

Where energies make tomorrow ●

# Technip Energies in the Middle East

Delivering successful projects, equipment  
and services for more than 50 years

**T.EN**

**TECHNIP  
ENERGIES**

# A unique offering

Technip Energies is a leading engineering and technology company serving the energy industry and its transition. Through our extensive portfolio of technologies, products and services, we break boundaries bringing our clients' innovative projects to life while accelerating the energy transition for a better tomorrow.

## A PRESENCE ACROSS THE ENTIRE VALUE CHAIN

### PROJECT DELIVERY

- Project management
- Engineering, Procurement and Construction
- Technology integration on complex projects
- Digital applications for project execution and safe and cost-effective operations and maintenance
- Project financing

### TECHNOLOGY, PRODUCTS AND SERVICES

- Process technologies and licensing
- Proprietary products: Loading Systems and Cybernetix
- Concept, feasibility, FEED studies
- Advisory Genesis
- Project Management Consultancy

### FULL COVERAGE OF DIVERSE MARKETS

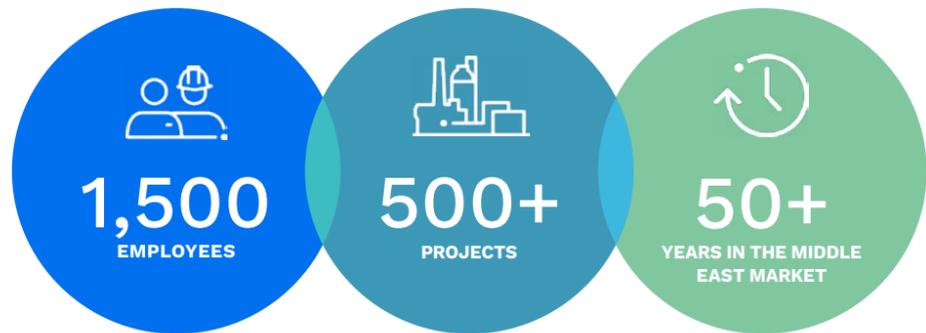
- LNG & gas monetization
- Sustainable chemistry
- Hydrogen
- CO<sub>2</sub> management
- Offshore
- Refining
- Ethylene
- Petrochemicals
- Fertilizers
- Mining & metals
- Nuclear
- Life sciences
- Agritech



# Your partner in the Middle East

With more than five decades of engagement in the Middle East, Technip Energies is the leading engineering and technology company in the region. We provide an extensive portfolio of technology, products and services including consultancy, turnkey contracting and construction expertise in downstream, including refining, LNG and ethylene, and offshore and loading systems, plus solutions that support and accelerate the energy transition.

- 500+ projects delivered
- The world's largest LNG trains in Qatar
- The Middle East's largest artificial island project in UAE
- The Middle East's largest offshore topside in UAE
- Landmark oil refining & petrochemicals projects
- 500+ loading arms deliveries



- IRAQ**
- Karbala Oil Refinery, SCOP
  - Al Zubair NGL Plant Rehabilitation, BGC
  - A Ratawi NGL Train 1 Project, BGC
- KSA**
- Halobutyl Project, KEMYA
  - Jubail Refinery, SATORP
  - Mixed Feedstock Ethylene, SADARA
  - Yansab Olefins Plant, SABIC
  - Steam Cracker, SHARQ
  - Cracker and DCC, Petro-Rabigh
  - Cracker, JCP
  - Saudi Aramco LTA Onshore Program
  - Saudi Aramco GES+

- KUWAIT**
- Gas & Condensate Export System, KGOB
  - Kuwait Long Term Frame Agreement for PMC Services, KOC
  - KIPIC (PMC): Project Engineering and Management Services
- KSA**
- Saudi Aramco LTA Offshore Program

- QATAR**
- FMB & Associated Cables for NSS Project, Qatar Petroleum
  - NFPS Compression & topsides, QG (FEED)
  - QGII Development Project, Qatargas II

