WE ALWAYS FIND A WAY TO DELIVER
Clough is a pioneering engineering and construction company established in 1919.

Clough delivers challenging projects for the energy, mining, and infrastructure industries underpinned by a dedication to problem solving and getting the job done safely and efficiently. Today, Clough manages a global workforce of almost 2,000 people from operating centres across Australia, Papua New Guinea, Asia, Africa, UK, and North America that strive for the best in everything they do, setting new safety and performance benchmarks every single day.

Clough is a wholly owned subsidiary of Murray & Roberts, a multinational group that focuses its expertise on delivering sustainable and fit-for-purpose project engineering, procurement, construction, commissioning, operations and maintenance solutions. The Group delivers its capabilities into three global market sectors: metals & minerals, oil & gas, and power & water.

Clough has been active on every major LNG project in Australia & PNG.

**Clough at a Glance**

- **+2,000** Projects completed to date across the globe
- **2,000** Global employees
- **100** Years in Australia - established in 1919
- **+148** Energy projects successfully delivered
- **53** Years’ experience in Energy
- **34** Years’ experience in LNG
HIGH VALUE ENERGY SERVICES

OVER TIME WE HAVE DEVELOPED HIGH VALUE SKILLS TO SUPPORT THE COMPLEX AND GLOBAL NATURE OF THE INDUSTRY. TODAY WE SPECIALISE IN THE DELIVERY OF PROJECT MANAGEMENT, 3D DESIGN, SOPHISTICATED PROCESS ENGINEERING, MODULAR CONSTRUCTION, COMMISSIONING SERVICES, AND BROWNFIELD ENGINEERING, OPERATIONS AND MAINTENANCE SERVICES FOR ENERGY PROJECTS OF ALL SIZES AND COMPLEXITIES.

We aim to maximise the value of our clients’ projects through excellence in project execution, cost efficiency and enhanced productivity performance.

Clough provides services across three key phases of the asset lifecycle – engineering, construction and operations. These functions deliver high value services to clients operating in the Energy, Mining, and Infrastructure sectors.

A Full Asset Lifecycle Delivery model

Clough reduces project risk by providing a complete engineering and project services solution that spans the full asset lifecycle. We engineer to construct and construct to commission, operate and maintain facilities, optimising safety, productivity and cost across every phase of a project. This project execution expertise has been developed through our work on some of the world’s most logistically challenging energy and resources projects, and provides a fresh approach for clients looking for a new way of contracting.

## ENGINEERING

### CONSULTANCY

Engineering studies and support to define and optimise assets
- Concept Evaluation
- Feasibility Studies
- Basis of Design
- Regulatory Approvals
- Specialised Process Engineering Design
- Process Optimisation and Debottlenecking

### CONSTRUCTION

- **OFFSHORE & ONSHORE CONSTRUCTION**
  - Fully integrated EPC, DBC, and Construct-only solutions
- **PROCUREMENT & FABRICATION**
- **INTEGRATED PARTNERSHIPS AND ALLIANCES**
- **SMALL SCALE LNG FACILITIES**
- **PROCESS FACILITIES**
- **POWER GENERATION**
- **GAS PLANTS & COMPRESSION FACILITIES**
- **Pipelines**
- **Civil Infrastructure**
- **Roads and Bridges**
- **Control Systems**

### OPERATIONS

- **COMMISSIONING**
  - Oshshore & Offshore Hook-up, and Commissioning
  - Completion Services
  - Hook-up Services
  - Oshshore and Offshore Pre-commissioning and Commissioning
  - Supply of Technical Trades
  - Hazardous Area Inspection
  - Asian Fabrication Yard Support

### NEAR SHORE MARINE

- **IMPORT & EXPORT JETTIES & TERMINALS, PORT DEVELOPMENTS**
- **IMPORT AND EXPORT JETTIES**
- **JETTY TOPSIDES**
- **PORTS AND HARBOUR INFRASTRUCTURE**
- **QUAY WALLS**
- **MATERIAL OFFLOADING FACILITIES (MOF)**
- **INTAKE AND OUTFALL STRUCTURES**
- **REGASIFICATION TERMINALS**
- **NEAR SHORE PIPELINES**
- **TUG PENS**
- **SUPPLY BASES**
- **MARINE ENGINEERING**

