

COMPANY PROFILE



WHO WE ARE

Saipem is an advanced technological and engineering platform for the design, construction and operation of complex, safe and sustainable infrastructures and plants.

MISSION

Transform our clients' strategies and projects into competitive and sustainable infrastructures, plants and processes.

DISTINCTIVE COMPETENCIES

Technological innovation capacity; engineering and management skills; consolidated experience in project management; strong penchant for problem-solving orientation; dialogue and transparency.

VALUES

We value our projects thanks to the ingenuity of everyone and the different cultures of each; we execute them responsibly, having the safety of people and the environment at heart; we carry them out with the utmost commitment to build trusting relationships with customers.



A TECHNOLOGICAL GLOBAL ENGINEERING PLATFORM

THE PILLARS OF OUR INTEGRATED BUSINESS MODEL



ASSET BASED SOLUTIONS

THE TRADITIONAL CORE BUSINESS
MANAGED IN THE NEW PRESENT

Solid track-record in the definition and implementation of the best strategies and technical-executive solutions for offshore.

- **Offshore E&C** (Engineering & Construction), including **SURF** (Subsea, Umbilicals, Risers & Flowlines)
- **Offshore Drilling:** versatile and heterogenous fleet composed by
 - Ultra deep water vessels with dual derrick capacity
 - Semi-submersible vessel for harsh environments
 - Rejuvenated jack up fleet for shallow waters



ENERGY CARRIERS

THE POWERHOUSE FOR COMPLEX
PROJECTS

Among the world players in the design and construction of large scale plants and projects with high technological content.

Onshore:

- LNG plants
- Gaz monetization (hydrogen, ammonia, urea)
- Biofuels
- Other proprietary technologies (i.e. SPELL™ for wastewater treatment, Saipem Liqueflex™)



ROBOTICS AND INDUSTRIALIZED SOLUTIONS

THE ANSWER TO THE NEW NEEDS FOR THE
ENERGY TRANSITION

Advanced engineering services for the concept and design of innovative & modular industrialized solutions to facilitate energy transition.

- Offshore wind: fixed and floating plants.
- Integrated energy hubs for the production and transport of energy from different renewable sources
- CCUS
- Green hydrogen cycle
- Circular economy
- Underwater robotics
- Subsea structures



SUSTAINABLE INFRASTRUCTURES

EXPERIENCE, SAFETY, RELIABILITY AND
TECHNOLOGIES APPLIED TO
INFRASTRUCTURES

Creation of complex, safe and sustainable infrastructures at the service of Italy and the world.

EPC Contractor, engineering, direction and management of projects

Sustainable infrastructures:





- HC/HS railways
- Subways and tramways
- High-end services for infrastructural works monitoring and efficiency improvement

THE ECONOMIC VALUE GENERATED AND DISTRIBUTED BY SAIPEM

Saipem generates economic value through its activities and redistributes part of this value by contributing to the economic growth of the countries and communities where it operates.



Total distributed economic value (2021): 8,893 M €

6,839 M €	To the supply chain (purchase of goods and services and other costs)	
1,651 M €	To employees (salaries and benefits)	
70 M €	To governments (taxes)	
333 M €	To lenders (interest on debt)	

ENGINEERS FOR A SUSTAINABLE FUTURE AND VALUE CREATORS

SAIPEM'S IMPACT ON THE ITALIAN ECONOMIC SYSTEM

ECONOMIC IMPACT



DIRECT IMPACT
(2017-2021)
5.5 billion €

Multipiers

1.77



**INDIRECT AND
INDUCED IMPACT**
(2017-2021)
4.1 billion €

TOTAL IMPACT
(2017-2021)
9.6 billion €

EMPLOYMENT IMPACT



DIRECT IMPACT
Yearly average
approx. 6,000 jobs

2.77



**INDIRECT AND
INDUCED IMPACT**
Yearly average
approx. 10,000 jobs

TOTAL IMPACT
Yearly average
approx. 16,000
jobs

0.1%

SAIPEM'S CONTRIBUTION TO THE GDP in 2017
The average value during the 2017-2021 period
is equal to 0.07%

