must draw on world-leading practice. It must be sufficiently flexible to accommodate improved decommissioning technologies. The code must include a requirement that: • wells undergo pressure and cement integrity tests as part of the decommissioning process, with any identified defects to be repaired prior to abandoning the well; and • cement plugs be placed to isolate critical formations and that testing must be conducted to confirm that the plugs have been properly set in the well.	Stage 2 (16.1) To be completed by March 2019.	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has worked with independent scientific experts to develop a draft Code of Practice relative to the Inquiry's recommendation. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.
5.2	• implements a mandatory program for regular monitoring by gas companies of decommissioned onshore shale gas wells (including exploration wells), with the results from the monitoring to be publicly reported in real-time. If the performance of a decommissioned well is determined to be acceptable to the regulator then the gas company may apply for relinquishment of the well to the Government; and • implements a program for the ongoing monitoring of all orphan wells.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Monitoring gas companies and their operations	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has commenced work with scientific experts to develop a monitoring program for decommissioned and orphaned wells. The government will consider the monitoring programs in comparable jurisdictions when developing the program. Industry and the community will have an opportunity to comment on the program before it is implemented. The program will be made enforceable via legislation.









50 % Complete.
Government approval for consultation on draft policy, guideline, framework, Bill.



75 % Complete.
Consultation undertaken on draft policy, guideline, framework, Bill.



Complete.
Approved by decision makers.
Recommendation has been implemented.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
5.3	That prior to the grant of any further exploration approvals, in consultation with industry and other stakeholders, the Government develops an enforceable code of practice setting out the minimum requirements that must be met to ensure the integrity of onshore shale gas wells in the NT. This code must require that: • all onshore shale gas wells (including exploration wells constructed for the purposes of production testing) be constructed to at least a Category 9 standard (unless it can be demonstrated by performance modelling/assessment that an alternative design would give at least an equivalent level of protection), with cementing extending up to at least the shallowest problematic hydrocarbon-bearing, organic carbon rich or saline aquifer zone; • all wells be fully tested for integrity before and after hydraulic fracturing and that the results be independently certified, with the immediate remediation of identified issues being required; • an ongoing program of integrity testing be established for each well during its operational life. For example, every two years initially for a period of 10 years and then at five-yearly intervals thereafter to ensure that if any issues develop, they are detected early and remediated; and • the results of all well integrity testing programs and any remedial actions undertaken be published as soon as they are available.	Stage 2 (16.1) To be completed by March 2019	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has commenced work with independent scientific experts to develop a draft Code of Practice relative to the Inquiry's recommendation. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.
5.4	That prior to the grant of any further exploration approvals, gas companies be required to develop and implement a well integrity management system (WIMS) for each well complying with ISO 16530-1:2017. That prior to the grant of any further exploration approvals, each well must have an approved well management plan in place that contains, at a minimum, the following elements: • consideration of well integrity management across the well life cycle; • a well integrity risk management process that documents how well integrity hazards are identified and risks assessed; • a well barrier plan containing well barrier performance standards, with specific reference to protection measures for beneficial use aquifers; • a process for periodically verifying well barrier integrity through the operational life of the well and immediately prior to abandonment, and a system for reporting to the regulator the findings from integrity assessments; • characterisation data for aquifers, saline water zones, and gas bearing zones in the formations intersected during drilling; and • monitoring methods to be used to detect migration of methane along the outside of the casing.	Stage 2 (16.1) To be completed by March 2019	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has commenced work with independent scientific experts to develop guidelines for a well integrity management system that will be contained within a draft Code of Practice relative to the Inquiry's recommendation. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.

	Recommendation	Target	Reform Area	Project	Lead Agency	Implementation	Implementation update as at 31 December 2018
		completion date		Action		progress as at 31 December 2018	
5.5a	(A) That prior to the grant of any further exploration approvals, in consultation with the gas industry and the community, the Government develops a wastewater management framework for any onshore shale gas industry. Consideration must be given to the likely volumes and nature of wastewaters that will be produced by the industry during the exploration and production phases. That the framework for managing wastewater includes an auditable chain of custody system for the transport of wastewater (including by pipelines) that enables source-to-delivery tracking of wastewater. (B) That the absence of any treatment and disposal facilities in the NT for wastewater and brines produced by the gas industry be addressed as a matter of priority.	Stage 2 (16.1) To be completed by March 2019.	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has commenced work with industry and independent scientific experts to develop to understand the nature and volume of wastewater that will be generated from onshore gas operations in the Northern Territory. The wastewater framework will be contained within a draft Code of Practice relative to the Inquiry's recommendation. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.
5.5b	(A)That prior to the grant of any further exploration approvals, in consultation with the gas industry and the community, the Government develops a wastewater management framework for any onshore shale gas industry. Consideration must be given to the likely volumes and nature of wastewaters that will be produced by the industry during the exploration and production phases. That the framework for managing wastewater includes an auditable chain of custody system for the transport of wastewater (including by pipelines) that enables source-to-delivery tracking of wastewater. (B) That the absence of any treatment and disposal facilities in the NT for wastewater and brines produced by the gas industry be addressed as a matter of priority.	Stage 3 To be completed by end Dec-21	Planning for industry	Roads and facilities	Department of Trade, Business and Innovation		The Department of Trade, Business and Innovation visited the United States on a fact-finding mission in October 2018. Collation of information pertinent to the industrial-scale infrastructure used for treatment and disposal of wastewater and brines commenced as part of this mission. The Department of Trade, Business and Innovation will work with industry to understand the quality and quantity of wastewater streams the industry expects to produce. This information will underpin plans for infrastructure and systems appropriate for managing each industry wastewater stream, including opportunities for private sector waste management.
5.6	That in consultation with the gas industry and the community, specific guidance be implemented by the Government, drawing on protocols and procedures developed in other jurisdictions, for the characterisation, segregation, potential reuse and management of solid wastes produced by any onshore shale gas industry.	Stage 3 To be completed by March 2019.	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has commenced work with industry and independent scientific experts to develop a Code of Practice for how solid wastes will be managed relative to the Inquiry's recommendation. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.
5.7	That to minimise the risk of occurrence of seismic events during hydraulic fracturing operations, a traffic light system for measured seismic intensity, similar to that in the UK, be implemented.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has commenced work with independent scientific experts to formulate an appropriate system for measuring seismic intensity in the Northern Territory.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
7.1	That the Water Act be amended prior to the grant of any further exploration approvals to require gas companies to obtain water extraction licences under that Act.	Completed	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		The <i>Water Act</i> was amended to remove the exemption for petroleum and the changes commenced on 31 December 2018. All water extraction for petroleum activities now requires a water extraction licence and is regulated under the <i>Water Act</i> .
7.2	That the Government introduces a charge on water for all onshore shale gas activities.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		The Department of Environment and Natural Resources will develop options for a water pricing model applying to water extraction by the onshore gas industry. The Water Regulations will be amended to accommodate water pricing.
7.3	That the Australian Government amends the EPBC Act to apply the 'water trigger' to onshore shale gas development.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of the Chief Minister		The Chief Minister has written to the Federal Minister for Environment and Energy requesting that the Australian Government considers amending the <i>Environment Protection and Biodiversity (EPBC) Act</i> .
7.4	That the Government develops specific guidelines for human health and environmental risk assessments for all onshore shale gas developments consistent with the National Chemicals Risk Assessment framework, including the national guidance manual for human and environmental risk assessment for chemicals associated with CSG extraction.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Environment and Natural Resources		The Department of Environment and Natural Resources will commission industry specialists to develop guidelines for human health and environmental risk assessment consistent with the national framework. The guidelines will be made enforceable via legislation.
7.5	That before any further production approvals are granted, a regional water assessment be conducted as part of a SREBA for any prospective shale gas basin, commencing with the Beetaloo Sub-basin. The regional assessment should focus on surface and groundwater quality and quantity (recharge and flow), characterisation of surface and groundwater-dependent ecosystems, and the development of a regional groundwater model to assess the effects of proposed water extraction of the onshore shale gas industry on the dynamics and yield of the regional aquifer system.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		The Department of Environment and Natural Resources has started developing a regional groundwater model for the Beetaloo Sub-basin, as part of the Strategic Regional Environmental Baseline Assessment (SREBA), to be completed before any production approvals are granted. The groundwater model will be further developed in cooperation with the Commonwealth Government's Geological and Bioregional Assessment of the Beetaloo Sub-basin. The Department of Environment and Natural Resources will undertake similar
							water assessments of other areas prospective for gas activities as they are identified for potential development.

Hydraulic Fracturing Inquiry Implementation of 135 Recommendations – Status Report to December 2018.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	
7.6	That prior to the grant of any further exploration approvals, the use of all surface water resources for any onshore shale gas activity in the NT be prohibited.	Stage 2 (16.1) To be completed by March 2019	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		The passage and commencement of the Water Legislation Amendment Bill 2018 requires petroleum activities to obtain a water extraction licence under the Water Act to take surface water. The Controller of Water Resources under the Water Act, and the Minister responsible for deciding whether to approve Environment Management Plans for onshore gas activities under the Petroleum (Environment) Regulations already have the power to make decisions consistent with the relevant recommendations of the Inquiry Report regarding the protection of water resources. The Controller of Water Resources will provide a policy position on assessing and once published this recommendation will be completed. To future proof this recommendation the Government will introduce further amendments to the Water Act to ensure that there is no way for decisions to be made which do not align with these recommendations and to prevent future challenge of either decision. These amendments are proposed to be tabled in the February 2019 sittings of Parliament with likely passage in May 2019.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
7.7	 That in relation to the Beetaloo Sub-basin: the Daly-Roper WCD be extended south to include all of the Beetaloo Sub-basin; that WAPs be developed for each of the northern and southern regions of the Beetaloo Sub-basin; the new northern Sub-basin WAP provides for a water allocation rule that restricts the consumptive use to less than that which can be sustainably extracted without having adverse impacts on other users and the environment; and the southern Sub-basin WAP prohibits water extraction for any onshore shale gas production until the nature and extent of the groundwater resource and recharge rates in that area are quantified. That in relation to other shale gas basins with similar or greater rainfall rates than the Beetaloo Sub-basin, WCDs be declared and WAPs be developed to specify substantial groundwater extraction rates for shale gas production activities that will not have adverse impacts on existing users and the environment. That in relation to other potential shale gas basins in semi-arid and arid regions, all groundwater extraction for any shale gas production activities be prohibited until there is sufficient information to demonstrate that it will have no adverse impacts on existing users and the environment. 	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		The Minister for Environment and Natural Resources extended the Daly-Roper Water Control District (WCD) to include the Beetaloo Sub-basin in July 2018 and has been renamed the Daly Roper Beetaloo Water Control District. The Department or Environment and Natural Resources will develop Water Allocation Plans (WAPs) for the northern and southern regions of the Beetaloo Sub-basin. This will include developing an estimated sustainable yield, which will guide licensing decisions for water extraction. A Water Advisory Committee (WAC) will be established for each plan area. WCDs, WAPs and WACs will be established for other areas prospective for gas activity as they are identified for potential development. Further information about WCDs, WAPs and WACs is at < <hr/> https://denr.nt.gov.au/land-resource-management/water/water-information-systems/water-licensing-portal>>

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
7.8a	That the following measures be mandated to ensure that any onshore shale gas development does not cause unacceptable local drawdown of aquifers: • that prior to the grant of any further exploration approvals, the extraction of water from water bores to supply water for hydraulic fracturing be prohibited within at least 1 km of existing or proposed groundwater bores (that are used for domestic or stock use) unless hydrogeological investigations and groundwater modelling, including the SREBA, indicate that a different distance is appropriate, or if the landholder agrees to a variation of this distance;	Stage 2 (16.1) To be completed by March 2019	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		Environment Management Plans currently require onshore gas companies to provide details of all water bore locations. The passage and commencement of the Water Legislation Amendment Bill 2018 requires petroleum activities to obtain a water extraction licence under the Water Act to take groundwater. Any application that did not accord with this recommendation will be refused by the Controller of Water Resources in accordance with consideration powers provided under section 90. The Controller of Water Resources will provide a policy position on assessing and once published this recommendation will be completed. To future proof this recommendation the Government will introduce further amendments to the Water Act to ensure that there is no way for decisions to be made which do not align with these recommendations and to prevent future challenge of either decision. These amendments are proposed to be tabled in the February 2019 sittings of Parliament with likely passage in May 2019.
