A world designed to last

O&M Consulting

Maximizing asset value through operations excellence



TECHNIP ENERGIES

Driving excellence in Operations & Maintenance

We are a global technology & engineering powerhouse in energy & decarbonization infrastructure, with a 65+ year track record of delivering large and complex projects.

A strategic partner for stewarding your O&M activities and tackling technical challenges.

Each client has a unique operational challenge. Our O&M Consulting teams are prepared to deliver customized solutions aligned with your goals. We prioritize partnership and collaboration to drive value through operations excellence.



KEY MARKETS

- Downstream (Petrochemicals, Refining)
- Upstream (Offshore & Onshore)
- LNG & Gas
- Sustainable Energies (Circularity, CCUS, SAF, Hydrogen)
- Mining & Metals
- Life Sciences



OUR O&M CONSULTING HELPS YOU

- **Simplify operations**
- **Manage uncertainty**
- **Optimize OPEX**
- **Leverage the latest technologies**

65+
years successfully delivering large and complex projects

18,000+
employees in 35 countries

500+
operating plants delivered globally

40,000+
available construction and operations contracted resources

Integrated O&M solutions across the asset life cycle

Technip Energies provides comprehensive O&M solutions across the energy value chain, combining operational, technical and digital expertise to manage, monitor and optimize asset performance.

From commissioning and startup through to decommissioning, we support asset owners at every stage of the operating life cycle. With Technip Energies, you have a trusted partner for the life of your asset.



COMMISSIONING, STARTUP & READINESS

Services to secure a smooth transition between EPC and O&M.

OPERATIONS PERFORMANCE

Solutions to ensure safe and efficient plant performance.

RELIABILITY, INTEGRITY & MAINTENANCE

Support to establish reliability and integrity of assets while minimizing downtime.

SHUTDOWN & TURNAROUND

Turnaround planning and management by implementing best practices.

MODIFICATIONS & UPGRADES

Brownfield engineering capabilities that deliver efficient and reliable operations while maximizing plant performance.

Your partner for operational excellence

Operations & maintenance consulting capabilities

Technip Eneries' O&M Consulting supports operators and asset owners in enhancing the operational **performance, reliability and safety** of their industrial assets. We help clients address operational challenges and unlock greater value from their existing facilities through targeted guidance and proven O&M expertise.

Our global network of specialists combines deep **engineering know-how with advanced methodologies and digital solutions** to optimize plant performance, strengthen decision-making and improve overall efficiency. By aligning processes, data and technology, we empower operators to run safer, smarter and more resilient operations across their brownfield facilities.

Whether supporting **improvement initiatives**, providing high-value technical insights or helping clients address complex operational challenges, our O&M Consulting teams provide the expertise needed to maintain reliable operations and long-term asset performance—delivering measurable value throughout the operational life cycle.

Flexible Delivery models for every operational need

Whatever your operational needs, Technip Energies' O&M Consulting teams provide flexible solutions designed to optimize the life cycle of your assets.

DAY-TO-DAY SITE CONSULTING

Providing embedded, ongoing support directly at the site to ensure smooth and efficient operations. This includes on-site O&M coordination, contractor supervision, KPI monitoring and reporting, and continuous improvement initiatives.

TECHNICAL STUDIES & SERVICE ORDERS

On-demand, technical studies and task-specific services delivered through clearly defined scopes and deliverables, enabling efficient transactional engagement. This model provides rapid access to Technip Energies' expertise, with a focus on precise task execution and responsiveness to immediate operational needs.

TECHNICAL FRAMEWORK AGREEMENTS

- **Proximity Agreements**

Flexible long-term agreements tailored to local operational needs. Through an embedded technical office model, dedicated specialists provide day-to-day support, enabling agile responses to operational challenges and fostering close collaboration with client teams.

- **Global/Specific Agreements**

Regional and global agreements provide access to specialist expertise, niche technical capabilities, technology integration, technical studies, remote diagnostics and performance engineering. Clients benefit from Technip Energies' global knowledge network, enabling them to enhance performance across multiple assets and locations.

Case study: Coral Sul floating LNG

Delivering end-to-end O&M support from FEED to Operations

The Coral Sul FLNG project comprises a floating LNG facility and SURF infrastructure located in deepwater offshore Mozambique. As the first FLNG project arranged with project financing, Technip Energies' O&M involvement began during FEED with preliminary OPEX assessments and continued through the engineering phase with O&M planning.

By ensuring a seamless transition from project delivery to operations, Technip Energies mobilized an O&M team to operate and maintain the FLNG facility, delivering integrated support from FEED through O&M execution and provisional acceptance.

