What is the ECSP Wells Connection activity?

Amplitude Energy (formerly Cooper Energy) has been consulting with the community about our planned offshore gas activities to maintain gas supply through our existing infrastructure. Upon completion of up to four subsea offshore gas wells as part of our East Coast Supply Project (ECSP), this Environment Plan will provide for the vessel-based activities to connect the wells into our existing subsea infrastructure offshore from Peterborough, Victoria in Commonwealth Waters. This infrastructure will connect into our existing subsea pipeline which already transports gas to our onshore Athena Gas Plant for processing. Gas transported through our infrastructure will contribute to the east coast domestic gas supply.

Proposed Activity Overview

The ECSP Wells Connection activity will use a construction vessel(s) to plumb-in and connect the new wells to the existing Casino pipeline. The main equipment being installed comprises flowlines (to transport gas), umbilicals (to connect electrical and hydraulic lines) and structures which provide a link between new and existing equipment.

A summary of the activities associated with the installation of subsea infrastructure is shown in Table 1 and Figure 1. When in the field, activities will operate on a 24 hour, 7 days per week basis.

Table 1: Activity Summary

Proposed Activity	Detail	Expected Timing	Expected Duration
Wells connection (installation of equipment to connect up to 4 wells)	**Modifications to existing subsea equipment**: Diving campaign: To convert existing In Line Tees to diverless connection points at 1-2 locations.	Installation activity window is 2027 – 2030	~120 days
	Flowline and umbilical installation: Vessel managed laying of flowlines and umbilicals on seabed.		
	Installation and connection of subsea structures: Vessel managed installation of structures such as production manifolds, temporary manifolds and subsea control units on seabed.		
	System Testing and Commissioning: Cleaning and testing the new system to confirm integrity, and then flowing gas to the Athena Ga Plant through the new and existing infrastructure.		
	Vessel operations: 1-2 specialised construction vessels equipped with dynamic positioning systems, cranes, remotely operated vehicles and/or diving equipment. ~50-100 personnel per vessel including vessel crew and subsea project team.		
Inspection, maintenance and repair (IMR) and Survey	**IMR:** IMR of the flowlines and/or umbilicals using Remotely Operated Vehicle (ROV) in the event a repair is required, or otherwise ~ 2 years between campaigns.	2027 - 2030	Up to ~60 days per campaign
	Survey: may include ROV, glider mounted and towed geophysical equipment: sub bottom profiler, side scan sonar, multi-beam echosounder and magnetometer, and geotechnical equipment for shallow seabed sampling.		
	Vessel operations: Generally 1specialised survey or construction support vessel equipped with dynamic positioning systems, cranes, remotely operated vehicle and/or diving equipment. ~50-100 personnel per vessel including vessel crew and subsea project team.		