### BROWNFIELDS

- **ASSET OPERATIONS, MAINTENANCE, AND OPTIMISATION SOLUTIONS**
- **RELIABILITY MODELLING**
- **MAINTENANCE MANAGEMENT AND EXECUTION**
- **SHUTDOWNS AND TURNAROUNDS**
- **OPERATIONAL READINESS**
- **SUPPLY CHAIN MANAGEMENT**
- **OPERATIONS MAINTENANCE STAFF**
- **COMPETENCY ASSURANCE AND TRAINING**
- **DECOMMISSIONING**
ENERGY VALUE CHAIN

CLOUGH DESIGNS, CONSTRUCTS, COMMISSIONS AND MAINTAINS A COMPREHENSIVE RANGE OF INFRASTRUCTURE FOR MAJOR ENERGY PROJECTS. OUR SERVICES COVER CIVIL INFRASTRUCTURE, UNCONVENTIONAL GAS, GAS PROCESSING FACILITIES, LIQUEFACTION FACILITIES, LOAD-OUT JETTIES, OFFSHORE PLATFORMS, FPSOS AND FLOATING LNG FACILITIES.

1 CIVIL INFRASTRUCTURE
Roads, bridges, wharves, camps and airports provide critical access to remote Energy project sites. Clough designs and constructs fit for purpose civil infrastructure for Energy projects located in remote and challenging environments.

2 UNCONVENTIONAL GAS
Clough designs, constructs, commissions and maintains upstream infrastructure for coal seam gas and shale gas projects, including gas gathering systems, processing and compression facilities and gas and water pipeline and plant.

3 GAS PROCESSING PLANTS
Since the early 1980s, Clough has been delivering full turnkey services to gas processing plants, including Conceptual and Front End Engineering Design, EPC/EPCM, modularisation, fabrication, construction commissioning, production operations services and control systems.

4 LIQUEFACTION FACILITIES
Clough provides design, project management, construction, commissioning, process optimisation, debottlenecking and maintenance services to liquefaction facilities.

5 LNG LOADOUT JETTIES
Clough has 50 years of experience in the delivery of import and export jetties, jetty topsides, ports and harbour infrastructure, quay walls, MOPs, near shore pipelines, intake and outfall structures, tug pans, regasification terminals and supply bases.

6 OFFSHORE PLATFORMS
Clough has been providing engineering and project management services to the offshore sector for more than 30 years. Today we design, fabricate, transport, commission, and provide production operations support for offshore platforms.

7 FPSOS
Clough provides project management, engineering, procurement, fabrication, hook-up, commissioning and long-term production operations support to Floating Production, Storage and Offloading (FPSO) projects and through Booth Welsh offer a specialised capability in FPSO control systems.

8 FLOATING LNG
Groundbreaking floating LNG (FLNG) technology is the next step in the evolution of the LNG industry. Clough has developed high value engineering, project management, commissioning and brownfield services to support FLNG requirements.
Current and Recent Projects

**Ichthys LNG Project** - IMPS
- INPEX Browne Ltd, Western Australia
- Provision of detailed integrated Project Management Support Services (IMPS).

**Ichthys LNG Hook-up and Commissioning** - Samsung Heavy Industries Co. Ltd / Daewoo Shipbuilding & Marine Engineering Co. Ltd.
- Pre-commissioning, commissioning of offshore integrated float over deck systems, offshore Pre-commissioning, commissioning of three offshore integrated float over deck systems, offshore

**PNG LNG Project**
- Hidetaka Gas Conditioning Plant
  - ExxonMobil PNG Limited
  - Paua New Guinea
- EPC for the gas conditioning plant, nearby wellheads and associated piping and infrastructure.

**PNG LNG Project Hidetaka Gas Conditioning Plant**
- ExxonMobil PNG Limited
- Paua New Guinea
- Construction of critical infrastructure for the PNG LNG project.

**PNG LNG Project Marine Jetty**
- Ichiyoda JOC Joint Venture
- Paua New Guinea
- Design and construction of this jetty for the PNG LNG project.

**Macedon Gas Project** - Onshore Pipelines
- BHP Billiton, Western Australia
- Construction and installation of onshore pipelines and associated umbilical and cable installation.

**Devil Creek Development Project** - EPF
- Apache Energy (now Quadrant Energy), Western Australia
- Engineering, design, works, procurement of and fabrication of all modules for the onshore facility.

**Devil Creek Development Project - EPF**
- Apache Energy (now Quadrant Energy), Western Australia
- Engineering, design, works, procurement of and fabrication of all modules for the onshore facility.

**Marine Lift Campaign**
- Marine Installation Services for the Integrated Marine Lift Campaign.

**Karratha Gas Plant Life Extension**
- Marine Installation Services for the Integrated Marine Lift Campaign.

**Woodside LNG Jetty** - Train V Expansion
- Woodside Energy Ltd, Western Australia
- Construction of a second LNG loading berth at Woodside’s Karratha onshore gas plant.