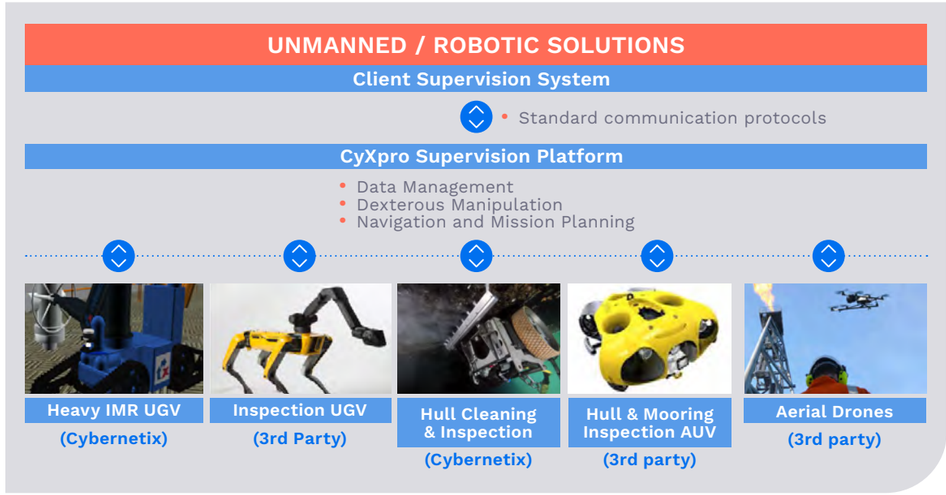
Database Development

- Reliability, availability and maintainability (RAM): simulate the entire lifetime performance of the asset to identify the main loss contributors and to calculate the facility efficiency.
- Asset Register: tag hierarchy and attributes database developed for the implementation of CMMS.
- Reliability centered maintenance (RCM) and risk-based inspection (RBI) engineering and studies for implementation of computerized maintenance and inspection management systems (CMIMS).
- Capital, startup, and operating spare parts.
- Dynamic simulator development.
- 3D as-built model development.

Digital services

- Cybersecurity: Continuously secure the FLNG facility by deploying on-premise and remote security operating center (SOC) to prepare, prevent, detect, respond and recover from cyber threats and incidents.
- OTS and ITS (proprietary technology): Provide field and control room operators and maintenance engineers with continuous training to operate and maintain the plant.





Engineering Services

A multidisciplinary engineering team to perform O&M activities such as:

- Develop global maintenance and inspection plan.
- Prepare the shutdown plan.
- Study operability, maintainability and accessibility.
- Develop up-to-date, «as-built» digital twin of the plant.
- Plan, optimize and assist shutdowns, turnarounds and outages (STO).
- Perform continuous maintenance engineering activities to optimize inspections and reliability and manage spare parts quantities to reduce OPEX.
- Analyze performance of on-demand studies and calculations.
- Develop operating and maintenance manuals.

Training and Staffing

- Augmented reality training simulator for O&M personnel.
- Competency assessment system and training courses.