- UAE**
- Additional Gas Supply to Onshore and Flexibility Assurance (AGFA), ADNOC
  - Umm Lulu Phase II, ADNOC
  - Bu Haseer & Belbazem Field Development Projects, Al Yasat
  - UZ 750K Field Development Projects, ADNOC
  - ADNOC Vision 2050 Masterplan Study, Genesis

- UAE**
- Jalilah A development – Installation of a Wellhead Platform and Associated Pipelines, Dubai Petroleum
  - Rashid C Development - WHPs and Pipelines, Dubai Petroleum
  - Rashid D Development - WHP and Pipelines, Dubai Petroleum

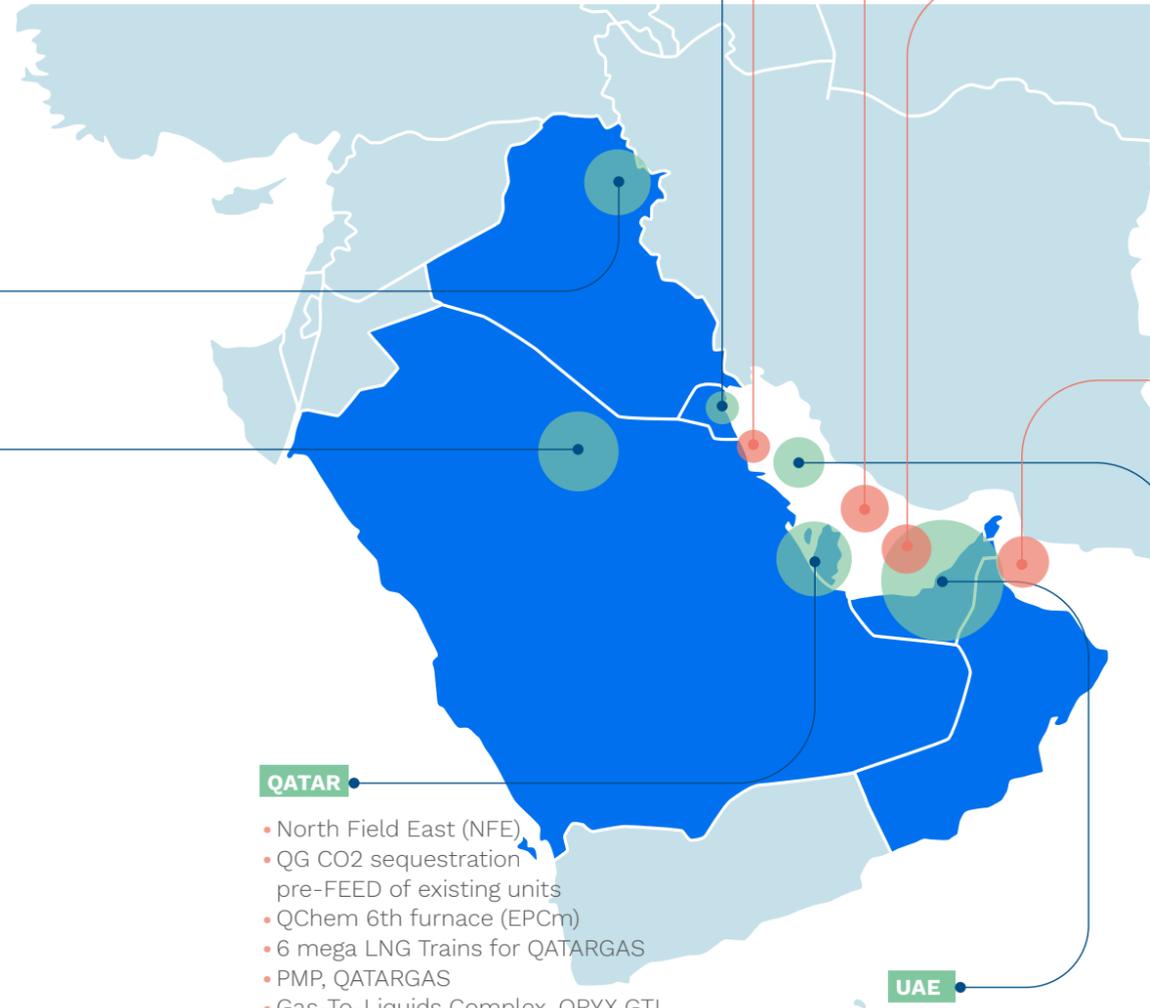
- BAHRAIN**
- Bapco Modernization Program, BAPCO
  - SRU Modification Project, BAPCO