7.8b	That the following measures be mandated to ensure that any onshore shale gas development does not cause unacceptable local drawdown of aquifers: • that relevant WAPs include provisions that adequately control both the rate and volume of water extraction by the gas companies; • that gas companies be required, at their expense, to monitor drawdown in local water supply bores; and • that gas companies be required to immediately 'make good' and rectify any problems if the drawdown is found to be excessive.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		The Department of Environment and Natural Resources will declare Water Control Districts and establish Water Allocation Plans (WAPs) for priority areas of prospective onshore gas activity. WAPs will identify the estimated sustainable yield and total volume of water available for extraction for petroleum activities. Water licences will be issued in accordance with the WAPs and conditions will control the rate and volume of extractions and provide for monitoring requirements. The government will consider the most appropriate legislative mechanism to implement the remainder of this recommendation, including ensuring an enforceable mechanism for "making good" any excessive impacts.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
7.9	That prior to the grant of any further exploration approvals, the reinjection of wastewater into deep aquifers and conventional reservoirs and the reinjection of treated or untreated wastewaters (including brines) into aquifers be prohibited, unless full scientific investigations determine that all risks associated with these practices can be mitigated.	Stage 2 (16.1) To be completed by March 2019	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		This activity is a regulated activity which currently requires an authorisation under the Petroleum (Environment) Regulations and the Water Act (where the waste leaves a petroleum site). These authorisations will not be granted if they relate to the release of petroleum wastewater to groundwater (i.e. are prohibited). The Controller of Water Resources under the Water Act, and the Minister responsible for deciding whether to approve Environment Management Plans for onshore gas activities under the Petroleum (Environment) Regulations already have the power to make decisions consistent with the relevant recommendations of the Inquiry Report regarding the protection of water resources. The Controller of Water Resources will provide a policy position on assessing and once published this recommendation will be completed. To future proof this recommendation the Government will introduce further amendments to the Water Act to ensure that there is no way for decisions to be made which do not align with these recommendations and to prevent future challenge of either decision. These amendments are proposed to be tabled in the February 2019 sittings of Parliament with likely passage in May 2019. The Controller of Water Resources will provide a policy position on assessing applications prior to legislative amendments, to align with this recommendation
7.10	That prior to the grant of any further exploration approvals, the following information about hydraulic fracturing fluids must, as a matter of law, be reported and publicly disclosed before any exploration activities and production activities are carried out: • the identities, volumes and concentrations of chemicals (including environmentally relevant chemical species present as contaminants in the bulk chemicals) to be used; • the purpose of the chemicals; • how and where the chemicals will be managed and transported onsite, including how spills will be prevented, and if spills do occur, how they will be remediated and managed; and • the laws that apply to the management of the chemicals and how they are enforced.	Completed.	Ensuring accountable industry practice	Managing wastewater and chemical safety	Department of Primary Industry and Resources		The Petroleum (Environment) Regulations were amended on 19 December 2018 to meet this recommendation, which requires that the information specified in the recommendation is included in an Environment Management Plan (EMP), is reported and made available online. The regulations can be found here: https://legislation.nt.gov.au/en/Legislation/PETROLEUM-ENVIRONMENT-REGULATIONS

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
7.11	That prior to the grant of any further exploration approvals, in order to minimise the risk of groundwater contamination from leaky gas wells: • all wells subject to hydraulic fracturing must be constructed to at least Category 9 (or equivalent) and tested to ensure well integrity before and after hydraulic fracturing, with the integrity test results certified by the regulator and publicly disclosed online; • a minimum offset distance of at least 1 km between water supply bores and well pads must be adopted unless site-specific information of the kind described in Recommendation 7.8 is available to the contrary; • where a well is hydraulically fractured, monitoring of groundwater be undertaken around each well pad to detect any groundwater contamination using multilevel observation bores to ensure full coverage of the horizon, of any aquifer(s) containing water of sufficient quality to be of value for environmental or consumptive use; • all existing well pads are to be equipped with multilevel observation bores (as above); • as a minimum, electrical conductivity data from each level of the monitor bore array should be measured and results electronically transmitted from the well pad site to the regulator as soon as they are available. The utility of continuous monitoring for other parameters should be reviewed every five years or as soon as advances in monitoring technology become commercially available; and • other water quality indicators, as determined by the regulator, should be measured quarterly, with the results publicly disclosed online as soon as reasonably practical from the date of sampling. This monitoring regime should continue for three years and be reviewed for suitability by the regulator.	Stage 2 (16.1) To be completed by March 2019	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Environment and Natural Resources		This recommendation will be delivered through the Codes of Practice developed for well integrity and decommissioning in response to recommendations 5.1 and 5.3. The Codes are currently under development and will be made enforceable via legislation Government will also develop specific minimum monitoring requirements and establish an appropriate compliance and enforcement framework and develop an online portal to enable timely public reporting, as required in recommendation 9.5. The Preliminary Guideline for Groundwater monitoring bores for Exploration Petroleum Wells in the Beetaloo Sub-Basin was finalised and distributed on 29 November 2018. The guideline has been uploaded to the DENR website www.denr.nt.gov.au/onshoregas
7.12	That prior to the grant of any further exploration approvals, to reduce the risk of contamination of surface aquifers from on-site spills of wastewater: • the Environment Management Plan for each well pad must include an enforceable wastewater management plan and spill management plan; • enclosed tanks must be used to hold all wastewater; and • the well pad site must be bunded to prevent any runoff of wastewater, and be treated (for example, with a geomembrane or clay liner) to prevent the infiltration of wastewater spills into underlying soil.	Stage 2 (16.1) To be completed by March 2019	Ensuring accountable industry practice	Managing wastewater and chemical safety	Department of Primary Industry and Resources		The requirement for a wastewater management plan and spill management plan will be detailed in a Code of Practice and made enforceable via legislation. The requirement for enclosed tanks and bunded well pads will-be detailed in a Code of Practice and made enforceable via legislation. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019.

	Recommendation	Target	Reform Area	Project	Lead Agency	Implementation	Implementation update as at 31 December 2018
		completion date		Action		progress as at 31 December 2018	
7.13	Upon a gas company undertaking any exploration activity or production activity, monitoring of the groundwater must be implemented around each well pad to detect any groundwater contamination, adopting the monitoring outlined in Recommendation 7.11. If contamination is detected, remediation must commence immediately.	Stage 2 (16.1) To be completed by March 2019	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		This recommendation will be made enforceable via Environment Management Plans under the Petroleum (Environment) Regulations legislation and will be a component of the relevant Code of Practice A Preliminary Guideline for Groundwater monitoring bores for Exploration Petroleum Wells in the Beetaloo Sub-Basin outlining monitoring requirements has been finalised and distributed on 29 November 2018. The guideline has been uploaded to the DENR website www.denr.nt.gov.au/onshoregas
7.14	That the Government, having regard to the measures detailed in Recommendation 5.5, undertakes a review to determine whether: • restrictions need to be placed on the transport of hydraulic fracturing chemicals and wastewater during the wet season, particularly on unsealed roads, to avoid the risk of spills; and • rail transport of some or all of the hydraulic fracturing chemicals and other consumables required, be used to avoid the risk of spills.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Managing wastewater and chemical safety	Department of Environment and Natural Resources		The government will further consider the most appropriate ways to implement this recommendation. Aspects of the recommendation are also being considered in the development of the Codes of Practice or reforming legislation.
7.15	That gas companies must submit details of the locations of all faults that could compromise well integrity. The occurrence of any faults must be addressed in the well design plan submitted to the regulator for approval. The details of all faults and the well design plans must be publicly disclosed online as soon as they are available.	Stage 3 To be completed by March 2019.	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The requirement for operators to report locations of faults that could compromise well integrity, address these faults in their well design plans and publish these details online will be required through a Code of Practice. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.
7.16	That appropriate modelling of the local and regional groundwater system must be undertaken before any production approvals are granted to ensure that there are no unacceptable impacts on groundwater quality and quantity. This modelling should be undertaken as part of a SREBA.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Collecting baseline data and informing regional management	Department of Environment and Natural Resources		The Department of Environment and Natural Resources-has commenced modelling of the Cambrian Tindall Limestone aquifers in the Beetaloo Sub-basin. The groundwater model will be further developed in cooperation with the Commonwealth Government's Geological and Bioregional Assessment of the Beetaloo Sub-basin. The NT Government has engaged the CSIRO to co-develop the overarching framework and methodologies for a SREBA. This will be expanded to regional groundwater systems in areas of prospective onshore gas activity to assess the impacts of extraction-related activities on groundwater quality and quantity as part of the SREBA process. The department will start with the water resources in the Cambrian Tindall Limestone aquifers in the Beetaloo Sub-basin.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
7.17	That prior to the grant of any further exploration approvals, the discharge of any onshore shale gas hydraulic fracturing wastewater (treated or untreated) to either drainage lines, waterways, temporary stream systems or waterholes be prohibited.	Stage 2 (16.1) To be completed by March 2019	Ensuring accountable industry practice	Managing wastewater and chemical safety	Department of Environment and Natural Resources		The passage and commencement of the Water Legislation Amendment Bill 2018 requires petroleum activities to obtain licences from the Controller of Water Resources While this recommendation is being enforced immediately, to remove discretion of decision makers or potential legal challenges, amendments have been drafted to the <i>Water Act</i> to stipulate that authorisation cannot be given for discharging wastewater. These amendments are proposed to be tabled in the February 2019 sittings of Parliament with likely passage in May 2019. The Controller of Water Resources will provide a policy position on assessing applications prior to legislative amendments, to align with this recommendation
7.18	That to minimise the adverse impacts of any onshore shale gas infrastructure (roads and pipelines) on the flow and quality of surface waters, the Government must ensure that: • landscape or regional impacts are considered in the design and planning phase of development to avoid unforeseen consequences arising from the incremental (piecemeal) rollout of linear infrastructure; and • roads and pipeline corridors must be constructed to: o minimise the interference with wet season surface water flow paths; o minimise erosion of exposed (road) surfaces and drains; o ensure fauna passage at all stream crossings; and o comply with relevant guidelines such as the International Erosion Control Association Best Practice for Erosion and Sediment Control and the Australian Pipeline Industry Association Code of Environmental Practice 2009.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		The government will further consider the most appropriate ways to implement this recommendation.
