



Enppi

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Who
We Are

Who We Are



International Engineering and EPC Main contractor for energy, refining, petrochemical & chemicals, power and other industries.



Establishment

Established since **1978**, on the solid basis and knowhow of CF Braun Engineering.



HQ & Offices

Headquartered in Cairo, Egypt, Enppi's branches and offices are in **14 countries** around the world, with a HQ representing a landmark accommodating **3000+** employees.

Vision & Mission



Our Vision

To be the EPC *partner of choice* in *engineering* industries, evolving *sustainable energy* solutions worldwide.

Our Mission

- Add value by providing trustworthy *sustainable* and *reliable EPC* solutions exceeding our stakeholders' expectations while *accelerating energy transition* for a better world for next generations.
- Deliver *world class projects* and *services* through our accumulated organizational *knowledge* and *cutting-edge technologies* with unwavering *commitment* to *safety, quality* and *integrity*.
- Foster the *national economy* and promote a better quality of life for community wellbeing.
- Our Mission is accomplished by leveraging our most valuable asset and *competitive edge*; our *passionate* and *competent people*.

Core Values



Shareholders



Enppi is a state owned joint-stock company; working under the Egyptian Investment Law (8) for 1997. EGPC, is the principal shareholder owning 96.61% of the total shares of Enppi.



96.61%



2.12%

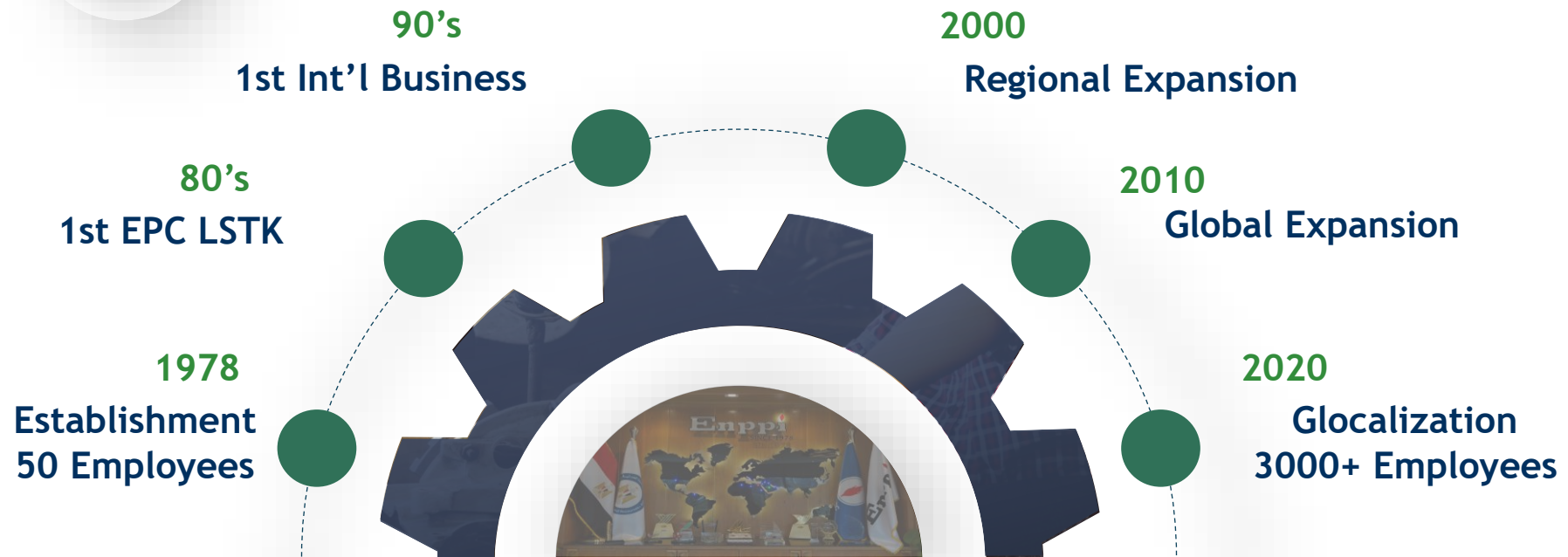


1.27%

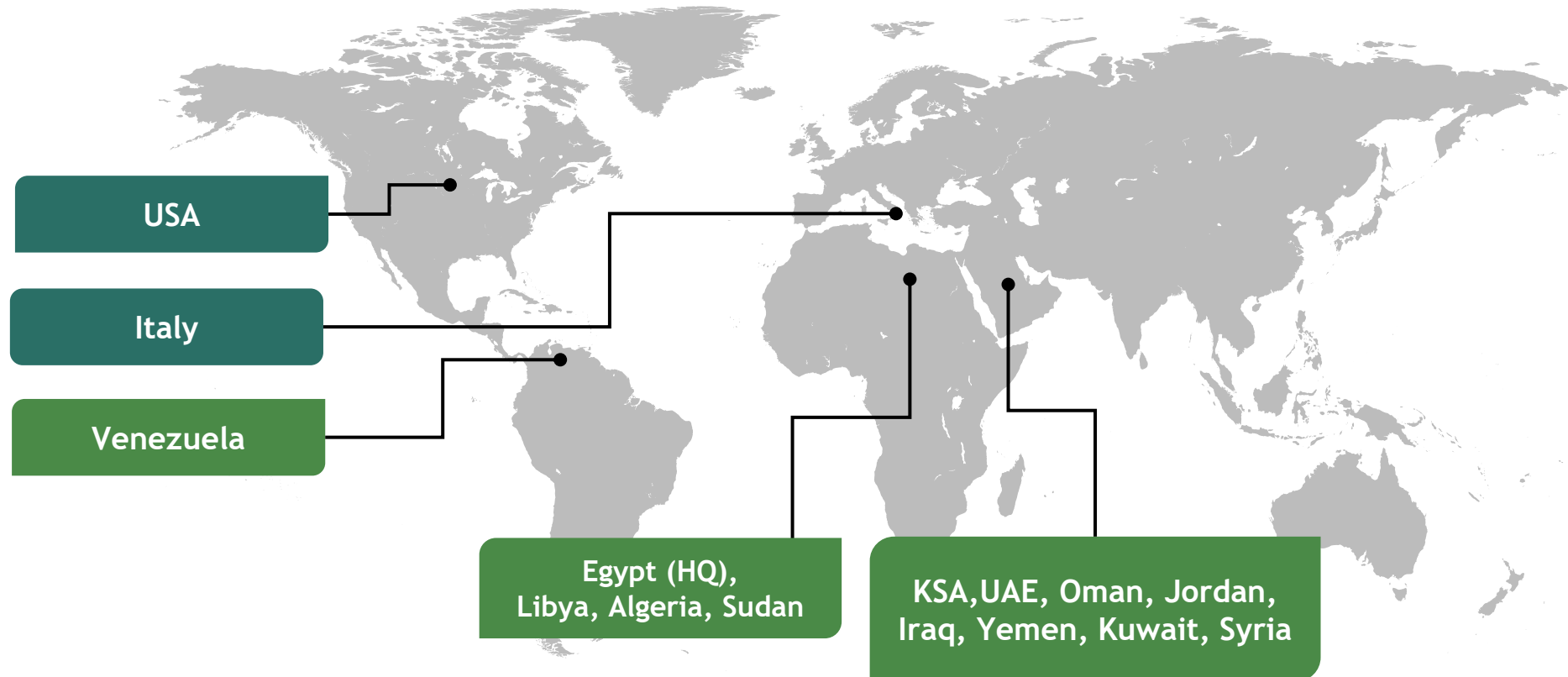
Authorized
Capital
800 MM USD

Paid Capital
357 MM USD

Milestones



Enppi Worldwide



Enppi Worldwide



1985



1st EPC LSTK
project in Egypt
(Assiut)

1995



1st project
in UAE
(ADCO)

1996



project
in Syria
(Shell)

2002



1st project
in Jordan
(FAJR)

2004



1st project
in Libya
(AGIP)

2006



1st project
in KSA
(Saudi Aramco)

2006



1st project
in Sudan
(GNPOC)

2007



1st project
in Venezuela
(PDVSA)

2008



1st project in
Yemen
(Total E&P Yemen)

2009



1st project
in Qatar
(QP)

2013



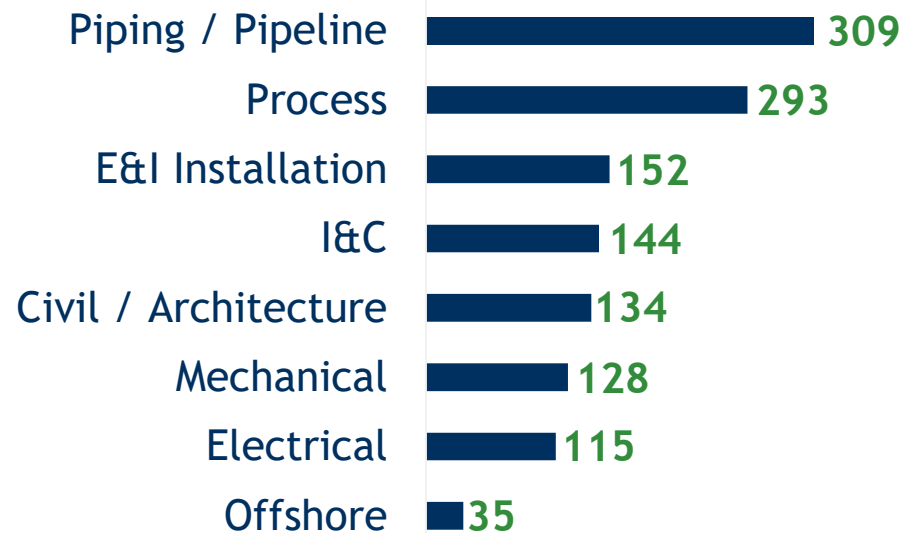
1st project
in Iraq
(Petrochina)



Engineering Capabilities

Engineering & Projects Delivery Workforce

Engineering



Project Delivery



3000+
Employees



1700+
Engineers

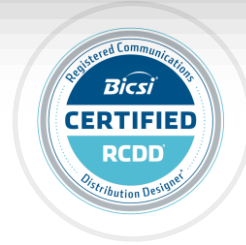


65%
Internationally Certified

International Certificates



1200+ Internationally Certified
60+ International Certificate



Software



100+ Software



Engineering Capabilities



Enppi Engineering capabilities are represented in eight Engineering disciplines covering all technical aspects of the project, performing in an integrated mechanism to deliver the excellence within each engineering process implementing Enppi's top-notch energy management and energy optimization standards.