- QATAR**
- North Field East (NFE)
  - QG CO2 sequestration pre-FEED of existing units
  - QChem 6th furnace (EPCm)
  - 6 mega LNG Trains for QATARGAS
  - PMP, QATARGAS
  - Gas-To-Liquids Complex, ORYX GTL
  - Ras Laffan Olefins Company, RLOC

- UAE**
- B4 Steam Cracker Unit, BOROUGE (FEED)
  - EPC3 SRP Sulphate Reduction Plant, ADNOC
  - Offshore Associated Gases Package 1, ADNOC
  - Jebel Ali Refinery Expansion, ENOC
  - Asab 3 Gas Processing Project, ADNOC
  - Al Dabbiya Gas Development project
  - Offshore Associated Gases Package 1, ADNOC
  - NEB Development Projects, ADNOC

**ONSHORE**

**OFFSHORE**



# From feasibility studies to project delivery and beyond

| Project Phase                      | Scope  |
|------------------------------------|--|
| <b>Genesis Conceptual Services</b> | <ul style="list-style-type: none"> <li>Feasibility studies</li> <li>Conceptual studies and select stage studies</li> <li>Field development studies</li> <li>Master plan development</li> <li>Screening and assess stage studies</li> <li>Energy management</li> <li>Master plan development</li> <li>RAM and CFD studies</li> <li>Flow assurance</li> <li>Rigorous blowdown modelling</li> </ul> |
| <b>FEED</b>                        | <ul style="list-style-type: none"> <li>Basic engineering</li> <li>Front-end engineering design</li> </ul>  |
| <b>EPC</b>                         | <ul style="list-style-type: none"> <li>Detailed engineering</li> <li>Procurement</li> <li>Inspection, expediting</li> <li>Construction and installation</li> <li>Commissioning and startup</li> </ul>  |
| <b>Process Technologies</b>        | <ul style="list-style-type: none"> <li>Hydrogen</li> <li>Decarbonization</li> <li>LNG &amp; Gas</li> <li>Sustainable Chemistry</li> <li>Ethylene</li> <li>Refining</li> <li>Petrochemicals and Polymers</li> <li>Fertilizers</li> </ul>  |
| <b>PMC</b>                         | <ul style="list-style-type: none"> <li>Specialist consultancy services</li> <li>Owner's engineer</li> <li>Project management consultancy</li> </ul>  |



# Project management consultancy

Technip Energies has extensive experience delivering project management consultancy services, notably in the Middle East. We are successful in supporting our clients' business objectives, consistently delivering projects with outstanding safety and environmental performance that meet cost, schedule and quality targets.

## A DEDICATED AND STRUCTURED ORGANIZATION

**We offer our clients a dedicated and structured organization and a robust operational business model to deliver efficient and cost-effective project management services .**

Our team's experience and competency combine to add value to our clients' projects in areas such as

- **Project management**

We manage and integrate the Engineering, Procurement and Construction phases of the project, in particular for large and complex capital projects that are often located in remote areas. Acting as the single point of contact, we consolidate all contractors and subcontractors, often from diverse cultures and backgrounds, to deliver a successful project.

- **Contracting experience and management**

- Our commitment to quality, safety, health, and the

environment produces outstanding results.

- Our EPC contracting experience gives our teams unique insights and expertise.

- Each project management consultancy team is equipped to optimize designs and recommend realistic execution plans.

- Proven software tools facilitate monitoring and forecasting of future performance for an effective management of project schedules and cost.

- **Resourcing strategy**

We identify personnel with the necessary experience, maximizing the use of local/regional staff.