7.19	That the SREBA undertaken for the Beetaloo Sub-basin must take into account groundwater-dependent ecosystems in the Roper River region, including identification and characterisation of aquatic ecosystems, and provide measures to ensure the protection of these ecosystems.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Collecting baseline data and informing regional management	Department of the Chief Minister		Work has commenced to determine the methodologies for undertaking the Strategic Regional Environment Baseline Assessments (SREBAs). The target completion date for approval of these methodologies is mid-2019 and will include a public consultation phase before finalisation. The methodologies for assessing groundwater dependent ecosystems will consider the links between surface and groundwater resources. The baseline studies undertaken for the Beetaloo Sub-basin will include identifying, mapping and characterising groundwater-dependent ecosystems, including subterranean aquatic systems, in the Roper River region.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
7.20	That the Beetaloo Sub-basin SREBA must identify and characterise all subterranean aquatic ecosystems, with particular emphasis on the Roper River region.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Maintaining and monitoring ecosystem health	Department of the Chief Minister		The baseline studies undertaken for the Beetaloo Sub-basin will include identifying, mapping and characterising groundwater-dependent ecosystems, including subterranean aquatic systems, in the Roper River region.
8.1	That: • strategic regional terrestrial biodiversity assessments be conducted as part of a SREBA prior to the granting of any further production approvals; • any onshore shale gas development be excluded from areas considered to be of high conservation value; and • the results of the SREBA must inform any decision to release land for exploration permits as specified in Recommendation 14.2 and, upon completion, must be considered by the decision-maker in the granting of any future exploration approvals.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Maintaining and monitoring ecosystem health	Department of the Chief Minister		Work has commenced to determine the methodologies for undertaking the Strategic Regional Environment Baseline Assessments (SREBAs). This work includes approval of a methodology for undertaking biodiversity assessments. The target completion date for approval of these methodologies is mid-2019 and will include a public consultation phase before finalisation. The results of biodiversity assessments for specific areas will inform future Government decisions on whether specific areas should be excluded from future development, including decisions on releasing land for exploration, or the declaration of reserved blocks under the <i>Petroleum Act</i> (commonly referred to as 'no-go-zones').
8.2	That a baseline weed assessment be conducted over all areas that will be accessed by a gas company on an exploration permit prior to any exploration activities being carried out on that area and that ongoing weed monitoring be undertaken to inform any weed management measures necessary to ensure no incursions or spread of weeds.	Stage 2 (16.1) To be completed by March 2019	Safeguarding water and the environment	Collecting baseline data and informing regional management	Department of Environment and Natural Resources		The Department of Environment and Natural Resources will require baseline weed assessments in all areas subject to exploration for gas, before exploration takes place. Industry will fund this activity, and carry it out in line with standards by the Department of Environment and Natural Resources. A requirement for ongoing weed monitoring and management to prevent new incursions or spread of weeds will be made enforceable via legislation incorporated in mandatory weed management commitments which will be required to be included in Environment Management Plans enforced under the Petroleum (Environment) Regulations. Formal guidance regarding baseline weed assessments is provided within the Weed Management Plan Guideline. The Guideline will be released to the public along with the relevant Code of Practice.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
8.3	That, at all times, gas companies must have a dedicated weeds officer for each gas field who is responsible for weed management and whose role includes: • training all field workers in the identification of weeds, especially gamba and grader grass, and to establish an effective reporting system for any suspected weed incursions; • designing and implementing effective weed surveillance; and • ensuring prompt and effective management of any weed incursions in consultation with affected landholders. That the gas industry funds a dedicated officer responsible for weed management associated with any onshore shale gas development. This officer is to be located in the Government's Weed Management Branch in a regional centre. The officer will be responsible for: • coordinating regional weed baseline assessments and subsequent weed surveillance; and • overseeing strategic and effective management of any weed incursions by gas companies.	Stage 2 (16.1) To be completed by March 2019	Safeguarding water and the environment	Maintaining and monitoring ecosystem health	Department of Environment and Natural Resources		The obligation on gas companies to have a dedicated weeds officer for each gas field will be incorporated in mandatory weed management commitments which will be required to be included in Environment Management Plans enforced under the Petroleum (Environment) Regulations. A dedicated weeds officer has been employed by the Department of Environment and Natural Resources working closely with industry to ensure weeds related risks are appropriately managed. The government will consider the most appropriate mechanism to implement the recommendation that the gas industry funds a dedicated weeds officer, including cost recovery.
8.4	That gas companies must be required to have an approved weed management plan for any area the subject of an exploration permit prior to any part of that area being accessed for the carrying out of any exploration activities. The WMP must be consistent with all relevant statutory obligations and relevant threat abatement plans established under the EPBC Act.	Stage 2 (16.1) To be completed by March 2019	Safeguarding water and the environment	Maintaining and monitoring ecosystem health	Department of Environment and Natural Resources		Guideline developed for Weed Management Plans will be required as part of an Environment Management Plan, under the Petroleum (Environment) Regulations. The Guideline will be released to the public along with the Surface Activities Code of Practice in early 2019 Environment Management Plans under the Petroleum (Environment) Regulations will not be accepted by the Regulator where they do not provide a weed management plan.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
8.5	That gas companies be required to comply with any statutory regional fire management plan within their area of exploration and/or production activity. The fire management plan must: • address the impacts that any onshore shale gas industry will have on fire regimes in the NT and identify how those impacts will be managed; • establish robust monitoring programs for assessing seasonal conditions and fuel loads; • require that annual fire mapping be undertaken to monitor any increase in fire frequency due to any onshore shale gas development; • require that all existing baseline data for at least the decade prior to commencement of any exploration activity be collated and published; • implement management actions, such as prescribed fuel reduction burns at strategic locations, if fire frequency is shown to have increased due to onshore shale gas activity; and • facilitate support for local volunteer fire brigades to increase regional capacity for fire management.	Stage 3 To be completed by March 2019	Safeguarding water and the environment	Maintaining and monitoring ecosystem health	Department of Primary Industry and Resources		This recommendation will be addressed via a Code of Practice. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.
8.6	That as part of a SREBA, a study be undertaken to determine if any threatened species are likely to be affected by the cumulative effects of vegetation and habitat loss, and if so, that there be ongoing monitoring of the populations of these species. If monitoring reveals a decline in populations (compared with predevelopment baselines), management plans aimed at mitigating these declines must be developed and implemented.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Collecting baseline data and informing regional management	Department of the Chief Minister		Work has commenced to determine the methodologies for undertaking the Strategic Regional Environment Baseline Assessments (SREBAs). This work includes approval of a methodology for undertaking assessments of threatened species in a specific area. The target completion date for approval of these methodologies is mid-2019 and will include a public consultation phase before finalisation. The results of assessments of threatened species for specific areas will inform future management plans and assessment of individual project proposals from industry. The government will ensure there is ongoing monitoring of populations of threatened species within onshore gas project areas. Industry will fund this activity.
8.7	That the area of vegetation cleared for infrastructure development (well pads, roads and pipeline corridors) be minimised through the efficient design of flowlines and access roads, and where possible, the colocation of shared infrastructure by gas companies.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Maintaining and monitoring ecosystem health	Department of Primary Industry and Resources		This recommendation will be made enforceable via legislation.
8.8	That well pads and pipeline corridors be progressively rehabilitated, with native vegetation re-established such that the corridors become ecologically integrated into the surrounding landscape.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Maintaining and monitoring ecosystem health	Department of Primary Industry and Resources		This recommendation will be made enforceable via legislation.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
8.9	That to compensate for any local vegetation, habitat and biodiversity loss, the Government develops and implements an environmental offset policy to ensure that, where environmental impacts and risks are unable to be avoided or adequately mitigated, they are offset. That the Government considers the funding of local Aboriginal land ranger programs to undertake land conservation activities as an appropriate offset.	Stage 2 To be completed by Dec 2019	Safeguarding water and the environment	Maintaining and monitoring ecosystem health	Department of the Chief Minister		The Department of the Chief Minister and the Department of Environment and Natural Resources are developing an environmental offset policy that will operate under the new <i>Environment Protection Act</i> , to ensure unmitigated environmental impacts are appropriately managed or offset. The government will continue to support local Aboriginal land ranger programs. Gas companies will also be encouraged to use the skills and expertise of Aboriginal ranger groups.
8.10	That gas companies be required to identify critical habitats during corridor construction and select an appropriate mechanism to avoid any impact on them.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Maintaining and monitoring ecosystem health	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has commenced work with independent scientific experts to develop a draft Code of Practice that will include this requirement. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation. Legislation such as the Environment Protection and Biodiversity Conservation Act and the Territory Parks and Wildlife Conservation Act may apply.
8.11	That clearing for corridors, well pads and other operational areas be kept to a minimum, that pipelines and other linear infrastructure be buried (except for necessary inspection points), and that all disturbed ground be revegetated.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Maintaining and monitoring ecosystem health	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has commenced work with independent scientific experts to develop a draft Code of Practice that will include this recommendation. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.
8.12	That directional drilling under stream crossings be used in preference to trenching unless geomorphic and hydrological investigations confirm that trenching will have no adverse impact on water flow patterns and waterhole water retention timing.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		The Department of Primary Industry and Resources has commenced work with independent scientific experts to develop a draft Code of Practice that will incorporate this recommendation. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.
8.13	That roads and pipeline surface water flow paths minimise erosion of all exposed surfaces and drains.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		The Department of Primary Industry and Resources has commenced work with independent scientific experts to develop a draft Code of Practice that will incorporate this recommendation. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
8.14	That all corridors be constructed to minimise the interference with wet season stream crossings and comply with relevant guidelines, such as the International Erosion Control Association Best Practice for Erosion and Sediment Control and the Australian Pipeline Industry Association Code of Environmental Practice 2009.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has commenced work with independent scientific experts to develop a draft Code of Practice that will incorporate this recommendation. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.
8.15	That to minimise the impact of any onshore shale gas industry on landscape amenity, gas companies must demonstrate that they have minimised the surface footprint of development to ALARP, including that: • well pads are spaced a minimum of 2 km apart; and • the long-term infrastructure within any development area (exploration or production) has little to no visibility from any major public roads.	Stage 3 To be completed by March 2019	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has commenced work with independent scientific experts to develop a draft Code of Practice that will incorporate this recommendation. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.
8.16	That the Government assesses the impact that any heavy-vehicle traffic associated with any onshore shale gas industry will have on the NT's transport system and develops a management plan to mitigate such impacts. Consideration must be given to: • forecast traffic volume and roads used; • the feasibility of using the existing Adelaide to Darwin railway line (or some other railway network) to reduce heavy-vehicle road use; and • road upgrades.	Stage 3 To be completed by end Dec-21	Planning for industry	Roads and facilities	Department of Infrastructure, Planning and Logistics	Not yet commenced.	Impacts on the road network and the Northern Territory's transport system will be mitigated through processes outlined in <i>Development Guidelines for Northern Territory Government Controlled Roads</i> , in particular the requirement to provide a Traffic Impact Assessment (TIA). The potential impact of heavy vehicle traffic will be assessed through a TIA. Industry will be required to develop a management plan to mitigate traffic impacts. Government will engage industry on the potential to use rail transport as an alternative to road transport.
