LNG

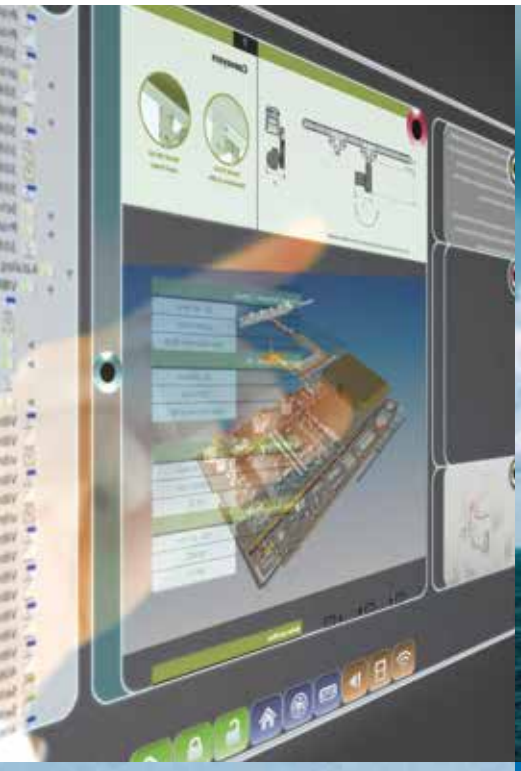
INDEX

SAIPEM TODAY

SAIPEM TODAY IS A WORLD LEADER IN THE GLOBAL SUPPLY OF ENGINEERING, PROCUREMENT, PROJECT MANAGEMENT, CONSTRUCTION AND DRILLING SERVICES WITH DISTINCTIVE CAPABILITIES IN THE DESIGN AND EXECUTION OF LARGE-SCALE OFFSHORE AND ONSHORE PROJECTS.

Saipem has a strong bias towards oil and gas frontiers, namely activities in harsh and remote areas, in deep waters as well as in extremely cold and hot environments, applying significant technological competences in many diverse fields such as gas monetization and heavy oil exploitation.

Saipem is organized in two Business Units: Engineering & Construction and Drilling.




SAIPEM
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SAIPEM ENGINEERING & CONSTRUCTION

FOLLOWING AN AGGRESSIVE GROWTH STRATEGY, WHICH INCLUDED IN THE LAST DECADE THE ACQUISITION OF MANY CONSTRUCTION, TECHNOLOGY AND ENGINEERING COMPANIES, MOST PROMINENTLY OF SNAMPROGETTI, BOUYGUES OFFSHORE, SOFRESID AND MOSS MARITIME, SAIPEM HAS BECOME ONE OF THE WORLD LARGEST AND MOST COMPLETE ENGINEERING AND CONSTRUCTION COMPANIES IN THE GLOBAL OIL AND GAS MARKETS, ONSHORE AND OFFSHORE.

Ever since its initial steps in the fifties as the construction division of Snam, the pipeline company of the Eni Group in Italy, Saipem has pursued a systematic growth strategy, based on the development of internal assets, expertise and skilled resources, as well as on the acquisition of other players with their own asset bases, such as Micoperi in late eighties, and many others.

In the last decade, Saipem has continued its growth by acquiring Bouygues Offshore and Sofresid in France, Moss Maritime in Norway, IDPE in India and Snamprogetti in Italy, and by carrying out a multibillion investment program into the expansion of its offshore construction and drilling fleets. Since the year 2000, Saipem's market capitalization has grown more than sixfold and its revenues tenfold.(*)

The organizational integration of this considerable asset base, namely the network of engineering centres, fabrication and support yards in several continents as well as the offshore construction fleet, has been completed gradually over the years - most recently with the creation of a unified Business Unit Engineering & Construction, an entity with over 30,000 employees (excluding corporate and BU Drilling staff) from over 100 nationalities, with over 60 permanent establishments and numerous project execution centres around the globe, and with yearly revenues exceeding 10 billion €/y; all held together by outstanding project management skills.

Through the involvement of our global EP(I)C hubs in Milan, Rome and Fano (Italy), Paris (France) and Chennai (India), which operate in connection with a growing number of medium size and smaller regional engineering and project execution centres employing altogether over 7,000 engineers, Saipem balances high project execution quality with a competitive cost and - most importantly - with a major emphasis on local know-how and content.

This well-integrated multicenter approach provides a consistent design and robust execution philosophy on all our projects worldwide. Top priority is provided throughout to all HSEQ aspects.

Saipem therefore offers a complete range of project definition and execution services, offshore and onshore, particularly for the complex "mega-projects" required by the market today: from feasibility and conceptual studies to complex integrated solutions combining design, engineering, procurement, field construction, fabrication and offshore installation; also revamps, upgradings, maintenance, decommissionings, reclamations and decontaminations.

Saipem today operates in virtually every world market, often in remote locations with harsh environmental conditions and challenging logistics, leveraging on its proven experience across the most significant product lines in the oil and gas production onshore, offshore, in deepwater; gas and oil transportation via offshore and onshore pipeline systems; midstream, refining, chemicals, power generation from fossil as well as from renewable sources; environmental industries, maritime works and infrastructure.

This new series, therefore, outlines Saipem's integrated references in engineering and construction markets offshore and onshore, according to individual business and technology lines.

(*) Until Dec. 31, 2010

LIQUEFIED NATURAL GAS

IF THE 20TH CENTURY WAS PROBABLY "THE CENTURY OF OIL", THE 21ST CENTURY COULD EASILY BECOME "THE CENTURY OF GAS". INDEED, NATURAL GAS, A CLEAN BURNING FUEL, WITH RELATIVELY PLENTIFUL RESERVES, EVER MORE EASILY TRANSPORTABLE WITH NEW TECHNOLOGY BREAKTHROUGHS, CONVERTIBLE INTO POWER AND OTHER ENERGY SOURCES WITH CONTINUOUSLY IMPROVING EFFICIENCIES, MIGHT BECOME ONE OF THE MOST EFFICIENT AND READILY USABLE ENERGY SOURCES.

According to IEA's World Energy Outlook (2009), natural gas had satisfied 17% of world's primary energy demand in the 1980s; in 2007, 21%; over the next decades, it is widely expected that this share could grow further.