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**BassGas Project**
- Origin Energy Asia Pacific
- Australia
- EPC for an offshore production platform, subsea and onshore pipelines and onshore gas plant.

**Hazira Gas Project**
- Niko Resources
- Bay of Cambo, India
- EPCIC of an offshore drilling/ wellhead platform, pipelines and fabrication and fabrication.

**LNG Expansion Project - EPICM, Phase IV**
- Woodside Energy Ltd, Western Australia
- EPC for the expansion of the North West Shelf LNG facilities.

**Bayu-Undan Hook-Up and Commissioning**
- ConocoPhillips Australia
- Timor Sea
- Commissioning of the wellhead platform, topsides the entire field production systems.

**Sawar Gas Field Development**
- ONGC
- Thar Desert, Pakistan
- EPC contract for a gas plant consisting of two process trains, and an associated infrastructure.

**Lakshmi Gas Field Development**
- Cairn Energy India Pty Ltd, India
- Thar Desert, Pakistan
- EPCIC for two topsides of Wellhead Platforms, Submarine Pipelines and Offshore Terminal facilities.

**Roma to Brisbane Pipeline**
- Agility
- Queensland
- EPC services for duplication (looping) of existing Roma to Brisbane pipeline.

**PNG LNG Project Upstream Infrastructure**
- ExxonMobil PNG Limited
- Paua New Guinea
- Construction of critical infrastructure for the PNG LNG project.

**EPCIC for two topsides of Wellhead Platforms, Submarine Pipelines and Offshore Terminal facilities.**
- Cairn Energy India Pty Ltd, India
- Thar Desert, Pakistan
- EPCIC for two topsides of Wellhead Platforms, Submarine Pipelines and Offshore Terminal facilities.

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- Cairn Energy India Pty Ltd, India
- Thar Desert, Pakistan
- EPCIC for two topsides of Wellhead Platforms, Submarine Pipelines and Offshore Terminal facilities.

**EPC for the expansion of the North West Shelf LNG facilities.**
- Woodside Energy Ltd, Western Australia
- EPC for the expansion of the North West Shelf LNG facilities.

**EPCIC for two topsides of Wellhead Platforms, Submarine Pipelines and Offshore Terminal facilities.**
- Cairn Energy India Pty Ltd, India
- Thar Desert, Pakistan
- EPCIC for two topsides of Wellhead Platforms, Submarine Pipelines and Offshore Terminal facilities.

**Woodside’s North Rankin ‘A’, Clough’s first major offshore construction project.**
- Woodside Offshore Petroleum Pty Ltd, Western Australia
- Woodside’s North Rankin ‘A’ project.

**Design, installation and pre-commissioning of a 16” sales gas line between Woodside’s Karratha onshore gas plant and the mainline.**
- Woodside Offshore Petroleum Pty Ltd, Western Australia
- Woodside’s North Rankin ‘A’ project.

**Woodside’s North Rankin ‘A’, Clough’s first major offshore construction project.**
- Woodside Offshore Petroleum Pty Ltd, Western Australia
- Woodside’s North Rankin ‘A’ project.

**Design, installation and pre-commissioning of a 16” sales gas line between Woodside’s Karratha onshore gas plant and the mainline.**
- Woodside Offshore Petroleum Pty Ltd, Western Australia
- Woodside’s North Rankin ‘A’ project.

**Wirraway Project**
- Woodside Offshore Petroleum Pty Ltd, Western Australia
- Woodside’s Wirraway Project.

**Design, installation and pre-commissioning of a 16” sales gas line between Woodside’s Karratha onshore gas plant and the mainline.**
- Woodside Offshore Petroleum Pty Ltd, Western Australia
- Woodside’s Wirraway Project.

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- Cairn Energy India Pty Ltd, India
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**Roma to Brisbane Pipeline**
- Agility
- Queensland
- EPC services for duplication (looping) of existing Roma to Brisbane pipeline.

**PNG Oil Refinery Project**
- ConocoPhillips Australia
- Thar Desert, Pakistan
- EPC contract for a gas plant consisting of two process trains, and an associated infrastructure.

**Lakshmi Gas Field Development**
- Cairn Energy India Pty Ltd, India
- Thar Desert, Pakistan
- EPCIC for two topsides of Wellhead Platforms, Submarine Pipelines and Offshore Terminal facilities.