- **Project controls**

We draw on the company's EPC experience and our detailed understanding of project costs and schedules to enhance our project management and control capabilities and provide effective monitoring.

## AN INTEGRATED APPROACH

Our Project Management Consultancy business unit offers wide-ranging services to manage all project phases: feasibility studies, basic design and FEED, detailed engineering and procurement, construction, commissioning, and start-up. We team up client and Technip Energies personnel as needed, with no duplication of roles.

## TIMELY MOBILIZATION AND GLOBAL SOURCING

We understand the challenges clients face in awarding contracts "as planned". Consequently, we mobilize our project teams immediately following contract award. Our staffing process coordinates global sourcing, identifies skilled personnel, and submits qualified candidates. Our global presence enables us to mobilize people with the right experience in the right place at the right time.

**“A proven track record in helping our clients meet their safety and environmental targets.”**

# Genesis advisory

Genesis is a market-leading advisory company focused on helping clients make decisions, assure their investments and maximize the value of their assets.



**Genesis has extensive global experience across the hydrocarbon, renewable and alternative energy sectors, operating in greenfield and brownfield as well as in subsea, offshore and onshore settings. Our highly sophisticated teams, tools and processes offer robust support to our clients, helping them to derisk opportunities and maximize value.**

Genesis develops innovative solutions for the global energy industry by leveraging its core engineering and techno-economic skills. The company helps achieve world-class performance from its assets by providing expertise and innovative methods and tools to realize its maximum potential.

“Our extensive experience across the energy industry makes us your trusted advisor on your journey to a sustainable future.”

Christophe Malaurie, SVP Genesis

# Leading-edge loading systems

We are well-positioned to meet the challenges of the industry by bringing together complementary skills and innovative technologies. Our Loading Systems Business Unit is the leading supplier of fluid transfer systems in the oil, gas and petrochemical industries.

## Innovative designs, systems, packages and services

We offer our clients advanced technologies in transfer operations, providing innovative designs, systems, packages and services. Our offerings extend from concept to project delivery and beyond. We are recognized for setting the technical and performance standards in the onshore and offshore transfer of liquids and gas.

Our proven ability to innovate, coupled with our modern

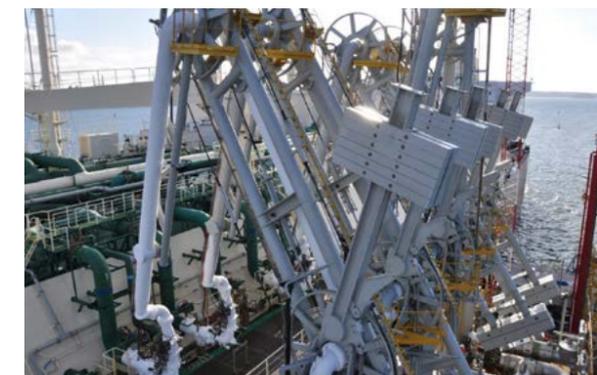
manufacturing and assembly techniques, serve as the foundation for the future development of fluid transfer systems capable of operating in hostile and challenging environments. Safety and sustainability are an integral part of our foundational beliefs, and are reflected in the design of our products and in our world-wide service network. Our focus is on ensuring our

clients' success by providing efficient and long-term operability in loading systems.

Loading Systems has a wide presence in the Middle East with over 500 marine loading arms delivered to the main petrochemical industries and LNG terminals. Loading Systems maintains a permanent team in the Middle East to provide technical assistance and field services.

### FACTS AND FIGURES

- Product range covering marine loading arms, truck loading arms, and other fluid transfer systems
- 49 patents filed
- 3 certifications ISO9001 (quality), OHSAS 45001 (health & safety), ISO14001 (environment)
- 24/48 responsive service
- 83,000 m<sup>2</sup> main plant in Sens, France
- 60 years of expertise
- 15,000+ marine loading arms delivered
- 33 highly-skilled field engineers with global coverage dedicated to rapid intervention and on-site supervision
- 2 partnered factories worldwide for loading arms assembly
- Worldwide presence



“Our innovative loading solutions focus on safety and long-term sustainability.”

