

Dredging & beneficial re-use of materials

The Port Kembla Energy Terminal project involves the construction of a new wharf and berthing facility at Berth 101 in Port Kembla. Dredging will enable the Floating Storage and Regasification Unit (FSRU) vessel and Liquefied Natural Gas Carriers to berth in the inner harbour.

What is Port Kembla Energy Terminal?

Squadron Energy is building an energy terminal in Port Kembla's Inner Harbour. When completed, the facility will have the capacity to supply more than 70% of NSW's gas needs. With a green hydrogen future in mind, Squadron Energy is investigating if the Terminal can be re-purposed for green hydrogen as part of the energy transition, subject to regulatory and third party approvals and consents.

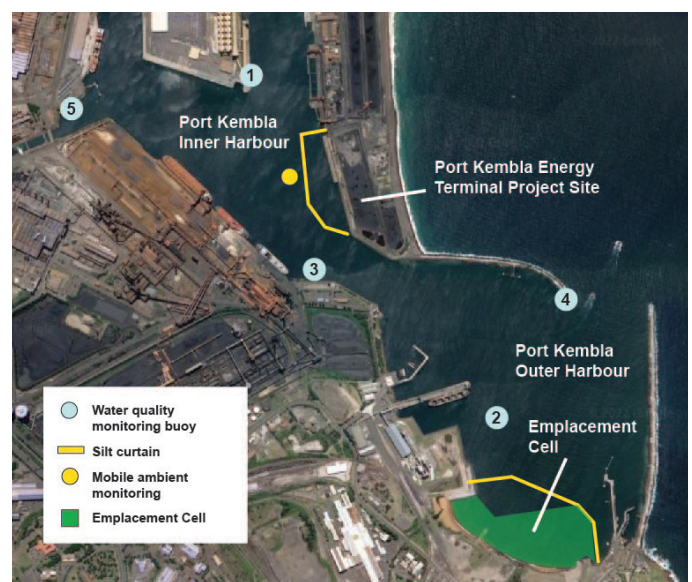
What is dredging and why is it necessary?

Dredging is the excavation of material from a water environment. The Port Kembla Energy Terminal project involves the construction of a new wharf and berthing facility at Berth 101 in Port Kembla. Dredging will increase the amount of space and enable the FSRU vessel and Liquefied Natural Gas Carriers to berth in the inner harbour. Dredging commenced in October 2022 and will be expected to be completed in the first half of 2023. It is taking place 24 hours per day, seven days per week.

What kind of materials are being relocated and where will they go?

We are relocating approximately 450,000m³ of sands, clays and harbour muds, and silts from Berth 101. Port Kembla is a highly industrialised harbour with historical contamination. Assessments of the area to be excavated at Berth 101 show contamination to be relatively minor with risk to marine environment from relocation of the berth material considered low.

Materials are being relocated for beneficial re-use in a purpose-built containment cell in the Outer Harbour known as the Emplacement Cell. This is in line with the project's existing environmental approvals and our Infrastructure approval and NSW Ports' Masterplan. Our Dredge and Excavation Management Plan further outlines how we are mitigating environmental impact by using specialised dredge equipment, silt curtains and water monitoring.





FACTSHEET

Mitigation measures

Protection and respect for the natural environment is what drives us at Squadron Energy and underpins every aspect of our projects.

We are reducing our impact by:

- Installing silt curtains at Berth 101 in the Inner Harbour and surrounding the Emplacement Cell at the Outer Harbour.
- Specific placement of the dredged materials in certain locations within the cell
- Using mechanical backhoe dredging which mobilises a lower level of sediments compared to hydraulic dredging.
- Constructing a wall (or bund) around the Emplacement Cell. This wall will ensure relocated heavier materials don't spread beyond the cell. The bund wall is constructed of sand and rock to ensure the materials are contained during and after the campaign.
- Daily observations and plans in place should monitoring detect early increases in turbidity so we can assess our activities and take action as needed.
- Clearing vessels for flora and fauna prior to arrival at Port Kembla.
- Tracking the movement of vessels in conjunction with the Port Authority to lessen the impact, access and flow of other vessels within and around the harbour.

What is water turbidity?

Turbidity is caused by particles such as silt and mud in water that scatter light making the water appear cloudy or murky. Dredging and relocation of the materials will inevitably cause some turbidity in the Inner and Outer Harbour.

What is a silt curtain?

Silt curtains are a temporary sediment barrier installed to help prevent the dispersion of sediment associated with the dredging activities. The silt curtains are specifically designed for this project to prevent dredged materials spreading into the broader harbour and surrounds. Silt curtains are routinely checked to ensure they are as effective as possible to maintain the dredge sediments.

What kind of water quality monitoring and reporting is taking place?

Five water quality monitoring buoys (WQMB) continuously monitoring turbidity, temperature, pH, electrical conductivity and dissolved oxygen. Three buoys measure impact and two buoys measure background. The impact buoys have trigger alarms to notify key personnel if levels increase. This enables fast action and timely assessment and adjustment of work practices, if required.

Weekly grab samples are taken at each of the five WQMBs and sent to an independent lab for testing. Daily water insitu sampling for turbidity takes place off the Inner Harbour silt curtain when dredging is underway, and visual inspections take place throughout the harbour. Monthly environmental data reports are available on our website.

Who is Squadron Energy?

Squadron Energy is an Australian-owned energy company dedicated to accelerating the decarbonisation of Australia's economy. We have projects and investments in renewable energy across Australia. We also invest in transition projects that are needed to provide a reliable and secure energy system in the short term, without creating longer-term dependence on fossil fuels.

We are a values led company and believe that Australia has a once-in-generation opportunity to position itself as a global leader in green energy and achieve rapid decarbonisation of our economy.

What if I notice something unusual?

Please direct immediate enquiries or concerns to our community hotline on 1800 789 177.