

BMG Closure Project Annual Progress Report 2021

Purpose and Scope

The purpose of this report is to provide an update on the Basker Manta Gummy (BMG) Closure (Decommissioning) Project, including planning and progress towards meeting the actions required by General Direction 824.

Related Content

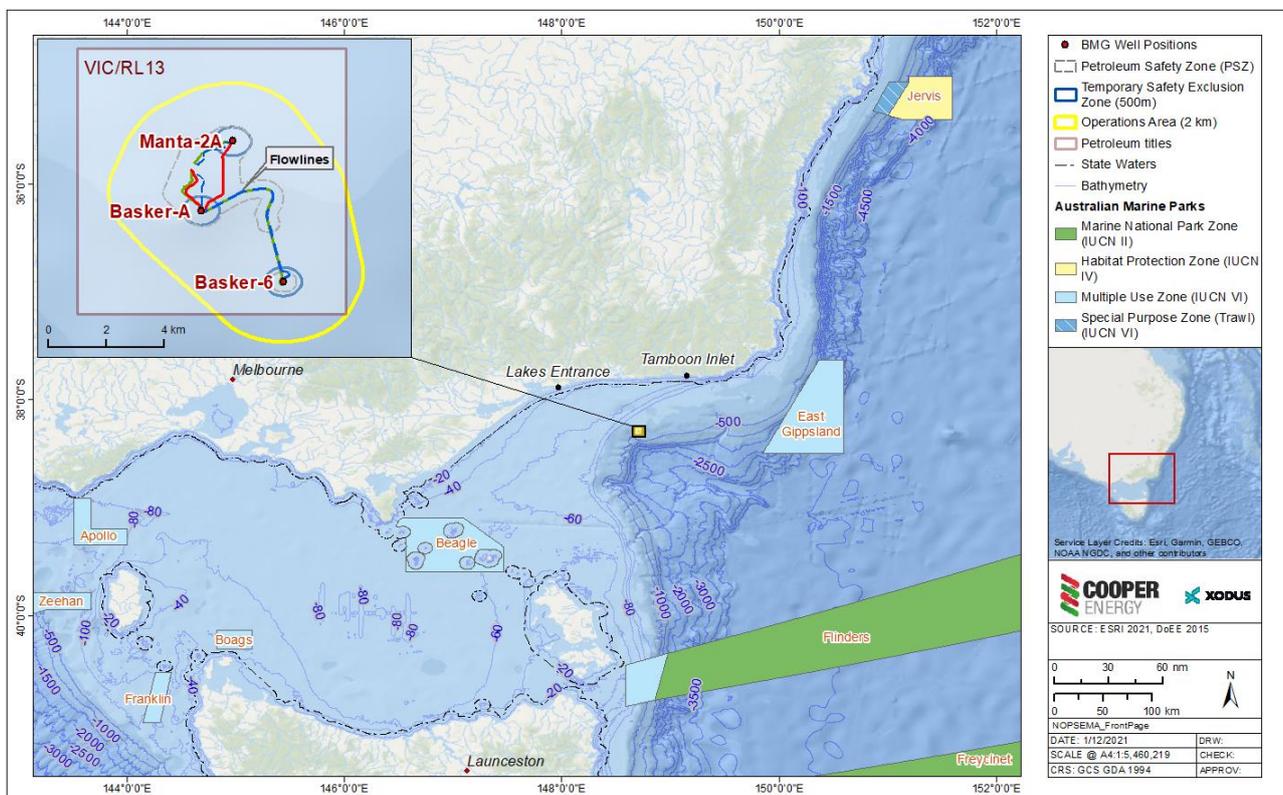
BMG Closure Project (Phase 1) EP	https://info.nopsema.gov.au/environment_plans/569/show_public
BMG Petroleum Safety Zone	https://www.nopsema.gov.au/sites/default/files/2021-03/A443819.pdf
Gippsland Operations EP	https://info.nopsema.gov.au/offshore_projects/10/show_public
General Direction 824	https://www.nopsema.gov.au/sites/default/files/2021-09/A800345.pdf