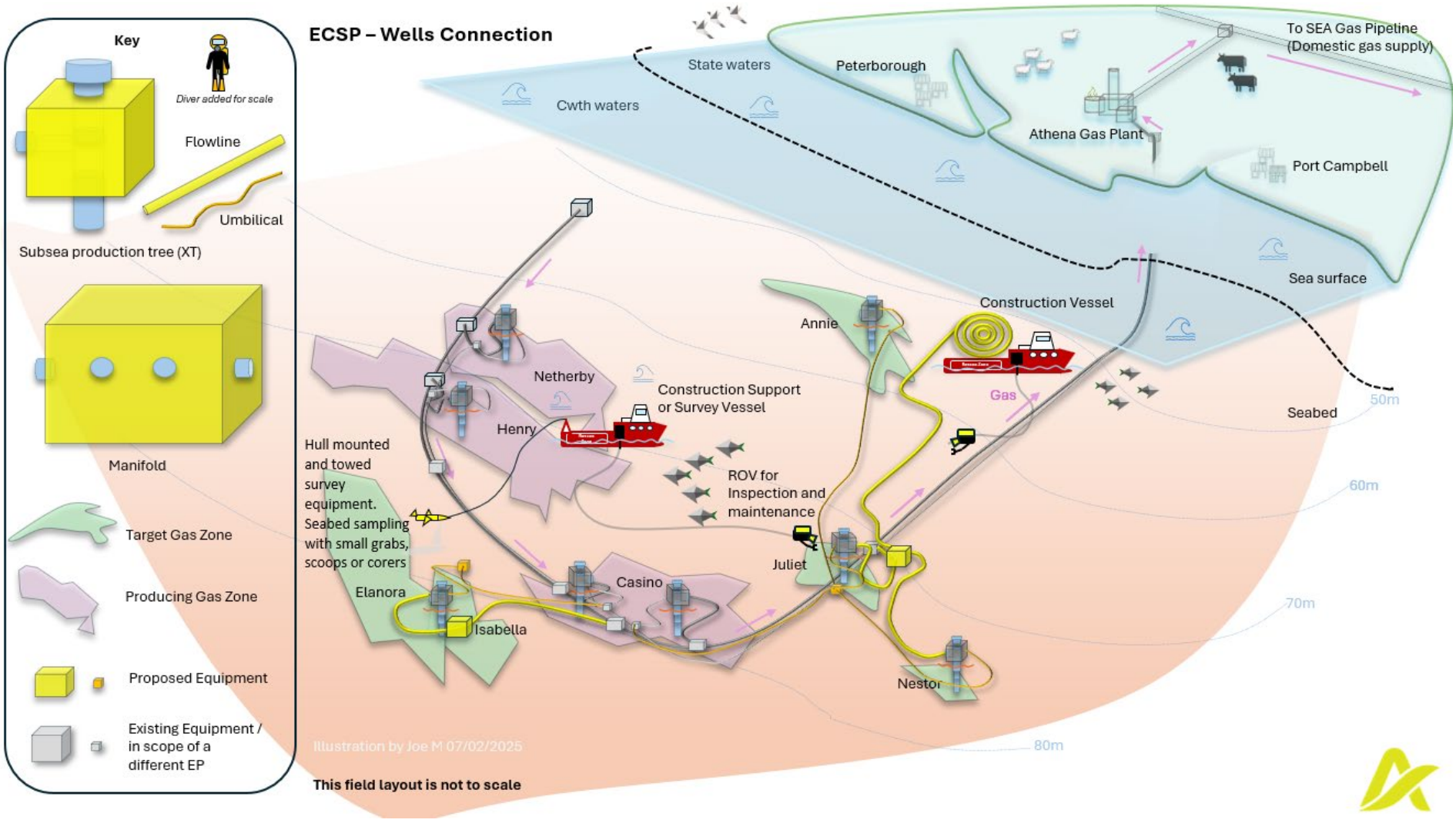


Figure 1 Indicative activities

Please advise us if your feedback is sensitive and we will advise NOPSEMA in order for this information to remain confidential.

Amplitude Energy will communicate any material changes to the proposed activity to relevant persons as they arise

Location:

The closest of the new connecting flowlines is approximately 9 km offshore Peterborough. The flowlines will be in water depths of 55-80 m. The maximum estimated length of all flowlines is ~25 km, and ~35km for all umbilicals.

All activities under this EP will occur within an operational area that includes a 3km buffer around the subsea equipment shown in the map below. Within these areas we may request temporary exclusion zones (~500m radius) around the construction vessels.