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**PNG Oil Refinery Project**
- ConocoPhillips Australia
- Thar Desert, Pakistan
- EPC contract for a gas plant consisting of two process trains, and an associated infrastructure.
Clough is a wholly owned subsidiary of Murray & Roberts (M&R), South Africa’s leading engineering and construction services company. M&R has delivered infrastructure throughout South and Southern Africa for more than 110 years and today employs a global workforce of over 20,000 people.

CH•IV provides consulting services to LNG asset developers, regulators, facility owners, operators and lenders to ensure assets are designed, developed, constructed and operated safely and in accordance with codes, regulations, and the project’s technical and commercial specifications.

Clough Enercore provides integrated engineering, procurement and construction solutions for Canadian greenfield and brownfield projects. The group specialises in the LNG, heavy oil/oil sands, conventional upstream, midstream & waste processing and downstream oil & gas sectors, taking a production focused approach, working across the entire asset lifecycle.

Established in 1989, Booth Welsh is recognised as a market leader in lifecycle services for control systems, from front end engineering design through to service and replacement. Booth Welsh also act as Clough’s centre of excellence for electrical, control and instrumentation engineering.

PSI Clough combines worldwide resources with local Kazakhstani project delivery expertise to deliver EPC and commissioning projects for some of the world’s largest energy and resources clients across Kazakhstan.

Future Generation is a joint venture between Salini Impregilo, Clough, and Lane, currently delivering the Snowy 2.0 project. Its capability combines Salini’s hydropower and tunnelling expertise with Clough’s engineering and construction expertise.
ENGINEERING

Clough uses advanced technology and a century of engineering and construction expertise to deliver a full suite of engineering services across the entire asset lifecycle, from concept and feasibility studies through to design, delivery, and long-term operation and optimisation.

Our engineers design with a construction mindset to maximise safety, cost, quality and productivity outcomes during the construction and operations phases of a project. Engineering services are incorporated into three delivery solutions:

- Consulting Services cover all asset planning, optimisation and sustainability solutions including concept, feasibility and select studies, basis of design, safety in design, geospatial services, process and plant optimisation and debottlenecking.
- Multidiscipline engineering supports asset definition and execution planning requirements and includes FEED and detailed design services across process, mechanical, piping, pipeline instrumentation, electrical, civil and structural engineering disciplines.
- Engineering and Project Management covers all engineering requirements during the execution phase of a project including project management, project, field and package engineering, procurement support, cost estimating, constructability analysis and safety reviews.

Our engineering model is enhanced by highly specialised engineering capability through CH•IV, who specialise in front-end LNG design, and Booth Welsh, who act as Clough’s centre of excellence for electrical, control and instrumentation engineering.

OURCapabilities
Concept Evaluation
Regulatory Approvals
Project Feasibility Studies
Basis of Design
Front End Engineering Design
Detailed Design
Specialised Process Engineering Design
Engineering, Procurement, Construction and Project Management (EPCM)
Project Management Consultancy (and Services)
Process Optimisation and Debottlenecking
Brownfield Engineering
Electrical Controls and Instrumentation (EC&I)

ICHTHYS INTEGRATED PROJECT MANAGEMENT SERVICES
CLIENT
INPEX
LOCATION
Offshore Darwin, Northern Territory, Australia
CONTRACTING ENTITY
Clough DORIS
SCOPE
Integrated Project Management Services overseeing the detailed design, procurement, fabrication, commissioning, tow to site, and offsite back-up of the Central Processing Facility and FPSO.

TANGGUH EXPANSION PROJECT
CLIENT
BP Berau
LOCATION
Bintuni Bay, West Papua, Indonesia
CONTRACTING ENTITY
Clough
SCOPE
Basis of Design for a 3rd LNG train (T3), mechanical engineering studies and supporting scope development, definition and procurement.

WOODSIDE LNG EXPANSION EPCM PHASE 4
CLIENT
Woodside Energy Ltd
LOCATION
North West Shelf, Australia
CONTRACTING ENTITY
Kellogg Joint Venture
SCOPE
Engineering, procurement and construction management (EPCM) services for the project’s development of the LNG Train 4, Sulphur Unit, Power Generation Unit, Other Utilities, Brownfields Interconnecting Racks, Tie-ins, and Trunkline Onshore Terminal (Basis of Design (BOD) and front end engineering design (FEED) initially).

FREEPORT LNG PROJECT
CLIENT
Freeport LNG
LOCATION
Texas, USA
CONTRACTING ENTITY
CH•IV
SCOPE
Engineering for Federal Energy Regulatory Commission (FERC) application to add a fourth LNG train; pre-FEED services and regulatory requirements to convert an LNG import terminal to a gas liquefaction and LNG export facility; balance of plant FEED for liquefaction facility.