9.1	That to reduce the risk of upstream methane emissions from any onshore shale gas wells, the Government implement the US EPA New Source Performance Standards of 2012 and 2016.	Stage 2 To be completed by March 2019.	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Government has commissioned CSIRO as an independent expert to develop a Code of Practice consistent with the <i>US EPA New Source Performance Standards of 2012</i> and <i>2016</i> . The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
9.2	That prior to the grant of any further exploration approvals, a code of practice be developed and implemented for the ongoing monitoring, detection and reporting of methane emissions from any onshore shale gas fields and wells.	Stage 2 (16.1) To be completed by March 2019.	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources.		The Government has commissioned CSIRO as an independent expert to lead the development of a Code of Practice regarding monitoring and reporting of methane emissions from onshore gas fields and wells. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation. Baseline monitoring will be undertaken by CSIRO at a regional scale in the Beetaloo Sub-basin, and in the vicinity of proposed gas exploration activity, before further exploration approvals for drilling and hydraulic fracturing for gas are granted.
9.3	That baseline monitoring of methane concentrations be undertaken for at least six months prior to the grant of any further exploration approvals. In areas where hydraulic fracturing has already occurred, the baseline monitoring should be undertaken at least a year prior to the grant of any production approvals.	Stage 2 (16.1) To be completed by March 2019.	Safeguarding water and the environment	Collecting baseline data and informing regional management	Department of Primary Industry and Resources		Measurement of regional baseline methane concentrations in the Beetaloo Subbasin was commenced by CSIRO in July 2018, and will be conducted for least six months prior to the grant of any further exploration approvals. CSIRO has released reports of the initial surveys for naturally occurring methane monitoring it has conducted. The CSIRO's final report for methane monitoring is due March 2019. As per recommendation 9.2 outlines, the government-has commenced work with independent scientific experts to develop a Code of Practice to guide ongoing methane monitoring. The Code of Practice will be made enforceable via legislation. Industry will fund the monitoring.
9.4	That baseline and ongoing monitoring be the responsibility of the regulator and funded by the gas industry.	Stage 3 To be completed by March 2019.	Ensuring accountable industry practice	Developing cost recovery arrangements	Department of Primary Industry and Resources		Exploration permit holders in the Beetaloo Sub-basin will pay the NT Government for the methane monitoring work CSIRO has been engaged to do and is due for completion in March 2019. Industry will pay for the baseline through a cost recovery exercise. Methane monitoring for baseline and ongoing activities will be regulated by a Code of Practice that will be enforceable by legislation under the Petroleum (Environment) Regulations.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
9.5	That all monitoring results must be made publically available online on a continuous basis in real time.	Stage 2 (16.1) To be completed by March 2019	Ensuring accountable industry practice	Monitoring gas companies and their operations	Department of Environment and Natural Resources		The Government has commissioned CSIRO as an independent expert to lead the development of a Code of Practice regarding monitoring and reporting of methane emissions from onshore gas fields and wells. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation. The government has commenced work on an online portal to enable timely public reporting.
9.6	That once emission concentration limits are exceeded, as soon as reasonably practicable the regulator must be notified, an investigation must be undertaken by the gas company to identify the source or sources of the emissions, and make-good provisions be carried out by the gas industry.	Stage 2 (16.1) To be completed by March 2019.	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has commenced work with independent scientific experts to develop a Code of Practice on methane emissions (see recommendation 9.2). The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation. The Code of Practice will identify the process gas companies must undertake if emission concentration limits are exceeded. The process will include giving notice to the regulator and undertaking an investigation. Cumulative impacts will also be considered through the delivery of recommendations 14.19 and 14.21.
9.7	That the action framework outlined in Table 9.10 be implemented to lower fugitive methane emissions.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The design and implementation of the seven recommendations relating to greenhouse gas emissions will encompass the seven mitigation actions listed in table 9.10 of the Inquiry's final report.
9.8	That the NT and Australian governments seek to ensure that there is no net increase in the life cycle GHG emissions emitted in Australia from any onshore shale gas produced in the NT.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Maintaining and monitoring ecosystem health	Department of the Chief Minister		The Chief Minister wrote to the Prime Minister and the Opposition Leader requesting that the two jurisdictions work together on this recommendation. Discussions have commenced with the Commonwealth to identify the range of policy options and arrangements that may be available when the industry enters its production phase.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
10.1	That formal site or regional-specific HHRA reports be prepared and approved by the regulator prior to the grant of any production approvals. Such HHRA reports must address the potential human exposures and health risks associated with the exploration for, and the production of, any shale gas development, off-site transport, and the decommissioning of wells, as recommended in NCRA guidance. The HHRA reports must include risk estimate assessments for exposure pathways that are deemed to be incomplete.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Managing social and cultural impacts	Department of the Chief Minister		Work has commenced to determine the methodologies for undertaking the Strategic Regional Environment Baseline Assessments (SREBAs). This work includes approval of a methodology for undertaking public health assessments. The target completion date for approval of these methodologies is mid-2019. Site specific or regional level human health risk assessments and reports will be developed by experts to identify any human health risks associated with industry development and will be provided to the regulator to enable risks to be identified and mitigated.
10.2	That in consultation with the gas industry, landholders, Land Councils, local government and local communities, the Government mandates an appropriate setback distance from all gas well heads, pipelines and gas processing facilities to a habitable dwelling (including all buildings or premises where people reside or work, schools and associated playgrounds, permanent sporting facilities and hospitals or other community medical facilities) in order to minimise risks identified in HHRA reports, including potential pathways for waterborne and airborne contaminants. Such setback distances should not be less than 2 km and should apply to all exploration and production activities.	Stage 2 (16.1) To be completed by March 2019.	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Department of Primary Industry and Resources will work with public health experts to develop guidelines for appropriate setback distances and be outlined in the Codes of Practice. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation. Appropriate setback distances will be made enforceable via legislation. Setback distances will not be less than 2 km from a well head, pipeline or gas processing facility.
11.1	That gas companies be required to obtain an Authority Certificate prior to the grant of any exploration and production approvals.	Stage 2 (16.1) To be completed by March 2019	Respecting community and culture	Respectful information, consultation and negotiation	Department of Primary Industry and Resources		This recommendation will be made enforceable under the Petroleum (Environmental) Regulations and be mandated in the granting of exploration permits.
11.2	That the Aboriginal Areas Protection Authority: • be provided with a copy of any application to conduct hydraulic fracturing for onshore shale gas under petroleum environment legislation at an early stage of the assessment and approval process; • be given an adequate opportunity to explain the application to custodians; and • be given an adequate opportunity to comment on the application and have those comments considered by the decision-maker.	Stage 2 To be completed by March 2019	Respecting community and culture	Respectful information, consultation and negotiation	Department of Environment and Natural Resources		The Regulator will provide a copy of any application to conduct hydraulic fracturing for onshore gas at the earliest opportunity to Aboriginal Areas Protection Authority (AAPA). During consultations on Authority Certificates, the application will be explained to custodians. Any feedback arising will be communicated to the Regulator for its assessment and approval process.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
11.3	That the Sacred Sites Act be amended to protect all sub-surface features of a sacred site.	Stage 2 To be completed by March 2019	Respecting community and culture	Respectful information, consultation and negotiation	AAPA		The Aboriginal Areas Protection Authority (AAPA) will evaluate whether proposed activities will impact on the sub-surface features of sacred sites and will provide advice to gas companies and the approval authority. The government will amend the Northern Territory Aboriginal Sacred Sites Act to better protect all sub-surface features of a sacred site. The Board of the Aboriginal Areas Protection Authority has considered legal advice on the extent of protection to sub-surface sites provided by the Northern Territory Sacred Sites Act. The Authority will consult with relevant Land Councils to ensure they have an opportunity to comment.
11.4	That gas companies be required to provide a statement to native title holders containing information of the kind required under section 41(6) of the Land Rights Act for the purposes of negotiating an onshore shale gas exploration agreement under the future act provisions of the Native Title Act.	Stage 3 To be completed by 30 June 2019.	Respecting community and culture	Respectful information, consultation and negotiation	Department of Primary Industry and Resources		Government will work with land councils and other relevant stakeholders to ensure all Native Title holders are fully informed of all activities that will take place on Aboriginal land at all stages of development. Recommendation 11.2 and the implementation actions also relates to this recommendation. The government has amended the <i>Petroleum (Environment) Regulations</i> in December 2018 to ensure that any stakeholder, including Native Title holders and land councils, has an opportunity to comment on draft Environment Management Plans for drilling of petroleum wells and hydraulic fracturing, before they are assessed and approved.
11.5	That interpreters be used at all consultations with Aboriginal people for whom English is a second language. Interpreters must be appropriately supported to ensure that they understand the subject matter of the consultation.	Stage 3 To be completed by 30 June 2019	Respecting community and culture	Respectful information, consultation and negotiation	Department of the Chief Minister		Culturally appropriate interpreter services will be used when consulting with Aboriginal people for whom English may not be their first language.
11.6	That in collaboration with the Government, Land Councils and AAPA, an independent, third-party designs and implements an information program to ensure that reliable, accessible, trusted and accurate information about any onshore shale gas industry is effectively communicated to all Aboriginal people who will be affected by any onshore shale gas industry. That the program be funded by the gas industry.	Stage 2 To be completed by June 2019	Respecting community and culture	Respectful information, consultation and negotiation	Department of the Chief Minister		The government will collaborate with stakeholders, including land councils and the Aboriginal Areas Protection Authority (AAPA), to develop and commission independent information programs to inform affected Aboriginal people about any onshore gas industry. The government will amend the Petroleum (Environment) Regulations to ensure that any stakeholder, including Native Title holders and land councils, have an opportunity to comment on draft Environment Management Plans before they are approved. The government will consider the most appropriate legal or regulatory mechanism to seek cost recovery from industry for this program.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
11.7	That Land Councils, traditional Aboriginal owners and gas companies consider making all, or if this is not appropriate, part of petroleum exploration agreements publicly available.	Stage 2 To be completed by June 2019	Respecting community and culture	Respectful information, consultation and negotiation	Department of the Chief Minister		The government will encourage all stakeholders to make relevant information from petroleum exploration agreements publicly available.
11.8	That a comprehensive assessment of the cultural impacts of any onshore shale gas industry must be completed prior to the grant of any production approvals. The cultural assessment must: • be designed in consultation with Land Councils and AAPA; • engage traditional Aboriginal owners, native title holders and the affected Aboriginal communities, and be conducted in accordance with world-leading practice; and • be resourced by the gas industry.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Respectful information, consultation and negotiation	Department of the Chief Minister		Cultural impact assessment will be undertaken by government in collaboration with experts in accordance with world leading practice and prior to the grant of any production approval. The cultural impact assessment will be undertaken in conjunction with the social impact assessment as part of the broader Strategic Regional Environmental Baseline Assessment (SREBA). The government will consider the most appropriate legal or regulatory mechanism to seek funding from industry for this assessment.