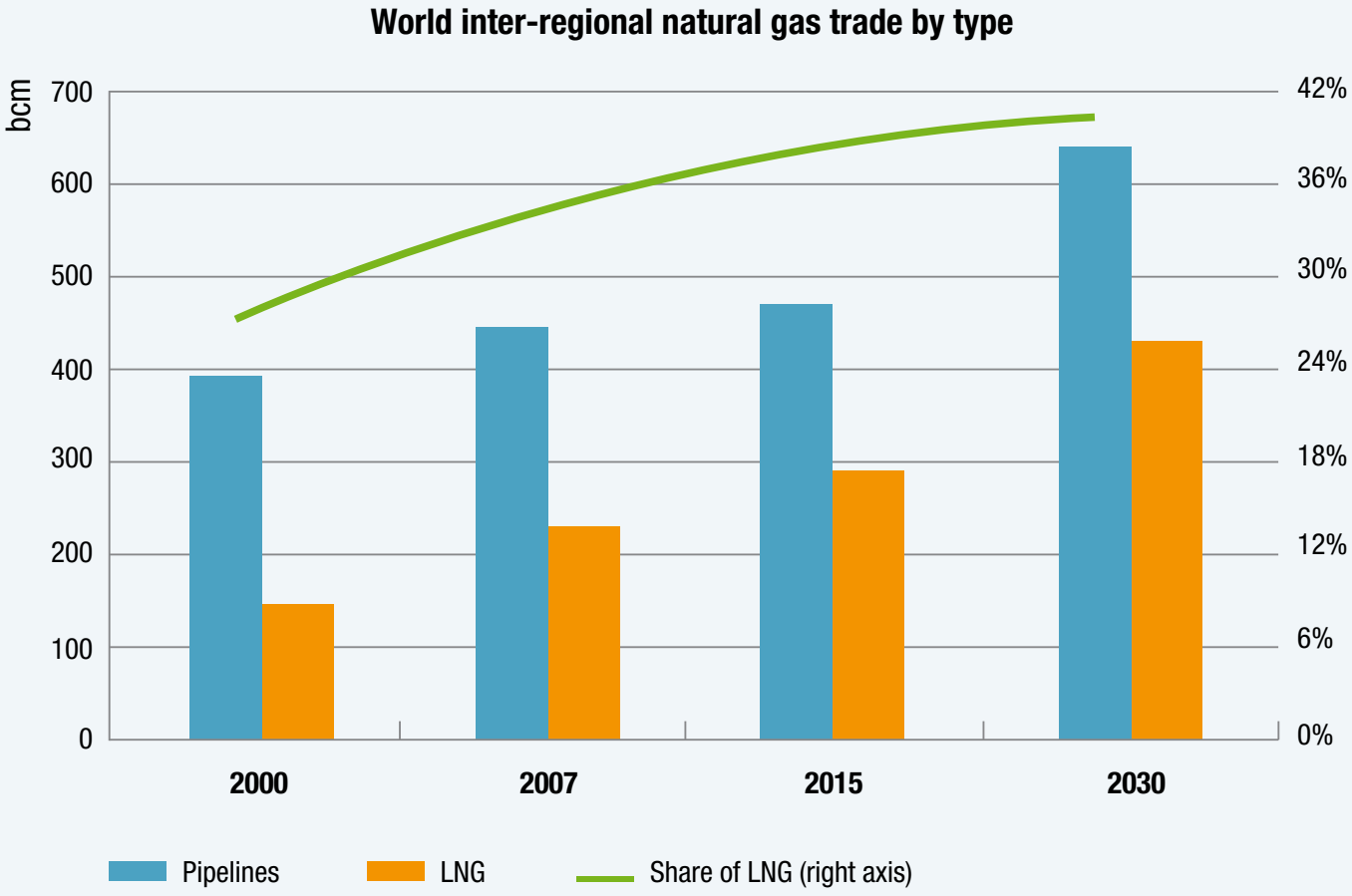
As the local gas reserves in main established markets of North America, Europe, Japan and later China and India have shown significant signs of depletion, new reserves have started being exploited in massive quantities in newer gas producing regions, such as Russia, Asia/Pacific, North Africa, Middle-East, Latin America, Canada, etc.

For example, already today approximately 60% of EU's gas consumption is supplied from non-EU sources, a figure destined to rise to over 80% by 2030. Over the recent decades, a significant cost reduction, due to greater experience and to major technological breakthroughs, has made the gas production and transportation economically feasible over ever longer distances, e.g. today from even 10,000 km away from main markets. The frontier of economical acceptability of gas production is therefore continuously moving farther away.

For a long time, gas transportation by pipeline has been the predominant vehicle of gas transmission over short and long distances.

Over the recent decades, however, gas transportation by Liquefied Natural Gas, hereafter LNG, has steadily gained in importance, particularly over very long distances, due to many technical breakthroughs which have contributed to the reduction or closure of the comparative cost gap. In addition, gas transmission as LNG offers much greater commercial flexibility and is less dependent on permitting, right-of-way and political issues.

Today, gas transportation as LNG accounts for about 26% of the interregional gas trade, a figure expected to exceed 40% by 2030, with LNG cargoes from Qatar reaching the U.S.A., or from Nigeria to Japan.



Trade between 24 regions modelled by IEA World Energy Outlook (2009). It does not include international trade within each region.

SAIPEM EXPERIENCE IN LNG

THE CONSTITUENT COMPANIES OF SAIPEM, NAMELY SNAMPROGETTI, BOUYGUES OFFSHORE, SOFRESID AND TECHNIGAZ, EVER SINCE THE EARLY 1960S HAVE STARTED ACCUMULATING SIGNIFICANT EXPERIENCES, KNOW-HOW AND MAJOR REFERENCES IN VARIOUS PROJECTS RELATED TO THE NATURAL GAS DELIVERY CHAIN, FROM PRODUCTION AND PROCESSING TO TRANSPORTATION BY PIPELINE, LIQUEFACTION AND REGASIFICATION.(*)

Following the consolidation over the years of all these originally separate entities and capabilities into a single new and well integrated global organization, Saipem can perform today a full range of engineering and project execution services, from preliminary studies to mega-project design and construction on an EPC/LSTK basis, on any project, even the largest one, in the entire natural gas processing and transportation chain.