Process

Mechanical

Electrical

I&C and
Telecom.

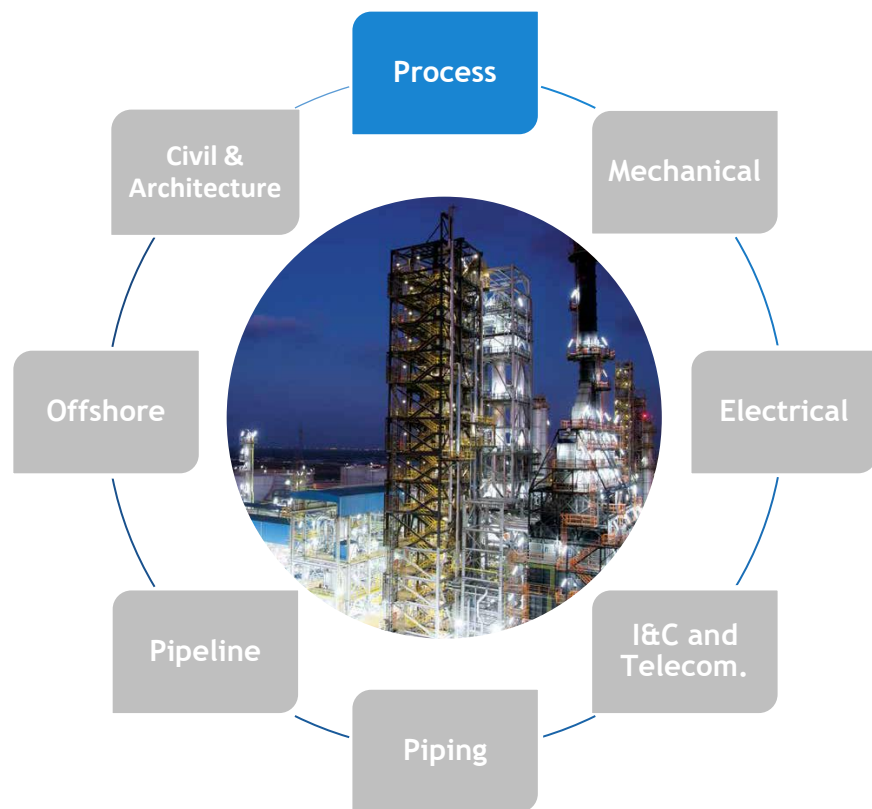
Piping

Pipeline

Offshore

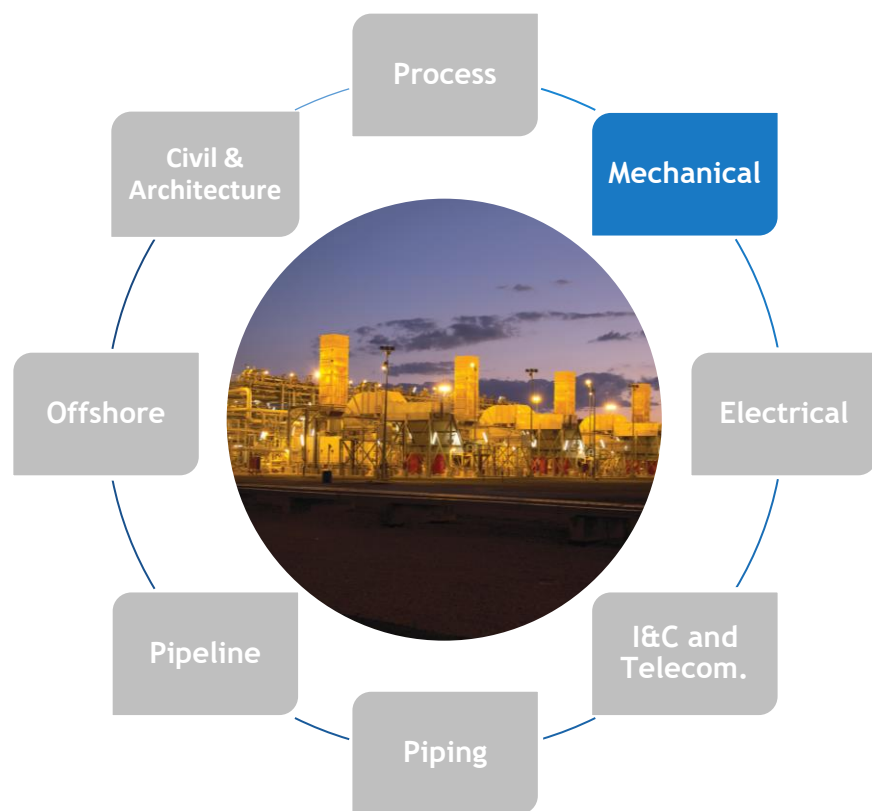
Civil &
Arch.

Engineering Capabilities



- Licenser selection and design review
- Steady state Process and dynamic Simulation
- Conceptual Engineering and Studies
- Process scheme selection and design
- Energy Management and Optimization
- Flow assurance Engineering and Design
- Process, utilities, offsites, environmental and Loss prevention & firefighting systems design & engineering
- ITB development

Engineering Capabilities



■ Static equipment

- Process Columns & Towers
- Pressure vessels / Tanks
- Fire & water tube Boilers
- WHRU / HRSG

■ Machinery equipment

- Pumps & Compressors
- Steam & Gas turbines
- Diesel / Gas engines
- Handling equipment