12.1	That a strategic SIA, separate from an EIS, must be conducted for any onshore shale gas development prior to any production approvals being granted.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Building a comprehensive framework for social and cultural baselines	Department of the Chief Minister		Work has commenced to determine the methodologies for undertaking the Strategic Regional Environment Baseline Assessments (SREBAs). This work includes approval of a methodology for undertaking social, cultural and economic baselines which will inform strategic social impact assessments. The target completion date for approval of these methodologies is mid-2019 including public consultation. The baseline and strategic regional assessment will not replace the need for companies to do their own Social Impact Assessment (SIA) process however the baseline assessment will support and streamline company work and will assist with monitoring and evaluation, including assessing and managing cumulative impacts.
12.2	That the strategic SIA be funded by the gas industry.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Building a comprehensive framework for social and cultural baselines	Department of the Chief Minister		The government will consider the most effective arrangements for industry to fund strategic Social Impact Analysis (SIA) as part of a broader arrangements to recover costs.
12.3	That the strategic SIA must be conducted comprehensively and in such a manner that it will anticipate any expected impacts on infrastructure and services and to mitigate potential negative impacts.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Managing social and cultural impacts	Department of the Chief Minister		Government is developing a framework for conducting a SREBA. A strategic SIA is considered through the Social Cultural Economic baseline guidance note in the SREBA framework. The government will require the scope of a SREBA considers the impact on shared and community infrastructure and identifies options to address any potentially adverse effects. This analysis will be shared with affected communities and industry so that the analysis can be considered in the development and assessment of individual project proposals. The information will also be used by government to inform policy work and planning decisions.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
12.4	That early engagement and communication of the findings of the strategic SIA be systematically undertaken with all potentially affected communities, all levels of government and potentially affected stakeholders, including Land Councils, to ensure that unintended consequences are limited, and that shared understanding of roles and responsibilities, including financial responsibilities, can be developed.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Managing social and cultural impacts	Department of the Chief Minister		Government will require that work undertaken to deliver a the Social, Cultural Economic components of the SREBA in a specific area will be discussed with resident communities and stakeholders during the planning and analysis phases, and feedback loops are established.
12.5	That ongoing monitoring and measurement of social and cumulative impacts be undertaken, with the results being made publicly available online as soon as they are available.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Building a comprehensive framework for social and cultural baselines	Department of the Chief Minister		Work has commenced to determine the methodologies for undertaking the Strategic Regional Environment Baseline Assessments (SREBAs). This work includes approval of a methodology for undertaking social, cultural and economic baselines which will inform strategic social impact assessments, and recommendations on ongoing monitoring of potential impacts. The target completion date for approval of these methodologies is mid-2019.
							The assessment of individual project proposals will consider what social, cultural and economic impacts may need to be managed as projects progress into the production phase, and the regulator may include these requirements as approval conditions.
12.6	That a strategic SIA be conducted as part of any SREBA to obtain essential baseline data.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Building a comprehensive framework for social and cultural baselines	Department of the Chief Minister		Work has commenced to determine the methodologies for undertaking the Strategic Regional Environment Baseline Assessments (SREBAs). This work includes approval of a methodology for undertaking social, cultural and economic baselines which will inform strategic social impact assessments. The target completion date for approval of these methodologies is mid-2019.
12.7	That in order to operationalise an SIA framework in the NT, the Government must: • give the regulator power to request information from, and to facilitate the collaboration between, individual gas companies, government agencies (including local government), Land Councils, communities and potentially affected landholders; • establish a long-term participatory regional monitoring framework, overseen by the regulator, with secure funding from the gas industry and able to endure multiple election cycles; and • establish periodic and standardised reporting to communities on the social, cultural, economic and environmental performance of the industry through either the regulator or a specialised research institution. This includes information from the monitoring of key indicators, and an industry-wide complaints and escalation process.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Building a comprehensive framework for social and cultural baselines	Department of the Chief Minister		Government will work with local communities in areas where the industry moves into the production phase to ensure that these communities have access to information on the impact of industry development on their communities, opportunities to participate in ongoing monitoring, and appropriate arrangements to raise concerns and opportunities to improve outcomes This will be achieved through the development of, and ongoing monitoring associated with a SREBA, including a portal which is under development.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
12.8	That as part of any strategic SIA and prior to any significant increase in traffic as a result of any onshore shale gas industry, consultation must be undertaken on road use and related infrastructure requirements that results in road upgrades and work schedules to the appropriate Austroad standards and commensurate with the anticipated vehicle type required for any onshore shale gas industry.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Managing social and cultural impacts	Department of Infrastructure, Planning and Logistics		The Department of the Chief Minister will work with industry and independent experts to establish regional social, health and cultural baseline data and information as a component of any Strategic Environmental and Regional Baseline Assessment (SREBA) outlined in recommendations 15.1 to 15.3. This recommendation will be addressed with recommendation 12.3 where a Strategic Regional Social and Cultural Assessment will be undertaken to consider social, cultural and economic associated risks and develop plans to mitigate those risks prior to production approvals being granted. The government will establish a policy and guidelines for conducting social and cultural impact assessments and management plans These guidelines will include analysis of road use and infrastructure requirements and will reflect the Traffic Impact Assessment (TIA). Companies are already required to conduct a TIA, and a Traffic Management Plan is currently required prior to approval of an Environment Management Plan for a specific project.
12.9	That gas companies provide the necessary funds to ensure the ongoing maintenance requirements for road infrastructure are met for the life of any onshore shale gas project. These should be based on the individual gas company's percentage of tonnage hauled along the roads.	Stage 3 To be completed by end Dec-21	Planning for industry	Roads and facilities	Department of Infrastructure, Planning and Logistics		The Department of Infrastructure, Planning and Logistics will investigate and facilitate opportunities for private sector investment and developer contributions to support remote and regional transport and infrastructure construction projects. The Department is actively involved in national heavy vehicle reform initiatives.
12.10	That road use agreements between gas companies and local NT road authorities be mandated to include safety considerations and to ensure monitoring for compliance and reporting requirements.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Ensuring gas companies comply with our laws	Department of Infrastructure, Planning and Logistics		Government will require gas companies to develop road use agreements to ensure they clearly state and monitor expectations around transport safety and road use.
12.11	That gas companies be required to work closely with all levels of government, Land Councils and local communities early in any onshore shale gas development project to quantify the potential impacts on health and educational services and ensure steps to mitigate adverse impacts are implemented.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Managing social and cultural impacts	Department of the Chief Minister		Government will require the scope of the social cultural and economic baselines of a SREBA considers the impact on shared and community infrastructure and identifies options to address any potentially adverse effects. This analysis will be shared with affected communities and industry so that the analysis can be considered in the development and assessment of individual project proposals.
12.12	That any strategic SIA anticipate the long-term impacts and requirements for housing (not just through the construction phase) to adequately mitigate the risk of inflated real estate prices and shortages within a community.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Managing social and cultural impacts	Department of Infrastructure, Planning and Logistics		The Department has commenced a scoping study to understand existing infrastructure provision, land availability and land tenure in the Beetaloo Basin and is identifying potential locations for facilities to support hydraulic fracturing operations. Project social impact assessments and social impact management plans will be required to consider housing and accommodation plans as part of the assessment.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
12.13	That in consultation with all local community stakeholders, Land Councils, local government and the Government, gas companies be required to provide accommodation, whether temporary or permanent, which must be completed prior to the granting of any production approvals.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Managing social and cultural impacts	Department of the Chief Minister	Not yet commenced	Government will require the scope of the social cultural and economic baselines of a SREBA considers the impact on shared and community infrastructure and identifies options to address any potentially adverse effects. This analysis will be shared with affected communities, industry and planners so that the analysis can be considered in the development and assessment of individual project proposals.
12.14	That to the extent practicable, gas companies be required to source goods, services and workers from local communities. This must include the development of training programs for Aboriginal and other local workers to develop the necessary skills and expertise to maximise opportunities for local employment in any onshore shale gas industry.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Creating local training programs, skills assessment and employment	Department of Trade, Business and Innovation		Social impact assessments will identify the capacity of local communities to adequately service and supply the gas industry. The government will work with companies to develop plans to address shortfalls in capacity so local businesses and communities can support development of the industry. Following a period of public consultation in August 2018, the Government is finalising the development of a new Territory Benefit Policy to capture local benefits for Territorians from private sector projects. A commitment to providing training and sourcing goods and services locally is expected of companies operating under this policy.
12.15	That gas companies work proactively with local businesses, local government, Government, Land Councils and communities to ensure that local businesses are able and adequately skilled to compete for contracts, and to assist local businesses to be ready to participate in any economic opportunities that may emerge.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Maximising opportunities for Territory businesses	Department of Trade, Business and Innovation		This recommendation will be addressed with recommendations 13.2 to 13.10. The Department of Trade, Business and Innovation will work with gas companies and their contractors to develop appropriate local employment, training and business development plans for each stage of the project. Each plan will generate a list of all occupations and qualification requirements for each phase of the project. This will be supported by regular sessions for local businesses providing information on upcoming work, prequalification requirements and how to register interest. In August 2018, the Department of Trade Business and Innovation began working with ICNNT to map service and supply industry capabilities and identify business opportunities. A gaps analysis will allow Government to understand what skills will need to be developed to allow local businesses to effectively compete for contracts.
12.16	That gas companies must establish a relationship with communities to determine how to best facilitate community cohesion on an individual and collective level. This should be done in consultation with all landholders, Land Councils and local government, to ensure that the needs of all stakeholders are accommodated.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Managing social and cultural impacts	Department of the Chief Minister	Not yet commenced	Industry will be responsible for negotiating local and regional support for their activities. Government will work with industry in areas where the industry moves into the production phase to ensure that these communities have access to information on the impact of industry development on their communities, opportunities to participate in ongoing monitoring, and appropriate arrangements to raise concerns and opportunities to improve outcomes.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
12.17	That a representative community advisory group be established to act as a conduit for ongoing monitoring of community cohesion.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Building a comprehensive framework for social and cultural baselines	Department of the Chief Minister	Not yet commenced	Industry will be responsible for negotiating local and regional support for their activities. Government will work with industry in areas where the industry moves into the production phase to ensure that these communities have access to information on the impact of industry development on their communities, opportunities to participate in ongoing monitoring, and appropriate arrangements to raise concerns and opportunities to improve local outcomes
12.18	That gas companies must develop and implement a social impact management plan for communities, detailing how they will optimise the relationship with a community prior to the grant of any production approvals. This plan should be developed in consultation with all landholders, Land Councils and local government to ensure that it meets community needs. The regulator must consent to the plan prior to the grant of any production approvals.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Managing social and cultural impacts	Department of the Chief Minister		The government will establish a policy and guidelines for social and cultural impact assessments and management plans which are project specific and implemented by the gas companies. Industry will be responsible for negotiating local and regional support for their activities. Government will work with industry in areas where the industry moves into the production phase to ensure that these communities have access to information on the impact of industry development on their communities, opportunities to participate in ongoing monitoring, and appropriate arrangements to raise concerns and opportunities to improve local outcomes.