Saipem's efforts in the LNG liquefaction and regasification chain started in the 1960's when it built the Marsa El Brega liquefaction plant in Libya for Esso Standard Inc. and the Panigaglia LNG regasification plant in Italy for Snam S.p.A., two terminals in one of the first operating LNG chains in the world.
At about the same time, Technigaz (also Saipem, today) started to develop its own LNG storage and later regasification technology, with pioneer membrane LNG tanks delivered to Gaz de France in Montoir (France) in the '70s, and the first LNG regasification terminal designed and built for KOGAS at Pyeong Taek in 1987 (South Korea).

Since those early days, which included the development and application of new technologies, e.g. TealarcTM, a precursor to the modern dual mixed refrigerant system, by Snamprogetti (now Saipem) and Technip, to date Saipem has designed and built:

- In the last decade, 9 world-scale base-load natural gas liquefaction trains, all currently in operation, for a total capacity of 35 MTPA, as well as in earlier times 2 peak shaving facilities. Another 4.7 base load MTPA project is currently in design and execution.
  Saipem has also carried out many front end designs and provided pre-EPC services on several projects. Some of these are awaiting today the Final Investment Decision, in order to proceed to the EPC phase.

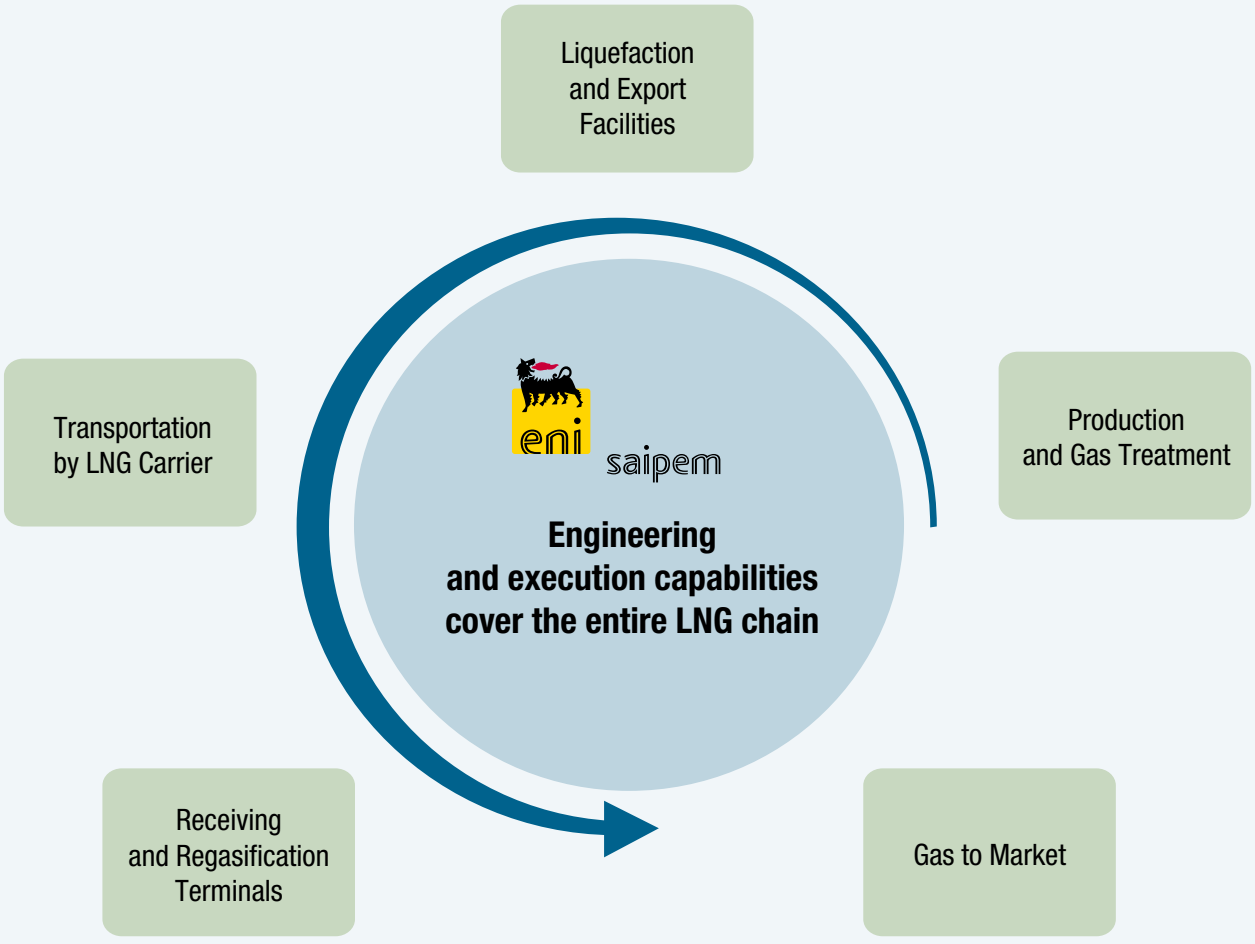
(*) Please refer to parallel Saipem brochures "Oil and Gas Production and Processing", "Onshore Oil and Gas Transportation Systems" and "Marine Works and Terminals".

- Since the early 70's, 11 LNG regasification terminals in different countries of Asia, Europe and North America, with the total capacity exceeding 40 MTPA.
- 44 specialized LNG Storage Tanks, totaling a storage capacity of more than 2.5 Mcu.m LNG.
- Numerous ports and specialized LNG loading and unloading marine terminals.

This performance has been achieved via a strong organization, with dedicated groups for the various specialized areas, inclusive of engineering and execution capabilities in cryogenic systems and other critical areas, as well as with strong and durable local presence in key markets.

Saipem therefore offers full in-house capabilities for developing customized engineering and construction methods for the core plants, for the storage tanks and for the associated maritime works infrastructure.
The project activities are continuously supported by Saipem's applied R&D efforts worldwide, leading to the application of many innovative technology solutions.

Saipem and the LNG chain



Marsa El Brega liquefaction plant in Libya for Esso Std. Inc. (1970)

Panigaglia LNG regasification plant in Italy for SNAM S.p.A. (1971)

Montoir LNG Tanks in France for Gaz de France (1981)

ACCESS TO LNG TECHNOLOGIES

SAIPEM, HAS ACCESS TO ALL MAJOR GAS LIQUEFACTION TECHNOLOGIES AVAILABLE ON THE MARKET TODAY, BOTH FOR BASE LOAD AND MID / SMALL SCALE PLANTS:

- APCI (SMR, C3MR, AP-X, DMR).
- SHELL (DMR, PMR).
- LINDE (MFC).
- AXENS (LIQUEFIN).
- BLACK & VEATCH (SMR).
- COSTAIN (NITROGEN).
- MOSS (NITROGEN).
- SALOF (SMR).