4 B €

**SAIPEM'S CONTRIBUTION TO THE ITALIAN INDUSTRIAL
SYSTEM (PURCHASE OF GOODS AND SERVICES IN ITALY)**
2017-2021

THE VALUE GENERATED BY SAIPEM IN THE WORLD

FOCUS ON SOME KEY COUNTRIES

Nigeria



Average contribution
to national GDP *

0.15%

Saudi Arabia



Average contribution
to national GDP *

0.09%

Indonesia



Average contribution
to national GDP *

0.016%

Norway



Average contribution
to national GDP *

0.08%

* From the latest studies carried out through the SELCE (Saipem Externalities Local Content Evaluation) model

SAIPEM SUSTAINABLE BUSINESS MODEL

ACKNOWLEDGMENTS

DOW JONES SUSTAINABILITY INDICES
Sector Leader for 4 consecutive years

Winner of
Dow Jones Sustainability Indices
Presented by the S&P Global CSA

GOLD CLASS MEDAL
2021 S&P Sustainability Yearbook

Sustainability Award
Gold Class 2021
S&P Global

NET ZERO SAIPEM PROGRAM



Saipem's assets and operations
carbon footprint reduction



Supporting clients to reduce their
carbon footprint

2025

Net Zero Scope 2 emissions

2035

50% reduction in Scope 1 & 2
emissions (-670,000 t CO2 equiv)

2050

Further reductions in Scope
1, 2 & 3 emissions



Saipem adheres to the United Nations Global Compact, committing itself to comply with the ten principles covering human rights, labour, the environment and anti-corruption.

It is committed to contributing to the achievement of the Sustainable Development Goals (SDGs) of the UN 2030 Agenda.