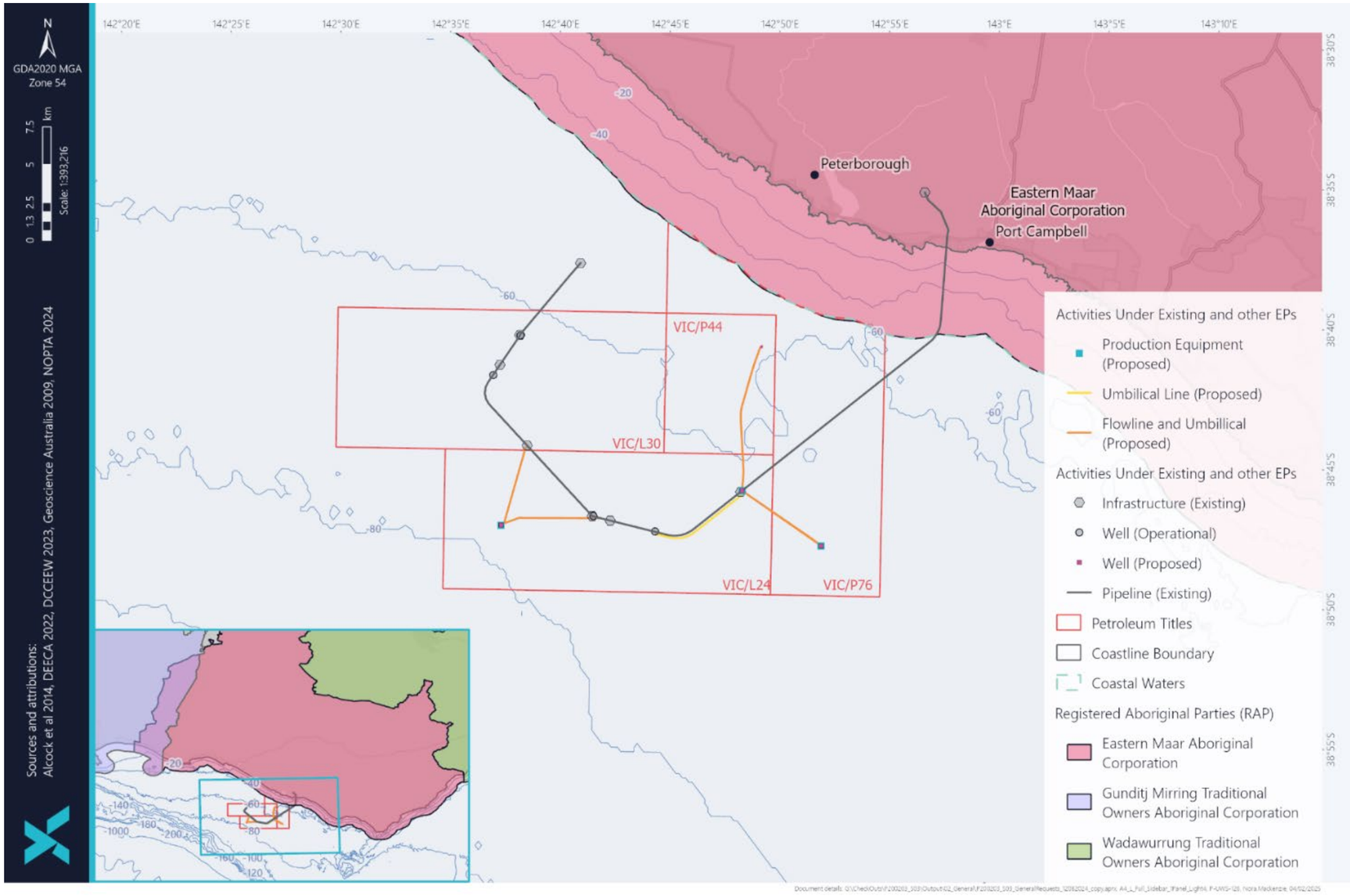


Figure 2 Indicative location of the subsea flowline infrastructure

Management of Potential Environmental Impacts and Risks

Below is a summary of the key potential environmental aspects and associated impacts and risks and how they will be managed. Other aspects include light emissions, other atmospheric emissions, planned discharges, unplanned interactions with marine fauna, dropped objects and unplanned waste. If you have specific concerns about how these might affect your functions, interests or activities, please contact us and we will provide further information

Seabed Disturbance

Seabed disturbance will occur from various sources during the project including the installation of infrastructure on the seabed.

Available survey data can help us to identify and avoid sensitive benthic features and potential underwater cultural heritage.

Physical Presence of Vessels

Construction vessels may be visible from shore, on the horizon, whilst work is underway. Vessels will be similar to this 120m long construction vessel. The dimensions compare to a small container ship or government research vessel.

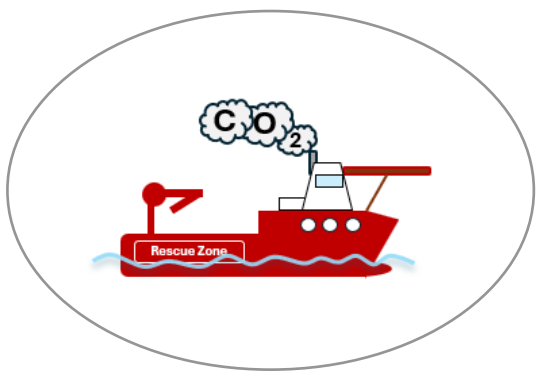
Once the installation work is complete, the vessels sail away. All equipment is on the seabed – no elements of the project infrastructure will be visible above the sea.

Like any vessel operating at sea (e.g. fishing boats, cargo ships, passenger ships), there is a chance that the vessels we work with could collide with marine life. We manage this through compliance with offshore operational procedures which include safe distances and speed limits on vessels.

Underwater Sound

Vessels generate subsea noise which has the potential to disturb marine life including whales.

We take measures to make sure these potential impacts and risks are minimised.



Climate Change

Greenhouse gases will be emitted during project activities. The emissions from the project vessels will be minimised through ongoing monitoring and management of fuel use. Amplitude Energy's residual emissions will be quantified and offset at the end of the campaign.

Accidental Hydrocarbon Release

Amplitude Energy has never had a major spill. We work hard to prevent emergency events and we are prepared to respond in the event of a spill.

Feedback

To find out more about Amplitude Energy or our activities please contact us through the details below.

Email: stakeholder@cooperenergy.com.au. Phone: 61 8 8100 4900