THEREFORE, SAIPEM IS IN THE OPTIMAL POSITION TO ASSIST ITS CLIENTS AS EARLY AS DURING THE TECHNOLOGY COMPARISON AND SELECTION STAGES OF ANY LNG PROJECT.

COMMERCIAL EXPERIENCE

WITH MORE THAN 40 YEARS OF EXPERIENCE, SAIPEM IS TODAY A KEY PLAYER IN THE DESIGN AND CONSTRUCTION OF WORLD SCALE BASE-LOAD NATURAL GAS LIQUEFACTION AND LNG REGASIFICATION PLANTS.
IN THE LNG INDUSTRY, SAIPEM IS ONE OF THE FEW E&C CONTRACTORS TO HAVE ENGINEERED AND BUILT LNG COMPLEXES.
SAIPEM HAS THE ABILITY TO MANAGE MULTIBILLION PROJECTS AND TO WORK WITH ALL LNG EQUIPMENT SUPPLIERS.

NATURAL GAS LIQUEFACTION

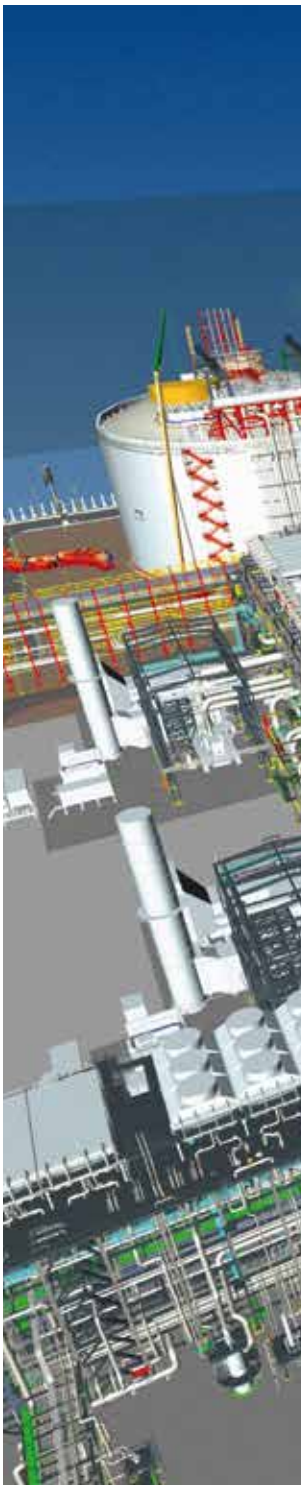
HIGHLIGHTS

- PERFORMED FEED'S FOR 6 LNG PROJECTS IN SEVERAL LOCATIONS (NIGERIA, QATAR, ALGERIA, OTHERS).
- ENGINEERED AND BUILT 9 LIQUEFACTION TRAINS FOR A TOTAL OF 35 MTPA (NIGERIA, QATAR).
- CURRENTLY LEADING THE EPC CONTRACT FOR GL-3Z LNG PLANT FOR SONATRACH.

SONATRACH
GL-3 Z
ARZEW (ALGERIA)

Capacity: 4.7 MTPA.
Liquefaction Technology: APCI (C3MR), GE Frame 7 gas turbine.
Tanks: 2 LNG x 160,000 cu.m each.
Product Export Jetty.
Contract: EPC.
JV Partner: Chiyoda.
In execution since end 2008.

In this project, Saipem has demonstrated, as the leader of the JV, the ability to readily develop together with the Client optimized solutions for capacity increase and schedule reduction.



RAS LAFFAN LNG CO. LTD.
RASGAS ONSHORE EXPANSION PROJECT (TRAINS 3, 4, 5)
RAS LAFFAN (QATAR)

Capacity: 4.7 MTPA each train.
Liquefaction Technology: APCI (C3MR), GE Frame 7 gas turbines, water cooled.
Tanks: 2 LNG x 140,000 cu.m each.
Contract: EPC.
JV Partner: Chiyoda.

Completed, respectively, in 2004, 2005, 2006.
This project, which included the design and installation of LNG trains whose capacity ranked among the largest trains operating in the world, contributed to launch Qatar into a new era as an LNG exporter.

NIGERIA LNG LTD.
LNG PRODUCTION (6 TRAINS)
BONNY ISLAND (NIGERIA)

↘ TRAINS 1&2
Capacity: 2.9 MTPA each train.
Liquefaction Technology: APCI (C3MR), GE Frame 6 & GE Frame 7 gas turbines, water cooled.
Tanks: 2 LNG x 84,000 cu.m each.
Product Export Jetty.
Contract: FEED + EPC.
JV Partner: Technip, KBR, JGC.
Completed in 1999.

↘ TRAIN 3
Capacity: 2.9 MTPA.
Liquefaction Technology: APCI (C3MR), GE Frame 6 & GE Frame 7 gas turbines, water cooled.
Tanks: 1 LNG x 84,000 cu.m.
Product Export Jetty.
Contract: FEED + EPC.
JV Partner: Technip, KBR, JGC.
Completed in 2003.

TRAINS 4&5
Capacity: 4 MTPA each train.
Liquefaction Technology: Shell/APCI (C3MR), GE Frame 7 gas turbines, air cooled.
Contract: FEED + EPC.
JV Partner: Technip, KBR, JGC.
Completed in 2006.

TRAIN 6
Capacity: 4 MTPA.
Liquefaction Technology: Shell/APCI (C3MR), GE Frame 7 gas turbines, air cooled.
Tanks: 1 LNG x 84,000 cu.m.
Contract: FEED + EPC.
JV Partner: Technip, KBR, JGC.
Completed in 2008.

TRAIN 7 PLUS
Capacity: 8.5 MTPA.
Liquefaction Technology: Shell (PMR).
Contract: FEED.
JV Partner: Technip, KBR, JGC.
Completed in 2007.

With the start-up of train 6, the Nigeria LNG Complex has reached an overall capacity of 22 MTPA of LNG, which will grow to more than 30 MTPA, once the Nigeria LNG Seven Plus Project will be completed.
This overall investment has enabled Nigeria LNG Ltd. to become one of the top LNG producers in the world.