12.19	That gas companies be required to develop a social impact management plan that outlines how they intend to develop, obtain and maintain their SLO within communities. This must be developed in conjunction with any SIA, and should be implemented prior to the grant of any further production approvals, to ensure that any potential changes can be identified in advance to allow communities time to adapt and prepare for the changes.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Managing social and cultural impacts	Department of the Chief Minister		The government will establish a policy and guidelines for social and cultural impact assessments and management plans which are project specific and implemented by the gas companies. Industry will be responsible for negotiating local and regional support for their activities. Government will work with industry in areas where the industry moves into the production phase to ensure that these communities have access to information on the impact of industry development on their communities, opportunities to participate in ongoing monitoring, and appropriate arrangements to raise concerns and opportunities to improve local outcomes.
12.20	That as part of the SREBA for the Beetaloo Sub-basin, a strategic SIA be conducted to obtain essential baseline data prior to the granting of any further production approvals.	Stage 3 To be completed by end Dec-21	Respecting community and culture	Conducting regional social and cultural impact assessments	Department of the Chief Minister		Work has commenced to determine the methodologies for undertaking the Strategic Regional Environment Baseline Assessments (SREBAs). This work includes approval of a methodology for undertaking social, cultural and economic baselines which will inform strategic social impact assessments. The target completion date for approval of these methodologies is mid-2019.
13.1	That in developing its budget, the Government must have regard to the source of royalty revenue and must ensure that regions that are the source of taxation revenue benefit from any onshore shale gas extraction activity that has occurred in their region. That the Government works with local government, stakeholders, Land Councils, and local communities in the design and implementation of all such programs.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Ensuring Territorians benefit from royalties	Department of Treasury and Finance		The government can expect to receive increased royalty and tax revenue from an onshore gas industry. The government will investigate options for allocating royalty revenues that facilitate economic, business and social development in the regions and the Northern Territory more broadly.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
13.2	That the Government works with stakeholders and gas companies to ensure that there is early knowledge of the labour and skills required for all phases of any onshore shale gas development in order to maximise local employment.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Creating local training programs, skills assessment and employment	Department of Trade, Business and Innovation		The Department of Trade, Business and Innovation will work with gas companies, their prime contractors and training providers to audit workforce skills and requirements and identify gaps.
13.3	That the Government works with gas companies, training providers, local workers, job seekers, Land Councils and local Aboriginal corporations and communities to maximise opportunities for local people to obtain employment during all phases of any onshore shale gas development.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Creating local training programs, skills assessment and employment	Department of Trade, Business and Innovation		The Department of Trade, Business and Innovation will work with gas companies and their contractors to develop appropriate local employment, training and business development plans for each stage of the project. Each plan will generate a list of all occupations and qualification requirements for each phase of the project. This will be supported by regular sessions for local businesses providing information on upcoming work, prequalification requirements and how to register interest. Following a period of public consultation in August 2018, the Government is finalising the development of a new Territory Benefit Policy to capture local benefits for Territorians from private sector projects. A commitment to providing training is expected of companies operating under this policy. DTBI is in discussions with oil and gas companies to develop a forward plan that will enable identification of local business opportunities linked to development of the onshore gas industry.
13.4	That the Government ensures that training providers and gas companies collaborate so that skill requirements are clearly understood by training providers, and that trainees acquire appropriate skills.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Creating local training programs, skills assessment and employment	Department of Trade, Business and Innovation		The Department of Trade, Business and Innovation will work with the gas industry, its contractors and with training and research bodies such as Charles Darwin University and the North Australian Centre for Oil and Gas to identify and address gaps in the availability of specialised training. Appropriately skilled training providers will be encouraged to partner with specialist support industries (e.g. drilling companies) and communities to deliver the required skills training locally. DTBI is in discussions with oil and gas companies, Universities and other training bodies to identify specific skills requirements and training opportunities.
13.5	That the Government works with gas companies, training providers, Land Councils, local government, and local communities in the setting of local employment targets, including local employment targets for Aboriginal people.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Creating local training programs, skills assessment and employment	Department of Trade, Business and Innovation		The local industry participation framework managed by the Department of Trade, Business and Innovation requires gas companies to maximise local employment and outline their strategies to maximise Aboriginal participation. Following a period of public consultation in August 2018, the Government is finalising the development of a new Territory Benefit Policy to capture local benefits for Territorians from private sector projects. The Department of Trade, Business and Innovation is developing a forward plan to identify business requirements related to development of the Beetaloo sub-Basin. This plan will be used to develop local employment targets across all phases of onshore gas development

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
13.6	That the Government works with gas companies and local suppliers to ensure that there is early knowledge of local supply and service opportunities for all phases of any onshore shale gas development.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Maximising opportunities for Territory businesses	Department of Trade, Business and Innovation		The Department of Trade, Business and Innovation will work with gas companies and their prime contractors to identify industry service and supply requirements. Engagement has commenced with Universities for research and skills training opportunities The Department of Trade, Business and Innovation is developing a forward plan to identify business requirements related to development of the Beetaloo sub-Basin. This plan will be used to identify local service and supply opportunities across all phases of onshore gas development
13.7	That the Government works with gas companies and local suppliers (regional and Territory wide) to identify immediate supply opportunities and to facilitate future potential supply opportunities. This should be done in consultation with the ICN-NT and the Chamber of Commerce.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Maximising opportunities for Territory businesses	Department of Trade, Business and Innovation		The Department of Trade, Business and Innovation and gas companies will engage the Industry Capability Network of the Northern Territory and the Chamber of Commerce to map the capabilities of local industry. They will identify opportunities to facilitate partnering or other collaborative approaches between local businesses so they can tender for work supporting the onshore gas industry. ICNNT has been engaged to meet with gas companies to map existing service and supply industry capabilities to identify opportunities that will stem from industry growth. Companies working in the Beetaloo sub-basin have sites connected to the ICN Gateway.
13.8	That the Government works with gas companies, Land Councils, local Aboriginal corporations, Aboriginal communities, and businesses to identify local supply and service opportunities to keep sustainable economic benefits on country.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Maximising opportunities for Territory businesses	Department of Trade, Business and Innovation		The Department of Trade, Business and Innovation will promote the advantages of locally-based, capable suppliers and labour to gas companies-and their major contractors, and will encourage engagement of local Aboriginal businesses. Following a period of public consultation in August 2018, the Government is finalising the development of a new Territory Benefit Policy to capture local benefits for Territorians from private sector projects. Under this Policy, companies are expected to commit to maximise their use and development of local service and supply industries.
13.9	That the Government assists regional businesses to obtain quality assurance certification and to partner with larger suppliers to encourage greater local supply, employment and knowledge transfer.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Maximising opportunities for Territory businesses	Department of Trade, Business and Innovation		Gas companies and their contractors will be expected to provide prequalification requirements to enable business to understand the standards required to tender for specific work packages.

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	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
13.10	That the Government works with gas companies, Land Councils, local governments, local suppliers and businesses to devise and implement local procurement targets.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Maximising opportunities for Territory businesses	Department of Trade, Business and Innovation		The Department of Trade, Business and Innovation will refresh its current framework that aims to maximise the contribution made by private sector projects in the Northern Territory. Under this framework, gas companies will be required to develop a plan that clearly articulates their commitments and strategies to deliver training and employment outcomes for local and regional stakeholders. Following a period of public consultation in August 2018, the Government is finalising the development of a new Territory Benefit Policy to capture local benefits for Territorians from private sector projects. Under this Policy, companies are expected to identify local procurement targets.
13.11	That the Government works with gas companies, peak bodies of affected industries, and affected stakeholders to identify and resolve all potentially negative economic impacts of any onshore shale gas development on other industries.	Stage 3 To be completed by end Dec-21	Planning for industry	Planning for infrastructure, services, and industry impact	Department of the Chief Minister	Not yet commenced	The government will work with industry and stakeholders to identify opportunities to maximise and capture regional benefits, and manage risks of negative economic impacts.
13.12	That the Government works with all levels of government, (including the Australian Government), peak organisations, communities and gas companies to identify and manage infrastructure risks, including identifying and implementing options to fund any new infrastructure or upgrade existing infrastructure.	Stage 3 To be completed by end Dec-21	Planning for industry	Planning for infrastructure, services, and industry impact	Department of Infrastructure, Planning and Logistics		The Department of Infrastructure, Planning and Logistics will assess risks to throughout the planning process, and will include those risks in its usual consultation with industry and local communities. The government's 10 Year Infrastructure Plan will include requirements for new or upgraded infrastructure.
14.1	That prior to the granting of any further production approvals, the Government designs and implements a full cost recovery system for the regulation of any onshore shale gas industry.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Developing cost recovery arrangements	Department of Treasury and Finance		The Department of Treasury and Finance will undertake a comparative analysis of regulatory fees charged in similar jurisdictions to ensure the Northern Territory remains a competitive jurisdiction for exploration expenditure. The department will prepare a discussion paper for consultation on the proposed cost recovery system. Consultation with industry and key stakeholders will inform the final system. The government will make the required legislative changes.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
14.2	That the Minister must immediately notify the public of any proposed land release for any onshore shale gas exploration. That the Minister must consult with the public and stakeholders and consider any comments received in relation to any proposed land release. That the Minister be required to take into account the following matters when deciding whether or not to release land for exploration: • the prospectivity of the land for petroleum; • the possibility of co-existence between the onshore gas industry and any existing or proposed industries in the area; and • whether the land is an area of intensive agriculture, high ecological value, high scenic value, culturally significant or strategic significance. That the Minister publish a statement of reasons why the land has been released and why coexistence is deemed to be possible.	Stage 2 To be completed by end of 2019.	Strengthening regulation	Ensuring decisions are made transparently	Department of Primary Industry and Resources		The government will amend the <i>Petroleum Act</i> to implement this process before releasing any further land for exploration in the Northern Territory.
14.3	That Government not approve any application for an exploration permit in relation to areas that are not prospective for onshore shale gas or where co-existence is not possible. Priority must be given to the areas identified in Recommendation 14.4.	Stage 3 To be completed by end Dec-21	Planning for industry	Defining areas, processes, and mechanisms for no-go areas	Department of Primary Industry and Resources		The Department of Primary Industry and Resources is-reviewing current exploration permit applications. Following the review, the Department will consult with industry and key stakeholders on areas that are not prospective or where coexistence is not possible. The Minister for Primary Industry and Resources will consider the prospectively and particular values of land for which industry has sought exploration permits.
14.4	That prior to the grant of any further exploration approvals, the following areas must be declared reserved blocks under section 9 of the Petroleum Act, each with an appropriate buffer zone: • areas of high tourism value; • towns and residential areas (including areas that have assets of strategic importance to nearby residential areas); • national parks; • conservation reserves; • areas of high ecological value; • areas of cultural significance; and • Indigenous Protected Areas.	Stage 2 (16.1) To be completed by April 2019	Planning for industry	Defining areas, processes, and mechanisms for no-go areas	Department of Primary Industry and Resources		The Department of Primary Industry and Resources is consulting with Land Councils regarding the policy of reserved blocks and the Aboriginal Land Rights Act. Government will then consult on proposed reserved blocks under the Petroleum Act, as defined in the recommendation.
