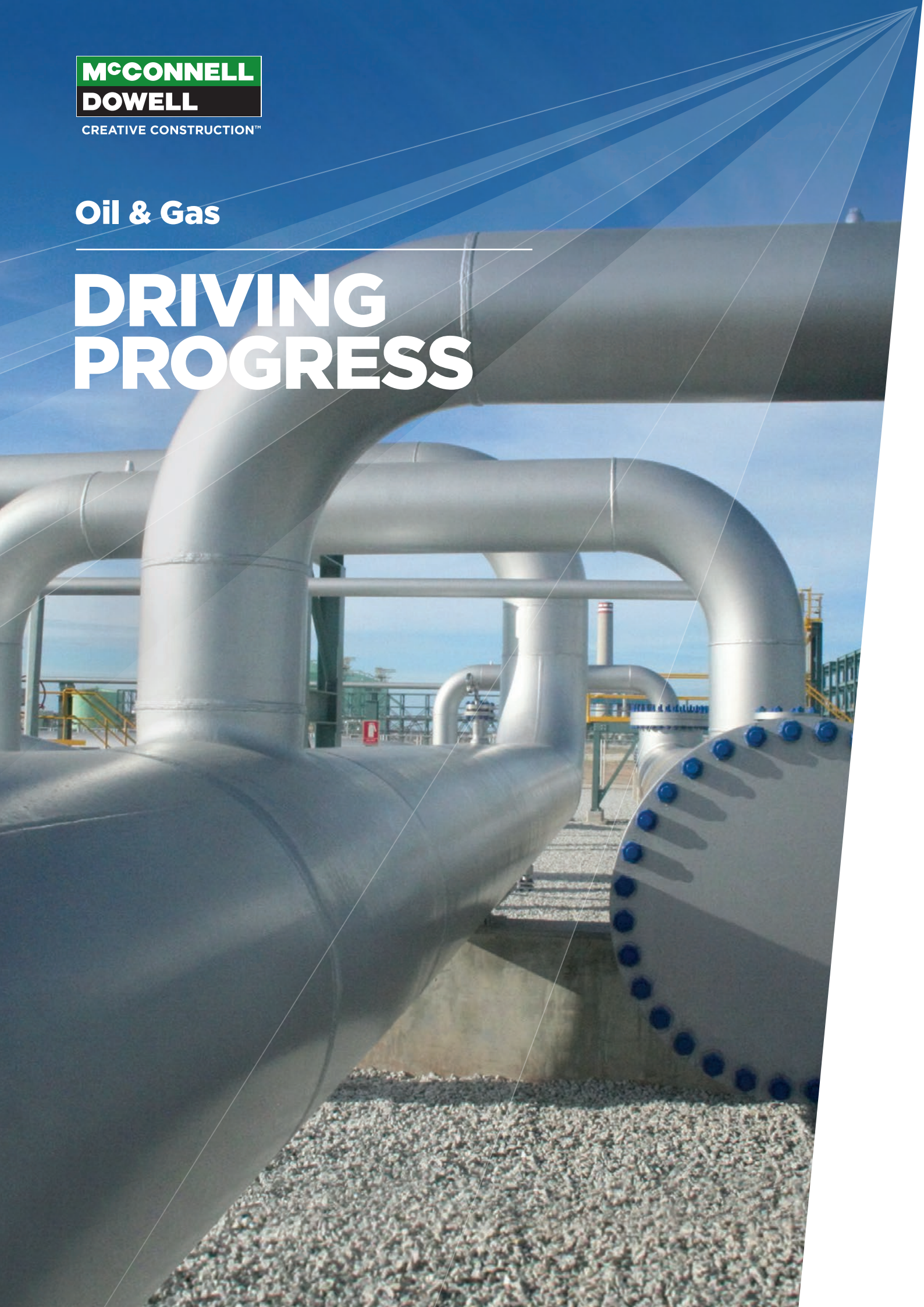


Oil & Gas

DRIVING PROGRESS



Innovation and creative construction in Oil & Gas.



From major processing facilities and pipelines, to civil and marine infrastructure, McConnell Dowell delivers outstanding oil and gas solutions for our customers and the community.