HSE

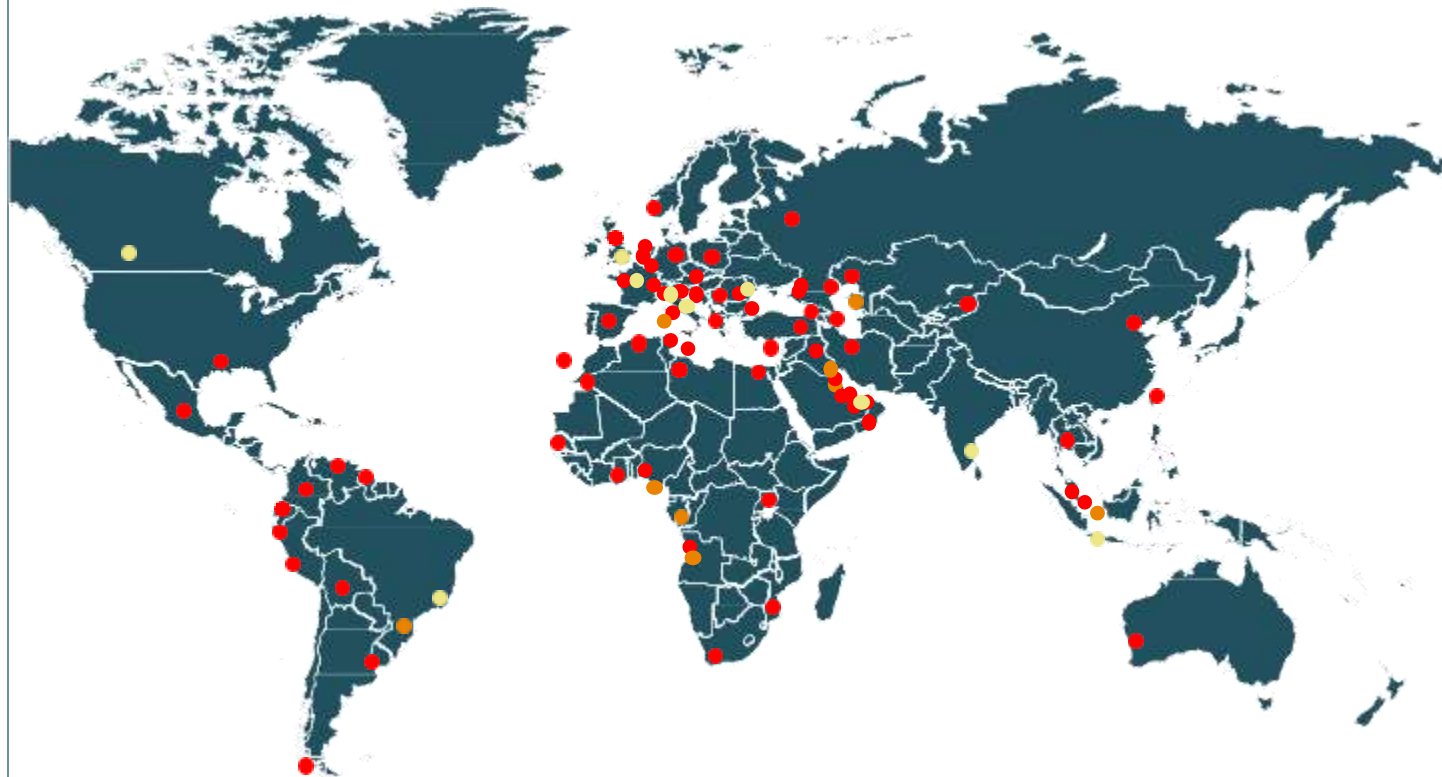


The LIHS Foundation was established by Saipem in 2010 to spread health & safety culture in the industry and society.

The Foundation promotes safety culture in the workplace and international *best practices* through training, awareness campaigns and cultural initiatives aimed at both general public and industrial operators.



SAIPEM IN THE WORLD



- Engineering centres
- Prefabrication yards
- Other relevant sites (headquarters, branches, etc.)



KEY FIGURES *

WE OPERATE IN > 60 COUNTRIES

> 34,000
EMPLOYEES WORLDWIDE

> 130
DIFFERENT
NATIONALITIES

8 PREFABRICATION
YARDS
Italy, Brazil, Republic of the
Congo, Angola, Saudi
Arabia, Indonesia,
Kazakhstan, Nigeria

7 ENGINEERING
HUBS
Italy, Mexico, France, UAE,
India

40 VESSELS

298 M €
INVESTMENTS IN INNOVATION

2,827
ACTIVE PATENTS

* as of 2021

SOLUTIONS TO LOWER CARBON FOOTPRINT

TOWARDS TRANSITION THROUGH TECHNOLOGICAL INNOVATION

Renewable energies



- **Wind farms:** technologies for conventional and floating wind farms
- **Floating solar parks** also combined with wind farms
- **Emerging marine energies** (waves, tides, sea currents, etc.)
- **Geothermal** (onshore/offshore)
- **Energy storage and systems integration**

Decarbonization



- **CO2 management:** Carbon capture, reuse, transport and storage for carbon- and/or energy-intensive industries (ACCSESS project funded by the EU)
- **New hybrid configurations:** fossils together with renewables (offshore and onshore)
- **Energy efficiency:** a *must* of the industry
- Identification of solutions with a minimum **carbon footprint** along the entire EPC supply chain

Hydrogen



- **Electrolysers:** Onshore and offshore green hydrogen production
- **Transport of hydrogen** in pipelines (pure or mixed with natural gas) or liquefied
- Hydrogen for **industrial uses** (fertilizers, refinery, steel, etc.)
- **Green Hydrogen to Substitute Natural Gas** or e-fuel
- **Offshore hubs** (for production, storage, etc.)