14.5	That the Government immediately considers and implements mechanisms to retrospectively apply Recommendation 14.4 to granted exploration permits.	Stage 3 To be completed by end Dec 2021.	Planning for industry	Defining areas, processes, and mechanisms for no-go areas	Department of Primary Industry and Resources		The Department of Primary Industry and Resources will consider the options for implementing this recommendation and consult with industry.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
14.6	That a statutory land access agreement be required by legislation. That prior to undertaking any onshore shale gas activity on a Pastoral Lease (including but not limited to any exploration or production activity), a land access agreement must be negotiated and signed by the Pastoral Lessee and the gas company. That breach of the land access agreement be a breach of the relevant exploration or production approval giving rise to the onshore shale gas activity being carried out on the land.	Stage 3 To be completed by end of 2019	Planning for industry	Addressing arrangements to access pastoral land	Department of Primary Industry and Resources		The Department of Primary Industry and Resources will review current processes in the Northern Territory and other jurisdictions, and will consult to develop a revised process for how gas companies and pastoral lessees will negotiate access agreements and the requirement for and content of a statutory land access agreement. The requirements will be made enforceable via legislation.
14.7	That in addition to any terms negotiated between the pastoralist and the gas company, the statutory land access agreement must contain the above standard minimum protections for pastoralists.	Stage 3 To be completed by end of 2019	Planning for industry	Addressing arrangements to access pastoral land	Department of Primary Industry and Resources		Consultation, as detailed in recommendation 14.6, will incorporate the development of standard minimum protection for pastoralists.
14.8	That prior to the grant of any further exploration permits or production approvals, the Government enacts a minimum mandatory compensation scheme payable to Pastoral Lessees for all onshore shale gas production on their Pastoral Lease. Compensation should be calculated by reference to the impact that the development will have on the Pastoral Lease and the Pastoral Lessee, for example, the number of wells drilled, the value of the land (both before and after), and the area of land cleared and rendered unavailable for pastoral activities.	Stage 3 To be completed by end of 2019	Planning for industry	Addressing arrangements to access pastoral land	Department of Primary Industry and Resources	Not yet commenced	The Department of Primary Industry and Resources will develop, through consultation, a process for how pastoral lessees should be compensated for the impact that gas production operations have on their pastoral operations, which will be made enforceable via legislation.
14.9	That the Government considers whether a royalty payment scheme should be implemented to compensate Pastoral Lessees prior to any further production approvals being granted.	Stage 3 To be completed by end Dec-21	Maximising regional benefits and local opportunities	Ensuring Territorians benefit from royalties	Department of Treasury and Finance	Not yet commenced	The government will work with the pastoral industry and the gas industry to determine the best way to compensate pastoralists for the impact that gas operations may have on their businesses.
14.10	That any person may lodge an objection to the proposed grant of an exploration permit within a prescribed time limit. That all objections received by the Minister must be published online. That the Minister must, in determining whether to grant or refuse the application, take into account any objection received.	Stage 3 To be completed by end of-2019.	Strengthening regulation	Giving the community a say	Department of Primary Industry and Resources		The government will amend the <i>Petroleum Act</i> to implement this process before any further exploration permits are granted in the Northern Territory. This recommendation will be completed in conjunction with Recommendation 14.2.
14.11	That the Petroleum Act be amended to make the principles of ESD a mandatory relevant consideration for any decision made under that Act in relation to any onshore shale gas industry. That the principles of ESD must be taken into account and applied by a decision-maker in respect of all decisions concerning any onshore shale gas industry.	Stage 3 To be completed by end of 2019.	Strengthening regulation	Holding decision makers accountable	Department of Primary Industry and Resources		The government will amend environmental and petroleum legislation to ensure decision makers take the principle of ecologically sustainable development into account when deciding whether or not an activity should proceed. This recommendation will be completed in conjunction with Recommendation 14.2 and 14.10. The Petroleum (Environment) Regulations already have provisions for considering ecologically sustainable development.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
14.12	That the Minister must not grant any further exploration permits unless satisfied that the applicant (including any related entity) is a fit and proper person, taking into account, among other things, the applicant's environmental history and history of compliance with the Petroleum Act and any other relevant legislation both domestically and overseas. That failure to disclose a matter upon request relevant to the determination of whether an applicant is a fit and proper person will result in civil and/or criminal sanctions under the Petroleum Act. That the Minister's reasons for determining whether or not the applicant is a fit and proper person be published online.	Stage 2 To be completed by March 2019.	Strengthening regulation	Ensuring decisions are made transparently	Department of Primary Industry and Resources		The government tabled the Petroleum Legislation Amendment Bill in the Legislative Assembly on 29 November 2018. The Amendment Bill proposes changes to the Petroleum Act that will implement the recommendation. Public comment on the Bill closes 30 January 2019. The Economic Scrutiny Committee has been asked to have its report to Parliament by 12 March 2019.
14.13	That prior to the grant of any further production approvals, the Government develops and implements a financial assurance framework for the onshore shale gas industry that: • is transparent and is developed in consultation with the community and key stakeholders; • clarifies the activities that require a bond or security to be in place and describe how the amount of the bond or security is calculated; and • requires the public disclosure of all financial assurances and the calculation methodology.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Developing cost recovery arrangements	Department of Primary Industry and Resources	Not yet commenced	The Department of Primary Industry and Resources will work with industry, the community and stakeholders to develop a draft financial assurance framework in line with the Inquiry's recommendation and will consult on the draft framework. The government will amend the legislation as to implement the framework.
14.14	That prior to the grant of any further production approvals, the Government imposes a non-refundable levy for the long-term monitoring, management and remediation of abandoned onshore shale gas wells in the NT.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Developing cost recovery arrangements	Department of Primary Industry and Resources	Not yet commenced	The Department of Primary Industry and Resources will consult with industry, the community and scientific experts to develop appropriate monitoring and remediation activities for abandoned wells, and to cost these accordingly. The government will amend the legislation to impose a non-refundable levy on industry prior to the grant of any further production approvals. The government will consider the levy in the Mining Management Act and whether it can be adapted for the onshore gas industry.
14.15	That prior to the grant of any further exploration approvals, all draft Environment Management Plans for hydraulic fracturing must be published in print and online and available for public comment prior to Ministerial approval That all comments made on draft Environment Management Plans must be published online. That the Minister must take into account comments received during the public consultation period when assessing a draft Environment Management Plan.	Completed	Strengthening regulation	Giving the community a say	Department of Primary Industry and Resources		Petroleum (Environment) Regulations were amended on 19 December 2018 to meet the requirements of-this recommendation. All draft Environment Management Plans seeking Minister's consideration for drilling of petroleum wells and hydraulic fracturing activities must be advertised for a 28 day public comment period, comments received must be published online and the Minister must take into account all comments received before making a decision on the draft Environment Management Plan.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
14.16	That prior to the grant of any further exploration approvals, all notices and reports of environmental incidents, including reports about reportable incidents under the Petroleum Environment Regulations, must be published immediately upon notification in print and online.	Completed	Strengthening regulation	Ensuring decisions are made transparently	Department of Primary Industry and Resources		The <i>Petroleum (Environment) Regulations</i> were amended on 19 December 2018 to meet the requirements of this recommendation.
14.17	That prior to the grant of any further production approvals, the Schedule be repealed and replaced with legislation to regulate land clearing, seismic surveys, well construction, drilling, hydraulic fracturing, and well decommissioning and abandonment.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Department of Primary Industry and Resources will amend the <i>Petroleum Act</i> to regulate activities that are currently dealt with in the <i>Schedule of Onshore Petroleum Exploration and Production Requirements 2016,</i> -for matters that do not align with a Code of Practice. The contents of the Schedule will be repealed-as new Codes of Practice (for example, methane monitoring, well integrity and decommissioning) are completed. The remaining aspects of the Schedule will be legally enforceable under the Petroleum Act.
14.18	That prior to the grant of any further exploration approvals, the Government develops and implements enforceable codes of practice with minimum prescriptive standards and requirements in relation to all exploration and production activities, including but not limited to, land clearing, seismic surveys, well construction, drilling, hydraulic fracturing and decommissioning and abandonment.	Stage 2 (16.1) To be completed by March 2019	Ensuring accountable industry practice	Developing transparent and enforceable codes of practice	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has worked with independent scientific experts to develop a draft Code of Practice relative to the Inquiry's many recommendations. The Code will include all the requirements recommended by the Inquiry. The Draft Codes of Practice will be undergoing independent third party peer review in January 2019 and will be released for public comment from February 2019. The Codes of Practice will be finalised soon after and will be made enforceable via legislation.
14.19	That prior to granting any further exploration approvals, cl 3(2)(b) of Schedule 1 of the Petroleum Environment Regulations be amended to read as follows: "3(2)(b) [delete 'as far as practicable'] any cumulative effects of those impacts and risks when considered both together and in conjunction with other events, activities or industries, including any other petroleum activities and extractive industries, that have occurred or that may occur in or near the location of the activity or in or near the region, area or play where the regulated activity is located".	Completed	Strengthening regulation	Holding decision makers accountable	Department of Primary Industry and Resources		The Petroleum (Environment) Regulations were amended on 19 December 2018 to meet the requirements of this recommendation.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
14.20	That the Minister must be satisfied that an applicant is a fit and proper person to hold a production licence, taking into account, among other things, the applicant's environmental history and history of compliance with the Petroleum Act and any other relevant legislation both domestically and overseas. That failure to disclose a matter relevant to the determination of whether an applicant is a fit and proper person upon request will result in civil and/or criminal sanctions under the Petroleum Act. That the Minister's reasons for determining whether or not the applicant is a fit and proper person be published online.	Stage 3 To be completed by March 2019	Strengthening regulation	Ensuring decisions are made transparently	Department of Primary Industry and Resources		The government tabled the Petroleum Legislation Amendment Bill in the Legislative Assembly on 29 November 2018. The Amendment Bill proposes changes to the Petroleum Act that will implement the recommendation. Public comment on the Bill closes 30 January 2019. The Economic Scrutiny Committee has been asked to have its report to Parliament by 12 March 2019.
14.21	That as part of the environmental assessment and approval process for all exploration and production approvals, the Minister be required to consider the cumulative impacts of any proposed onshore shale gas activity.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Collecting baseline data and informing regional management	Department of Environment and Natural Resources		The environmental assessment processes and the assessment of environment management plans under the <i>Petroleum (Environment) Regulations</i> already provides scope for the assessment of cumulative impacts where appropriate. The <i>Petroleum (Environment) Regulations</i> amendment completed on 12 December with Gazettal on 19 December 2018 and now "in law".
14.22	That prior to the granting of any further production approvals, the Government considers developing and implementing regional or areabased assessment for the regulation of any onshore shale gas industry in the NT.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Assessing, protecting and monitoring water resources	Department of Environment and Natural Resources		The Department of Environment and Natural Resources will consider developing and implementing area-based assessments for the purpose of regulating the onshore gas industry. The underlying information for such an assessment will would be provided through the results of the Strategic Regional Environmental Baseline Assessment (SREBA).
14.23	That prior to the grant of any further exploration approvals, the Petroleum Act and Petroleum Environment Regulations be amended to allow open standing to challenge administrative decisions made under these enactments.	Stage 2 (16.1) To be completed by end March 2019	Strengthening regulation	Holding decision makers accountable	Department of Primary Industry and Resources		The government tabled the Petroleum Legislation Amendment Bill in the Legislative Assembly on 29 November 2018. The Amendment Bill proposes changes to the Petroleum Act that will implement the recommendation. Public comment on the Bill closes 30 January 2019. The Economic Scrutiny Committee has been asked to have its report to Parliament by 12 March 2019.