ESSO STANDARD INC.
LNG PRODUCTION PLANT
MARSA EL BREGA (LIBYA)

Capacity: 2.5 MTPA.
Liquefaction Technology: APCI (SMR).
Contract: for construction of the grass-roots complex.
Completed in 1970.

PEAK SHAVING PROJECTS

SHANGHAI MUNICIPAL GAS CO.
LNG PEAK SHAVING PROJECT
SHANGHAI (CHINA)

Capacity: 80 t/d.
Liquefaction Technology: Tecnimont.
On stream since 1999.
Contract: EPC.
First LNG plant in the People's Republic of China.

BRITISH GAS CORP.
LNG PRODUCTION PLANT
DYNEVOR ARMS (UNITED KINGDOM)

Capacity: 275 t/d.
Contract: Lump Sum contract for License and detailed engineering, material supply, construction, commissioning, supervision.
JV Partner: Technip.
Completed in 1983.

DESIGNS AND STUDIES

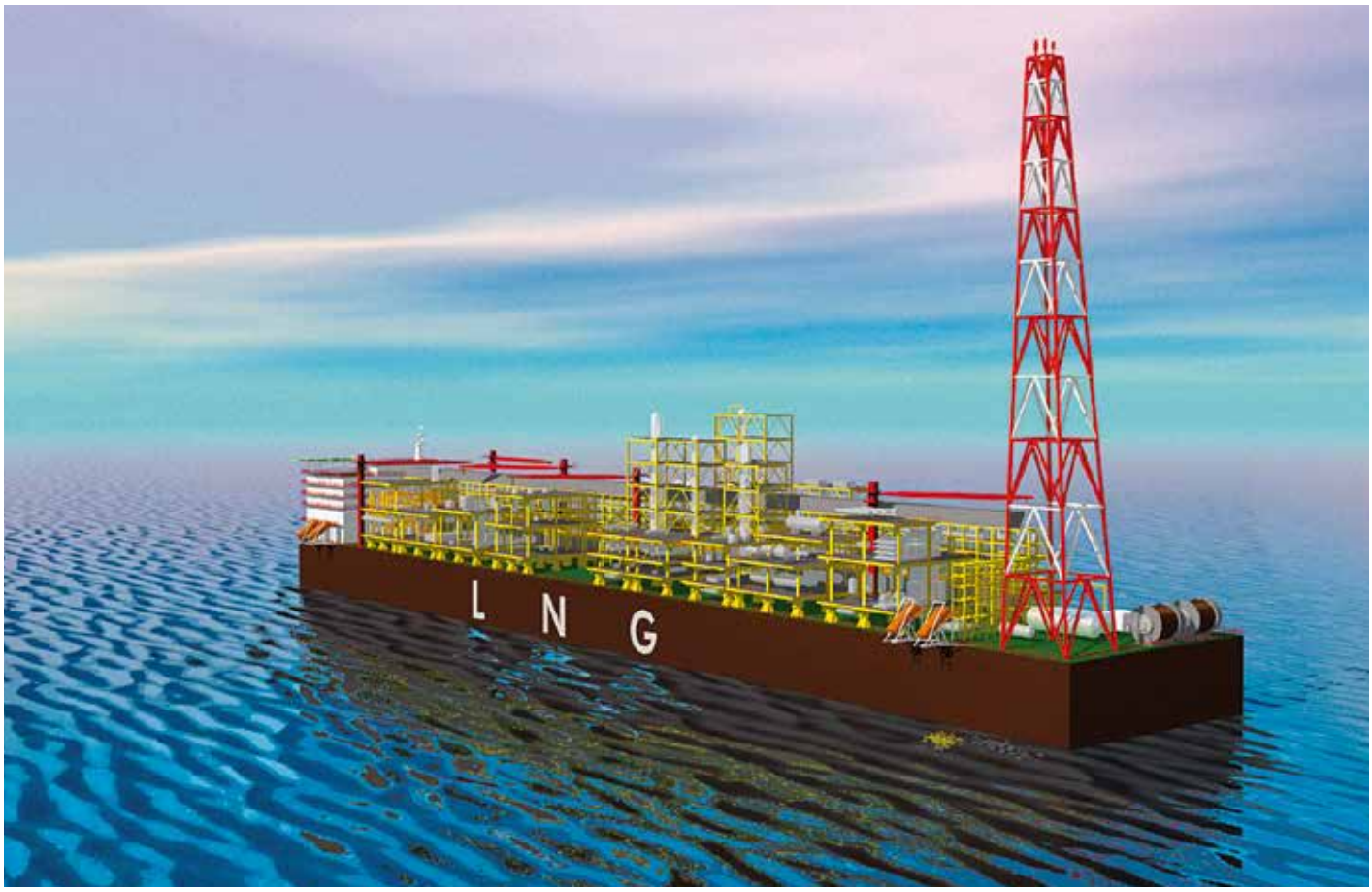
SAIPEM HAS COMBINED ITS SUBSTANTIAL KNOW-HOW IN DESIGNING AND BUILDING LNG PROJECTS WITH ITS EXPERIENCE IN LAND-BASED AND FLOATING GAS LIQUEFACTION PLANTS, TO BECOME ONE OF THE KEY PLAYERS IN THE LNG MARKET.

ONSHORE:

- PETRONAS, Bintulu (MALAYSIA), 3.8 MTPA: FEED (Under Execution).
- WOODSIDE BROWSE (AUSTRALIA) 3 x 4 MTPA: FEED (Under Execution).
- ARROW ENERGY (AUSTRALIA) 3x 4 MTPA: FEED (Under Execution).
- NOVATEK-TOTAL, Yamal (RUSSIA) 3 x 5 MTPA: FEED (Under Execution).
- PETRONAS, SOJITS Songo Songo (TANZANIA) 1 MTPA: Feasibility (2011).
- DNG PARTNERS, Douglas Channel (CANADA) 1 MTPA: Feasibility (2010-2011).
- LNG Plant for ENI E&P, one 5 MTPA LNG train, APCI (C3MR) Technology: Conceptual Design, (2008-2009).
- IRIS LNG (IRAN), four 5 MTPA LNG trains, Linde (MFC) Technology: Conceptual Design (All Electric Drives), (2007-2008).
- LIBYA LNG (LIBYA), three 5 MTPA LNG trains, APCI (C3MR) Technology: Basic Design, (2007-2008).
- OK LNG, Olo Kola (NIGERIA) 2 x 6.3 MTPA (2007-2008).
- PARS LNG (IRAN), two 5 MTPA LNG trains, Axens (Liquefin) Technology: FEED review and EPC Bid (All Electric Drives), (2006-2008).
- IRAN LNG (IRAN), two 5 MTPA LNG trains, Linde (MFC) Technology: FEED updating (All Electric Drives), (2006-2008).