BioTechnologies & Circular economy

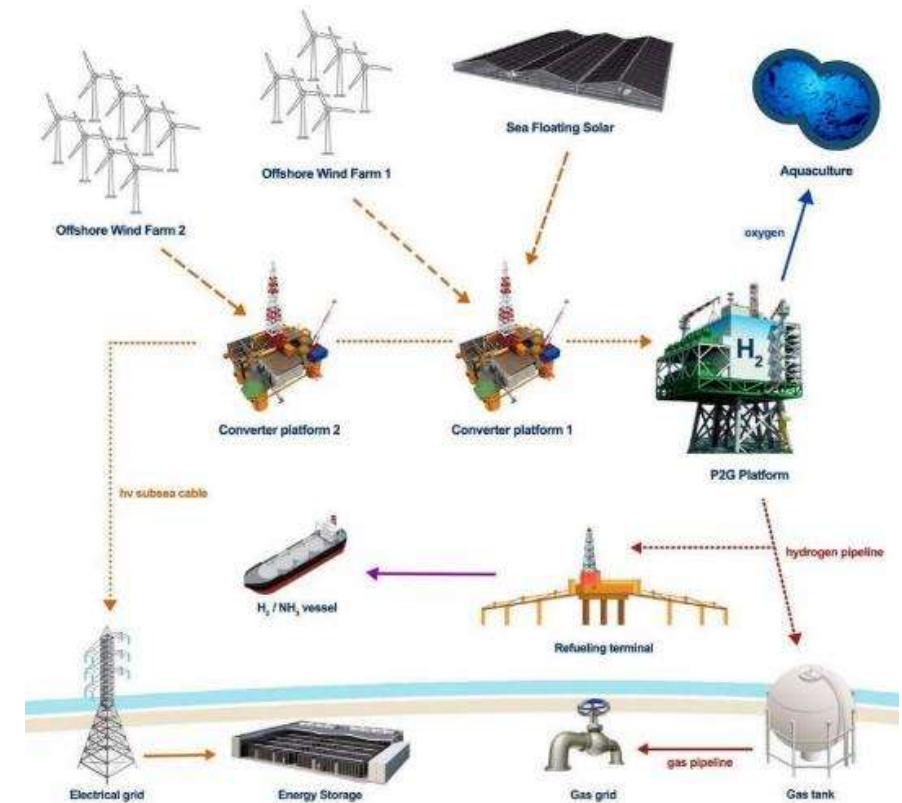


- Advanced technologies for **bioethanol, bio-fuel for jets, bio-gas**
- Technologies by system / circular economy:
 - Waste to Fuel/Energy
 - **Plastic recycling**
 - Sustainable water management

THE “AGNES” GREEN ENERGY HUB IN THE ADRIATIC SEA

ADRIATIC GREEN NETWORK OF ENERGY SOURCES (AGNES)

- The Adriatic Green Network of Energy Sources (AGNES) project consists in an integrated offshore district of renewable energies off the coast of Ravenna.
- The goal is to convert the Oil & Gas sector and create beneficial synergies between various Renewable energy sources such as solar, wind and green hydrogen.
- It is one of the first offshore wind projects in the Mediterranean Sea in phase of development, and the first in which wind, hydrogen and floating solar will be implemented on a commercial scale.
- Minimal visual impact from the coast: over 12 nautical miles
- The Integrated Marine District is a modular and scalable project in which offshore wind, floating solar, wave energy and green hydrogen can be integrated. Several areas can host this offshore energy hub concept both in Italy and worldwide.



SAIPEM CCUS APPROACH

END-TO-END CO₂ MANAGEMENT

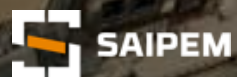
Saipem can master the entire CCUS value chain, thanks to its solid background in process technology, pipeline fluid transportation and reinjection, brownfield repurposing and its new propriety carbon capture technology “CO₂ Solutions by Saipem”

70+
CO₂ REMOVAL
PLANTS

>130,000 KM
PIPELINES INSTALLED

136+
PLANTS transform
CO₂ into Urea
with Snamprogetti
TM Technology

7,000+
WELLS DRILLED



Capture



Re-use



Transport



Storage

SAIPEM CCUS APPROACH

CO₂ SOLUTIONS BY SAIPEM



In December 2019, Saipem acquired a proprietary technology for CO₂ capture from the Canadian company CO₂ Solutions Inc. Demonstration facility is operating in Canada and Saipem is ready to commercialize and scale-up.