Capability, Capacity and Creativity

We have been delivering creative Engineering, Procurement and Construction (EPC) solutions to the international oil and gas industry for more than 50 years.

Our capability is truly multi-disciplinary. From pipelines, mechanical, civil and marine works; through to our world-class in-house fabrication facilities; the depth and breadth of our offer drives innovative, cost efficient construction and effective risk management.

Safe, Assured and Committed

At McConnell Dowell, we are committed to safety and ensuring everyone goes 'Home Without Harm'. Everything we do is focused on minimising impact on our customers, the environment and the community.

Our collaborative and professional approach, combined with our ISO accredited project management systems, ensures high quality infrastructure is delivered on time and within budget.

As active members of the International Pipeline and Offshore Contractors Association (IPLOCA), Australian Pipelines and Gas Association (APGA) and Australian Petroleum Production & Exploration Association (APPEA), we are at the forefront of industry innovation and best practice.



**Our progressive
thinking and creative
approach is what
makes us different.**





From ambitious resource projects in remote locations to large-scale, city-changing infrastructure, for over 50 years customers have been coming to McConnell Dowell with complex projects that require innovative solutions.

So we've built a culture of progressive thinking. It's an approach that looks for opportunities, embraces change and finds different, creative solutions to difficult problems.

Building better communities and providing a better life


McConnell Dowell is founded on a proud heritage of innovation and pioneering spirit. In collaboration with our customers and partners, we have a proven track record of building better communities through safe, smart and efficient infrastructure. Since the early 1960's our reputation has been forged by finding innovative solutions and delivering creative construction outcomes that contribute positively to those communities.

Our progressive thinking, on-going culture of expertise, innovation and creative approach is what sets us apart. It's why our projects consistently win industry awards and why so many of our customers keep coming back to us.

Innovation that improves lives

We care deeply about the people we work with: our customers, our employees, our partners, investors and the communities we serve around the world.

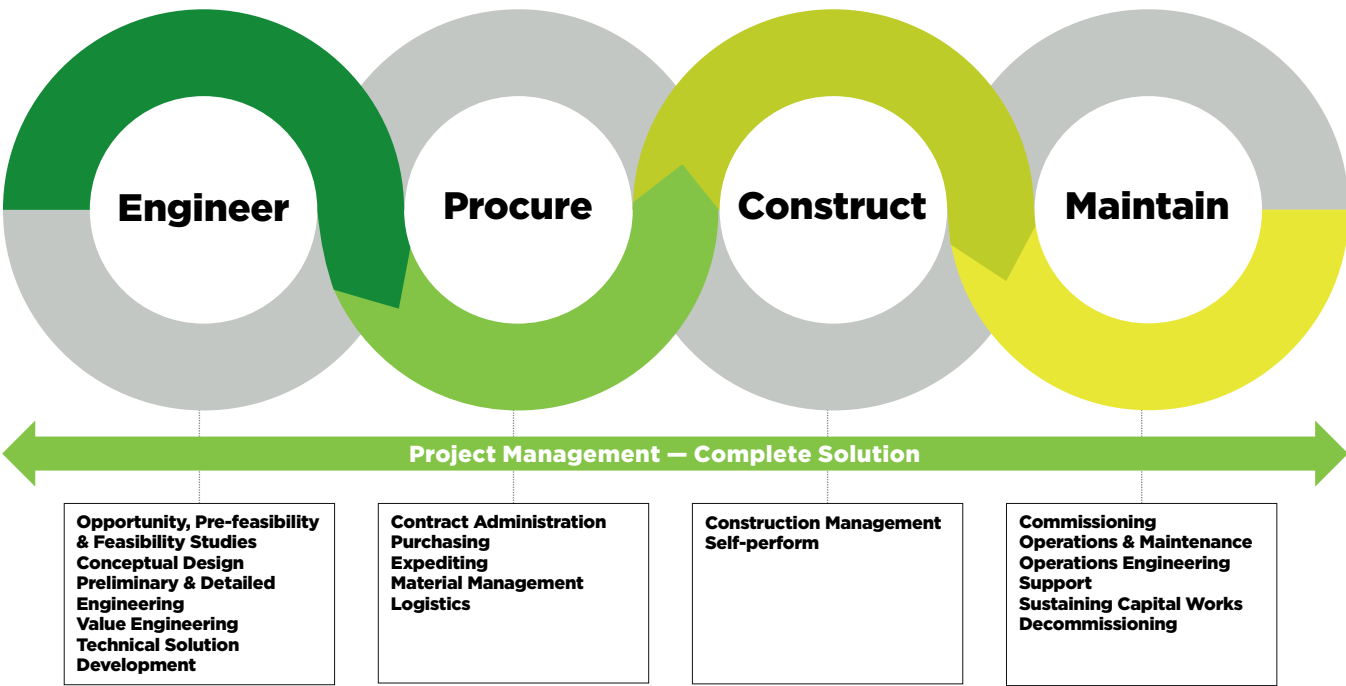
We foster a safe, high quality, systematic and structured approach that allows people to challenge ideas, find hidden insights, look for innovative solutions and deliver infrastructure that improves the quality of life and benefits all stakeholders.



