

gorgon and jansz feed gas pipeline and wells operations

(including jansz-io compression)



overview

Chevron Australia, on behalf of the Gorgon Joint Venture, operates the Gorgon Project located off the northwest coast of Western Australia (WA).

Since 2015, offshore production wells and pipeline infrastructure have gathered natural gas from the Jansz-Io and Gorgon gas fields and transported it to the Gorgon Gas Facility on Barrow Island. From the Gorgon Gas Facility, gas is processed for export as liquefied natural gas (LNG) or piped to the mainland for WA domestic gas users.

As predicted, the Jansz-Io gas field reservoir pressure has declined over time. To enhance the recoverability of gas and maintain current rates of production at the Gorgon Gas Facility, Chevron Australia plans to install and operate a subsea compression station (SCSt), floating field control station (FCS) and associated infrastructure [Table 1].

Installation of compression infrastructure in the Jansz-Io field was always contemplated as a means of maintaining

current production levels over the approved life of the Gorgon development and will support the ongoing delivery of energy to customers in WA and the Asia Pacific region for decades to come.

Chevron Australia is currently undertaking a revision of the Gorgon Gas Development Gorgon and Jansz Feed Gas Pipeline and Wells Operations (Commonwealth Waters) Environment Plan (EP), to include the operation of the Jansz-Io Compression (J-IC) infrastructure.

A separate EP, which addresses J-IC installation activities was accepted by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) in May 2024.

This information sheet is intended to assist 'relevant persons' to make an informed assessment of the environmental impact and risks of our activities and to provide input and feedback to enhance the revision of the EP.

Relevant persons are those whose functions, interests or activities may be affected by our activities. This includes

Traditional Owners and Custodians' spiritual and cultural connection to Country, commercial and recreational fishing, tourism, individuals or groups in local communities.

Please note: in the context of an EP, each of the following is considered part of the 'environment':

- an ecosystem and their constituent parts, including people and communities
- natural and physical resources
- the qualities and characteristics of locations, places and areas
- the heritage value of places
- the social, economic and cultural features of the above.

location and water depth

The Jansz-lo gas field is located within production licences WA-36-L, WA-39-L and WA-40-L, approximately 200 kilometres (km) off the northwest coast of WA in water depths of approximately 1,350 metres (m).

The Gorgon gas field is located within production licences WA-37-L and WA-38-L, approximately 130 km off the northwest coast of WA, and 65 km northwest of Barrow Island in water depths of approximately 200 m.

The Gorgon and Jansz pipelines are located in Commonwealth waters within pipeline licences WA-19-PL and WA-20-PL.

The operational area (OA) in which the petroleum activities described in the EP will be undertaken is shown in Figure 1.

The location of Gorgon Project infrastructure is shown in Table 1 (coordinates) and Figure 2 (map).

activity summary

The revised EP will include the commissioning and start-up of the SCSt and ongoing operations of the new J-IC subsea and floating infrastructure [Table 1].

The FCS will be normally unattended, with personnel onboard during periodic inspection, maintenance and repair (IMR) campaigns. Personnel will be transferred to the FCS via helicopter or a support vessel. The SCSt will be operated and monitored remotely from a control room on Barrow Island.

The routine operation of the existing Gorgon and Jansz-Io hydrocarbon systems will continue under the revised EP. Primary activities include the flow and transportation of hydrocarbon and other produced fluids from the wells to the Gorgon Gas Facility on Barrow Island, via infield flowlines and pipelines. Periodic IMR activities will be undertaken to ensure the integrity of infrastructure is maintained.

IMR activities may include:

- visual inspections may involve the use of remotely operated vehicles (ROVs) or similar and divers and a dive support vessel
- marine surveys
- testing and measurements
- pigging (e.g. cleaning) of pipelines
- module/component change-out, stabilisation, removal of marine growth etc.

During normal operations, vessels will typically be limited to supply/support vessels and IMR vessels. The vessel size and type will be dependent on the work scope. It is anticipated vessels will operate 24 hours per day for the duration of activities.

schedule and duration

The revised EP will cover the ongoing operation of the hydrocarbon system (production wells, pipelines, and associated infrastructure) in Commonwealth waters for the Gorgon and Jansz-lo gas fields.