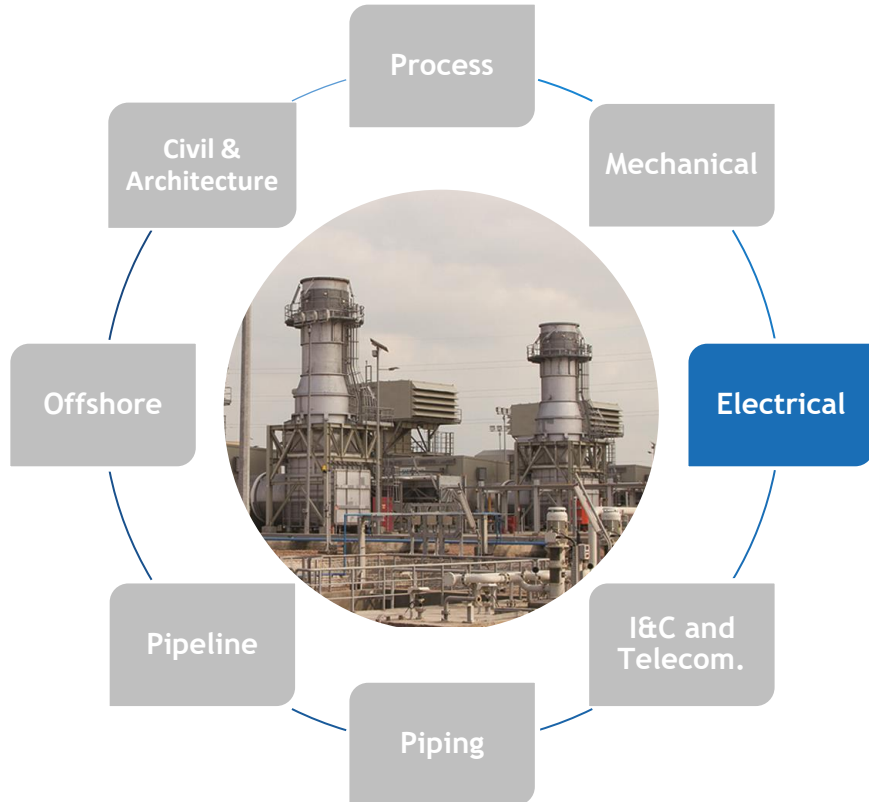
■ Materials

- Cathodic Protection System
- RBI & CMP

■ Solid handling systems

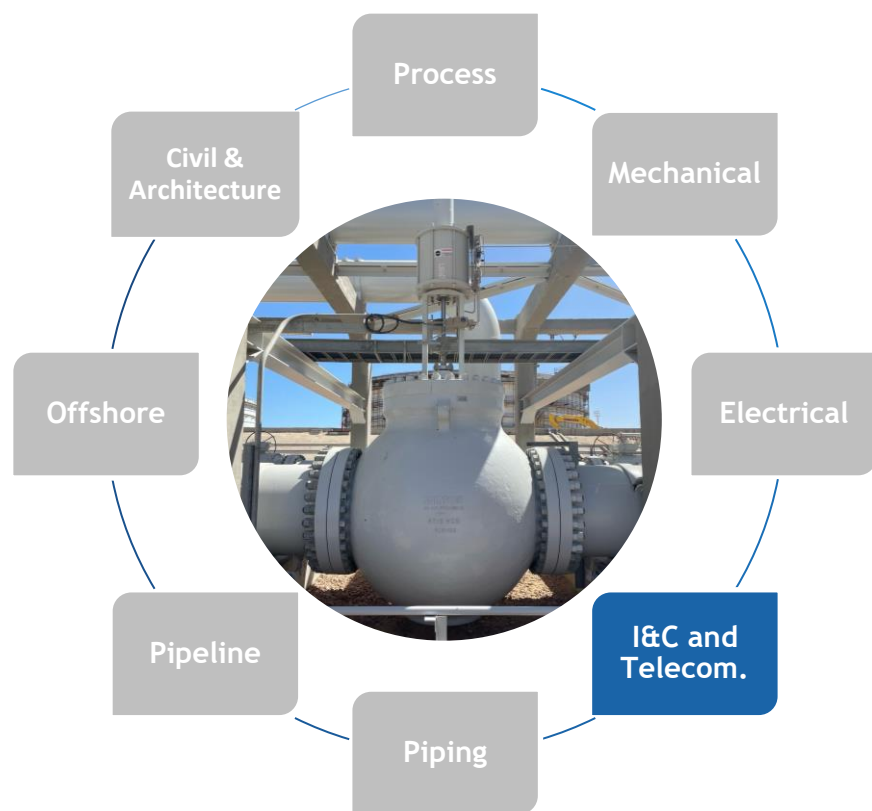
■ HVAC systems

Engineering Capabilities



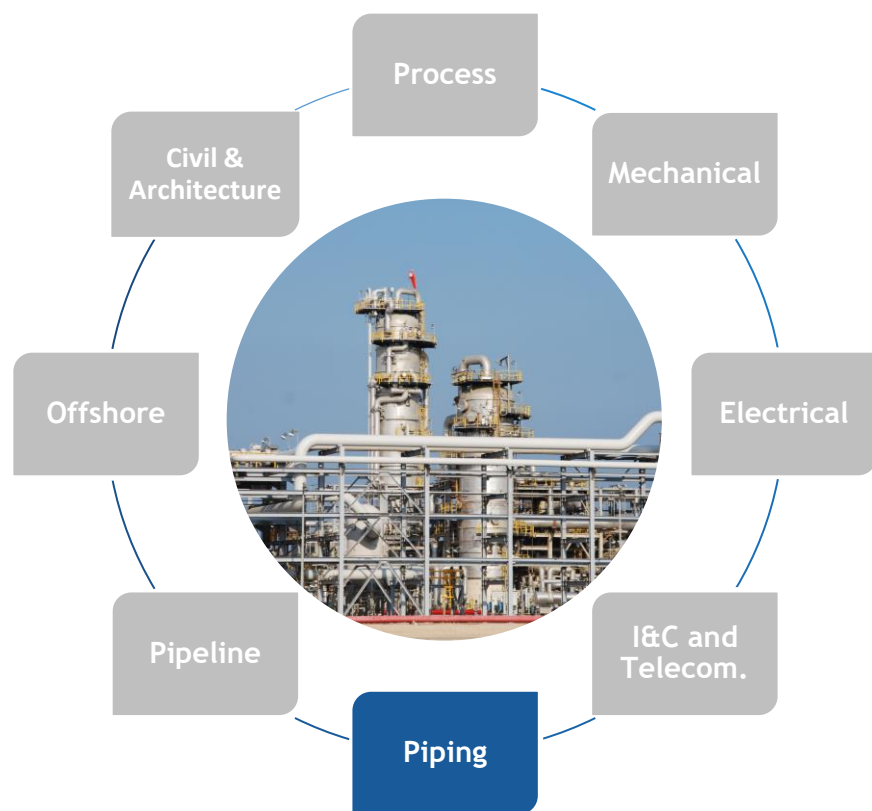
- Electrical studies, calculations, layouts, schedules & drawings
- Electrical Single line diagrams
- Electrical interconnecting & wiring diagrams
- Hazardous area classification
- Power System Studies
- HV / LV Switchgears
- Transformers
- AC generators
- Neutral Earthing Resistors
- Bus Duct Systems
- AC and DC UPS systems
- Electrical Power Modules
- LV Distribution Panels & Switch racks

Engineering Capabilities



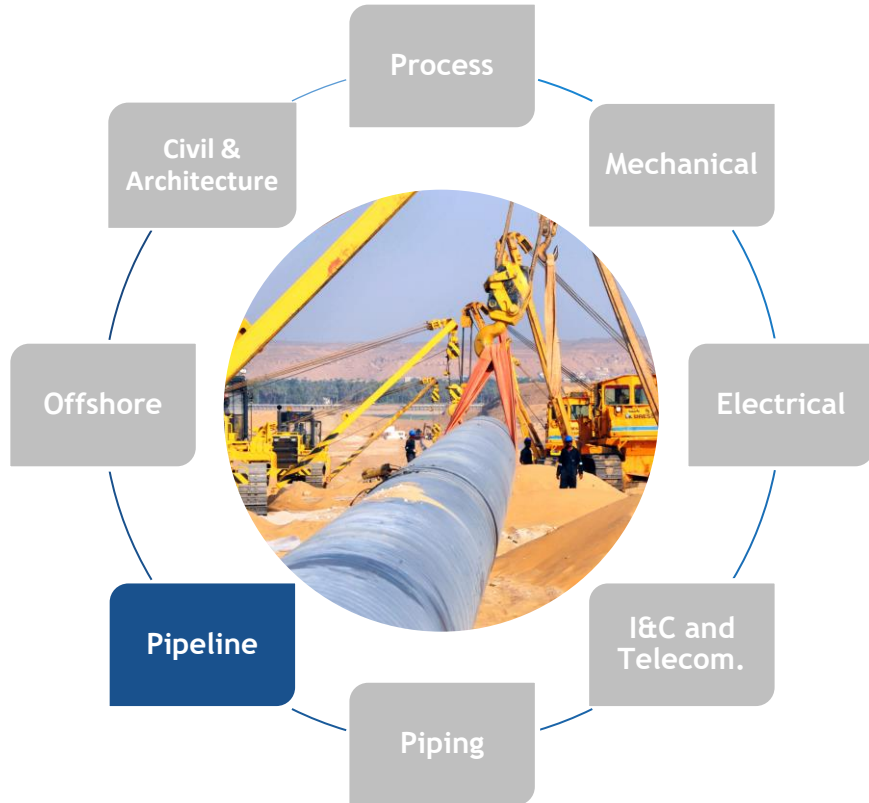
- Distributed control systems
- Safety Instrumented Systems
- SCADA
- Process Analyzers systems (Gas Chromatograph, CEMS, etc.)
- Final Control Elements (shutdown valves, Control valves, etc.)
- Telecommunication, CCTV, microwave systems
- Flow Metering & Custody Transfer
- Automatic Tank Gauging
- Fuel Retail Management
- Wellhead Safety & Control

Engineering Capabilities



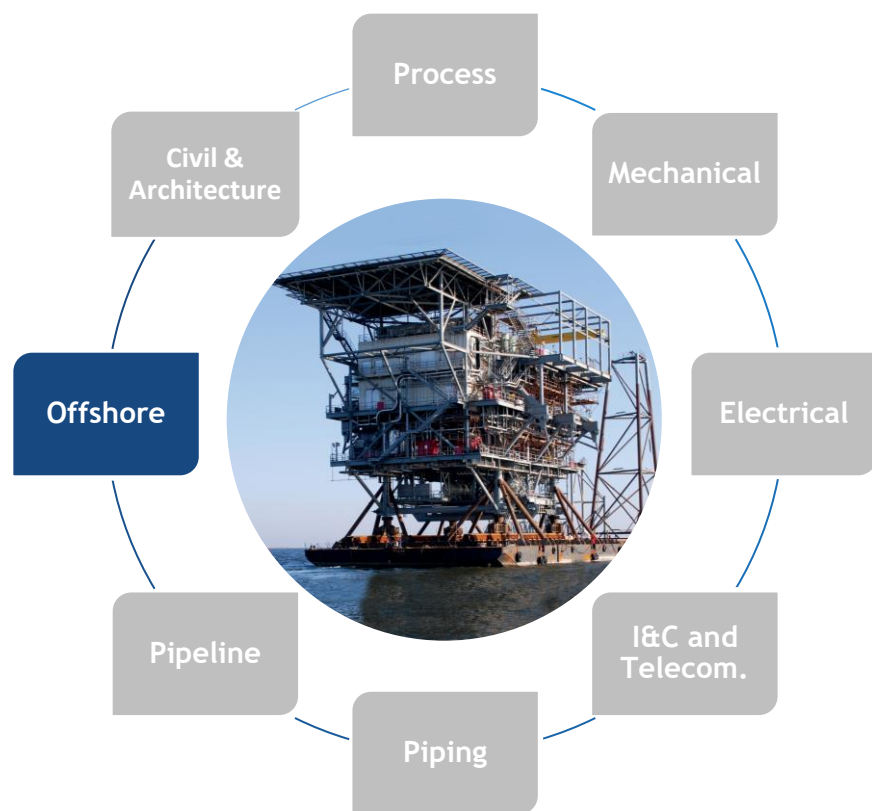
- Design process & utility plants plot areas
- Above and U/G piping systems and networks
- 3D modelling
- Material take-off & BOQs
- Isometric drawings
- Piping Material Specification & Classifications and Line List
- Piping Static & Dynamic Analysis, i.e., stress analysis, acoustic & flow induced vibration
- Pipe supports design and management

Engineering Capabilities



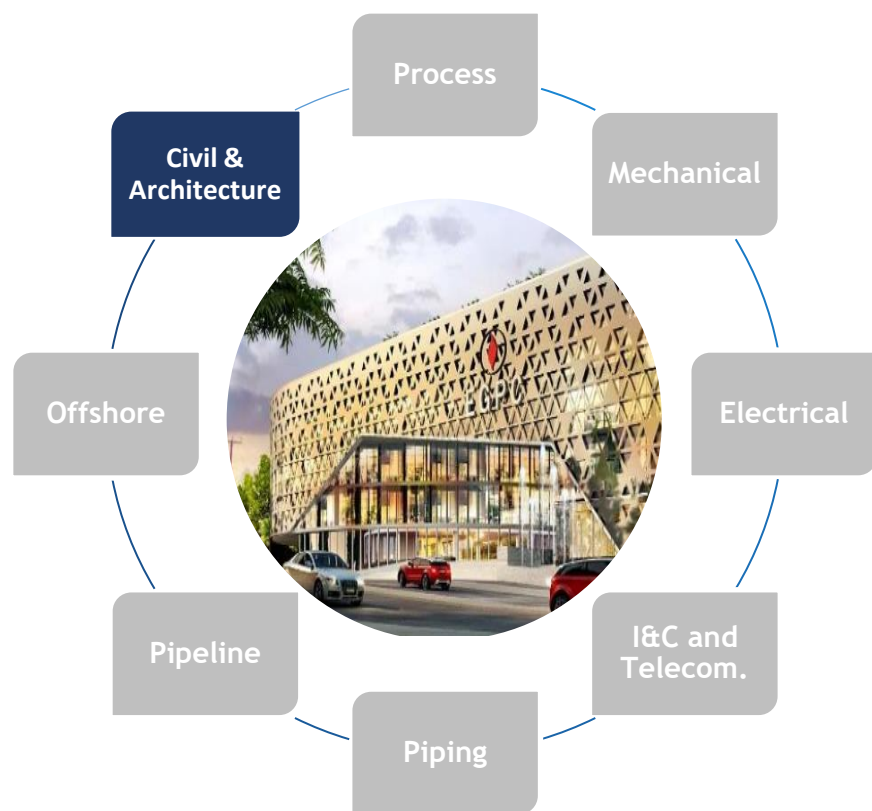
- Onshore & Offshore Pipeline Functional Specifications
- Onshore & Offshore Pipeline Layouts (Alignment Sheets, Approach Layouts, Field/Overall Layouts)
- Onshore & Offshore Pipeline Installation Specifications
- Pipeline Route Selection & Survey
- Pipeline Hydraulics & Flow Assurance
- Complete mechanical design of pipelines