# Principal offices

Technip Energies has demonstrated a strong local commitment to its clients in the Middle East with several offices in key regional locations.

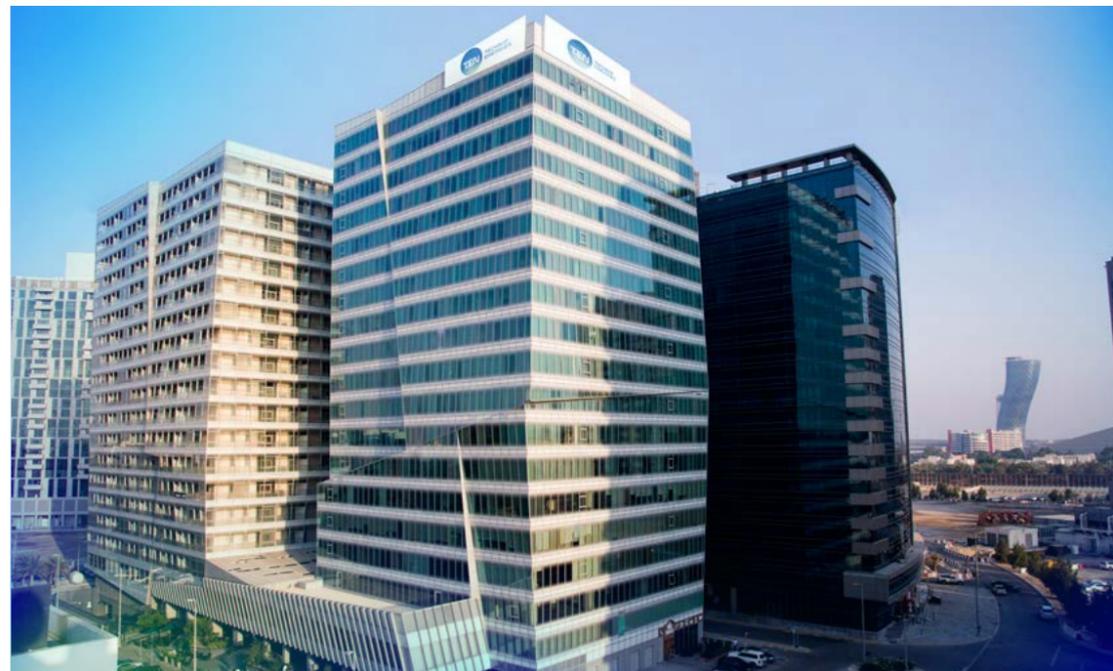
## Abu Dhabi, United Arab Emirates

Technip Energies established its office in Abu Dhabi in 1984. With our lengthy presence in the country, we provide technological solutions, consultancy, FEED and engineering services, turnkey contracting and EPC expertise in onshore, offshore and loading systems.

We are fully committed in our ongoing effort to build and maintain long-term relationships with our clients in the UAE and Middle East, including the ADNOC Group and all NOCs and IOCs in the region. Group and all national and international oil companies in the region.

## Khobar, Saudi Arabia

Technip Energies has an extensive history in Saudi Arabia, a key country and market where we are a leading player in onshore, offshore and loading systems. We have operated continuously in the country since the mid-1970s. We supply proprietary technologies to the market as well as expertise in the design and construction of state-of-the-art processing facilities.



Technip Energies office in Abu Dhabi, United Arab Emirates



Technip Energies office in Doha, Qatar

## Doha, Qatar

Technip Energies established its office in Qatar in 1986 to provide engineering procurement and construction services as well as technical assistance to the energy industry in the country. With a permanent workforce of 300 people, our objective is to maintain our long-term relationship with Qatar Petroleum and its ventures and participate in the country's development.

## Al Ahmadi, Kuwait

Technip Energies is fulfilling a contract with the national oil company, KOC (Kuwait Oil Company), for project management consultancy services. With a local workforce of 240 people, we provide FEED services through Genesis, EPC bidding on behalf of KOC, and PMC services during EPC execution of major projects. We cover both new energy infrastructure facilities, as well as the upgrading of existing facilities.