IMR activities may occur at any time, with the frequency determined using a broad risk-based approach, which will include an assessment of safety, environmental and commercial risks. The duration will depend on the scope of the activities, however works will typically be completed within 10 to 200 days.

Subject to relevant approvals and other factors, J-IC operational activities, including commissioning and start-up, were expected to commence from 2026.

As of December 2024, the indicative schedule for the J-IC Project has been updated, with commissioning activities expected to commence from 2026, and start-up and operational activities expected from 2027 or 2028.

environment that may be affected (EMBA)

As part of our environmental assessment and consultation process, we create an EMBA map to provide geographical context for stakeholders to determine if their functions, interests or activities may be affected by an offshore activity during operations or in an emergency scenario.

Figure 1 shows the EMBA, which is based on a worst-case environmental scenario, which in this case is an unplanned release (oil spill) from the hydrocarbon system and/or a vessel collision. Shoreline loading refers to areas of the coast that may be impacted by hydrocarbons.

The EMBA has been defined through combining 300 simulations for each unplanned release scenario under different weather and ocean conditions. This means that in the highly unlikely event an unplanned release does occur, a geographical area much smaller than the EMBA would be affected.

The majority of the impacts or risks directly arising from activities, or from an emergency scenario, would occur within close proximity of the OA.

Chevron Australia has systematic control measures to prevent and mitigate emergencies and to reduce the impact of planned activities on the environment, including ecological, social and cultural sensitivities.

Table 2 summarises the key impacts or risks and proposed control measures to manage these to levels that are as low as reasonably practicable (ALARP) and acceptable.

marine fauna and biologically important areas (BIAs)

Chevron Australia has undertaken extensive environmental and modelling studies and considered scientific advice and government guidance (including conservation management and recovery plans) in assessing impacts and risks to marine fauna. The SCSt will be situated at a water depth of ~1,350 m on the seabed, where operations will result in a localised change to ambient underwater sound.

Marine fauna found at the SCSt location are predominantly pelagic and deep-sea demersal fish species. Some threatened and/or migratory fish species (e.g. whale sharks, other sharks and manta rays) may be present in the area; however, these are primarily coastal species or are associated with shallower water or features (e.g. seamounts and reefs).

Biologically Important Areas (BIAs) for several marine fauna species overlap the EMBA. Additionally, the pygmy blue whale migration BIA overlaps with the SCSt location [Figure 2].

As with most offshore areas in WA, a range of other marine mammal species are known to transit the J-IC area including Antarctic minke whales, Bryde's whales, fin whales, humpback whales, sei whales, sperm whales, killer whales and spotted bottlenose dolphins.

The closest turtle nesting habitats to J-IC are Barrow, Montebello, and Lowendal islands, over 135 km away. Similarly, shallower internesting BIAs extend a maximum of 60 km from these nesting beaches, more than 70 km from the SCSt and FCS.

safe navigation area and marine exclusion zone

The following infrastructure is subject to a 500 m radius petroleum safety exclusion zone:

- Gorgon midline pipeline termination structure
- Gorgon M1 production manifold and wells
- Gorgon M2 production manifold and wells
- Gorgon M3 production manifold and wells
- Gorgon M4 production manifold and wells
- Jansz umbilical midline connection assembly

A new 500 m radius exclusion zone will be sought for the FCS once installed.

No other exclusion zones will be sought for the subsea infrastructure.

first nations cultural values

We acknowledge that Traditional Owner groups in the northwest region of WA have identified Sea Country as an important value and expressed a deep obligation to protect songlines, dreaming stories and the marine fauna connected to them.

Chevron Australia is committed to ongoing engagement and consultation with Traditional Owners and their representative bodies. This process will continue to inform our understanding of cultural values and features and help facilitate the co-design of appropriate controls to avoid impacts.

approvals process

Petroleum activities in Commonwealth waters are regulated by NOPSEMA. Before petroleum activities can take place, Chevron Australia must develop an EP which will be assessed by NOPSEMA in accordance with the requirements of the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2023 (the Regulations).