Engineering Capabilities



- Concept Structure Selection Studies
- Structural modelling
- In-service Analyses
- Structural and foundation engineering and modelling utilizing FEA
- Weight control engineering
- Geophysical & Geotechnical surveys
- Offshore platforms assessment & rehabilitation
- Structural integrity services
- Ports and terminals

Engineering Capabilities



- Landscape
- Site Development Works (Roads, Fence, Rough Grading, etc.)
- Foundation and concrete Works
- Onshore Structural Steel Works
- Building Structural Design
- Building Architectural Design
- 3D Models
- Review Steel Fabrication Drawings
- Calculations
- As-Is Drawings
- Site support



Scope Of Services

Scope of Services

EPC

Feasibility /
Techno-economic Studies



FEED



Detailed Engineering



Procurement



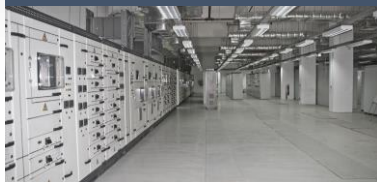
Construction Mgmt.



Project Mgmt.



E&I Installation



Pre-Commissioning,
Commissioning & Start-up



Asset Integrity
Management



Laser Scanning
& 3D Modeling



Business Fields



Business Fields



**Oil Production
Facilities &
Refining**



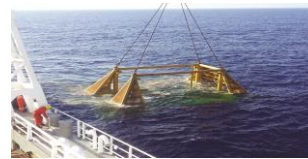
**Gas Production
Facilities &
NGL Processes**



**Petrochemicals
& Chemicals
and Fertilizers**



Offshore



Subsea



**Tank Farms
& Terminals**



Pipelines



**Water
Treatment**



**Utilities
& Offsites**



**Power
Plants**



**Architectural
Design**



**Energy
Transition &
Sustainability**

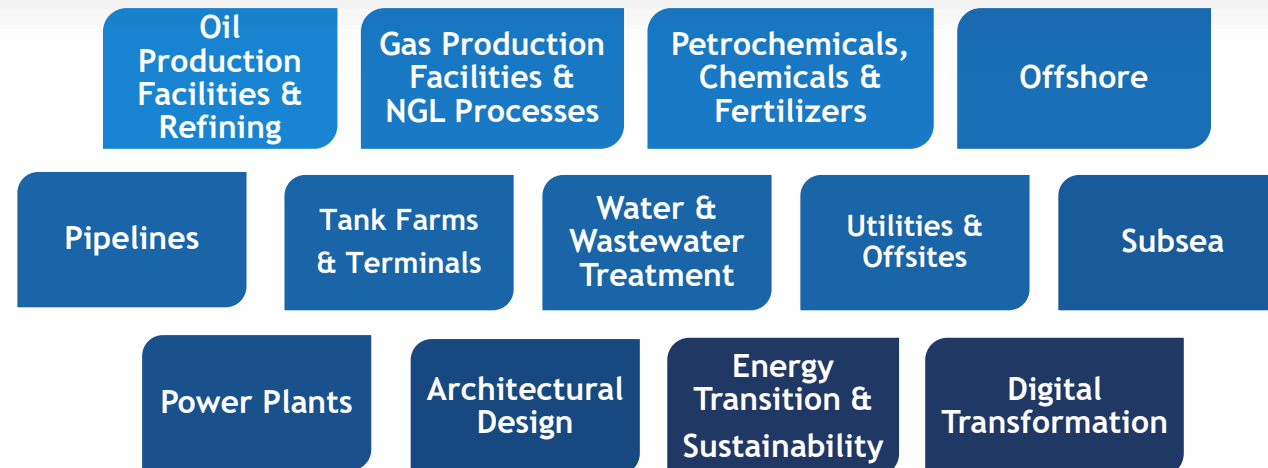


**Digital
Transformation**

Business Fields



Enppi expertise has been applied to a wide range of upstream/downstream onshore oil and gas projects as well as upstream offshore projects including oil and gas production facilities, onshore/offshore pipelines, boosting, pumping and compression stations for oil and gas, oil refining, gas processing, petrochemicals, terminal & storage facilities including Offsite and utilities.



Business Fields

Oil Production
Facilities &
Refining

Gas Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

Tank Farms
& Terminals

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- Desalter units
- CDU / VDU
- Vapor recovery unit
- Sulphur recovery unit
- Deasphalting units
- Hydro Cracking units
- Hydro Treating units
- Hydro Desulphurization
- Tail gas treatment
- Lube oil production & blending
- Isomerization
- Reforming & CCR
- Sour water stripping unit
- Amine Absorption & Regen.
- Hydrogen Production units

Business Fields

Oil
Production
Facilities &
Refining

Gas
Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

Tank Farms
& Terminals

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



■ Gas Production Facilities

- Onshore Production
- Offshore Platform
- Flared Gas Recovery
- Receiving Terminals

■ Gas Processing Plants

- NGL recovery
- LPG production
- Condensate production
- C2/C3 production

■ Gas Treatment Facilities

- Acid Gas / CO2 removal
- Dehydration
- Mercury Removal

Business Fields

Oil
Production
Facilities &
Refining

Gas Production
Facilities &
NGL Processes

**Petrochemicals,
Chemicals &
Fertilizers**

Offshore

Pipelines

Tank Farms
& Terminals

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- Ethylene
- Polyethylene
- Linear Alkyl Benzene (LAB)
- Methanol
- Polypropylene
- Styrene
- Polystyrene
- Ammonia
- Urea
- Sulphuric acid
- Phosphoric acid

Business Fields

Oil
Production
Facilities &
Refining

Gas
Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

Tank Farms
& Terminals

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- Jacket & Deck
- Topside Facilities
- Offshore platform assessment & rehabilitation
- Construction support analysis
- Weight control engineering
- Geophysical & Geotechnical surveys
- Ports & Terminals
- Structural integrity services

Business Fields

Oil
Production
Facilities &
Refining

Gas
Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

Tank Farms
& Terminals

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- Onshore & Offshore Subsea
- Pipeline Route Selection & Survey
- Pipeline layout
- Pipeline Hydraulics & Flow Assurance
- Landfall and shore approach design
- Material Selection & Wall Thickness Assessment
- Stress analysis
- Thermal Expansion Analysis
- Cathodic Protection Design

Business Fields

Oil
Production
Facilities &
Refining

Gas
Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

**Tank Farms
& Terminals**

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- Tanks (atmospheric, low pressure and cryogenic)
- Tank design & sizing
- Stress analysis
- Loading / Unloading Arms
- Metering Skids & Custody Transfer Skids
- Terminal Management and Automation System
- Automatic Tank gauging

Business Fields

Oil
Production
Facilities &
Refining

Gas
Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

Tank Farms
& Terminals

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- Filtration Systems
- De-Salination Systems
- Zero Liquid Discharge (ZLD)
- Oily Water Separation Systems
- Dewatering Systems
- Biological treatment system
- UV sterilization system
- De-aerator system
- Ozonation system
- Phenol removal system

Business Fields

Oil
Production
Facilities &
Refining

Gas
Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

Tank Farms
& Terminals

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- Utility, Potable and Cooling Water systems
- Fuel Gas & Fuel Oil Systems
- Open, Closed and Chemical Drain Systems
- Chemical Injection System
- Steam generation systems & Steam Condensate Collection
- Instrument Air & Plant Air
- Nitrogen System
- Fire detection & protection
- Boiler Feed Water
- Stripped Sour Water
- Power generation & distribution

Business Fields

Oil
Production
Facilities &
Refining

Gas
Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

Tank Farms
& Terminals

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- Overall Field Layout & Architecture
- Flow Assurance & Operation Philosophy
- Subsea Production Systems (SPS) Design
- Subsea Umbilical & Control Systems
- Subsea Pipeline & Infield Flowlines
- Subsea structures design
- Corrosion Control & Material Selection
- Technical Interface Management

Business Fields

Oil
Production
Facilities &
Refining

Gas
Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

Tank Farms
& Terminals

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- Gas Turbine power generation plant
- Steam Turbine power generation plant
- Combined cycle power generation
- Solar Power Units

Business Fields

Oil
Production
Facilities &
Refining

Gas
Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

Tank Farms
& Terminals

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- Roads and site development
- Offices and administration buildings
- Control rooms and electrical substation building
- Workshops
- Laboratory buildings
- Housing complexes

Business Fields

Oil
Production
Facilities &
Refining

Gas
Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

Tank Farms
& Terminals

Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- Energy Efficiency & Decarbonization
- Carbon Capture Utilization & Storage (CCUS)
- Methane Abatement
- Renewable and H2
- Biofuels
- Plastic Recycle
- Operation Excellence

Business Fields

Oil
Production
Facilities &
Refining

Gas Production
Facilities &
NGL Processes

Petrochemicals,
Chemicals &
Fertilizers

Offshore

Pipelines

Tank Farms
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Water &
Wastewater
Treatment