FLOATING:

- PETROBRAS NETHERLANDS B.V., 2.5 MTPA LNG train: FEED (2009-2011).
- For a Major IOC, 2.5 / 4.5 MTPA train: Feasibility Study (2008-2009).
- For a Major IOC, full field development (oil and gas) 2.0 MTPA train: Feasibility & pre-FEED Study (2008-2009).
- FLEX LNG, 1.7 MTPA LNG train: Conceptual Design & FEED (2007-2008).
- For a Major IOC, 1.5 MTPA train: Feasibility Study (2007-2008).
- AZURE Project for EEC, 1.0 / 3.0 MTPA LNG train: Conceptual Design (1999).




PETROBRAS
L N G

LNG REGASIFICATION

A UNIQUE HISTORY AND EXPERIENCE IN LNG TERMINALS FOR REGASIFICATION AND STORAGE.

HIGHLIGHTS

DESIGNED AND BUILT TO DATE:

- 11 LNG REGASIFICATION TERMINALS.

APPLIED THE FOLLOWING VAPORIZER TECHNOLOGIES:

- OPEN RACK VAPORIZER (ORV).
- SUBMERGED COMBUSTION VAPORIZER (SCV).
- INTERMEDIATE FLUID VAPORIZER (IFV).
- SHELL AND TUBES EXCHANGER (STE).

In 2002 Saipem acquired Technigaz, which was subsequently fully integrated into Saipem SA, a subsidiary of Saipem.
Technigaz was created in late '50s to develop the engineering of the LNG carriers storage tanks, based on membrane technology. The first LNG maritime carrier has been put into operation in the 60's.
In the '70s, Technigaz started to develop its own onshore LNG storage tanks technology and delivered the first two above ground membrane LNG tanks to Gaz De France in Montoir (France).
In parallel Technigaz entered into the onshore LNG regasification market and designed and delivered in 1987 the first LNG regasification terminal in Korea at Pyeong Taek for KOGAS, together with 3 LNG membrane tanks.
Technigaz technology was also used in Japan by its licensees.

POLSKIE LNG
PLNG REGASIFICATION TERMINAL
SWINOUJSCIC (POLAND)

LNG Send Out Capacity: 4.1 MTPA.
Vaporizers: 4+1 SCV of 139 T/h each.
Tanks: 2x 160,000 cu.m (9% Full Containment Tanks).
Contract: EPC LSTK.
JV Partners: Techint, PBG.
Under Execution.

The first LNG regasification plant ever built in Poland.
The schedule and construction organization had been tailored to take into account the harsh Polish winter conditions.

GAZ DE FRANCE/TOTAL
FOS CAVAOU LNG IMPORT TERMINAL
FOS SUR MER, MARSEILLE (FRANCE)

LNG Send Out Capacity: 6.6 MTPA.
Vaporizers: 4 ORV of 343 t/h each.
Tanks: 3 x 110,000 cu.m (9% Ni Full Containment tanks).
Marine Works: LNG offloading Jetty.
Contract: EPC LSTK.
JV Partner: Tecnimont Sofregaz.
On stream in 2011.

The biggest ORV's ever designed and built.

REPSOL / IRVING OIL
CANAPORT LNG TERMINAL
ST.JOHN, NEW BRUNSWICK (CANADA)

LNG Send Out Capacity: 7.7 MTPA.
Vaporizers: 6+1 SCV of 126 T/h each.
Tanks: 3 x 160,000 cu.m (9% Ni Full Containment Tanks).
Contract: EPC LSTK.
JV Partner: SNC Lavalin.
On stream in 2009.

The first LNG regasification plant ever built in Canada.
The schedule and construction organization had been tailored to take into account the harsh Canadian winter conditions.

FREEPORT LNG
LNG IMPORT TERMINAL
QUINTANA ISLAND, TEXAS (USA)

LNG Send Out Capacity: 11.0 MTPA.
Vaporizers: 7 shell + tube vaporizers water/glycol loop heated of 200 t/h each.
Tanks: 2 x 160,000 cu.m (9% Ni Full Containment Tanks).
Marine Works: LNG offloading jetty.
Contract: EPC LSTK.
JV Partner: Technip Zachry.
On stream in 2008.

The first design and installation of vacuum insulated unloading line.
The terminal is fully operated with shell and tubes Vaporisers.

FLUXYS LNG
LNG IMPORT TERMINAL
ZEEBRUGGE (BELGIUM)

LNG Send Out Capacity: 5.7 MTPA (additional capacity).
Vaporizers: 5 x SCV of 182 t/h each.
Tanks: 1 x 140,000 cu.m semi buried (9% Ni Full Containment tank).
Contract: EPC LSTK.
Consortium Partner: MBG, Fontech Soletanche.
On stream since 2008.

Extension of an existing terminal.
The project has been performed in a plant in operation.

DAPENG GUANDONG LNG
LNG IMPORT TERMINAL
CHENGTOUJIAO, GUANGDONG PROVINCE (CHINA)

LNG Send Out Capacity: 4.0 MTPA.
Vaporizers: 5 x ORV of 180 t/h each, 1 x SCV of 120 t/h.
Tanks: 3 x 160,000 cu.m (9% Ni Full Containment Tanks).
Marine Works: LNG unloading jetty with mooring facilities for 160,000 cu.m LNG carriers, dredging 1.5 MM cu.m.
Contract: EPC LSTK.
JV Partner: Tecnimont.
On stream since 2006.

First LNG Terminal ever built in the People's Republic of China.
All tanks were erected on seismic insulators.