The Regulations require us to consult with relevant persons whose functions, interests and activities may be affected by the petroleum activity.

Following consultation, we will submit to NOPSEMA a revised version of the Gorgon Gas Development Gorgon and Jansz Feed Gas Pipeline and Wells Operations EP, which will:

- describe the environment in which operations, including the operation of the J-IC infrastructure, are planned to take place;
- include an assessment of environmental impacts and risks arising from those operations;
- identify control measures to manage the potential impacts and risks to levels that are acceptable and ALARP; and
- outline how Chevron Australia has engaged with relevant persons and how their feedback has been considered and addressed.

NOPSEMA will assess whether the EP satisfies the Regulations, including whether the environmental impacts and risks of operations will be managed so that they are acceptable and ALARP before accepting the EP.

your input

We are now seeking your feedback and input if you consider your functions, interests, or activities may be affected based on the information provided, including the summary of the key environmental impacts and risks identified to date in Table 2.

We encourage you to provide additional details about the environment, aspects, consequences of the activity or control measures or to ask for further information or consultation by Monday, 17 February 2025.

You can contact us with any questions, requests for information, or feedback at:

- 1800 225 195
- australia.chevron.com/feedback
- or scan the QR code

Relevant persons may request that the information they provide be treated as confidential. Chevron Australia will make this known to NOPSEMA and it will be identified as sensitive information and not published in the EP.

what's next?

The feedback we receive during consultation will be used to inform and enhance the EP before it is submitted to NOPSEMA for assessment.

We commit to keeping you informed and providing responses to any relevant person who so requests.

privacy notice

If you choose to provide feedback, Chevron Australia will collect your name and contact details, for the purposes of maintaining contact with you and including your feedback in our submission to NOPSEMA. Provision of this information is purely voluntary, however if you choose not to provide it, we may not be able to contact you in the future. Chevron may transfer your information to NOPSEMA if required and, if you do not identify it as sensitive, to other Chevron affiliates including our head office in the United States. For further information regarding how we protect your personal information, and your rights, please refer to our privacy notice at australia.chevron.com/**privacy**