Utilities &
Offsites

Subsea

Power Plants

Architectural
Design

Energy
Transition &
Sustainability

Digital
Transformation



- IT Infrastructure ERP & Business Intelligence
- Field Development & Automation
- Executive & Operation Command Centers
- SCADA Systems
- Data analytics
- Process Optimization
- Predictive Maintenance
- Laser Scanning & 3D modelling
- Digital Twin

QEHs



QEHS



Enppi has the leadership in obtaining certificates of international standards for:

- Quality Management Systems (ISO 9001)
- Environmental Management Systems (ISO 14001)
- Occupational Health & Safety Management Systems (ISO 45001)
- Energy Management Systems (ISO 50001)





Int'l Recognition

Int'l Recognition



7

Top 10 Int'l Design Firms
(Refineries & Petrochemicals)

92

Top 225
International Design Firms

113

Top 150
Global Design Firms

187

Top 250
International Contractors

Int'l Recognition



MEED

SOPC New Vacuum Distillation Unit



**Oil & Gas Project of the Year
National Winner
2023**



**Oil & Gas Project of the Year
MENA Winner
2023**

Client Appreciation

Replacement & Segregation of Khuff Gas at Uthmaniyah Gas Plant (UGP)



Oily Water Treatment and Disposal System



Client Appreciation

Replacement & Segregation of Khuff Gas at Uthmaniyah Gas Plant (UGP)

GAS OPERATIONS TECHNICAL SUPPORT & PLANNING DEPARTMENT
CAPITAL PROGRAM MANAGEMENT DIVISION
Room E-317, South Admin Building 2099, Uthmaniyah
Tel: 576-6362 Fax: 577-4345
October 4, 2021

CPMD-1946-077-2021

BI-10-01946: REPLACEMENT AND SEGREGATION OF
KHUFF GAS PIPING IN UGP
CONTRACT NUMBER # 6600041426
LETTER OF APPRECIATION

WAEEL LOTFY MOSTAFA, Project Director
Engineering For The Petroleum and Process Industries (Contractor)
PO Box 3701, Khobar 31952
Kingdom Of Saudi Arabia

On behalf of the Company Management, I would like to extend our gratitude and appreciation for the outstanding work done by CONTRACTOR with the leadership of Mr. Mohamed Mounir (Senior Project Manager) and his team between October 2020 - March 2021 time period.

With great pleasure, we would like to express our thankfulness for the Khuff Gas system shutdown associated works completion, handled in full compliance with Company safety policy, adhering to Quality standards, and finally achieving Final Mechanical Completion Certificate signed off by the Company Acceptance Committee members on April 12, 2021.

Your diligence proven during the Khuff Gas system shutdown, self-motivation as well as dedication to go the extra mile to achieve the best possible results, maximizing use of the plant shutdown and minimizing impact on Uthmaniyah Gas Plant Department Operations is really appreciated.

Please pass our appreciation to them in meeting our aspiration and business objective.

MOHAMMED A. AL-ABDULQADER, Manager
GOTS&PD

AKM ELO
AKMELO@ARAMCO.SA

Cc: Ahmed A. Al-Hadi - UGP Manager
Ashraf Bahaa - ENPPI CEO
Ahmed Khalil - ENPPI Chairman Assistant for Projects
Gas Operations - CPMD Coordinator
Project File
Operation Excellence # 5.1.2
Operation Excellence # 7.1

Saudi Aramco Confidential

Oily Water Treatment and Disposal System

DISTRIBUTION & TERMINAL PROJECTS DEPARTMENT
TERMINAL PROJECTS DIVISION
R-06A, Floor 6, Al-Yaum Tower - Dammam
Tel.: (013) 807-4192

March 01, 2022

TPD-PM-L-2022-0008

Contract No.: 6600036411
BI-10-14492: Oily Water Treatment and Disposal System at YST
Appreciation Letter

AHMED M. NABIL, CONTRACTOR Representative
Engineering for the Petroleum and Process Industries
Site Office RYST Yanbu
Kingdom of Saudi Arabia
Tel.: (013) 887-7142, Mobile: 055-3332722

COMPANY are writing this letter with pleasure and appreciation on successfully completing the construction and commissioning of BI-10-14492 for Oily Water Treatment & Disposal System. COMPANY would like to congratulate all CONTRACTOR Management and team members for their valued contribution in completing the project on time, despite the many challenges faced during the execution.

The level of dedication and professionalism exhibited whilst working on this project has helped us reach this major milestone and we are pleased to share with the CONTRACTOR Project Performance recognition certificate awarded to BI-10-14492 (refer to Attachment 1).

COMPANY again thank your team members for their service in completing this project and wish you all the best on upcoming projects.

If you have any questions, please contact Mohammed Khalid Hamid, Sr. Project Engineer on (013) 807-4147 or email mohammed.hamid.2@aramco.com.

ADEL A. AL-MAZROUI, COMPANY Representative
Terminal Projects Division / D&TPD

MWA/MKH/MTO/RTA/ZYA: mof

Attachments: Attachment 1 - Project Performance Certificate 2020

cc: Letter Book
BI-10-14492 Project File
E-Cabinet

Remarks:
☐ Urgent Response:
☐ Response required:
☒ For information

Saudi Aramco: Company General Use

تم الاستلام والتقدير لغرض العمل
المقرر في المشروع
بإشراف المهندس
المقررات والمعلومات

Saudi Aramco LTA

In November 2020, Enppi signed a long-term agreement with Saudi Aramco for a period of six years, and extendable for a similar period, to execute projects in Aramco's various oil and gas sites through tendering to the limited list of selected contractors or on direct order basis.

Aramco awards major Long-Term Agreements to eight companies for its oil and gas brownfield projects

DHAHRAN, November 18, 2020

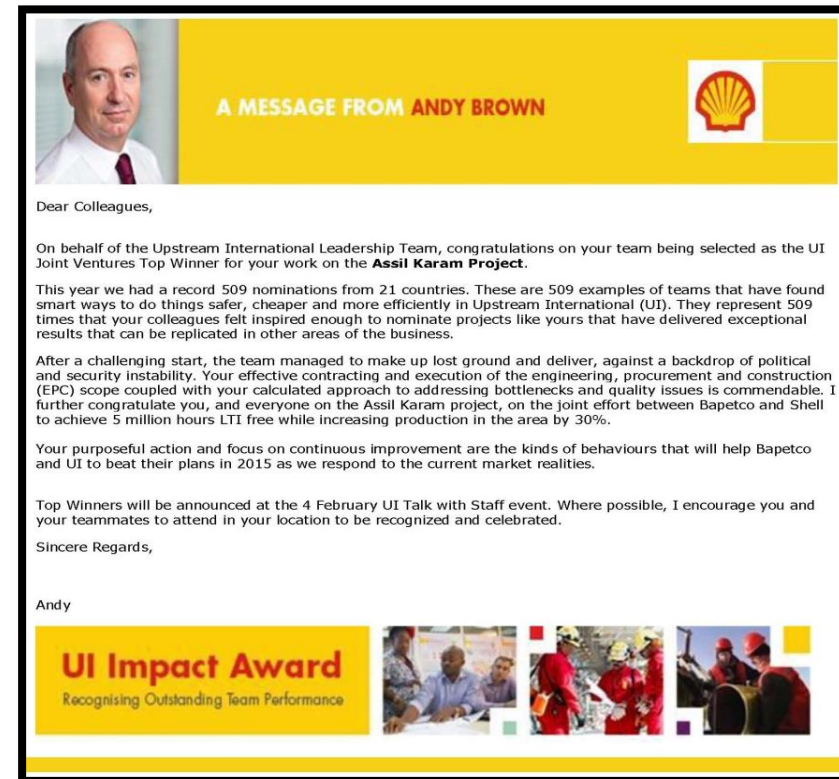
- 1 Consortium of Nasser Saeed Al-Hajri And Contracting /Samsung EPC Co. Ltd.
- 2 Daelim Saudi Arabia Co. LTD.
- 3 Engineering for The Petroleum and Process Industries (Enppi) Branch.
- 4 GS Construction Arabia Co. Ltd.
- 5 Snamprogetti Engineering and Contracting Co. Ltd. (Saipem).
- 6 JGC Gulf Engineering Co. Ltd.
- 7 Branch of Technip Italy S.P.A.
- 8 Branch of Hyundai Engineering and Construction Co. LTD.

Assil & Karam Project Named UI Joint Ventures Top Winner

From among 21 countries and 509 projects in Shell Upstream International (UI).

The **Assil & Karam project**, executed through an EPC contract with Enppi as a Main Contractor, has been selected as the **UI Joint Ventures Top Winner**.

The project achieved a record of **5 Million hours LTI Free**, while increasing production in the area by **30%**.



A MESSAGE FROM ANDY BROWN

Dear Colleagues,

On behalf of the Upstream International Leadership Team, congratulations on your team being selected as the UI Joint Ventures Top Winner for your work on the **Assil Karam Project**.

This year we had a record 509 nominations from 21 countries. These are 509 examples of teams that have found smart ways to do things safer, cheaper and more efficiently in Upstream International (UI). They represent 509 times that your colleagues felt inspired enough to nominate projects like yours that have delivered exceptional results that can be replicated in other areas of the business.

After a challenging start, the team managed to make up lost ground and deliver, against a backdrop of political and security instability. Your effective contracting and execution of the engineering, procurement and construction (EPC) scope coupled with your calculated approach to addressing bottlenecks and quality issues is commendable. I further congratulate you, and everyone on the Assil Karam project, on the joint effort between Bapetco and Shell to achieve 5 million hours LTI free while increasing production in the area by 30%.

Your purposeful action and focus on continuous improvement are the kinds of behaviours that will help Bapetco and UI to beat their plans in 2015 as we respond to the current market realities.

Top Winners will be announced at the 4 February UI Talk with Staff event. Where possible, I encourage you and your teammates to attend in your location to be recognized and celebrated.