Permanent Services

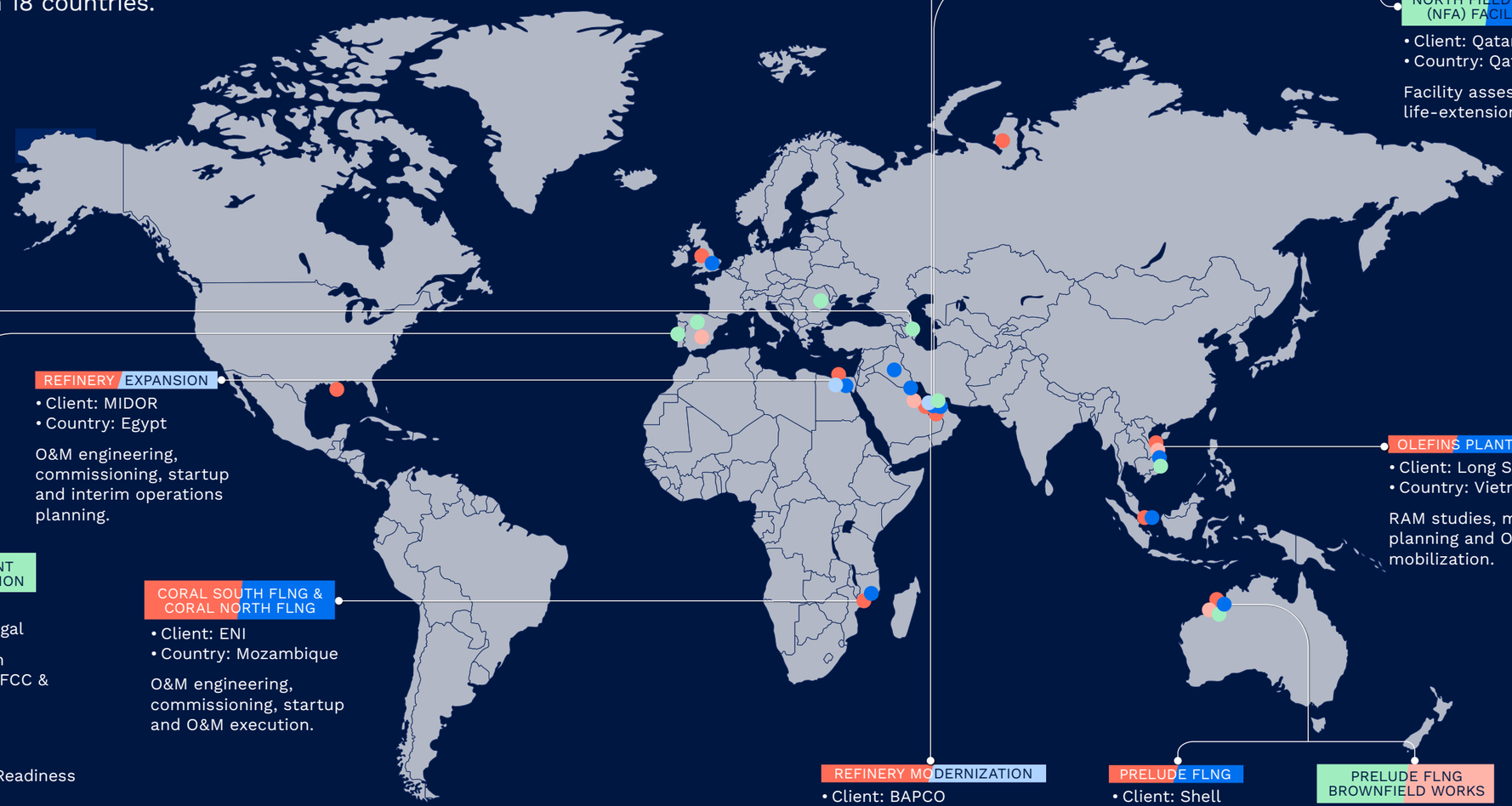
- Permanent operations and maintenance services onshore/offshore.
- Warehouse management.
- Development of competency assessment system with strong national content.
- Procurement and preservation of capital and operating spare parts.

Local Content

- Leverage and capitalize on our local engineering centers to ensure a smooth transition from project to O&M services.
- Develop local organization with a pool of resources to support engineering and O&M services.
- Mobilize future operation and maintenance team in early development phases.
- Develop training plan.
- Deploy continuity and transition from early development phases to post startup.
- Measure progress of local content indicators such as training and percentage of local mobilization.
- Encourage local partnerships for maintenance services when applicable using a strong selection and prequalification process.

Global O&M Consulting experience

Supporting leading operators and asset owners across LNG, refining, petrochemicals and energy infrastructure in 18 countries.



RUWAIS LNG
- Client: ADNOC
- Country: UAE

O&M strategy, RAM, CMMS, training and startup readiness.

BOROUGE 4
- Client: Abu Dhabi Polymers Co. Ltd
- Country: UAE

Asset register, RBI studies, maintenance manuals and O&M planning.

NORTH FIELD EAST & NORTH FIELD SOUTH
- Client: QatarEnergy LNG
- Country: Qatar

Inspection engineering, operating manuals, training and O&M execution planning.

NORTH FIELD ALPHA (NFA) FACILITIES
- Client: QatarEnergy LNG
- Country: Qatar

Facility assessment and life-extension studies.

FRAME AGREEMENT FOR O&M SUPPORT
- Client: SOCAR
- Country: Azerbaijan

Engineering design services for brownfield facilities.

REFINERY EXPANSION
- Client: MIDOR
- Country: Egypt

O&M engineering, commissioning, startup and interim operations planning.

SINES H_2 PLANT DECARBONIZATION
- Client: GALP
- Country: Portugal

Decarbonisation study for HMU, FCC & Cogen.

CORAL SOUTH FLNG & CORAL NORTH FLNG
- Client: ENI
- Country: Mozambique

O&M engineering, commissioning, startup and O&M execution.

OLEFINS PLANT
- Client: Long Son
- Country: Vietnam

RAM studies, maintenance planning and O&M mobilization.

REFINERY MODERNIZATION
- Client: BAPCO
- Country: Bahrain

O&M engineering, commissioning, startup and readiness support.