	Recommendation	Target completion	Reform Area	Project Action	Lead Agency	Implementation progress as at	Implementation update as at 31 December 2018
		date				31 December 2018	
14.24	That prior to the granting of any further production approvals, merits review be available in relation to decisions under the Petroleum Act and Petroleum Environment Regulations including, but not limited to, decisions made in relation to the granting of all Environment Management Plans. That, at a minimum, the following third parties have standing to seek merits review: • proponents (that is, gas companies) seeking a permit, approval, application, licence or • permission to engage in onshore shale gas activity; • persons who are directly or indirectly affected by the decision; • members of an organised environmental, community or industry group; • Aboriginal Land Councils; • Registered Native Title Prescribed Body Corporate and registered claimants under the Native Title Act; • local government bodies; and • persons who have made a genuine and valid objection during any assessment or approval process.	Stage 3 To be completed by end Dec-21	Strengthening regulation	Holding decision makers accountable	Department of Primary Industry and Resources		The government has commenced the policy development for amending the Petroleum Act to implement this recommendation.
	That an independent body, such as NTCAT, be given jurisdiction to hear merits review proceedings in relation to any onshore shale gas industry.						
14.25	That prior to any further production approvals being granted, where litigation is brought genuinely in the public interest, costs rules be amended to allow NT courts to not make an order for the payment of costs against an unsuccessful public interest litigant.	Stage 3 To be completed by end Dec-21	Strengthening regulation	Holding decision makers accountable	Department of Primary Industry and Resources	Not yet commenced	The Department of Primary Industry and Resources will seek legal policy advice on the most appropriate approach to addressing the costs of unsuccessful public interest litigants in cases related to the onshore gas industry.
14.26	That prior to the grant of any further exploration approvals, the Government develops and implements a robust and transparent compliance and monitoring strategy, having regard to the principles set out in the ANAO Administering Regulation: Achieving the right balance guide, and the policy in SA.	Stage 2 (16.1) To be completed by March 2019.	Ensuring accountable industry practice	Monitoring gas companies and their operations	Department of Primary Industry and Resources		The Department of Primary Industry and Resources has developed a draft Strategy in conjunction with the Department of Environment and Natural Resources, which entails the requirements of the recommendation. The community and industry will have an opportunity to comment on the strategy in early 2019. The Strategy is expected to be completed and in place by March 2019.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
14.27	That prior to the grant of any production approvals, the Government enacts whistleblower protections in respect of any onshore shale gas industry. That prior to any further exploration approvals being granted, a hotline be established permitting anonymous reporting about any onshore shale gas industry non-compliance. That all such reports be immediately investigated.	First Tranche: Completed Second Tranche: Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Ensuring gas companies comply with our laws	Department of the Chief Minister		The Onshore Gas Non-Compliance Hotline was introduced and contact details published in November 2018. The Department of the Chief Minister will consult stakeholders and experts to review the extent to which existing whistleblower protections are appropriate for implementing this recommendation, after considering recent legislative reforms that provide for the protection of whistleblowers.
14.28	That prior to the grant of any further production approvals, the Government considers developing and implementing a tiered regulatory model such as the one in SA, whereby gas companies with a demonstrated record of good governance and compliance require a lower level of monitoring, with a corresponding reduction in regulatory fees.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Monitoring gas companies and their operations	Department of Primary Industry and Resources and Department of Environment and Natural Resources	Not yet commenced	For at least the next five years, all operators will require a high level of monitoring by the regulator. Only when the industry is well established will the government consider the use of a tiered regulatory model of the kind used in South Australia
14.29	That prior the grant of any further production approvals, the Government enacts a broader range of powers to sanction, including but not limited to: • remediation and rehabilitation orders; • revocation, suspension or variation orders; • enforceable undertakings; • injunctions (mandatory and prohibitory); and • civil penalties.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Ensuring gas companies comply with our laws	Department of Primary Industry and Resources and Department of Environment and Natural Resources	Not yet commenced	The government will consider the Inquiry's recommendations whenever it introduces new legislation for the onshore gas industry. The community and industry will be consulted and have an opportunity to comment on all proposed amendments.
14.30	That prior to the grant of any further production approvals, the Government enacts provisions establishing a chain of responsibility for gas companies and related parties to ensure compliance with environmental obligations.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Ensuring gas companies comply with our laws	Department of Environment and Natural Resources		The Department of Environment and Natural Resources will consult with other Australian jurisdictions in relation to approaches to the chain of responsibility for environmental obligations on gas companies and related parties. This concept would work in with other requirements such as financial assurance required by recommendation 14.13 and the levy required by 14.14. These obligations will be imposed via legislation. It is noted that the concept of chain of responsibility legislation has been used in Australia in a range of subject areas including heavy vehicle regulation for a number of years. Recently it has been introduced to environmental legislation in Queensland.
14.31	That prior to the grant of any further production approvals, the Government allows civil enforcement proceedings to be instituted to enforce potential or actual non-compliance with any legislation governing any onshore shale gas industry.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Ensuring gas companies comply with our laws	Department of Primary Industry and Resources and Department of Environment and Natural Resources		The Department of Environment and Natural Resources will review approaches to civil enforcement proceedings in other jurisdictions and will provide for such proceedings via legislation.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
14.32	That prior to the grant of any further production approvals, the Government enacts provisions that reverse the onus of proof or create rebuttable presumptions for pollution and environmental harm offences for all onshore shale gas activities.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Ensuring gas companies comply with our laws	Department of Environment and Natural Resources		The Department of Environment and Natural Resources will consider the options for, and implications of, this recommendation and provide for it via legislation.
14.33	That prior to the grant of any further production approvals, criminal penalties for environmental harm under the Petroleum Act and Petroleum Environment Regulations be reviewed and increased in line with world-leading practice.	Stage 3 To be completed by end Dec-21	Ensuring accountable industry practice	Ensuring gas companies comply with our laws	Department of Primary Industry and Resources	Not yet commenced	The Department of Primary Industry and Resources will review the penalties for environmental harm under the <i>Petroleum Act</i> and <i>Petroleum Environment Regulations</i> to ensure that they are in line with leading practice.
14.34	That prior to the grant of any further exploration approvals, in order to ensure independence and accountability, there must be a clear separation between the agency with responsibility for regulating the environmental impacts and risks associated with any onshore shale gas industry and the agency responsible for promoting that industry.	Stage 2 (16.1) To be completed by March 2019	Strengthening regulation	Implementing a separate environmental approval	Department of Primary Industry and Resources		The government will amend the Administrative Arrangement Orders to provide the Minister for Environment and Natural Resources the authority of the Petroleum (Environment) Regulations and the Petroleum Act's Environmental Offences provisions (Part V Division 2 of the Act). The Minister for the Environment and Natural Resources will have the power to approve or refuse to approve environment management plans (EMPs)This transfer of the Administrative Arrangement Order will likely take place in February 2019.
							Legislative amendments to the Northern Territory Environment Protection Authority Act commenced in December 2018 enabling the NT Environment Protection Authority to provide advice to the Minister on a proposed environment management plan (EMP). Additional members have been appointed to ensure there is relevant expertise for that purpose.
14.35	That prior to the granting of any further production approvals, the Government considers establishing a one-stop-shop single, separate and independent shale gas regulator to regulate all aspects of any onshore shale gas industry in the NT (with the exception of the grant of exploration permits and the grant of water approvals).	Stage 3 To be completed by end Dec-21	Strengthening regulation	Implementing a separate environmental approval	Department of the Chief Minister		The government has approved a regulatory model where the Minister for Environment and Natural Resources is responsible for environmental approvals for the industry, the Minister for Primary Industry and Resources retains regulatory responsibility for industry-specific operational aspects of the industry, and no change in responsibilities for oversight of general industry activities such as work, health and safety, road transport, etc.
							The government will review and consider the merits of alternative regulatory arrangements after the industry indicates its potential to generate significant levels of activity and output.
15.1	That a strategic regional environmental and baseline assessment (SREBA) be undertaken prior to the granting of any further production approvals.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Collecting baseline data and informing regional management	Department of the Chief Minister		Government accepted this recommendation that Strategic Regional Environment Baseline Assessments (SREBAs) be completed before additional production approvals are granted. Work has commenced to determine the methodologies for undertaking the SREBAs. The target completion date for approval of these methodologies is mid-2019. Once the methodologies and overall Framework is approved the SREBAs for specific areas such as the Beetaloo Sub-basin can be undertaken and completed.

	Recommendation	Target completion date	Reform Area	Project Action	Lead Agency	Implementation progress as at 31 December 2018	Implementation update as at 31 December 2018
15.2	That the regulator oversees the auditing and the data-collection processes and provides a central repository for all data informing any SREBA.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Collecting baseline data and informing regional management	Department of Environment and Natural Resources		The Department of Environment and Natural Resources will develop a central repository for all data informing the Strategic Regional Environmental Baseline Assessment (SREBA), and make all results from the SREBA readily available to the public. Investigations into appropriate information management, storage and publication solutions have commenced.
15.3	That a SREBA: • should be completed within five years from the first grant of exploration approvals; and • must be completed prior to the grant of any production approvals.	Stage 3 To be completed by end Dec-21	Safeguarding water and the environment	Collecting baseline data and informing regional management	Department of the Chief Minister		Government accepted this recommendation that Strategic Regional Environment Baseline Assessments (SREBAs) be completed within 5 years of exploration permits first being granted, and completed before additional production approvals are granted.
16.1	That the Government implements all of the recommendations in this Report.	Stage 3 To be completed by end Dec-21	Implementation	Implement	Department of the Chief Minister		The government has accepted all of the recommendations. Recommendations 7.2, 12.9, 14.8, 14.19, and 14.25 were originally supported-in-principle. Recommendation 7.2 was subsequently upgraded to be fully supported. The remaining four recommendations require further consideration. The Hydraulic Fracturing Inquiry Implementation Taskforce has been established in the Department of the Chief Minister to coordinate the delivery of all 135 recommendations.
16.2	That an implementation framework including details of who, when and how each of the recommendations will be implemented, be completed within three months from any lifting of the moratorium.	Completed	Implementation	Implement	Department of the Chief Minister		The implementation plan has been released. A number of recommendations require further work to establish the best process. The plan will be updated periodically.
16.3	That a centralised, well-resourced, experienced and skilled Implementation Unit be established immediately within the Department of Chief Minister to coordinate the development of the implementation framework.	Completed	Implementation	Implement	Department of the Chief Minister		The Hydraulic Fracturing Inquiry Implementation Taskforce has been established in the Department of the Chief Minister.
16.4	That a Community and Onshore Shale Gas Industry and Business Reference Group be established to provide feedback to Government on the development of an implementation framework, and its subsequent execution, if the Government lifts the moratorium.	Completed	Implementation	Implement	Department of the Chief Minister		The Onshore Shale Gas Community and Business Reference Group has been formed and had its first meeting on 3 July 2018. The Terms of Reference can be downloaded at www.hydraulicfracturing.nt.gov.au