Sincere Regards,

Andy

UI Impact Award
Recognising Outstanding Team Performance



Our Partners



Our Partners



NOC's & IOC's



Our Partners



Holding Companies



Our Partners



Int'l Contractors



Major Projects



Zohr Development Project - Phase I & 2

2015 - 2017
2017 - 2020

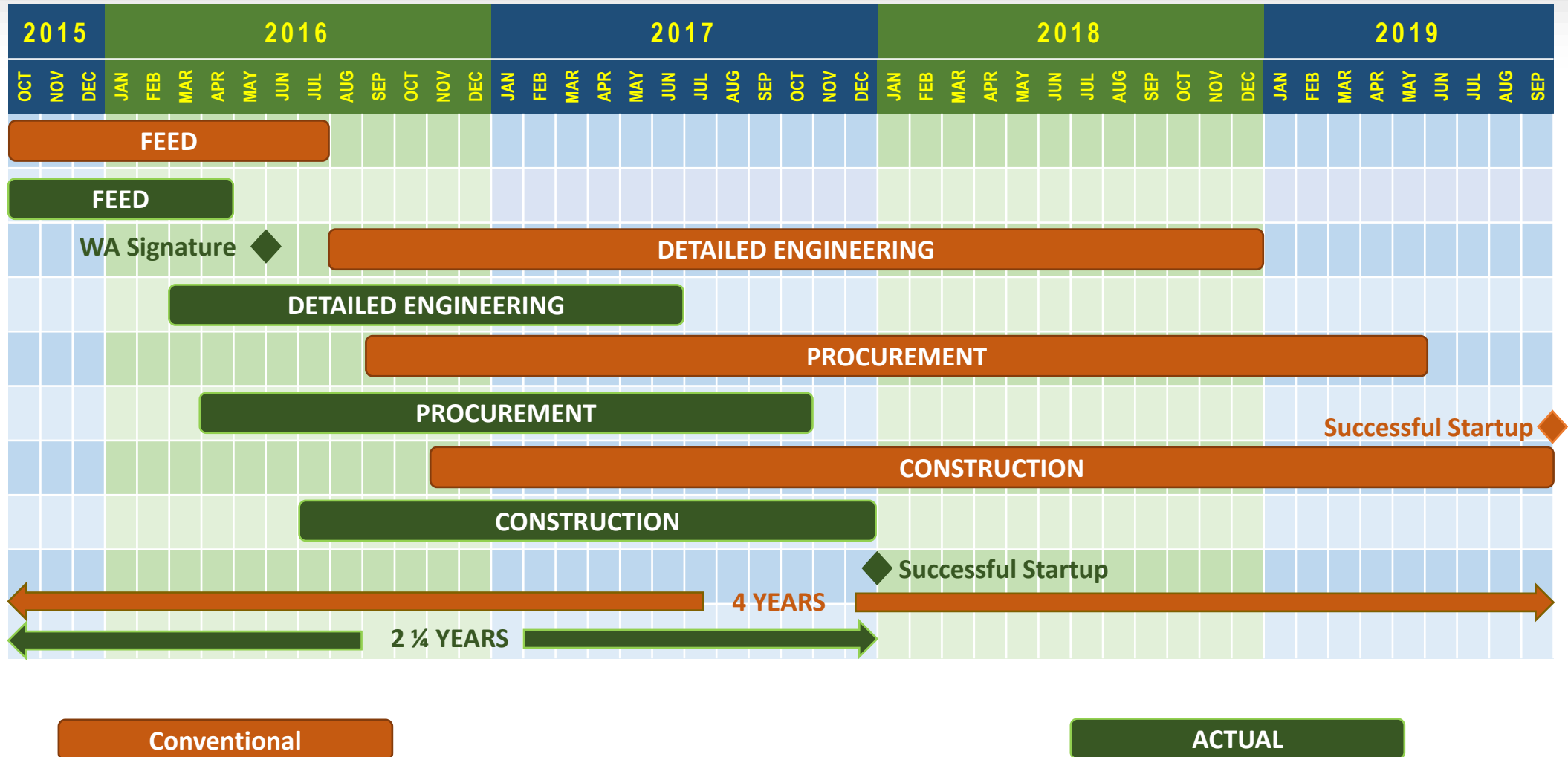


Zohr Development Project
Phase I



- Reaching a production capacity of 2800 MMSCFD of gas at a pressure of 84 barg, through 8 gas processing trains.
- 2000 tons Offshore control platform serving Zohr Field development Project; installed at 65 km from coast and 160 km of the production facilities at a water depth of 85 meters.
- Condensates at a daily production rate of 7000 standard barrels.
- High-quality Sulphur with purity up to 99.9% to be converted to solid shape for export with a daily production rate of 50 tons.
- Detailed engineering and procurement services / material management and engineering site support during the construction Phase

Conventional Vs. Actual Plan





Zohr Development Project

Zohr in Numbers - Phase I & II



- Engineering
8,900 Engineering Deliverables
18,500 Isometrics



Zohr Development Project

Zohr in Numbers - Phase I & II



- Procurement

291 Material Requisitions (50 during FEED Phase 1 & 2)

810 Equipment

28,500 Valve

124 Supplier

Over 1,360 Shipment

Over 155,000 tons of Material

Over 900 Expediting Visits

Over 700 Inspection Missions



Zohr Development Project

Zohr in Numbers – Phase I & II



- Construction
 - 5,000,000 m³ Soil Replacement
 - 13,610 Pile (42 Piling M/C)
 - 195,000 m³ Reinforced Concrete (Foundations/Structures)
 - 39,000 tons of Steel Structure
 - 1,300,000 Piping Diametric Inches
 - 5,000 km Cables

Al-Khafji Field Development Phase 1, Offshore Facilities 2006 - 2010



Al-Khafji Field Development
Phase 1



- Maintaining maximum sustainable production capacity of 300,000 BOD & 125 MSCFD associated gases, as well as 50 MSCFD gas lift.
- Installation of 6 new platforms, 7 flare tripods and 6 bridges, in addition to modifications to 8 existing platforms.
- Structural steel total weight is approximately 10,500 MT.
- 110 km subsea pipelines of 42", 36", 28" and 24" diameter & 34 km submarine cables.
- Consortium (Enppi - Petrojet - PMS - Rawabi) LSTK
- *Engineering, material supply, overall management, construction supervision and commissioning & start-up.*

Topside Installation Using Special Float Over Technique



Al-Khafji Field Development
Phase 1



- 'VERSATRUSS' company Performed a special float over technique for the Installation of Y-2B topside (3,300 Tones) and Y-1B Topside (2,900 Tones) for the project.
- This Technique is based on lifting the topside through two sets of pin connected booms, every set is supported on separate barge, the two barges are connected through wire winches which control the relative movement that results in topside rise and down.

Major Int'l Projects



Major Int'l Projects



Debottleneck Produced Water Handling System - Khurais (2024 - Ongoing)

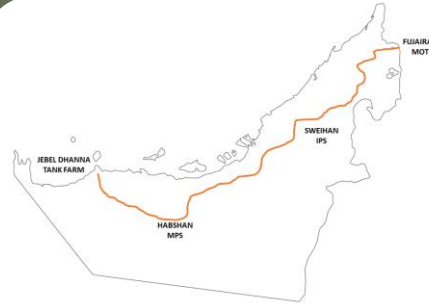


- Increase the capacity of the water handling facilities at the CPF from 750 MBD to 1,100 MBD and treating the water from 100 ppm to less than 50 ppm of oil-in-water will enable the oil production to be maintained at MSC levels when the water rates are forecasted to exceed the existing system capacity.

EPC LSTK - Main Contractor



West East Pipeline (WEP) (2024 - Ongoing)



- Pipeline beginning with Fujairah, through the West to East Pipeline (WEP) Project, spanning 500 Km.
- Constructing a 48" diameter onshore crude oil pipeline from Jebel Dhanna to Fujairah MOT, incorporating intermediate pumping stations and block valve stations for operational efficiency and safety.

EPCM



Debottleneck Production Facilities - Abqaiq (2023 - Ongoing)



- Optimize the production of Abqaiq Field and hold the maximum sustainable capability (350 MBCD) and overcoming the decline in the well head pressure due to the increase in the field water cut.

EPC Main Contractor

Major Int'l Projects



Juwayma Terminal
Expansion Project
(2022 - Ongoing)



- Constructing 6 condensate storage tanks with working volume of 1.0 MMBBL and associated 3 Booster Pumps and 3 Shipping pumps, utilities.
- The Project is part of JAFURAH Development Program (JDP).

EPC Main Contractor



Upgrade Sulfur Recovery
Units - Ras Tanura Refinery
(2022 - Ongoing)



- Reduce Sulfur Dioxide (SO₂) emissions from Sulfur Recovery Units (SRU) at Ras Tanura Refinery (RTR) to meet environmental regulations.
- Reduce the amount of H₂S in molten sulfur product for improved safety in handling;
- Provide improved SRU availability through replacement and upgrade of certain bad-actor equipment.

EPC Main Contractor



Install C3/C4 Refrigeration
Units & Storage Tanks
JNGLF Plant -
(2022 - Ongoing)



- Ensure the reliable export of additional forecasted volumes of Propane and Butane products from JNGLF by providing new refrigeration and storage facilities.
- Project will install new facilities at JNGLF in refrigeration (R93) unit and tank farm (R92) unit which will accommodate T&I of these units. This will improve the Propane & Butane facilities at JNGLF.

EPC Main Contractor

Major Int'l Projects



Debottleneck Safaniyah Onshore Plants
(2019 - Ongoing)



- Develop Safaniyah Plant facilities to sustain future oil production rate of 1,300 MBCD, while increasing the capacity of the produced water treatment facilities from 810 MBCD to 1,500 MBCD.
- The Arab Heavy crude production will also be increased from 1,200 to 1,300 MBCD, whilst meeting the specifications as given in the Aramco standards, salt content and BS&W.

EPC LSTK - Main Contractor



Satah Off Gas Compression Project
(2019 - Ongoing)



Installation of a new Off Gas Compressor (OGC) and associated facilities at Zirku Satah plant to perform the function of the existing Amine Bypass Compressor in Bypass mode, to handle the forecast export gas profile.