Table 1: Gorgon Project Infrastructure Details

Infrastructure	Details	Latitude South	Longitude East	Depth (~m)	
Existing infrastructure					
Gorgon Midline pipeline termination structure	Connects the infield production flowlines (running from the subsea production manifolds) and the main production pipeline to the Gorgon Gas Facility.	20° 29' 11.20"	114° 53' 53.29"	130	
Gorgon M1 – Production manifold and wells	Gorgon Drill Centre M1 has 7 production wells and a manifold (manifolds allows for commingling of well fluids before entering infield production flowlines).	20° 24' 29.58"	114° 50′ 57.27″	215	
Gorgon M2 – Production manifold and wells	Gorgon Drill Centre M2 has 2 production wells and a manifold.	20° 27' 37.44"	114° 50′ 30.99″	200	
Gorgon M3 – Production manifold and wells	Gorgon Drill Centre M3 has 2 production wells and a manifold.	20° 31′ 12.18″	114° 49' 25.45"	200	
Gorgon M4 – Production manifold and wells	Gorgon Drill Centre M4 has 4 production wells, a manifold and pipeline termination structure.	20° 34' 37.38"	114° 46' 37.97"	250	
Jansz Umbilical Midline Connection Assembly	Due to the length of the Jansz umbilical, it was installed in two sections and required the installation of a midline connection assembly.	20° 23′ 35.19″	114° 58′ 58.61″	107	
Jansz Midline pipeline termination structure	Connects the infield production flowlines (running from the subsea production manifolds) and the main production pipeline to the Gorgon Gas Facility.	19°48'33.90"	114º36'26.26"	1,275	
Jansz Drill Centre 1 and wells	Jansz Drill Centre 1 has 5 production wells and a manifold.	19° 49′ 35.16"	114° 34' 14.31″	1,338	
Jansz Drill Centre 2 and wells	Jansz Drill Centre 2 has 5 production wells and a manifold.	19° 47′ 29.65″	114° 38′ 39.66″	1,349	
Jansz Drill Centre 3 and wells	Jansz Drill Centre 3 has 4 production wells and a combined manifold/pipeline termination structure.	19° 51′ 10.44″	114° 30′ 56.19″	1,315	
Pipelines	The pipelines facilitate the flow of hydrocarbons and other produced fluids from the Gorgon and Jansz fields to the gas facility on Barrow Island.	Refer to Figure 2 for location		12 - 1,275	
Umbilicals	Umbilicals run from Barrow Island to the Gorgon and Jansz fields and provide power, fibre optics and chemical supplies.	Refer to Figure 2 for location 12 – 1,		12 - 1,275	
Contingency Power Supply Infrastructure	Contingency power supply infrastructure including a subsea battery system and a downline from a vessel may be used as required in the Gorgon and Jansz fields.	Gorgon : 19° 48' 45.971" Jansz : 19° 48' 45.971"	114° 36' 28.008" 114° 36' 28.008"	Gorgon : 130 Jansz : 1,345	
New J-IC infrastructure					
Subsea Compression Station (SCSt)	Electric powered SCSt for the Jansz-Io field, including compressors and pumps. Receives power via the FCS.	19° 48' 35.00"	114° 36' 20.84"	1,345	
Subsea Compression Manifold Station (SCMS)	A manifold located between the SCSt and existing Jansz infrastructure containing piping, sensors and connection systems.	19° 48' 32.44"	114° 36' 20.24"	1,345	
Field Control Station (FCS)	A normally unattended, moored floating facility that will accommodate electrical equipment, anchored to the seabed by 12 mooring lines. Accommodation is available on board when required during IMR campaigns.	19° 52' 43.67"	114° 36' 28.91"	1,275	
J-IC umbilical	Additional umbilical installed between Barrow Island and the FCS adjacent to the existing Jansz feed gas pipeline. Conveys power and fibre optics.	Refer to Figure	e 2 for location	12 - 1,275	

Table 2: Summary of key impacts and risks and key proposed control measures for operational activities.

