



**COMPANY PRESENTATION**

AMAL WAS STABLISHED IN APRIL 1984

## ***AGENDA JETM 2016***

**32  
ANIVERSĂRI  
0**

- *Introduction of AMAL*
- *Main Activities*
- *Peniche Industrial Cluster*



# SAFETY COEFFICIENTS

RATES	YEARS		
	2013	2014	2015
TRIR	0,96	0,23	0,73
Frequency Rate	0,97	1,19	0,62
LTIR	0,19	0,23	0,12
Severity Rate	8,70	8,90	7,40

Workers nr	492	864	855
Work Hours	1.034.144	1.684.631	1.621.775

OSHA 300 TRIR = (Total nr of recordable cases \* 200.000) / Total work hours

LTIR = (Total nr of DART-L \* 200.000) / Total work hours

OHSAS 18001

Frequency Rate = (Lost workday cases x 1.000.000) / Total work hours

Severity Rate = (Total lost workday x 1.000.000) / Total work hours

Heerema Talisman Project  
550.000 safety hours



# AMAL ACTIVITIES

## Major Fields of Activity

Tanks, silos and stacks



Equipment manufacturing & erection



Piping prefabrication & erection



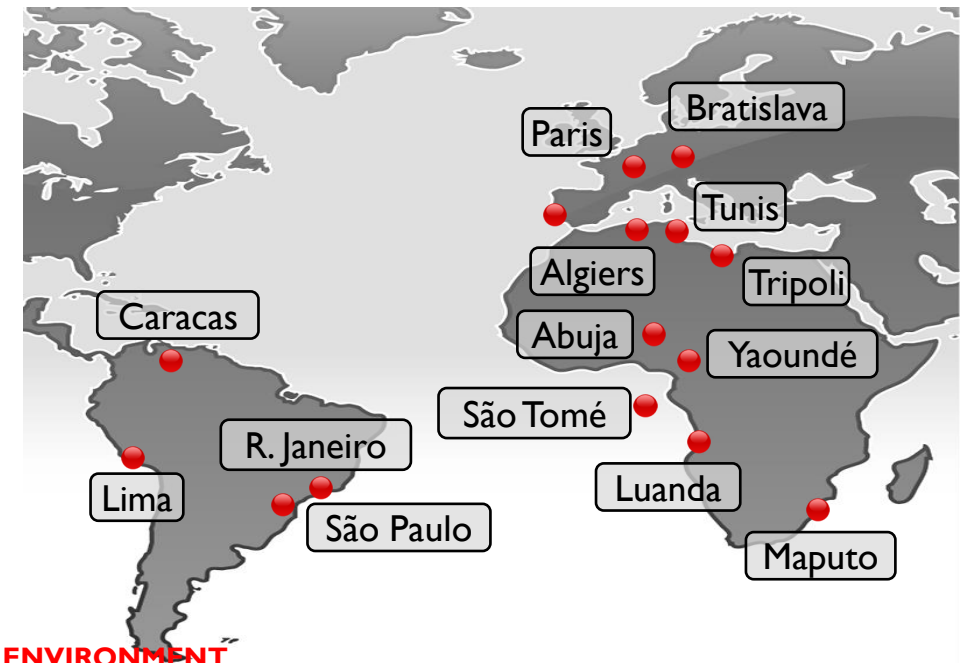
Modules



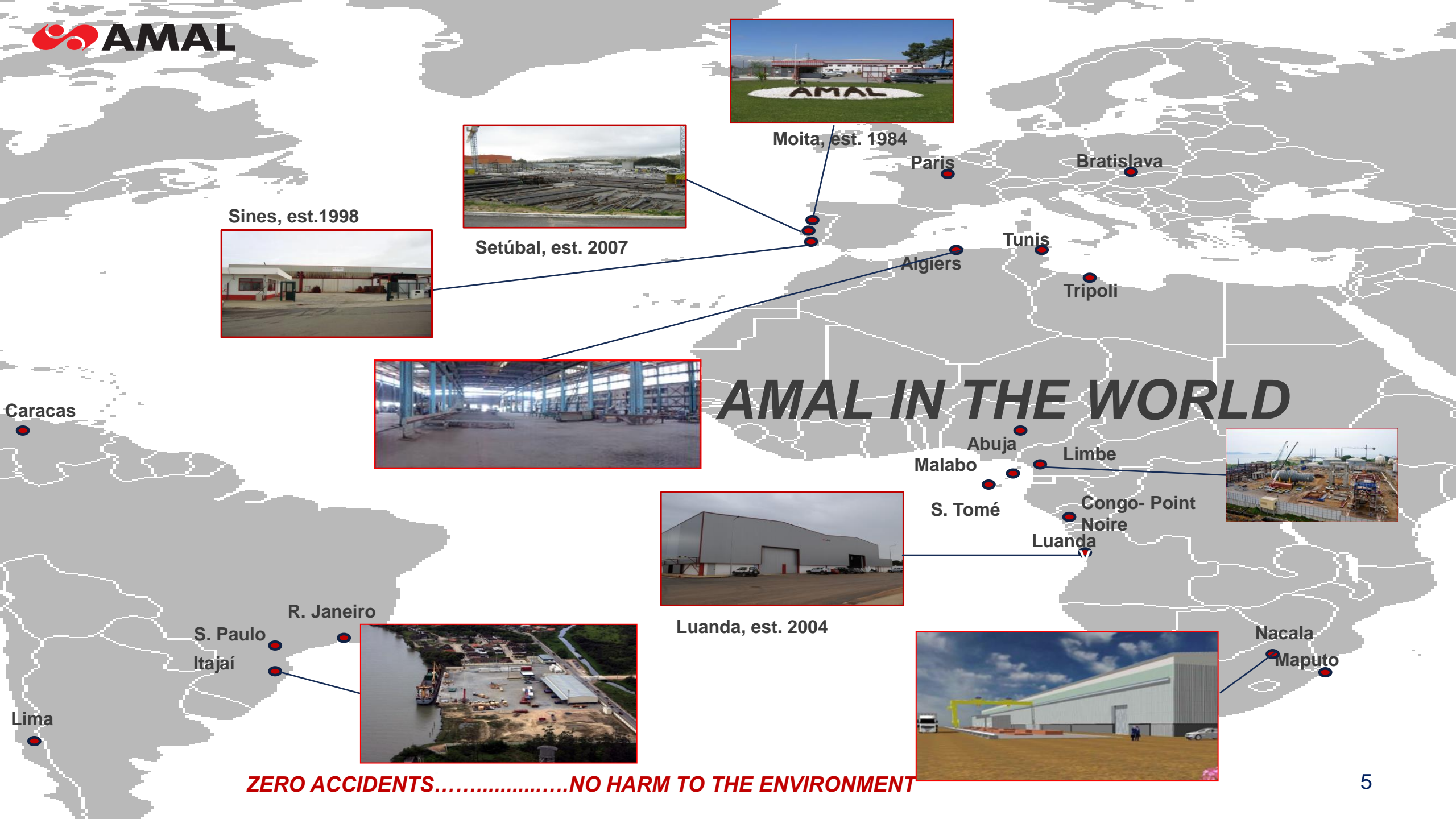
## Manufacturing and Branch Network



Location	Founded	Factory Area	Personnel
1 - Moita	1984	40,000 m <sup>2</sup>	175
2 - Setúbal	2008	25,000 m <sup>2</sup>	93
3 - Sines	1999	15,000 m <sup>2</sup>	82
4- AMY	2015	95.000 m2	38