PRELUDE FLNG
- Client: Shell
- Country: Australia

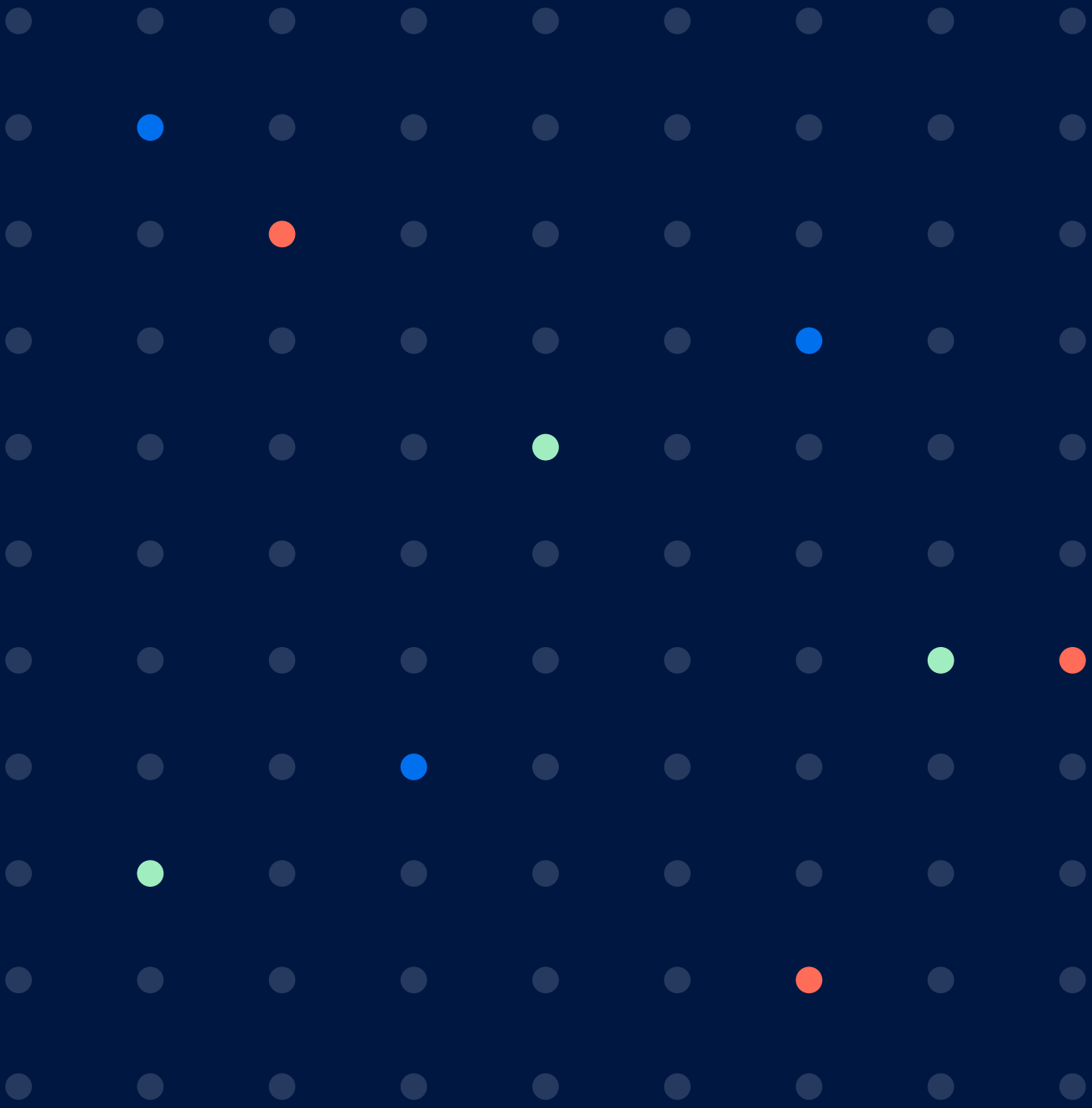
O&M engineering, commissioning, startup and initial operations.

PRELUDE FLNG BROWNFIELD WORKS
- Client: Shell
- Country: Australia

Frame agreement for brownfield engineering, procurement, logistics and site works.

- Commissioning, Startup & Readiness
- Operations performance
- Reliability, Integrity & Maintenance
- Shutdown & Turnaround
- Modifications & Upgrades

* Additional references include projects delivered in Iraq, Kuwait, Romania, Russia, Saudi Arabia, Singapore, Spain, the UK, and the USA.



Cyril Martin
Head of O&M Consulting
cyril.martin@ten.com

O&M Consulting is also known as Operations and Maintenance Consulting.

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