Aspect	Key impacts/risks	Key proposed control measures ¹		
First Nations cultural values (tangible and intangible)	 Potential disturbance to underwater cultural heritage (UCH) during IMR activities. Potential changes to cultural values, including songlines, dreaming stories and culturally important marine fauna. 	 A UCH 'finds protocol' will be implemented where there are activities interacting with the seabed with the risk of disturbing unlocated First Nations UCH, to ensure discoveries are identified and responded to with adequate conservation and management actions. Control measures related to marine fauna and other cultural values and features are outlined in sections below. Chevron Australia is committed to ongoing engagement and consultation with Traditional Owners and their representative bodies. This will continue to inform our understanding of cultural values and features and facilitate the co-design of appropriate controls to avoid impacts. 		
Planned activities				
Physical presence of subsea infrastructure, FCS and vessels within the OA	 Presence of subsea infrastructure, FCS and vessels within the OA may interact with and disrupt commercial shipping, fishing vessels and marine fauna. Potential interaction with fishing vessels may result in entanglement of trawl fishing gear on subsea infrastructure. 	 Relevant parties will be advised of the commencement of key phases of the activity. Marine safety information to be issued via AUSCOAST and/or Notice to Mariners (where required) prior to commencing the IMR activity. Vessels will meet Chevron Australia's crew competency, navigation equipment, and radar requirements as per the Chevron Corporation Marine Standard. In accordance with EPBC Regulations 2000 - Part 8 Division 8.1 - Interacting with Cetaceans, vessels will implement caution and no approach zones, where practicable. Where required, a simultaneous operation plan will be developed and implemented to manage the activity. 		
Electromagnetic field (EMF) from J-IC umbilical	 Cables and transformers create electromagnetic field, which may cause disruption to behaviour of EMF-sensitive species. 	 Cable shielding will be installed to enclose the electrical cores, reducing the transmission of EMFs into the water column. 		
Seabed disturbance from IMR activities	 Seabed disturbance from IMR activities may result in the alteration of marine habitat and a localised and temporary change in water quality. 	 Hazard Identification and Risk Assessment (HIRA) undertaken to identify and assess potential environmental impacts and risks associated with the proposed IMR activity. Activity specific work procedures implemented as required, including any additional controls identified for implementation (e.g. pre-activity surveys of the seabed). Vessels will be required to meet Chevron's crew competency, navigation equipment and radar requirements in accordance with the Chevron Corporation Marine Standard. 		
Underwater sound from SCSt operations *For more detailed information, view the J-IC Underwater Sound information sheet >	 SCSt operations will result in a localised change to ambient underwater sound. A change in ambient underwater sound may result in behavioural disturbance or auditory impairment to marine fauna. 	 In-field sound source level verification will be undertaken during SCSt startup and commissioning to ensure sound levels remain within the expected operating parameters of the SCSt. A control measure will be implemented to limit the power load of the compressors, if required, to ensure sound levels are not inconsistent with the Blue Whale Conservation Management Plan. 		
Underwater sound from vessel, IMR and helicopter operations	 Vessel, IMR and helicopter operations within the OA may result in a localised and temporary change to ambient underwater sound. A change in ambient underwater sound may result in behavioural disturbance or auditory impairment to marine fauna. 	 In accordance with EPBC Regulations 2000 – Part 8 Division 8.1 – Interacting with Cetaceans, vessels and helicopters will implement caution and no approach zones, and interaction management action. 		
Light emissions	 Navigation and operational lighting from vessels and the FCS may result in a localised change in ambient light. Change in ambient light may result in the temporary attraction or deterrence of light- sensitive species. 	 Vessels will meet lighting requirements of the Chevron Corporation Marine Standard. HIRA undertaken prior to vessels working at night within critical habitats and during turtle nesting season. 		

1 Proposed control measures are subject to change through consultation with relevant persons and the subsequent NOPSEMA assessment process.

Aspect	Key impacts/risks	Key proposed control measures ¹		
Air and Greenhouse Gas (GHG) emissions	 Combustion of fuel from vessels and on the FCS may result in a localised and temporary reduction in air quality. Direct GHG emissions within the OA and indirect GHG emissions from activities associated with processing of gas at the Gorgon Gas Facility on Barrow Island, transport and third-party end use of products, may result in contribution to the reduction of the global atmospheric carbon budget. 	 Reduced sulphur content fuel will be used. Vessels will comply with the requirements of Marine Order 97 (MARPOL 73/78 Annex VI) in relation to air pollution. Scope 1 GHG emissions will be managed in accordance with Ministerial Statement 800 (as amended by MS 1198) and are subject to the Federal Government's Safeguard Mechanism. For a full list of control measures, refer to the current NOPSEMA accepted revision of the Gorgon and Jansz Feed Gas Pipeline and Wells Operations (Commonwealth Waters) EP. 		
Planned discharges from vessel operations	 Planned discharges from vessel operations may result in localised and temporary change in water quality. 	 Vessels will comply with the requirements of Marine Order 96 (MARPOL 73/78 Annex IV) in relation to sewage discharge. Vessels will comply with the requirements of Marine Order 95 (MARPOL 73/78 Annex V) in relation to food waste discharge. Vessels will comply with the requirements of Marine Order 91 (MARPOL 73/78 Annex I) in relation to oily bilge water discharges. 		
Planned discharges from FCS operations	• Planned discharges (sewage, greywater, oily water and drainage from the deck and integrated firefighting system) from the FCS may result in a localised and temporary change in water quality.	 Hazardous materials will be selected and managed in accordance with the Chevron Australia Hazardous Materials Management Procedure. 		
Planned discharges from subsea operations and IMR activities	 Planned discharges from subsea operations and IMR activities may result in a localised and temporary reduction in water quality. 	 Hazardous materials will be selected and managed in accordance with the Chevron Australia Hazardous Materials Management Procedure. HIRA undertaken to identify and assess potential environmental impacts and risks associated with the proposed IMR activity. Activity specific work procedures developed to address HIRA findings, including any additional controls identified for implementation. 		
Unplanned events activities				
Invasive marine pests	• Planned discharge of ballast water or the presence of biofouling on vessels may result in the introduction of an invasive marine pest.	 Vessels will meet the requirements of the Chevron Australia Quarantine Management Procedure for Marine Vessels. Ballast water exchanges will be managed in accordance with the Australian Ballast Water Management Requirements. Vessels greater than 400 gross tonnes with an antifoul coating are to maintain an up-to-date international antifouling coating certification in accordance with the Protection of the Sea (Harmful Anti-fouling Systems) Act 2006 and/or relevant codes and standards. Where required, vessel pre-arrival information will be reported through the Maritime Arrivals Reporting System as per the Commonwealth Biosecurity Act 2015. 		
Accidental release – waste	Unplanned release of waste to environment causing marine pollution.	• Vessels will comply with the requirements of Marine Order 95 (MARPOL 73/78 Annex V) in relation to managing waste (garbage) offshore.		
Accidental release – hazardous materials (fuel bunkering, hydraulic line failure etc.)	 Unplanned release of hazardous material may result in indirect impacts to the marine environment and fauna arising from chemical toxicity. 	 Hazardous materials will be selected and managed in accordance with the Chevron Australia Hazardous Materials Management Procedure. Vessels will meet the requirements of the Chevron Corporation Marine Standard, including the pre-mobilisation inspections of equipment, couplings and secondary containment availability and refuelling/bunkering process. Vessels will comply with the requirements of Marine Order 91 (MARPOL 73/78 Annex I) in relation to having an approved Ship Oil Pollution Emergency Plan in place. 		