BMG Development Description

Cooper Energy Limited (Cooper Energy) is the titleholder (100%) of Petroleum Retention Lease VIC/RL13 in the Gippsland Basin. The BMG facilities are entirely within VIC/RL13 in Commonwealth waters, approximately 50 km from Cape Conran off the Victorian coast (Figure 1). The BMG facilities lie in water depths of circa 135 m – 270 m and comprise:

- 5 subsea wells and Basker-A Manifold (BAM) at the Basker-A Drill Centre
- 2 satellite wells; Manta 2A and Basker-6
- interconnecting flowlines and umbilicals
- ancillary structures including pipeline end manifold and umbilical termination units
- stabilisation materials including concrete mattresses and grout bags

Figure 1 – BMG Facility Location



BMG Development History

VIC/RL13 and the BMG subsea facilities were acquired by Cooper Energy from the previous Joint Venture Partner (JVP) in 2014. The BMG facilities were then in the non-production phase and had been partially deconstructed. A summary of the BMG development history is provided in Table 1.

Table 1 - BMG Field Development Phases

Development Phase		Timing	Activities
Production Phase	Extended Production Test	2005–2006	Basker-2 oil production well with associated gas flared.
	Full Field Development	2006–2008	Basker-2, 3, 4, 5 and Manta-2A oil production wells with gas-lift and gas re-injection. Production via the Crystal Ocean Floating Storage Production Offloading Vessel (FPSO) and the Basker Spirit oftake Tanker.
	Oil Development Phase 2	2008–2010	Basker-6 (ST1) oil production well and tie back to the Basker Manifold (BAM).
			Work-over of Basker-3 and Basker-5. Drilling and completion of Basker-7 well and tie back to the BAM at the Basker-A Drill Centre.
Flare Gas Compressor Project	2010	Re-injection of flare gas: installation of one, two stage screw compressor to the FPSO process module, starboard side.	
Cessation Phase and partial deconstruction		2011-2012	Production stopped. Facilities are shut in. Vessels are removed. Moorings and midwater equipment are decommissioned and removed.
Non-Production Phase (NPP)		2012–present	Cooper Energy took ownership in 2014. Routine offshore inspections.
Well decommissioning planned		2017/18	Well decommissioning planned and rig mobilised for the scope. Project recycled following regulator assessment (and non-acceptance) of well operations management plan (WOMP).
Decommissioning		Circa 2023 to 2026	Per Section 572 of the <i>OPGGGS Act</i> , the base case for decommissioning the BMG facilities is to remove all infrastructure, in phases: <ul style="list-style-type: none"> Phase 1: permanently seal (plug and abandon (P&A)) the wells and remove well equipment. Phase 2: decommission remaining equipment. Project milestones and progress is described below.
Future appraisal and development Phase		From 2023	Appraisal and development of Manta gas reserves in accordance with title activity plans and conditions.

