

# ROYAL DUTCH SHELL AUSTRALIA PRELUDE FLNG FACILITY



**Prelude FLNG is a liquid-rich gas field located in North-West Australia, 475 km North-North East of Broome, in approximately 240m water depth. The field subsea development includes 7 subsea wells, 4 production risers, and the world's largest umbilical. EnerMech secured the contract to provide services and equipment to undertake the pre-commissioning works on the risers, electro-hydraulic umbilical (EHU), electrical steel flying lead (ESFL), and electrical flying lead (EFL).**

**Client:** Royal Dutch Shell Australia

**Year:** 2018 - Present

**Product/Service:** Hose Integrity Management

## Scope of Work

Baseline inspection of over 2,800 flexible hoses onsite

Provision of an accurate Master Hose Register. All recorded inspection data held on EnerMech Live Online Hose Management system.

Supply of replacement flexible hose assemblies, based on recorded inspection data with pressure test certificates linked to the system. Recertification of flexible hose assemblies onshore, as required.

Ongoing, scheduled hose inspection campaigns. Supply of expert technical engineering support

## Project Delivery

An experienced EnerMech HIM Supervisor carried out a pre-survey visit to the Prelude FLNG asset to collect critical information to aid the planning and execution of the baseline survey.

A desktop review of asset drawings, datasheets and deck plans was then carried out to pre-populate an asset location breakdown structure to assist in efficient and effective survey planning. The Baseline flexible hose survey was then carried out by 2 HIM Surveyors to generate a complete inventory of all Flexible Hoses on the asset, uniquely tagging each hose for reference to the Master Hose Register and verifying current condition.

## Key Benefits

Master Hose Register is an accurate source of data, ensuring correct supply of replacement hose assemblies when required. Robust and demonstrable Hose Integrity Management programme, with full hose life traceability. Early identification of damaged/defective hose assemblies through regular inspection and frequency-interval replacement strategies improves asset safety, while decreasing the risk of loss of containment to the environment and reducing production loss and equipment downtime.

EnerMech Live Master Hose Register aids in the continuous planning of upcoming hose replacements and appropriate in-house and vendor stock alignment to meet client's maintenance schedules.