MAGNOLIA LNG PROJECT
CLIENT
Magnolia LNG
LOCATION
Louisiana, USA
CONTRACTING ENTITY
CH•IV
SCOPE
Owners engineer contract providing technical and project execution support personnel to Magnolia, overseeing engineering, procurement, construction contractor KSJV, as the project moves through detailed design, construction, commissioning and start-up.

ARROW ENGINEERING SERVICES
CLIENT
Arrow CSG Australia
LOCATION
Queensland, Australia
CONTRACTING ENTITY
Clough AMEC Foster Wheeler CPE Arrow Joint Venture
SCOPE
Engineering Support, Concept Select, FEED and Execute Engineering, as well as Procurement, Contract, Construction and Commissioning support services for the development of the client’s Surat and Bowen Basin gas assets in Queensland.
CLOUGH DELIVERS A COMPREHENSIVE RANGE OF CONSTRUCTION SOLUTIONS, FROM FULLY INTEGRATED EPC TO DESIGN AND CONSTRUCT AND CONSTRUCT-ONLY SOLUTIONS, INNOVATIVE SAFETY PROGRAMS, PROPRIETARY DAILY REPORTING SYSTEMS AND DISCIPLINED PROJECT MANAGEMENT ADD VALUE ACROSS THE ENTIRE CONSTRUCTION PHASE. An unrelenting commitment to safety underpins all construction activities. Our Target Zero safety management program delivers strong safety performance through behavioural based safety training, leading edge major accidents and events risk management programs and a proactive leading indicator focus. Construction services are supported through disciplined project execution methodologies, sophisticated project reporting systems and nine decades of project management experience. Clough also has more than 60 years’ experience in joint venture and alliance contracting, resulting in a company culture that understands, embraces and integrates with valued partners to deliver outstanding solutions for clients and stakeholders in complex environments. We employ highly skilled engineering, construction and project professionals and have access to a large talent pool of construction workers that are trained in our systems and project execution methods. Leadership positions on every Clough project are filled with highly qualified and experienced construction and project management professionals. Staff incentives are structured based on safety, cost and productivity performance. Clough has also established a Project Manager’s academy, with the aim of ensuring Clough certified project managers are recognised as the best in the industry.

OUR CAPABILITIES
- Fully integrated EPC
- Procurement
- Fabrication
- Design and Construct / Construct-only
- Integrated partnerships and alliances
- Small Scale LNG Facilities
- Power Generation
- Gas Plants & Compression Facilities
- Pipelines
- Water and Waste Water Facilities
- Minerals Handling Facilities
- Petrochemical Plants
- Roads and Bridges
- Control Systems

ONSHORE & OFFSHORE CONSTRUCTION

GORGON PROJECT
- CLIENT: Chevron Australia
- LOCATION: Barrow Island, Western Australia, Australia
- CONTRACTING ENTITY: Kellogg Joint Venture Gorgon (KJVG)
- SCOPE: EPCM, as part of KJVG, for all downstream facilities on the Chevron-operated Gorgon Project – one of the world’s largest natural gas projects.

KI28 UPSTREAM FACILITIES
- CLIENT: Santos / Fluar Australia
- LOCATION: Surat Basin, Queensland, Australia
- CONTRACTING ENTITY: Downer Clough
- SCOPE: Construction of more than 400 kilometres of gas and water transmission pipelines, two compression facilities, six water storage dams an 800-person camp and expansion of the existing Fairview compression facilities.

AMMONIUM NITRATE/NITRIC ACID PLANT NUMBER 3
- CLIENT: CSBP Limited
- LOCATION: Kwinana, Western Australia, Australia
- CONTRACTING ENTITY: Downer Clough
- SCOPE: Project management, engineering, procurement, pre-fabrication, construction and pre-commissioning for the NAAN3 Ammonium Nitrate plant. The contract was awarded after successful completion of the ECI phase.

PNG LNG PROJECT HIDES GAS CONDITIONING PLANT
- CLIENT: ExxonMobil PNG Limited
- LOCATION: Hela Province, Papua New Guinea
- CONTRACTING ENTITY: Clough JV
- SCOPE: Engineering, procurement and construction work for the gas conditioning plant, nearby wellpads and associated piping and infrastructure.

