



CASE STUDY



Customised laboratory module

OEG was engaged to supply a customised laboratory module for a global energy company, on a rental basis. The unit would facilitate temporary testing and sampling activities during the initial operational phase of a multi-user carbon capture and storage (CCS) project in North-West Australia.

Challenge

OEG was commissioned to deliver a custom-built, transportable laboratory module for offshore deployment. The module would be used short-term to support testing and sampling activities during the initial characterisation and validation phase of CCS operations.

Vital safety and compliance features and climate resilience were required to ensure compliance and operational readiness, the unit would need to meet international accreditation standards, with full certification in place at the point of delivery. This can be particularly challenging with temporary equipment.

A rental model was preferred, offering a more economically and environmentally sustainable solution, whilst supporting the compressed project timeline.

Solution

OEG custom built a 20-foot containerised laboratory module to deliver a practical and compliant solution to meet current and future offshore testing needs. OEG managed design, manufacture, and rapid deployment to meet the short lead time.

Key design features:

- **Integrated electrical control panel**
- **Ergonomic workstation**
- **Climate-controlled environment**
- **Fully compliant fire detection and alarm system**
- **Emergency escape hatch for quick egress**
- **Fume extraction cabinet for safe chemical analysis**

A detailed workpack was provided, helping offshore crews deploy the installation and removal of the module safely and securely.

OEG's extensive experience helped to expedite the accreditation process, ensuring full compliance with regulations, securing DNV 2.7-1 certification and A60 Zone II rating.

Our rental model helped to minimise upfront CAPEX for our customer, while promoting environmental and economic sustainability providing a cost-effective, scalable solution that can be redeployed for future energy projects.



Benefits

- Rapid deployment for early-phase CCS operations
- Certified compliance with offshore safety standards
- End-to-end cost controlled engineering and design service
- Rental model for cost and environmental efficiency
- Flexible rental timing to support dynamic offshore execution schedules
- Certification expertise and expedited accreditation process