BUSINESS MODEL

A value offering encompassing part or full optimal integration of the complete life cycle of project execution; Project Management, Engineering, Procurement, Construction, Commissioning and Operations.

Value Offering



Market Sectors

Infrastructure

- Power
- Water & Waste Water
- Transport

Resources

- Mining & Metals
- Oil & Gas
- Petrochemical

Building

- Government
- Commercial/Industrial
- Social/Residential

Specialist Capabilities

- Marine
- Pipelines
- Tunnel & Underground
- Rail
- Mechanical
- Civil
- Fabrication
- Building



We operate throughout Australia, Asia, New Zealand, Pacific Islands and the Middle East. Bringing local knowledge and international expertise.



PIPELINES

McConnell Dowell is a leading international pipeline contractor that has constructed more than 200 gas, petroleum, water and slurry pipeline projects.

We have helped drive economic and social progress across Australia, New Zealand, Asia, Africa and the Middle East in often challenging environments.

We are experts in large diameter pipeline construction and have delivered gas pipelines up to 1300 mm (50") in diameter.

Our competencies cover heavy equipment and lifts, welding, deep trenches and tight easements.

Our specialist in-house skills also enable us to carry out HDD, micro-tunnelling, marine pipe-pulls, pipe bridges and other complex crossing solutions.

McConnell Dowell owns and operates the largest fleet of pipeline plant and equipment in Australasia, allowing us to provide cost-effective and responsive construction services to our customers.





OUR PROJECTS

EPC Contract

60 km of 42-inch diameter pipeline, 18 block valve stations

20 km of pipe installation by Direct Pipe processes

Thailand


Nakhon Ratchasima Pipeline Extension



The Nakhon Ratchasima Pipeline Project is being delivered for PTT Public Company Limited, Thailand's state-owned oil and gas company.

The project involves the design, procurement, construction and commissioning of a 48 km, 28-inch diameter gas pipeline linking the Provincial Gas Transmission Pipeline Project to Nakhon Ratchasima Extension Phase.

The works include procurement of all line pipe, valves and permanent materials, construction of four block valve stations and tie-in facilities, SCADA and communications systems. The project is using innovation construction methodology utilising trenchless technology to minimise impact on stakeholders.

-  **Pipelines**
-  **Mechanical**
-  **Civil**
-  **Fabrication**
-  **Tunnel & Underground**

Australia

Northern Gas Pipeline

Leaders in cross-country pipeline and facilities construction.

The construction and pre-commissioning of approximately 481 km of high-pressure gas pipelines and associated facilities, including two mainline valves and a midline scraper station. The pipeline transports gas from existing offshore and onshore gas reserves in the Northern Territory into Queensland to supply industry around Mount Isa.

Fabrication works include the fabrication of above ground pig launcher and receivers, mainline valve assemblies and cathodic protection (CP) sites. Facility installation works include the construction and installation of three mainline valve (MLV) sites including a deep well anode ground bed at one mainline valve site.

From the outset of the project, McConnell Dowell worked in an integrated team with customer Jemena to develop innovative construction solutions to successfully overcome the numerous logistical, stakeholder, environmental and resource constraints associated with this remote location project.