EPC Lump Sum Main Contractor



Upgrade Desalinated Water Treatment at Safaniyah Plant
(2018 - 2021)



Meeting high demand of desalinated water in Safaniyah plant of 1,610 GPM by installing a new Reverse Osmosis plant (RO) including three Packages units, to replace the existing plant to minimize SONPD's dependence on Tanajib Reverse Osmosis plant.; the project includes upgrading of the existing Tanajib -Safaniyah pipeline to be Bi-directional.

EPC LSTK - Main Contractor

Major Int'l Projects



Water Disposal System
Refurbishment at
Safaniyah Onshore Plant
(2018 - 2022)



- Resolving performance issue related to gravity flow between existing CPI & DGF by increasing the performance through Pressurizing the CPIs and DGFs using motive fuel gas.

EPC LSTK - Main Contractor



Sulfate Removal Facilities
at Aindar and Fazran
(2018 - 2021)



- Processing and delivering 435 MBD of low sulfate water to injection headers in ANDR and FZRN reservoirs, using 580 MBD (maximum) sea water through 36" intake pipeline approx. 700 meter, 145 MBD of reject water will be returned to QUAD1 Pipeline thru 16" intake pipeline approx. 700 meter. Low sulfate water will be required to maintain reservoir pressure.

EPC LSTK - Main Contractor



Steam Turbine Generator
at Shedgum Gas Plant
(2018 - 2023)



Installation of a complete Steam Turbine Generator Package with all required auxiliaries to utilize the excess HP and LP steam to generate approximately 84 MW of power from the excess steam. The project will also install an Air Compressor Package to supply the additional air requirements for the STG package.

EPC LSTK Main Contractor

Major Int'l Projects



Downstream Pipeline
Haradh Increment (HUG-2)
(2017 - 2021)



Constructing a 56" gas pipeline and 56 km to transport treated rich gas from Hawiyah to Uthmaniyah for natural Gas liquid recovery before injection into the Master Gas System (MGS).

EPC LSTK - Main Contractor



56 Km North Gas pipeline
(2017 - 2021)



Installation of a 36" gas pipeline to transport natural gas from Jordanian Northwest border to the interconnection point to the existing Arab Gas pipeline with a total length of 56 Km to feed power plants and other domestic users.

EPC Lump Sum (Main Contractor)



Yanbu Gas
Plant Expansion
(2006 - 2009)



Expanding Yanbu NGL plant capacity from 390 to 585 MBOD. The scope includes 195 MBOD de-Ethanizer with ancillaries and propane, refrigeration system, feed to the existing de-Propanizer and de-Butanizer columns, construction of substation with process interface room and expansion of DCS and ESD systems.

EPC

Major Int'l Projects



Arab Gas Pipeline
Phase 1 (1999 - 2001)
Phase 2 (2006 - 2008)



Transmitting and compressing of 10 BCM/Y Egyptian gas from Aqaba to Rehab power station in Jordan by installation of Aqaba compression station, 36" - 394 km pipeline - gas, metering, and SCADA system.

Phase 1 (Inside Egypt): 36" for 193 KM and 36" for 250 KM

Phase 2 (Outside Egypt): 36" for 394 KM and 36" for 30 KM

EPC



Yanbu Export Refinery Project
(2010 - 2014)



Installation of a new tank farm for Yanbu export refinery with capacity of 400,000 Barrel/Day.

The Tank farm package includes 33 storage tanks with different diameters (12.5 to 120 mt), sizing up to 1.2 Million Barrels and 13 spherical tanks 60,000 barrels each

EPC LSTK



Global a Re-assessment of Structures in MM & BH Fields
(2009 - 2010)



Re-assessment of platforms structures consisting of the following:

- 15 Platforms
- 27 Connecting bridges
- 6 Support jackets
- 3 Satellite platforms
- 50 Wellhead platforms
- 4 Flare platforms

EPCM

Major Int'l Projects



Kharir Development Project
(2008 - 2010)

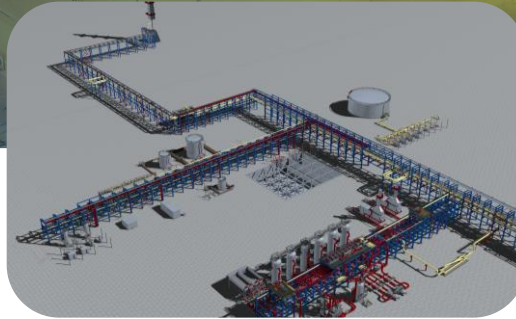


Installation of a crude stabilization unit with capacity of 30,000 Barrel per day. The unit includes oil separator, water bath heater, crude storage and export pumps, as well as, supporting utilities. The Project is situated in Kharir at Hadramout, 600 Kilometer from Sana'a in Yemen

EPC LSTK - Consortium with Petrojet (Enppi Consortium Leader)



PAGMI Project Phase I & II
(2007 - 2013)



Phase I: Conditioning of 600 MMSCFD from Dragon field (mainly Methane saturated with water), molecular sieve dehydration package and all required utilities to accomplish domestic market requirements.

Phase II: Treatment of 1000 MMSCFD gas & 20197 STD bpd condensate. There will be an additional dehydration module (module B) parallel to module A in PAGMI phase I with a capacity of 600 MMSCFD with different outlet water content.

EPCM



Expansion of Hout Crude Onshore Production Facility
(2006 - 2009)



Expanding the storage capacity at Hout onshore production facility by installation of additional 4 storage tanks (500 to 80,000 m3 capacity floating and fixed roof), in addition to booster pumps, instrumentation, piping, fire fighting and a new electrical substation.

EPC

Major National Projects



Major National Projects



ANOPC Hydrocracking Complex
(2020 - 2023)



Converting low value Fuel Oil (Mazot) into more valuable products (Diesel, Naphtha & LPG) via Vacuum distillation unit (VDU), Distillate Hydrotreating unit (DHTU) & Sulphur Recovery unit (SRU).

EPC - Licensor: SIIRTEC NIGI for SRU & AXENS for DHTU



Midor Refinery Expansion
(2019 - 2023)



Increase Midor plant refining capacity by 60% to reach 160,000 BPSD , by adding new units such as new CDU and VDU with capacity of 60,000 BPSD, diesel hydrotreating unit with capacity of 44,000 BPSD as well as solvent deasphalting unit with capacity of 14,000 BPSD in addition to the hydrogen production unit with capacity of 56,500 m3/h.

EPC - Licensor: UOP



ASORC Naphtha Complex - ISBL
(2017 - 2021)



Maximize the utilization of ASORC infrastructure and the existing facilities to increase the domestic production of high-octane Gasoline. The Project design capacity 800,000 tons/year of Naphtha (FEED) to produce high Octane gasoline and increase the LPG production to 187 tons/day.

EPC - Licensor: AXENS

Major National Projects



ANRPC New CCR & Platforming Project
(2015 - 2018)



Installing a new CCR and Platforming unit to Process 604,000 T/Y of hydrotreated heavy Naphtha to produce reformat of high-Octane Number.

EPC

(Executed 10 weeks ahead of project schedule)



New Asphalt Production Unit
(2019 - 2023)



Installation of a new Vacuum Distillation Unit (VDU) to produce 1200 ton/day of asphalt by removal of lighter fractions (Vacuum Gas Oils) from atmospheric residue that is produced from the existing atmospheric distillation units which process land Belayim crude or equivalent crude oil

Lump sum for professional services and material supply cost plus



New Vapor Recovery Unit
(2014 - 2016)



Establishing the New Vapor Recovery Unit with a feed capacity of 400,000 TON/Year to recover 97% of the butanes to produce 80,000 TON/year of on-spec LPG to serve upper Egypt LPG requirements.

Lump-sum Professional services, Cost Plus Material Supply, Commissioning and start-up assistance reimbursable MHRS

Major National Projects



GASCO Western Desert GAS Complex "Train D" (2020 - 2023)



Maximize the production of commercial propane with the applicable increase in the C2/C3 product to meet the national petrochemical sector needs.

The new feed will be handled by a new train (Train-D) with a design feed capacity of 600 MMSCFD. The train will comprise mainly of Dehydration, chilling, absorption, compression and fractionation sections.

Engineering & Procurement Services



Maximization of C2/C3 (2005 - 2012) / (3 phases) / Western Desert Gas Complex (1997 - 2000)



Maximization of C2/C3: Recovered C2 & C3 in Ameriya LPG plant transferred via 12" pipeline for processing within WGDC, where storage & loading facilities exist. Project executed in 3 phases with total production of 900 MMCFD.

Western Desert Gas Complex: Treatment of 550 MMCFD of natural gas produced from western desert to produce C2 & C3 mixture for downstream ethylene and polyethylene production, commercial propane, sales gas, LPG and condensate.

EPCM



Atoll Development Project (2016 - 2021) West Harbor Expansion (2010 - 2015)



Atoll Development Project: Installation of new equipment & developing existing West Harbor facilities to process the Atoll offshore field production of 360 MMSCFD gas & 15,000 BPD condensate.

Basic & Detailed Engineering, Procurement Services & Construction Supervision

West Harbor Expansions: Developing existing facilities to increase capacity to 585 MMSCFD and connecting PhPC plant to Petrobel Plant to secure Gas production during PhPC plant Shutdown.

EPC LSTK (Enppi Main Contractor)

Major National Projects



Assil & Karam Gas Development Project
(2011 - 2016)



Phase 1 of the project aimed to produce 164 MMSCFD of gas from Karam gas field and 60 MMSCFD from Assil gas Field in the Alam El Shawish West Block Western Desert. Scope of work includes carbon dioxide removal plant and Modification to existing BED-3 Facilities.

Phase 2 aimed to Install a Vapor Recovery Unit to reuse the exhaust vapors instead of venting, to increase the plant efficiency and reduce emissions to the environment.

EPC LSTK



Damietta LNG Project
(2002 - 2005)



Establishing a Liquefying Natural gas production plant in Damietta Port Area with an annual capacity of 4.7 MMTY of LNG for the first train, in addition to the related export facilities.