- The acquisition of CO₂ Solutions technology is a concrete step towards decarbonization
- Saipem EPC contractor support integrated with high level of competences from CO₂ Solutions

Low environmental impact: it doesn't generate toxic wastes as amine plant
Competitive for "GREEN APPLICATIONS"



Low-grade residual heat sufficient to regenerate the solvent
Heat recovery to reduce OPEX



Low corrosion rates and low toxicity of the solvent
Low-cost material can be used (PVC or CPVC)



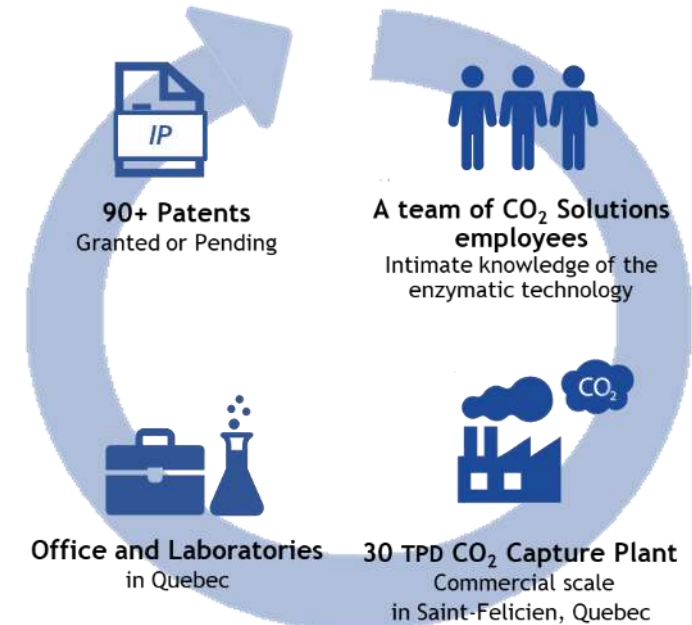
3 main process steps: Quench / conditioning, Absorption, Stripping
Low complexity process



No proprietary items: equipment available on the market
Standard equipment




- Potassium Carbonate Absorption catalyzed by Enzymes
- Mature technology already installed in industrial application



CIRCULAR ECONOMY

SUCCESSFUL IMPLEMENTATION STORY @VENICE GREEN REFINERY

- The **world's first conversion** of traditional refinery's entire processing cycle a to a biorefinery (ENI Porto Marghera Refinery, 2014)
- **Ecofining™** technology, developed and patented in 2007 by ENI in collaboration with Honeywell UOP


- 
- 300,000 TPA of Green Diesel (in addition to Green Nafta and Green LPG) - 500,000 TPA in the 2nd step
 - 230,000 TPA of vegetable oil treated & converted
 - Total investment approx 170 M€, i.e. an 80% reduction of the investment required for the construction of a brand new Biorefinery

ROBOTICS & SUBSEA TECHNOLOGIES IN NUMBERS

160 engineers
250 offshore specialists
VCE, TRS & ABZ main hubs
RDJ, HOU, ABD, SVG Biz Dev. offices

+60 patents filed
+10 patents deployed in projects (*)
6 Innovation Trophies won
2 OTC Spotlight Awards

(*) Since 2002
(**) Average figure

A large, yellow, industrial robotic arm is shown in operation on a barge. The arm is lifting a large, black, cylindrical component, likely a telescopic joint, from the water. The background shows a clear blue sky and a body of water.