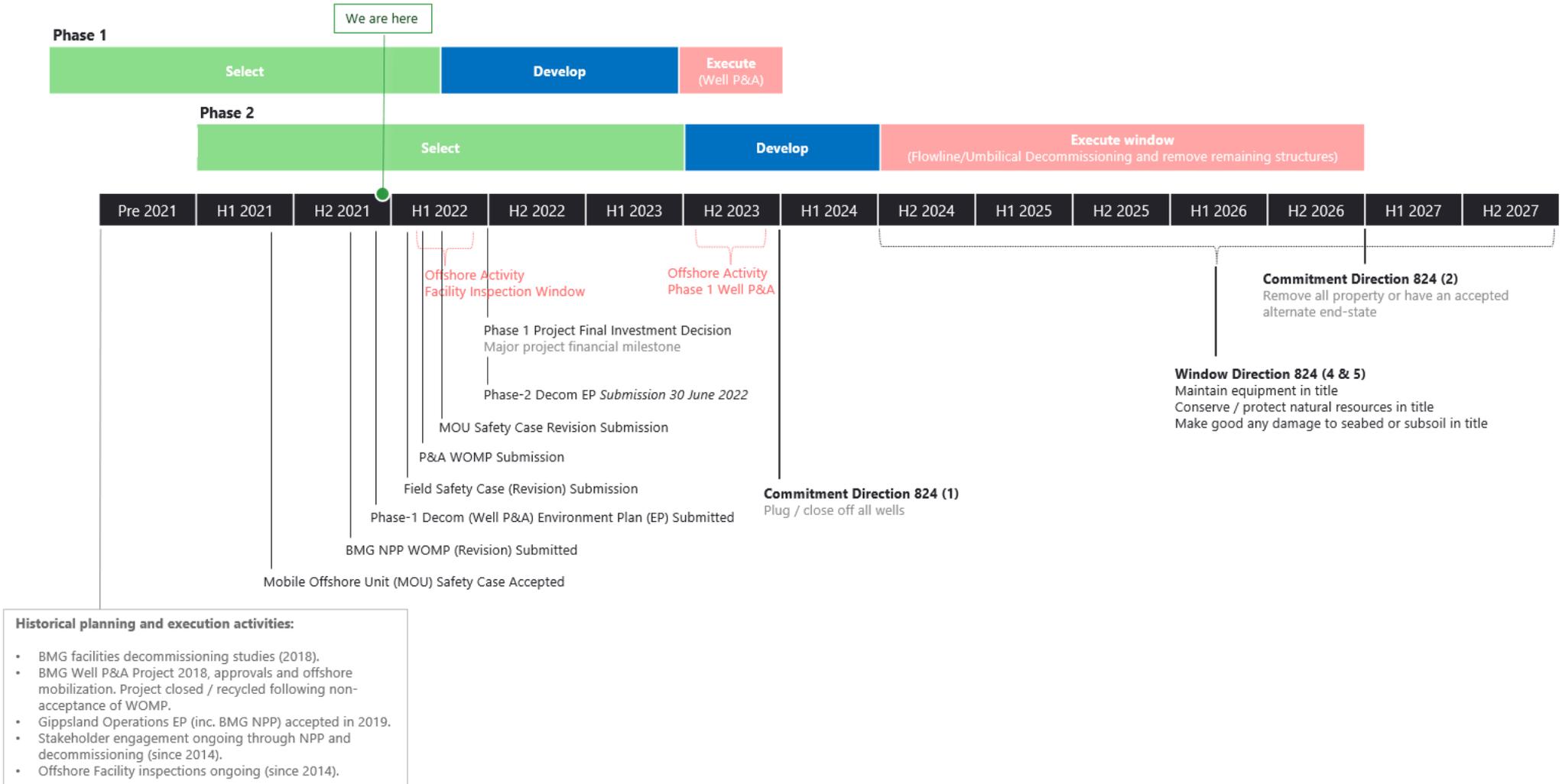
BMG Closure Project Planning and Progress

Figure 2 shows the indicative schedule of milestones and directions for the BMG Closure Project. The schedule shows current and future phases: Select, Develop and Execute. This phased approach ensures activities are planned and conducted in a consistent and repeatable manner with appropriate controls in place to manage all aspects of design, operations and closeout including safety, environment, risk, and change.

Table 2 identifies key work plan items as they align to the requirements of under General Direction 824. For each work plan item there is a summary of progress during the previous 12+ months. A look-ahead for the next 12-months is also provided.

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Figure 2 - Indicative Schedule: BMG Closure Project Milestones and Directions



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Table 2 - Project Progress and Look-ahead