Aspect	Key impacts/risks	Key proposed control measures ¹		
Accidental release – vessel collision	 Hydrocarbon exposure from an accidental vessel collision event may result in marine pollution, smothering of subtidal and intertidal habitats, indirect impacts to fisheries, and reduction in amenity. 	 Vessels will meet the crew competency, navigation equipment, and radar requirements of the Chevron Corporation Marine Standard. Marine safety information to be issued via AUSCOAST and/or Notice to Mariners (where required) prior to commencing the IMR activity. Spill response Vessels will comply with the requirements of Marine Order 91 (MARPOL 73/78 Annex I) in relation to having an approved Ship Oil Pollution Emergency Plan in place. Emergency response will be implemented in accordance with the arrangements and strategies detailed in the Chevron Australia Oil Pollution Emergency Plan (OPEP). Where required, operational and scientific monitoring will be undertaken in line with the Chevron Australia Operational and Scientific Monitoring Plan (OSMP). 		
Accidental release from subsea infrastructure	 Hydrocarbon exposure from an accidental subsea release may result in marine pollution, shoreline impacts of subtidal and intertidal habitats, indirect impacts to fisheries, and a reduction in amenity. 	 Lifting procedure in place that complies with the requirements of the Managing Safe Work ABU Standardised OE Process. Inspection, maintenance and monitoring of the hydrocarbon system to maintain integrity will be undertaken in accordance with the relevant Inspection and Monitoring Plan. Spill response Emergency response will be implemented in accordance with the arrangements and strategies detailed in the Chevron Australia OPEP. Where required, operational and scientific monitoring will be undertaken in line with the Chevron Australia OSMP. 		
Emergency response				
Ground disturbance – shoreline spill response	 In the event of an oil spill which impacts the shoreline, implementing shoreline clean-up techniques will involve people and equipment, which may disturb shoreline habitat with subsequent impacts to fauna. 	 Where required, operational and scientific monitoring will be undertaken in accordance with the Chevron Australia OSMP. 		
Physical presence – oiled wildlife response	 In the event of an oil spill which impacts fauna the handling and treating of marine fauna will result in personnel interacting with marine fauna. 	 Where required, operational and scientific monitoring will be undertaken in accordance with the Chevron Australia OSMP. 		





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