SiRCoS Telescopic Joint -
Advanced custom sealing
technology for Diverless
Emergency Pipeline Repair

SAIPEM ROBOTICS & SUBSEA TECHNOLOGIES PORTFOLIO

A FULL AND VARIED SET OF CAPABILITIES

Drones



Submarine Rescue Vehicle



Drones for Mine Haunting



Water Injection Treatment



Subsea Separation



EPRS (Emergency Pipeline Repairing System)



RiMS (Riser Integrity Monitoring System)



- SPRINGS® - Subsea Desulfation & Injection of Seawater
- FLUIDEEP™ - Subsea Chemical Storage & Injection
- Vertical MultiPipe - Subsea Gas/Liquid Separation
- SpoolSep - Subsea Produced Water Treatment for Re-Injection or Sea Disposal
- SirCos
- CRA Connector
- Wrapping

TECHNOLOGY & INNOVATION

ROBOTICS DISTRICT

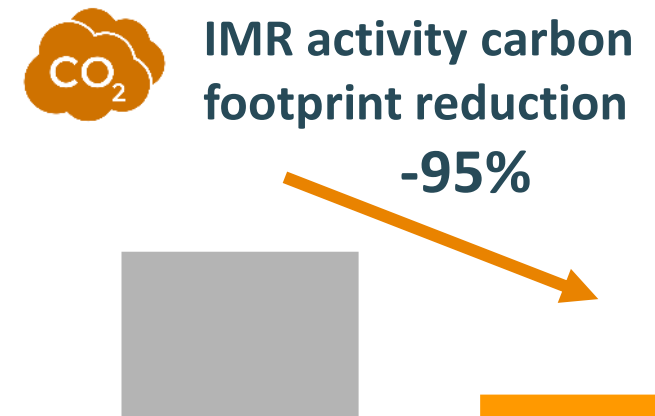
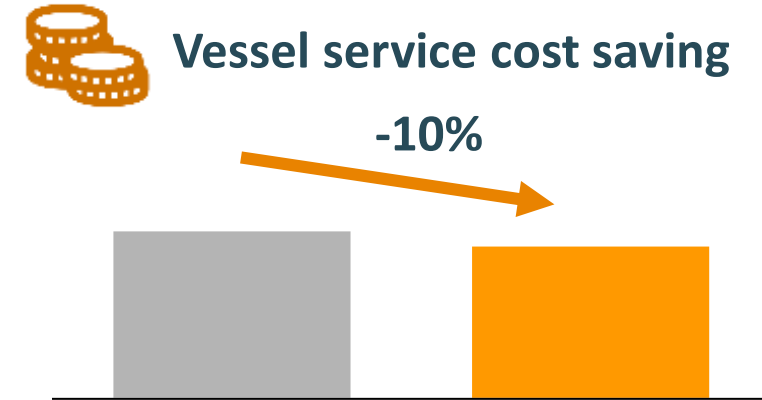
POTENTIAL USE CASE



- + FlatFish
 - SURF & SPS inspection
 - Surveillance
- + FSV all year for field development support

- + FlatFish
- + Hydrone-R
 - light maintenance
 - operation and production support
- + PSV / FSV on call