Direction	Schedule 1 – Directions	Key Work Plan Items	Progress to date	Lookahead next 12-months
1	Plug or close off, to the satisfaction of NOPSEMA, all wells made in the title area by any person engaged or concerned in operations authorised by the title as soon as practicable and no later than 31 December 2023.	Well Operations Management Plan for Well Abandonment	<ul style="list-style-type: none"> Development of well abandonment program. Verification of new technologies to resolve key abandonment challenges. Engineering studies including Global Riser Analysis (GRA). 	<ul style="list-style-type: none"> Continue technology studies and integrate findings into well abandonment program including technology trials / system integrity testing. Continue GRA.
		Safety Cases	<ul style="list-style-type: none"> In 2020/2021 Cooper Energy funded and supported the development of the preferred mobile offshore unit (MOU) Safety Case for Australian waters. The Safety case was accepted in 2021. 	<ul style="list-style-type: none"> Revise BMG Facility Safety Case to provide for decommissioning operations. Prepare MOU Safety Case Revision.
		Major Contracts	<ul style="list-style-type: none"> Financial commitment made to MOU. Multiple other service partners engaged. 	<ul style="list-style-type: none"> The Develop phase triggers financial commitments and procurement of long lead items, downhole consumables and equipment, and award of major contracts.
		Phase 1 Environment Plan (EP)	<ul style="list-style-type: none"> Re-commenced engagement with relevant stakeholders including fisheries and government agencies in 2020/21. Completed multiple environmental studies and impact/risk assessments. Submitted Phase 1 EP and associated plans to NOPSEMA in November 2021. 	<ul style="list-style-type: none"> Progress EP and associated plans through assessment with NOPSEMA. Continue engagement with relevant stakeholders including updates on activity timing.
2	Remove, or cause to be removed, to the satisfaction of NOPSEMA, from the title area all property brought into that area by any person engaged or concerned in the operations authorised by the title as soon as practicable and no later than 31 December 2026.	Environment Studies	<ul style="list-style-type: none"> Progression of studies and comparative assessment to support decommissioning panning and to assess and compare base case removal with alternate options. 	<ul style="list-style-type: none"> Finalise comparative assessment studies. Continue stakeholder engagement. Prepare Phase 2 EP which will provide for the decommissioning of remaining property referred to under Direction 2. Submit Phase 2 EP by 30 June 2022.
3	Until such time as direction 1 and 2 are complete, maintain all property on the title to 'NOPSEMA's satisfaction, to ensure removal of property is not precluded.	Implement the BMG Offshore Facilities Integrity Management Plan (IMP)	<ul style="list-style-type: none"> Ongoing through NPP. Works completed include facility integrity reviews and maintenance of inventory records informed by operational records and regular offshore inspections. 	<ul style="list-style-type: none"> Continue facility integrity reviews and upkeep of inventory records in accordance with IMP. Next facility inspection planned for H1 2022.

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Direction	Schedule 1 – Directions	Key Work Plan Items	Progress to date	Lookahead next 12-months
			<ul style="list-style-type: none"> Last facility inspection H1 2020 	
		Implement the BMG Well Operations Management Plan	<ul style="list-style-type: none"> Ongoing. Works complete include well integrity reviews. The non-production phase WOMP was resubmitted to NOPSEMA and accepted in 2021 covering a 5-year term. 	<ul style="list-style-type: none"> Continue annual risk assessments and management of wells in line with the WOMP.
		Implement the Gippsland Operations EP	<ul style="list-style-type: none"> Ongoing through NPP. Works complete include stakeholder engagement on activities described under that plan. 	<ul style="list-style-type: none"> Management of offshore inspection in line with Regulatory Plans. Continued Stakeholder Engagement in line with the Gippsland Operations EP.
		Implement the BMG Offshore Facility Safety Case	<ul style="list-style-type: none"> Ongoing through NPP. Works complete include regular facility risk register reviews, stakeholder engagement and facility inspections. 	<ul style="list-style-type: none"> Prepare and resubmit facility safety case for the next activity term (5-years). Continued works in line with the safety case.
4	Provide, to the satisfaction of NOPSEMA, for the conservation and protection of the natural resources in the title area within 12 months after property referred to in direction 2 is removed.	Phase 2 EP preparation and associated studies	<ul style="list-style-type: none"> Concept studies have been undertaken to identify feasible decommissioning options. 	<ul style="list-style-type: none"> Prepare Phase 2 EP which will include provision for the protection of natural resources in the title area post decommissioning. Submit Phase 2 EP by 30 June 2022. <p>Note, Cooper Energy plans to retain VIC/RL13 to appraise the Manta gas field.</p>
5	Make good, to the satisfaction of NOPSEMA, any damage to the seabed or subsoil in the title area caused by any person engaged or concerned in those operations within 12 months after property referred to in direction 2 is removed.			
6	Annual progress reporting until all directions have been met.	Annual Progress Report	<ul style="list-style-type: none"> Annual Report 2021 submitted to NOPSEMA December 2021. 	<ul style="list-style-type: none"> Prepare and submit 2022 Annual Report by 31 December 2022.