PNG LNG PROJECT UPSTREAM INFRASTRUCTURE
- CLIENT: ExxonMobil PNG Limited
- LOCATION: Hela, Southern Highlands and Gulf Provinces in Papua New Guinea
- CONTRACTING ENTITY: Clough Curtain JV
- SCOPE: Construction of critical upstream infrastructure across 12 geographically dispersed sites in PNG. Scope included roads, bridges, wharves, laydown and camp areas, gas pipelines and wellpads.

POM POWER STATION
- CLIENT: NiuPower
- LOCATION: Port Moresby, Papua New Guinea
- CONTRACTING ENTITY: Wartsila Clough
- SCOPE: Engineering, procurement, and construction to develop the POM Power Station near Port Moresby in Papua New Guinea. The POM Power Station uses natural gas supplied by the PNG LNG project to feed six high efficiency Reciprocating Gas engines and generators.
WITH A REPUTATION FOR DESIGN AND CONSTRUCTION EXCELLENCE, CLOUGH IS THE MARKET LEADER IN NEAR SHORE MARINE PROJECT DELIVERY.

Since 1964 Clough has combined worldwide resources with local project delivery expertise to deliver jetty and near shore marine projects for some of the world’s largest energy and resource clients.

With a worldwide talent pool, state of the art design and construction methods, and technologically advanced equipment, Clough presents a low risk, high quality option for near shore marine challenges.

OUR CAPABILITIES

Import and Export Jetties
Jetty Topsides
Ports and Harbour Infrastructure
Quay Walls
MRF's
Intake and Outfall Structures
Regasification Terminals
Near Shore Pipelines
Tug Pans
Supply Bases
Marine Engineering

KARRATHA GAS PLANT LIFE EXTENSION INTEGRATED MARINE

CLIENT
Woodside Energy Limited

LOCATION
Karratha, Western Australia, Australia

CONTRACTING ENTITY
BAM Clough

SCOPE
Project management and installation engineering associated with replacing existing equipment on two berths, including LNG and LPG marine loading arms, gangways and dolphin fenders.

WHEATSTONE PROJECT JETTY

CLIENT
Bechtel

LOCATION
Onslow, Western Australia, Australia

CONTRACTING ENTITY
BAM Clough

SCOPE
Design and construction of a 1.2 kilometre jetty with operations and product loading platforms, a single LNG and condensate loadout berth, and associated piping modules and piping installation.

ICHTHYS LNG PROJECT PRODUCT LOADING JETTY AND MOF

CLIENT
JKC Australia LNG Pty Ltd (JKC) (a joint venture between JGC Corporation, KBR and Chiyoda Corporation)

LOCATION
Darwin, Northern Territory, Australia

CONTRACTING ENTITY
BAM Clough

SCOPE
Design and construction of two separate vessel load-out berths, one for LNG carriers and a second for LPG / condensate carriers, and the MOF, a key facility for offloading modules to assemble the LNG liquefaction plant.

WHEATSTONE PROJECT JETTY

CLIENT
Bechtel

LOCATION
Onslow, Western Australia, Australia

CONTRACTING ENTITY
BAM Clough

SCOPE
Design and construction of a 1.2 kilometre jetty with operations and product loading platforms, a single LNG and condensate loadout berth, and associated piping modules and piping installation.

MALAYSIA MANUFACTURING PROJECT

CLIENT
VALE

LOCATION
Malaysia

CONTRACTING ENTITY
Murray & Roberts Marine

SCOPE
Design of a materials handling quay and management of construction for marine headquarters and jetty.

PNG LNG PROJECT MARINE JETTY

CLIENT
Bechtel Chiyoda JGC Joint Venture

LOCATION
Gulf of Papua, Papua New Guinea

CONTRACTING ENTITY
BAM Clough

SCOPE
Design and construction of a 2.4 kilometre triple with substation platform, loading platform and single berth. Scope included fabrication and construction of the topsides.

PLUTO LNG JETTY

CLIENT
Woodside Energy Limited

LOCATION
Karratha, Western Australia, Australia

CONTRACTING ENTITY
BAM Clough

SCOPE
Design and construction of a 300 metre long approach LNG jetty including a 45 x 50 metre platform, four breasting dolphins, six mooring dolphins and navigational aids.
SUCCESSFUL COMMISSIONING PLANNING AND EXECUTION CAN REDUCE THE SCHEDULE AND COST OVERRUN RISKS PRIOR TO THE START-UP OF OPERATIONS.

Clough is Australia’s largest commissioning contractor, offering integrated owner’s commissioning solutions. We bridge the gap between construction and operations to enable safe and orderly asset handover, while minimising the risk of production downtime.