## Karbala and Basra, Iraq

Technip Energies has been present in Iraq since the 1970s. Our offering in the country covers project management consultancy, and we have been involved in key projects such as the current Karbala project refinery.

# A track record of successful projects in the Middle East

More than 500 projects completed

**TECHNIP ENERGIES HAS SUCCESSFULLY EXECUTED MAJOR PROJECTS IN THE MIDDLE EAST FROM ENGINEERING STUDIES TO CONSTRUCTION AND COMMISSIONING:**

- Feasibility studies
- Project management
- Financing
- Engineering
- Procurement
- Construction
- Commissioning
- Operations
- Plant expansion and debottlenecking
- Plant decommissioning



## Our key references

Technip Energies has successfully executed major projects in the Middle East from engineering studies to construction and commissioning. Our recent project awards are examples of our diversified capabilities, technological innovation and ability to respond to our clients' needs.

### NORTH FIELD EAST (NFE)

- **Contract:** EPCC
- **Award:** 2021
- **Delivery:** 2025-2027
- **Client:** Qatar Petroleum
- **Location:** Qatar

Technip Energies, in a JV with Chiyoda, has been awarded a major contract for onshore LNG facilities. This contract covers the delivery of 4 mega trains, each with a capacity of 8 MTPA of LNG and associated utility and offsite facilities. The new LNG plant will receive approximately 6 billion standard cubic feet per day of feed gas from the Eastern sector of Qatar's North Field, which is the largest non-associated gas field in the world. The project will allow to increase Qatar's total LNG production from 77 to 110 MTPA. The plant will also include an helium production unit with a capacity of 20 tons/day and a large CO<sub>2</sub> Capture and Sequestration facility, leading to over 25% reduction in Green House Gas emissions when compared to similar LNG facilities.



### NORTH FIELD PRODUCTION SUSTAINABILITY (NFPS) COMPRESSION

- **Contract:** FEED
- **Award:** 2020
- **Delivery:** 2022
- **Client:** Qatargas Operating Limited
- **Location:** Qatar

Technip Energies has been awarded by Qatargas a large FEED contract for the North Field Production Sustainability (NFPS) Compression Project located offshore Qatar in water depth of 50-70 meters. This contract covers FEED activities for 7 compression complexes at QG North & QG South including topsides and jackets for compression platforms, living quarters (LQ) platforms, flare tower platforms, inter-connecting bridges and bridge support structures, associated pipelines and brownfield onshore & offshore activities. The principal objective of the NFPS project is to provide new assets in Qatar's North Field to sustain current production plateau.

### BAPCO MODERNIZATION PROGRAM

- **Contract:** EPC
- **Award:** 2018
- **Expected delivery:** 2022
- **Client:** Bapco
- **Location:** Bahrain

The project entails a major expansion and upgrade of the Sitra oil facility that will increase total refinery throughput up to a maximum of 380,000 barrels per day (MBPD) with an oil production capacity of 20,890,930 tpa\* and a hydrogen production capacity of 1.74 mtpa\*\*. The new facility will comprise a hydrocracker of 3,366 tpa. (MBPD) with an oil production capacity of 20,890,930 tpa\* and a hydrogen production capacity of 1.74 mtpa\*\*. The new facility will comprise a hydrocracker of 3,366 tpa.

\*tpa: tonnes per annum  
\*\*mtpa: million tonnes per annum



### UMM LULU PHASE II

- **Contract:** EPC (Lump Sum Turnkey)
- **Award:** 2013
- **Client:** ADNOC
- **Location:** UAE

Umm Lulu is one of the three fields that ADNOC Offshore is developing in its offshore concession areas to meet ADNOC's mid-term total sustainable production target of 1 MMSTBOPD\*. The project is being executed in association with NPCC and comprises a large offshore complex of six bridge-linked platforms including gathering, separation gas treatment and water disposal facilities, utilities and accommodation modules using float over methods developed by Technip Energies.