SHELL
HAZIRA LNG IMPORT TERMINAL
GUJARAT PROVINCE (INDIA)

LNG Send Out Capacity: 2.0 MTPA.
Vaporizers: 2 x ORV of 138 t/h each, 1 x SCV of 138 t/h.
Tanks: 2 x 160,000 cu.m (9% Ni Full Containment Tanks).
Marine Works: Complete harbour, LNG offloading jetty
for 150,000 cu.m LNG carriers, breakwaters.
Contract: EPC LSTK.
JV Partner: Tecnimont.
On stream since 2005.

This terminal included all necessary utilities production, due to the remote location.
Construction of a complete harbour facility including the breakwater and the LNG unloading jetty.

BAHIA DE BISKAIA GAS (BBG)
BILBAO LNG IMPORT TERMINAL
BILBAO (SPAIN)

LNG Send Out Capacity: 4.0 MTPA.
Vaporizers: 4 x ORV of 200,000 Ncu.m/h, 1 x SCV of 135,000 Ncu.m/h.
Tanks: 2 x 150,000 cu.m (9% Ni Full Containment Tanks).
Marine Works: LNG offloading jetty with mooring facilities for 135,000 cu.m LNG carriers.
Contract: EPC LSTK.
JV Partner: Initec, Tecnimont.
On stream since 2003.

First LNG Tanks hydrotest performed using sea water.

LNG IMPORT TERMINAL
REVITHOUSSA ISLAND (GREECE)

LNG Send Out Capacity: 0.5 MTPA.
Vaporizers: 2 x ORV of 60 t/h each, 2 x SCV of 60 t/h each.
Marine Works: Mooring quay.
Contract: EPC LSTK.
JV Partner: Sofregaz. The JV was in Consortium with Technical Union.
On stream since 1999.

First LNG Terminal ever built in Greece. The Terminal is located on an island.

BOTAS
LNG IMPORT TERMINAL
MARMARA EREGLISI (TURKEY)

LNG Send Out Capacity: 1.6 MTPA.
Vaporizers: 2 x ORV of 180 t/h, 4 x SCV of 100 t/h each.
Tanks: 3 x 85,000 cu.m (9% Ni Double Containment Tanks).
Marine Works: 300 m long LNG unloading jetty.
Contract: EPC LSTK.
Consortium Partner for construction: STFA.
On stream since 1994.

First LNG Terminal ever built in Turkey.

KOGAS
LNG IMPORT TERMINAL
PYEONG TAEK (SOUTH KOREA)

LNG Send Out Capacity: 2.8 MTPA.
Vaporizers: 2 x ORV of 130 t/h each, 2 x SCV of 140 t/h each.
Tanks: 10 x 110,000 cu.m (Membrane LNG Tanks).
Marine Works: LNG offloading jetty.
Contract: EPC LSTK.
On stream since 1987.

First LNG Terminal ever built in Korea.
Membrane LNG Tanks erected on seismic insulators.

SNAM S.P.A.
LNG IMPORT TERMINAL
PANIGAGLIA, LA SPEZIA (ITALY)

LNG Send Out Capacity: 2.8 MTPA.
Vaporizers: 4 x SCV of 110t/h each.
Tanks: 2 x 50,000 cu.m (The 9 Ni tanks were transformed into double integrity type, with the addition of a pre-stressed concrete wall together with the modernization of the loading/unloading system).
Contract: LSTK contract for basic and detailed engineering, procurement services, erection supervision, commissioning and start-up.
On stream since 1971.

First LNG Terminal ever built in Italy.

Analogously to floating liquefaction plants, also in regasification Saipem has combined its substantial know-how in designing and building floating offshore projects with its experience in land-based gas regasification plants, to develop the first offshore moored FSRU in the world, to be located in Italy.

OLT (OFFSHORE LNG TOSCANA)
LIVORNO FSRU
20KM OFFSHORE LIVORNO (ITALY)

Average natural gas send-out: 3.2 MTPA.
Peak send-out rate: 4.0 MTPA.
Hull: Golar Frost LNG carrier, 301 m (with turret & thruster) x 48 m, 137,000 cu.m net LNG capacity.
Compacted topsides module: 30 m.
LNG transfer system: Marinized loading arms.
Mooring: External turret.
Contract: EPC LSTK.
In execution since 2008.