481 km, 12" API5L x70 ERW pipeline

Three cathodic protection stations

Two 12" mainline valve stations

One 12" midline station (pig trap)



Pipelines



Mechanical



Civil



Australia

Australia Pacific LNG EPC Pipelines Project

Feed services followed by EPC contract
360 km, 42 " mainline
57 km, 36 " Condabri lateral
2015 IPA Contractor Excellence Award Winner



Australia Pacific LNG Pty Ltd - an incorporated joint venture between Origin, ConocoPhillips and Sinopec - is delivering a world-scale coal seam gas (CSG) to liquefied natural gas (LNG) project in Queensland, Australia.

MCJV, a McConnell Dowell and Consolidated Contractors Company joint venture, delivered Early Works services (FEED) and was then appointed EPC contractor to deliver the high-pressure gas pipeline - including the 360 km, 42 "main export pipeline, the Condabri lateral pipelines and associated facilities - running between the CSG fields to Curtis Island, off Gladstone in Queensland. This project is one of the largest, longest and most complex pipelines ever constructed in Australia.

The project team successfully overcame challenges of steep terrain, flood and logistics through execution excellence and innovative problem solving.

A collaborative cultural framework aligned with early contractor involvement, raised the benchmark for best practice project management with industry leading results in safety, environment, quality and cultural heritage. Best-for-project decision making was institutionalised and a unified culture optimised management and workforce performance.

-  **Mechanical**
-  **Civil**
-  **Fabrication**

Hong Kong

Installation of Submarine Pipelines and Associated Facilities

3.2 km twin submarine gas pipeline

1.1 km, 600 mm diameter onshore gas pipeline

Seawall removal and reinstatement

Main gas supply link for Hong Kong



McConnell Dowell installed twin submarine gas pipelines and associated facilities from To Kwa Wan to North Point in Hong Kong to become the main gas supply link for Hong Kong Island.

A double-opposed curved 3.2 km section of twin submarine gas pipeline was laid across the bustling Victoria Harbour. Upon the pipelines arriving onshore, we removed and reinstated the concrete gravity block seawalls on both sides of the harbour.

A bottom pipe-pull methodology was used to install 2,700 m of twin pipeline with a heavy 76 mm diameter steel pull wire, minimising deviation from the design curve alignment. We then launched a float and sink methodology for the 200 m landfall sections on each side of the harbour.



Marine



Pipelines



Mechanical



Civil





MECHANICAL

McConnell Dowell's global self-performance capability is fundamental to the successful delivery of mechanical projects.

Our fully-integrated service includes civil works, fabrication and structural mechanical piping (SMP), supported by our global engineering, procurement, construction and electrical and instrumentation capabilities.

Our construction and commissioning schedules are coordinated locally to take advantage of a strong understanding of regional construction capabilities, capacity and performance. This enables us to control safety, quality, scheduling and costs. Construction is optimised through modularisation, maximising offsite fabrication and minimising site construction risks and durations.

We leverage off our international procurement resources and fabrication facilities to maximise value for money and eliminate project risks.

OUR PROJECTS

Condensate filtration system & storage gas filtration system

39 km, 26-30 " pipeline

273 km slug catcher

Vietnam

Nam Con Son Onshore Gas Processing Facilities



The Nam Con Son Onshore Gas Processing plant handles a gas rate of 370 mmscfd and liquid handling facilities for a peak rate of 5625 bpd of stabilised condensate.

BP Pipelines Vietnam awarded McConnell Dowell the design, procure, construct and commission contract for its onshore gas processing facility and export pipeline at Dinh Co, outside Vung Tau in Southern Vietnam.

McConnell Dowell's design and construction work on the plant included a slug catcher, condensate filtration, storage and export systems, gas filtration and dewpoint control systems.

The 39 km, 26-30 " export pipeline was constructed through villages, paddy fields and swamps from Long Hai beach to a power station at Phu My. Pipeline pigging facilities and a metering station were also constructed.



Pipelines



Mechanical



Civil



Fabrication

Australia

GLNG Upstream Roma Hub and Pipelines Project

Zero lost time injuries

1.65 million m³ earthworks

300 km hdpe, cs & gre pipelines

Well head infrastructure

11, 000 m³ concrete foundations

300 km cabling



Through the conversion of coal seam gas to Liquefied Natural Gas (LNG), the Santos GLNG Project enables natural gas in Australia to be distributed to the global market.