Detailed engineering for
Fractionators Unit and
Procurement Services &
Construction Supervision



NGL Project at Port Said
(2001 - 2004)



Establishing a Liquefying Natural gas production plant in Damietta Port Area with an annual capacity of 4.7 MMTY of LNG for the first train, in addition to the related export facilities.

EPCM

Major National Projects



Dahshour Compression
Station Units 5 & 6
(2018 - 2023)



Adding new two gas compressor trains one turbine driven & two motor driven ($\approx 9\text{MW}$ each through MV VSD) and five heat recovery units on exhaust stakes of the five turbines to generate electricity through ORC (Organic Rankine Cycle) generator ($\approx 24\text{MW}$) at 11KV to supply all plant loads & be independent from Utility.

EPC Main Contractor



Qasr Gas
Compression
(2012 - 2015)



Adding pressure boosting facilities (Turbo-Gas Compressor) and associated utilities to the existing Qasr, start-of-line (SOL) Plant located in the Egyptian Western Desert.

EPC LSTK (Enppi Main Contractor)



Phase VII Main
Compression Onshore
(2009 - 2012)



Installation of a new 5x25% gas turbine driven compression trains, for Burullus Gas Company (a joint venture with BG), with a capacity of 642 MMSCFD in the 7th phase of Idku Hub plant, to accommodate the pressure declination of the plant inlet pressure from 58 to 30 bar gauge. It also includes a new Finger type slug catcher, High Pressure Separators and all supporting utilities.

EPC LSTK (Enppi Main Contractor)

Major National Projects



Assiut/Aswan Gas Pipeline & Dahshour Compression Station (2008 - 2012)



Installation of gas transmission pipelines (500 KM) from Assiut to Aswan as follow:

- **PHASE I:** Assiut / Gerga P/L 120 km - 32"
- **PHASE II:** Gerga / Aswan P/L 380 km - 30"
- **PHASE III:** Compression Station in Dahshour

Professional services, Material Supply



Nooros El Gamil Pipeline Project (2017 - 2021)



- 24" gas pipeline with length 31 Km starting from NIDOCO Well Head to Abu Madi plant
- passing through station NIDOCO 6, NIDOCO 11 and QARAA.
- 32" gas pipeline with length 92 Km from Abu Madi Plant to ELGAMIL in Portsaid.
- 26" gas pipeline with length 27 Km starting from West Baltim offshore platform to Abu Madi plant.

Detailed engineering and procurement services



Nubaria / Dahshour Gas Transmission Pipeline (2010 - 2012)



Installation of a two gas transmission pipelines and associated facilities:

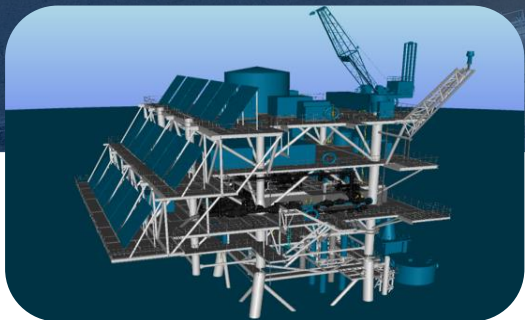
- 32" gas transmission pipeline between Nubaria and Sadat city (70 km long).
- 42" gas transmission pipeline between Sadat city and Dahshour (75 km long).

Engineering & Procurement services, and overall project management.

Major National Projects



Harmattan Deep Development
(2023 - Ongoing)



Producing 150 MMSCFD in addition to 3,000 barrels condensate. The platform will operate without human presence & with minimum required facilities.

The project includes 16" subsea pipeline to West Harbor onshore Facilities.

Engineering & Procurement Services



North Safa Field Development Project
(2022 - 2023)



North Safa field development is a new unmanned, minimal production facility platform. The new facility will accommodate 9 wells (4 Producers + 2 water Injector + 3 future).

EPC Lumpsum
Consortium (Enppi - Petrojet - PMS)



GUPCO Rehabilitation
Since 2005
(Long-Term Contract)



Rehabilitation of GUPCO offshore facilities including steel structural platforms, topside facilities and subsea pipelines.

The offshore facilities consist of 9 complexes & 69 satellites (with an overall count of 119 platforms and 400 wells) and 1600 km of subsea pipelines.

EPCM

Major National Projects



Two New Platforms
at NAO & HH Fields
(2016 - 2018)



Constructing two new Offshore Platforms at NAO and HH fields with production capacity of 9,500 BPD at Gulf of Suez, The production from the new (NAO & HH) Platforms will be transferred directly to existing (AMER-8) Platform via new 6" Pipeline 8 km long.

EPC LSTK
Consortium Enppi - Petrojet - PMS
(Enppi Consortium Leader)



Seth Offshore
Development
(2011 - 2012)



Installation of a new platform in water depth of 83.3m at PTB Seth gas field in the Ras El Barr Concession West Nile Delta area (Mediterranean Sea), total field production flow rate is 4.5 MMSCMD.

EPC LSTK
Consortium Enppi - Petrojet - Tecnomare (Enppi Leader)



TUNA Field
Development
(2008 - 2010)



Developing Tuna field at the Mediterranean Sea by installing a new platform (4-legged platform approx. 82 m of water) and connecting pipelines (24" subsea pipeline approx. 15 km from Tuna platform to new PLEM and eventually to the existing Denise-A SSIV and 32" P/L to onshore plant near T-NW2 existing platform) to support the production of 4.5 MMSCFD.
EPC LSTK- Consortium of Enppi, Tecnomare and Petrojet (Enppi Leader)

Major National Projects



**WDDM IXB & X
Dev. Projects
(2017 - 2023)**



As part of ongoing development of WDDM concessions (70 subsea Wells), Phase IXB expansion started production by 120 MMSCFD from 2 wells in 2018 & reached 370 MMSCFD in 2019 from 6 new wells.

PMC - Consortium Enppi - Wood



**DEKA
(Denis - Karawan)
Subsea Field Dev.
(2012 - 2014)**



Subsea tie-back of five new subsea wells in about 115m water depth via new 16"/10" sealines network to existing D4 well PLEM, Tamsah 32" & 24" sealines.

Field layout includes PLEMs, HIPPS modules, subsea spools between production facilities, control umbilicals / SUTUs & flying leads, subsea hot tapping skids (tie-in with existing 32" & 24" sealines), subsea foundation and fishing protection structures.

PMC



**Zohr Field Dev.
PMT for
Subsea Works
(2016 - 2020)**



The field is developed through 3 phases; the 1st two phases includes 20 wells connected via rigid infield flowlines to 7 off manifolds which in turn export the production through 3 main trunk lines (1 off 26" and 2 off 30"). Field is served with 2 off 14" service lines in addition to 2 off 8" MEG injection lines composing a closed loop for effective continuous MEG injections into XT's.

PMC

Major National Projects



New Hydrocracking & Naphtha Complex
(2021 - Ongoing)



Installation of a new hydrocracking complex & new naphtha complex to maximize the added value of the petroleum products through converting the low value heavy petroleum products (fuel oil & naphtha) into lighter high value products such as diesel, benzene and LPD. 18 Units (12 Licensed, 6 Open Art). 8,000 KTA Crude Oil.

Pre-FEED / FEED



New Polyethylene Plant 400,000 MT/Y
(2011 - 2015)



Building a Polyethylene plant in Alexandria with a Total capacity of 400 KTA, Linear Low- Density Polyethylene (LLDPE) and High-Density Polyethylene (HDPE) through two trains of a capacity 200 KTA each, using polymer grade ethylene as feed stock.

EPC
JV Enppi / Toyo engineering Corp.
Licensor: Univation Technologies LLC



Ethylene Cracker
(2011 - 2015)



Execution of the EPC scope of work of a 460 KTA Ethylene and 20 KTA Butadiene projects at Ameriya in Alexandria, Egypt.

EPC
JV Enppi / Toyo engineering Corp.
Licensor: Univation Technologies LLC

Major National Projects



Utilities & Offsites for
ASORC Naphtha Complex
“OSBL” - (2017 - 2021)



Establishing utilities and offsite facilities required for the new Naphtha Complex. The Utilities and Off-sites project includes Cooling Tower Package, Instrument and utility air compressor package, Nitrogen generation and Compression package, Steam Generation Package, Water Softening package, oily water treatment package and Chemical injection package

EPC



Permanent Power
Plant (PPP)
(2014 - 2019)



Generate electric power with a capacity of 70 MW per hour using Gas Turbines convertible to combined Cycle and connecting it to the Electrical National Grid to export the additional production and to export the excess electricity. (Phase 2)

EPC



Utilities Project for
Ethylene & Derivatives
Complex
(2011 - 2015)



Installation of new utilities required for the New Ethylene & Derivatives Complex in Alexandria. The Utility Plant includes the following; Water Treatment System applying Zero Liquid Discharge (ZLD) concept with design capacity of 1100 m3/hr, Cooling water system, Chemical bulk storage and supply system, Potable /Utility water systems, Collection and discharge system for Treated wastewater from different plants

EPC

Enppi Academy

educate

train

People

reward



Enppi Academy

- Enppi Academy sustains its role in offering various technical & managerial programs aimed at developing newly graduated engineers.
- These programs are designed to bridge the gap between theoretical academic education and the practical business environment, enabling new engineering graduates to gain familiarity with the applied principles and techniques involved in engineering activities across various disciplines in the Oil & Gas industry.
- Enppi Academy introduces its services to Enppi employees, Egyptian oil and gas sector employees and international candidates.
- Enppi Academy succeeded in concluding a successful partnership with YOKOGAWA through which a DCS and SIS Demo System added to Enppi's training services and facilities.

Enppi Academy

- Enppi, through its KSA Branch, continues holding its position as a major investor in the human capital in the Kingdom of Saudi Arabia.
- The Alumni Development Program (ADP) aims to achieve capacity-building based on Enppi engineering expertise and proficiency that was built over decades of hands-on practice.



Celebrating the graduation of Saudi Aramco engineers after completing the Alumni Development Program (ADP), in the presence of Saudi Aramco VP for Projects and other Saudi Aramco GM's.



Enppi 