Key benefits estimated



SUSTAINABLE INFRASTRUCTURES

HS / HC Railway, Highways, Civil Works

SAIPEM INFRASTRUCTURES IN FIGURES

10 B

EUR Projects

1,000

Km of Railways

450

Km of Roads

47

Km of complex Viaducts

6.6

Km of TBM Tunnel

584

Km of Embankment

O&M

25k sqm O&M Depot

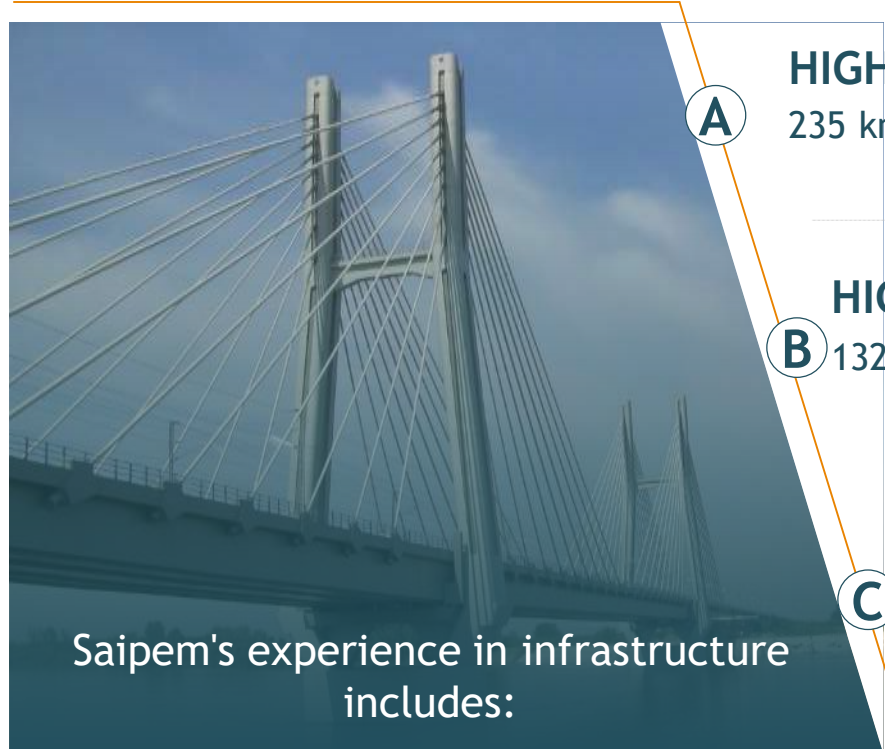
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Rail Structures

TRACK RECORD:

- One of the first ERTMS Level 2 (Signalling) implemented in Europe and in UAE
- Longest High Speed Rail cable stayed Bridge in Europe
- First Middle East Rail Project with Sustainable classification/certification (UAE Pearls rating Systems, Depot Buildings)

MAIN REFERENCES HS & RAILWAYS



A **HIGH SPEED RAIL MILAN - BOLOGNA - ITALY**
235 km double track, 300 km/h, > 6 BLN €

B **HIGH SPEED RAIL MILAN - VERONA - ITALY**
132 km (52 operative km), 300 km/h > 4 BLN €

C **RAILWAY SHAH-HABSHAN-RUWAIS - UAE**
264 km double track, 200 km/h, 1BLN \$
First railway in the UAE equipped with a signalling system ETCS L2

Saipem's experience in infrastructure includes:

 1.000 km of railways	 450 km of roads	 45.000 m ² of buildings	 40 km of complex viaducts and bridges	 >100 stakeholders involved
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SAIPEM PROJECTS AROUND THE WORLD



SAIPEM CURRENT KEY PROJECTS

ORDERS BACKLOG >24 B€

■ ONSHORE
■ OFFSHORE

Europe, CIS & Central Asia

NNG WIND - UK
BALTIC PIPE - POLAND
COURSEILLES WIND - FRANCE
SHAH DENIZ - AZERBAIJAN

ARCTIC2 LNG - RUSSIA
MOSCOW REF - RUSSIA
MI-VE AV/AC - ITALY

Americas

PAYARA DEV - GUYANA
YELLOW TAIL - GUYANA
BÚZIOS PIPE - BRAZIL

BÚZIOS FPSO - BRAZIL
DRILLING ON. - VARIOUS

Middle East

NFP OFFSHORE - QATAR
NFP PIPELINE - QATAR
LTAs - SAUDI ARABIA
DRILLING OFF. - VARIOUS

SHAH GAS - UAE
HAIFA UREA - ISRAEL
HARADH - SAUDI ARABIA
MARJAN - SAUDI ARABIA
DRILLING ON. - VARIOUS

Africa

AGOGO SURF - ANGOLA
DRILLING OFF. - VARIOUS
TORTUE - MAURITANIA

NLNG 7 TRAIN - NIGERIA
TOTAL LNG - MOZAMBIQUE

Asia Pacific

SCARBOROUGH PIPELINE - AUSTRALIA

DESTINY UREA - AUSTRALIA
TANGGUH LNG - INDONESIA
NONG FAB - THAILAND
CLEAN FUEL REF. - THAILAND



AUSTRALIA PERDAMAN PROJECT DESTINY

PROJECT OVERVIEW

Project: 2MTPA Urea fertiliser plant (Ammonia / Urea)

Client: Perdaman Chemicals and Fertilisers Pty Ltd.