The project included construction of a gas compression and water treatment hub with a capacity of 145 TJ per day and the associated infrastructure and water gathering lines at the coal seam gas fields around Roma.

The multi-disciplinary project focused on gas compression, power generation and water treatment facilities in addition to pipeline construction. To achieve the highest level of responsiveness and quality standards, we employed an integrated team with experience in engineering, civil, pipelines, SMP, electrical and instrumentation disciplines who self-performed a large percentage of the works and also managed specialist subcontractors.



Pipelines



Mechanical



Civil



Building

FABRICATION

McConnell Dowell's integrated fabrication and procurement facilities offer oil and gas customers a strategic commercial advantage in the supply of project materials.

McConnell Dowell operates major fabrication facilities in Indonesia, Thailand, the United Arab Emirates and New Zealand. These facilities deliver a comprehensive design, procurement, construction and fabrication service that drives value and quality through the supply chain.

Our fabrication services span structural steel and marine structures, mechanical steelwork and process piping, process modules and pre-assembled racks, concrete structures and concrete modules.

We ship steel and concrete structures from our fabrication yards to projects around the world. Our experienced professionals have the knowledge, expertise and local contacts to manage the most challenging logistical supply chains and deliver value for money with certainty.









EPC PROJECTS

McConnell Dowell is the partner of choice for complex Engineering, Procurement and Construction (EPC) projects.

We offer an integrated, multidisciplinary service. This approach eliminates contractor interface risks for customers, reduces project timelines and drives cost savings through project development and delivery.

We draw on specialist structural mechanical piping, civil, marine and fabrication capabilities to provide high quality, safe and sustainable project outcomes with commercial savings for our customers.

We bring our commitment and expertise in safety, environmental and stakeholder management to each project to ensure we meet and exceed our customer requirements.

OUR PROJECTS

Complex multi-disciplinary scope

Tank foundations

Jetty topside construction

Singapore workplace Safety & Health Award



Singapore

Helios Bulk Liquid Storage & Blending Facility

The expansion of petrochemical and storage works on Jurong Island has seen local and global industry develop as a strong contributor to Singapore's economy.

McConnell Dowell delivered the engineering, procurement, fabrication and mechanical and civil construction service of bulk storage and blending facilities of 448,000 m³ total volume for Helios Terminals Corporation in Singapore.

This included tank foundations, bund walls, pipe racks, valve and pump manifold, piping, electrical and instrumentation works, buildings, loading arms, jetty topsides and a new finger pier.

McConnell Dowell effectively mobilised several concurrent work fronts on a constrained site.

Structural steel and large bore piping was prefabricated in our Batam Indonesia fabrication yard with an onsite workshop set up for the balance of piping fabrication.



Marine



Pipelines



Mechanical



Civil



Fabrication



Building

Australia

Queensland Curtis LNG Narrows Crossing



Twin 12 km, 42 " export pipeline

2.3 km marine pipe pull

1.6 km hdds

Complex temporary works

Environmental management excellence

The QCLNG Project expanded QGC's existing natural gas production in the Surat Basin in southern Queensland, and ensures natural gas is transported economically across the globe.

The EPC contract required the connection of two 42 " coal seam gas (CSG) export pipelines from their termination points, across the Narrows Channel at Gladstone to connect to LNG plants sited on Curtis Island in Queensland, Australia.

McConnell Dowell implemented an innovative pipe launch methodology involving a causeway, pipe cofferdam and launching infrastructure.

The successful method involved twin 1.6 km 63 " Horizontal Directional Drills and Australia's longest large-diameter underwater pipe-pull, with the twin gas pipelines laid simultaneously across Gladstone Harbour for 2.3 km.

McConnell Dowell built a gas pipeline delivery station on Curtis Island for pigging, drying and metering the exported CSG. This included 8,618 "diameter piping fabrication and site installation, electrical and installation work.



Marine



Pipelines



Rail



Mechanical



Civil



Fabrication



Building



CREATIVE CONSTRUCTION™

**DRIVING
PROGRESS**

mcconnelldowell.com