Our commissioning teams plan for commissioning requirements across the entire project lifecycle, from conceptual and detailed design through to procurement, construction, start-up and handover. This service identifies and schedules commissioning requirements early, enabling timely detection and intervention on potential schedule delays. We also work with clients to ensure commissioning procedures are developed in line with operating needs.

Through its wholly owned subsidiary e2o, Clough has access to over 2,000 commissioning technicians across Australia and Asia. From its base in Geoje, South Korea, the CloughCoens JV delivers commissioning services to projects under construction in Asian fabrication yards.

Commissioning services are supported by sophisticated commissioning systems and an extensive database of blue collar resources that check, inspect and test every operational component of the asset prior to handover.

WHEATSTONE PROJECT
HOOK-UP AND COMMISSIONING

CLIENT
Chevron Australia

LOCATION
200 kilometres north of Onslow, Western Australia, Australia

CONTRACTING ENTITY
Clough

SCOPE
Provision of an independent commissioning team to assist the client with pre-commissioning, commissioning of integrated float over deck systems, offshore hook-up, and start-up assistance.

APLNG UPSTREAM COMMISSIONING

CLIENT
Origin

LOCATION
Surat and Bloven Basins, Queensland, Australia

CONTRACTING ENTITY
e2o

SCOPE
Commissioning, structural design and implementation of the completions/commissioning management software (CCMS).

GLADSTONE LNG COMMISSIONING MANAGEMENT SERVICES

CLIENT
Santos

LOCATION
Surat Basin, Queensland, Australia

CONTRACTING ENTITY
e2o

SCOPE
Commissioning management services for the upstream field development, and commissioning of the pipeline for the upstream project.

GORGON COMMISSIONING

CLIENT
Chevron Australia

LOCATION
Barrow Island, Western Australia, Australia

CONTRACTING ENTITY
Clough

SCOPE
Deployment of commissioning personnel to support commissioning of the downstream facilities.

ICHTHYS LNG HOOK-UP AND COMMISSIONING

CLIENT
FUBLEX

LOCATION
Western Australia, Australia

CONTRACTING ENTITY
Clough Coens

SCOPE
Commissioning and hook-up of the CPF and FPSD.

COMMISSIONING SUPPORT ASIA

CLIENT
BP, Shell, Chevron, SSHI, DSME, HHI

LOCATION
South Korea

CONTRACTING ENTITY
Clough Coens

SCOPE
The deployment of qualified commissioning technicians to support operators in the completions and commissioning of multiple offshore assets for various clients across the major fabrication yards in South Korea.
CLough provides a full range of operations and maintenance solutions to maximise the life and profitability of operating assets. These solutions include production engineering, operational readiness, asset management, shutdowns and general maintenance planning and execution, and decommissioning.

Clough has a track record of successfully executing major shutdowns, turnarounds and maintenance programs for onshore and offshore oil and gas facilities. Our brownfield project management systems are designed to maximise workforce productivity while minimising facility downtime and cost through effective planning, scheduling, workpackaging and job carding.

Our sophisticated competency assessment and training programs utilise a combination of classroom and e-learning systems that provide skilled and qualified operating staff. Clough can also develop operations procedures and operator training and development programs based on our client’s requirements.

WHEATSTONE PROJECT ORM
CLIENT Chevron Australia
LOCATION 200 kilometres north of Onslow, Western Australia, Australia
CONTRACTING ENTITY Clough AMEC
SCOPE Developing the maintenance database, assessing operational readiness for the offshore facilities, development of operations procedures and training and development programs, and engineering and support services.

BAYU-UNDAN OPERATIONS AND MAINTENANCE
CLIENT ConocoPhillips Australia
LOCATION Timor Sea
CONTRACTING ENTITY Clough AMEC
SCOPE Operations and maintenance services for ConocoPhillips’ Bayu-Undan facilities consisting of a floating storage, offloading facility and three fixed platforms. Recipient of the ConocoPhillips 2018 Supplier Recognition Award for Focus on Execution.

BLACKTIP
CLIENT ENI Australia
LOCATION Northern Territory and Western Australia, Australia
CONTRACTING ENTITY Clough AMEC
SCOPE Provision of trades labour to support routine and campaign maintenance and supporting services including specialist consultancy services, multidiscipline engineering, procurement, and management of subcontractors and fabrication.

OFFSHORE MAINTENANCE SERVICES
CLIENT Woodside
LOCATION North West Shelf, Australia
CONTRACTING ENTITY Clough AMEC
SCOPE Supply of maintenance and trades personnel for all of Woodside’s Australian offshore oil and gas assets.