Location: Burrup Peninsula, Western Australia

SoW: Turnkey EPC, commissioning and performance and reliability testing of:

- an ammonia unit with a capacity of 3,500 MTPD of ammonia
- 2 trains of urea with a capacity of 6,200 MTPD of granular urea
- utilities and offsites facilities

Partnership: JV Fully integrated Saipem 50% - Clough 50%

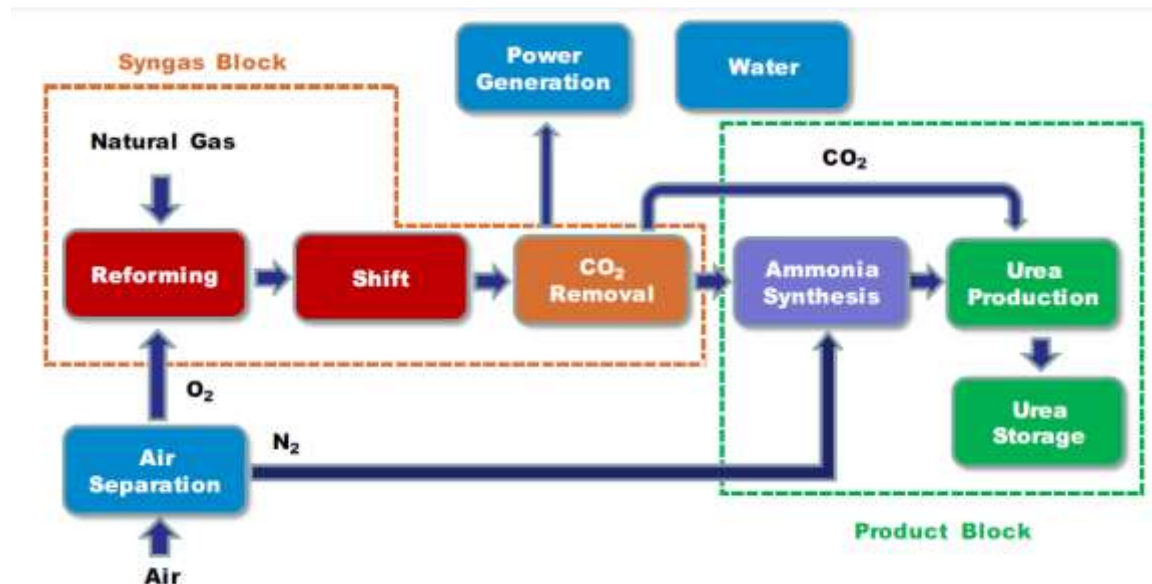


PROJECT DESCRIPTION

PROCESS SCHEME

The gas will be reformed to synthesis gas (syngas). The syngas is converted to ammonia, which is reacted with carbon dioxide (CO₂) to form urea.

- **Syngas Block** converts the natural gas to a high purity syngas suitable for conversion to ammonia.
- **Product Block** takes clean syngas and converts this to ammonia. The ammonia is converted to urea by addition of CO₂. The urea is dried and granulated.
- **Utility Block** delivers process utility requirements such as O₂, N₂, Power and Water.



Process Technologies

- Topsoe's SynCOR Ammonia™ process for Ammonia unit
- Snamprogetti Urea Technology Licensors for Urea synthesis units
- Thyssenkrupp Fertilizer Technology (tkFT) for Urea Granulation units

HALDOR TOPSOE 

 SAIPEM

 thyssenkrupp