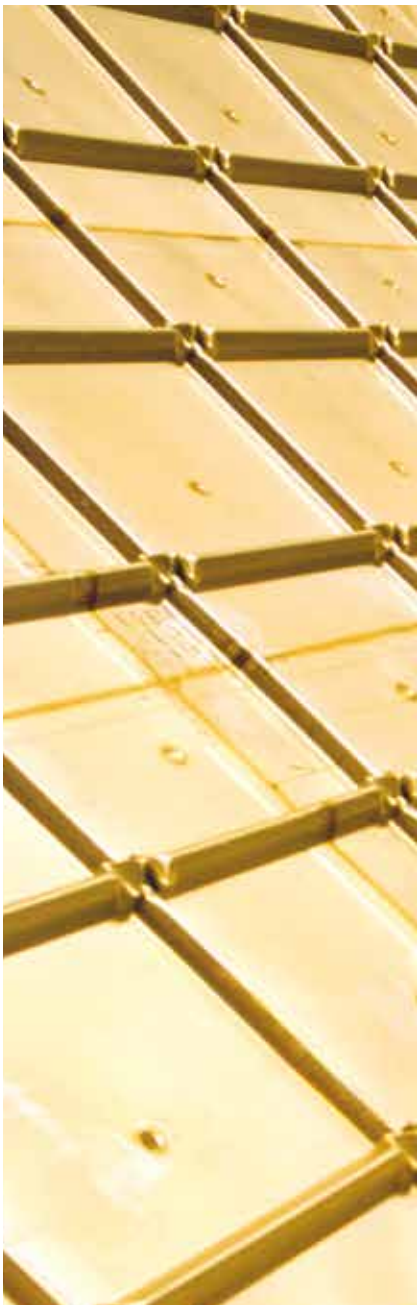
LNG TANKS

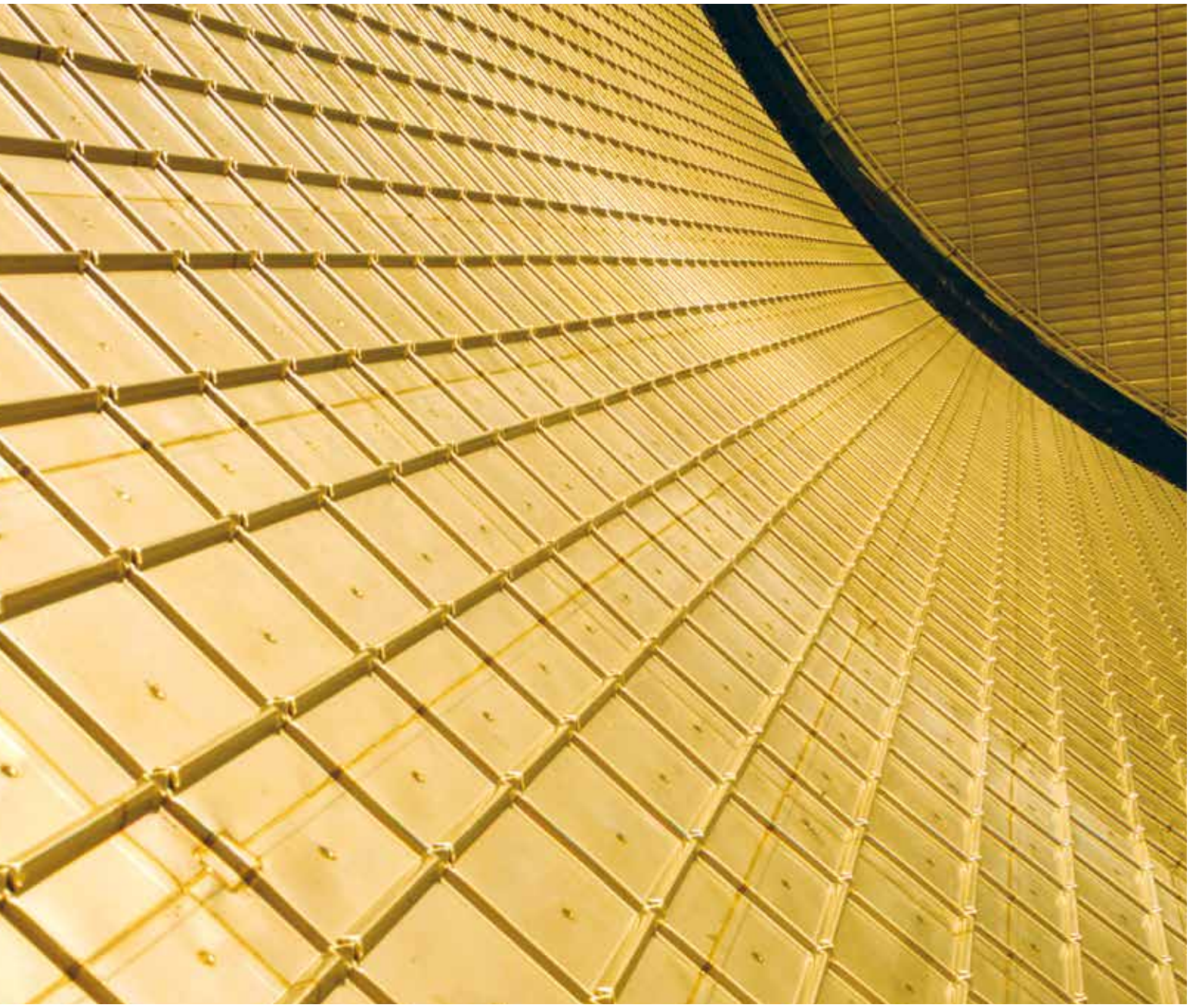
HIGHLIGHTS

DESIGNED AND BUILT:

↘ 44 LNG STORAGE TANKS OF WHICH:
- 29 DELIVERED TOGETHER WITH THE REGASIFICATION TERMINALS.
- 15 DELIVERED STAND ALONE.

↘ LNG STORAGE TANKS TECHNOLOGIES:
- 9% NICKEL FULL CONTAINMENT.
- STAINLESS STEEL MEMBRANE CONTAINMENT.





ANGOLA LNG
LNG TANKS
SOYO (ANGOLA)

Tanks: 2 x 150,000 cu.m (9% Ni Full Containment).
2 LPG Full Containment Tanks (Low Temperature Carbon Steel Inner Tank).
Contract: This contract is for construction only and includes also the construction of two LPG Full Containment tanks.
Consortium Partners: NAMKWENG, LION.
In execution since 2008.

First LNG and LPG Tanks ever built in Angola.

SONATRACH
GL-3 Z
ARZEW (ALGERIA)

Tanks: 2 x 160,000 cu.m (9% Ni Full Containment).
Contract: EPC LSTK.
In execution since 2008.

The contract included also the design and erection of LPG Full Containment Tanks.

ENAGAS
CARTAGENA III LNG TANK
MURCIA (SPAIN)

Tanks: 1 x 128,500 cu.m (9% Ni Full Containment).
Contract: EPC LSTK.
JV Partner: Initec.
On stream since 2005.

Tank built while the plant was in operation.

ENAGAS
HUELVA III - HUELVA IV LNG TANKS
ANDALUCIA (SPAIN)

Tanks: 2 x 150,000 cu.m (9% Ni Full Containment).
Contract: EPC LSTK.
JV Partner: Initec.
On stream since 2004 (the first tank) and 2006 (the second tank).

Tanks built while the plant was in operation.

SEGAS
LNG TANKS
DAMIETTA (EGYPT)

Tanks: 2 x 150,000 cu.m (Full Containment).
Contract: EPC LSTK.
JV Partner: Bouygues Travaux Publics. The JV was in Consortium with Egyptian construction companies: Orascom Construction Industry for Civil Works and DSD Ferrometalco for Mechanical Works.
On stream since 2004.

First LNG Tanks ever built in Egypt.

QATARGAS
RAS LAFFAN LNG STORAGE TANKS
RAS LAFFAN (QATAR)

Tanks: 4 x 85,000 cu.m (9% Ni Full Containment).
Contract: EPC LSTK.
JV Partner: Bouygues Travaux Publics. The JV was in Consortium with construction companies: MIDMAC and MEACON.

On stream since 1996 (the first 3 tanks) and 1998 (the fourth tank).

The fourth tank was built while the plant was in operation.

GAZ DE FRANCE
LNG TANKS
MONTOIR (FRANCE)

Tanks: 2 x 120,000 cu.m (Membrane Technology).
Contract: EPC LSTK.
On stream since 1981.

First above ground Membrane LNG.

NOTES