KUMUL TERMINAL REJUVENATION PROJECT
CLIENT Oil Search PNG
LOCATION Offshore Papua New Guinea
CONTRACTING ENTITY Clough AMEC
SCOPE Construction management and execution services for the rejuvenation of the Kumul Marine Terminal, located approximately 40km off the southern coast of PNG.

BARROW ISLAND ENGINEERING SERVICES
CLIENT Chevron Australia
LOCATION Barrow and Thevenard Islands, Western Australia, Australia
CONTRACTING ENTITY Clough AMEC
SCOPE Engineering Services Contract for Chevron’s oil production facilities at Barrow and Thevenard Islands.

BROWNFIELDS

OUR CAPABILITIES
Operations Engineering
Reliability Modeling
Maintenance Management and Execution
Supply of Maintenance Trades
Shutdowns and Turnarounds
Operational Readiness
Supply Chain Management
Competency Assurance and Training
Sustaining Capital Projects (EPC)
IR Management
Decommissioning

Recipient of the ConocoPhillips 2018 Supplier Recognition Award for Focus on Execution.
SAFETY, ENVIRONMENT & COMMUNITY

THROUGH THE TARGET ZERO AND MAP PROGRAMS, AND CLOUGH FOUNDATION, CLOUGH DELIVERS INDUSTRY LEADING SAFETY AND ENVIRONMENTAL PERFORMANCE WHILE PROTECTING AND GIVING BACK TO LOCAL COMMUNITIES.

SAFETY EXCELLENCE

Safety is a value on which we never compromise. While Clough’s safety performance is significantly better than the global contracting industry average, we continue to work towards a workplace that is incident and injury free by driving safety leadership accountability and developing our people.

Our Target Zero safety program takes a full project lifecycle view on safety – from design through to execution and operation. We employ behavioural based safety programs across every phase of a project. Leading indicators play a key role in the measurement of our safety performance.

Clough’s Major Accident Prevention (MAP) brings offshore safety case principles to the onshore construction environment. By analysing activities with potential for major accidents or events, and implementing critical controls, MAP provides lifesaving tools to provide real-time, line of sight management of potential major hazards.

ENVIRONMENT

Clough is committed to continuous improvement in environmental performance throughout our global operations. Over and above the commitments stated in our HSE policy, we actively seek out ways to continually deliver environmental excellence for our clients and the communities in which we operate. Our environmental management processes are embedded into our business delivery processes, championed by our environmental specialists and delivered by our management, engineering and project teams.

COMMUNITY

Clough embeds dedicated community relations professionals on our projects to implement programs that deliver tangible community benefits while achieving project objectives. Community engagement strategies are developed to facilitate community support and involvement, meet local stakeholder needs, minimise disruption and provide local and indigenous employment opportunities.

We understand the importance of giving back to the communities in which we live and work. Through Clough’s dedicated Charitable Trust, The Clough Foundation, Clough supports a range of local community groups to provide sustained benefits to local communities, strengthen stakeholder relationships and encourage employee involvement in community initiatives.

Clough has achieved zero harm on several recent projects:

- Oyu Tolgoi Mine Site (Rio Tinto), Gobi Desert, Mongolia
  - 2 million work hours / +700 days on site / 1 MTI injury / zero environmental impacts
- POM Power Station (Nui Power - Oil Search and Kumul Petroleum), Papua New Guinea
  - +800,000 work hours / +500 days on site / zero injuries / zero environmental impacts
- Mundaring Outlet Upgrade Project (Water Corporation of WA), Western Australia
  - +66,133 work hours / 457 days on site / 1 first aid injury / zero environmental impacts
- Karratha Life Extension (KLE) Marine Installation Services (Woodside Energy Ltd), Western Australia
  - 91,617 work hours / 235 days on site / zero injuries / zero environmental impacts

KEY CAPABILITIES

- Strong safety performance
- Safety addressed across the asset lifecycle
- Major Accident Prevention (MAP) Risk Management Program
- Behavioural based safety programs fundamental to improving safety performance
- Focus on leading as well as lagging indicators
- Commitment to environmental excellence
- Programs to engage and give back to the community

LTIF 0.15 / TRI 1.18
(12MR Apr 18 - Mar 2019)
Best LTIF free run: 555 days
Best TRI free run: 164 days

CLOUGH HAS ACHIEVED ZERO HARM ON SEVERAL RECENT PROJECTS
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CLOUGHCROUP.COM

WE ALWAYS
FIND A WAY TO
DELIVER