### JUBAIL REFINERY

- **Contract:** FEED & EPC
- **Award:** 2006 (FEED)
- **Delivery:** 2014 (EPC)
- **Client:** SATORP
- **Location:** Saudi Arabia

Technip Energies completed the front-end engineering and design (FEED) of this world class grassroots refinery and delivered two major EPC packages. The full conversion refinery currently has a processing capacity of 400,000 barrels per stream day of heavy crude oil.



### BELBAZEM OFFSHORE FIELD DEVELOPMENT

- **Contract:** FEED/Design ITB
- **Award:** 2019
- **Client:** Al Yasat Petroleum Operations LTD
- **Location:** UAE

The project is one of few pilot projects launched by ADNOC using the FEED in design competition scheme. It includes the FEED design, and EPC tender preparation of offshore well head towers, pipelines, cables/umbilicals, as well as onshore facilities for processing. In addition, electrical submersible pumps will be installed across all production wells. This project is being executed in partnership with the CPECC/COOEC consortium, for which we provide engineering services from our Abu Dhabi offices.

### AL-ZOUR LNG TERMINAL LOADING SYSTEMS

- **Operator:** KIPIC
- **Award:** 2017
- **Delivery:** 2019
- **Location:** Kuwait

The contract consists in the delivery of six LNG and two NG marine loading arms for the new terminal of Al-Zour, with associated construction supervision and commissioning services. These arms are the first 20" full bore ever manufactured for an LNG Application.

### SRP SULPHATE REDUCTION PLANT

- **Contract:** EPC
- **Award:** 2017
- **Client:** ADNOC
- **Location:** UAE

The Zakum oilfield ranks within the 10 largest worldwide. The project aims to increase the reservoir's overall recoverable reserves by 70% and sustain an oil production capacity of 750,000 BOPD\* from the Upper Zakum field by introducing a sulfate reduction plant on West Island. The plant incorporates cutting-edge water treatment technologies with advanced filtration and nano-filtration systems.

### JEBEL ALI REFINERY EXPANSION

- **Contract:** EPC
- **Award:** 2016
- **Delivery:** Q2019
- **Client:** ENOC Processing Co. Ltd
- **Location:** UAE

The project aims at a 50% increase in the capacity of the Jebel Ali facility. The existing plant was first delivered and commissioned by Technip Energies in 1999. The project will add a new condensate processing train to the existing facility, expanding its daily capacity from 140,000 barrels per day to 210,000 barrels per day. Additional processing units will also be added, including a new LPG/naphta hydrotreater, an isomerisation unit, a kerosene hydrotreater and a diesel hydrotreater.

\*BOPD: barrels of oil per day

### NASR FULL FIELD DEVELOPMENT PROJECT

- **Contract:** PMC Services
- **Award:** Q4 2014
- **Delivered:** 2019
- **Client:** ADNOC
- **Location:** UAE

ADNOC Offshore has undertaken a major development of its new offshore NASR oil field, located in the Arabian Gulf approximately 131 km north-west of Abu Dhabi. Technip Energies was engaged by ADNOC as the single PMC Consultant for management of the project scope that was divided into 3 EPC packages and assigned to 3 different EPC contractors. The project consists of a large offshore super complex of 3 bridge-linked platforms, brownfield modification of some existing facilities, wellhead towers and pipelines, and onshore power facilities.

### KOC DEVELOPMENT OF MAJOR PROJECTS

- **Contract:** Long-term frame agreement for PMC Services
- **Award:** Q4 2013
- **Extended until:** 2020
- **Client:** KOC
- **Location:** Kuwait

Technip Energies has entered a long-term frame agreement with Kuwait Oil Company (KOC) covering FEED and PMC services for the development of major projects for the company. The team has been managing and delivering quality performance services for a portfolio of projects in excess of US\$1 billion enabling the EPC contractors to successfully hand over landmark projects with no LTI\*, within budget and on schedule.

\*MMSTBOPD: million standard barrels of oil per day  
\*LTI: lost time incidents

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