# AMAL IN THE WORLD

**ZERO ACCIDENTS.....NO HARM TO THE ENVIRONMENT**

# CLIENTS



**galp**  
energia

**FLUOR**®



**Lurgi**



**REPSOL**



**SIEMENS**



**JACOBS**™



**ExxonMobil**

**ALSTOM**



ZERO ACCIDENTS.....NO HARM TO THE ENVIRONMENT



# AMAL PRODUCTION FACILITIES



**ZERO ACCIDENTS.....NO HARM TO THE ENVIRONMENT**



# AMAL SETUBAL FACILITIES





# AMAL SETUBAL WORKSHOP

*“This is the best piping workshop I have ever seen”*



*We proudly quote,*

**Mr. BEN CHAVEZ**  
**(FLUOR Director,  
Material Management, Improvement  
Initiative).**

***Quality / Inspection visit conducted in  
September 2009 to the facilities and  
management systems.***

# AMAL SINES FACILITIES





# ANGOLA FACILITIES



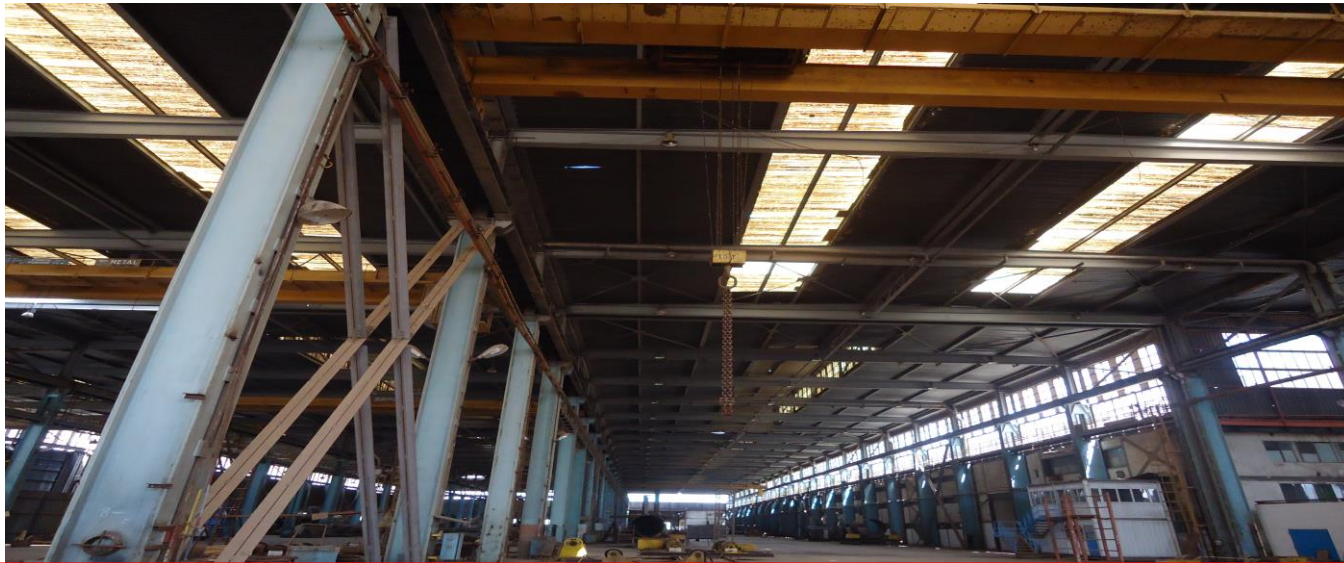


# MOZAMBIQUE COMPANY- INDUSTRIAL COMPLEX





# ALGERIA COMPANY- CONSTRETAL ( UNDER REVAMPING)





# ***CURRENT AND RECENT WORKS***

**ZERO ACCIDENTS.....NO HARM TO THE ENVIRONMENT**

# CURRENT PROJECT AND CONTRACTS

CLIENT	DESCRIPTION	DURATION	DATE	VALUE (€)
<i>Sonangol</i>	Oceanic Terminal of Cabinda. Storage tanks, LPG tanks, Sea-line and Pipeline.	36 Months	2008-2017	87.200.000
<i>TOTAL/ TR</i>	Optara Refinery- Modules Installation, Mechanical installation / Piping – Contract 2A-Total Refinery, Belgium.	10 Months	2014- 2015	28.700.000
<i>S.O.NA.R.A- FOSTER WHEELER</i>	Limbe Refinery Major Revamping – Storage tanks, Offsites; Piping Prefabrcation; interconnecting and underground piping, equipment installation, heaters erection.	27 Months	2013-2017 (On-Going)	87.252.130
<i>Heerema / Talisman</i>	Offshore Work. Material management, pre-fabrication, and installation on the platform.	14 months	2013-2016	33.874.251
<i>General Electric</i>	Modules Fabrication in Brazil	20 Months	20013-2016	77.500.000

15



# *TANK FARM    TURN-KEY CLC / GALP, AVEIRAS*







**LNG TERMINAL  
BECHTEL / BESIX  
EQUAT. GUINE**







**ZERO ACCIDENTS..... NO HARM TO THE ENVIRONMENT**



# HARBORING THE MODULAR CONSTRUCTION CLUSTER FOR OIL & GAS

A large, solid dark blue rectangle occupies the middle section of the slide. At the bottom right, there is a stylized graphic of a ship's hull and superstructure in shades of blue and white, appearing to emerge from the bottom edge.

AMAL MODULAR YARD

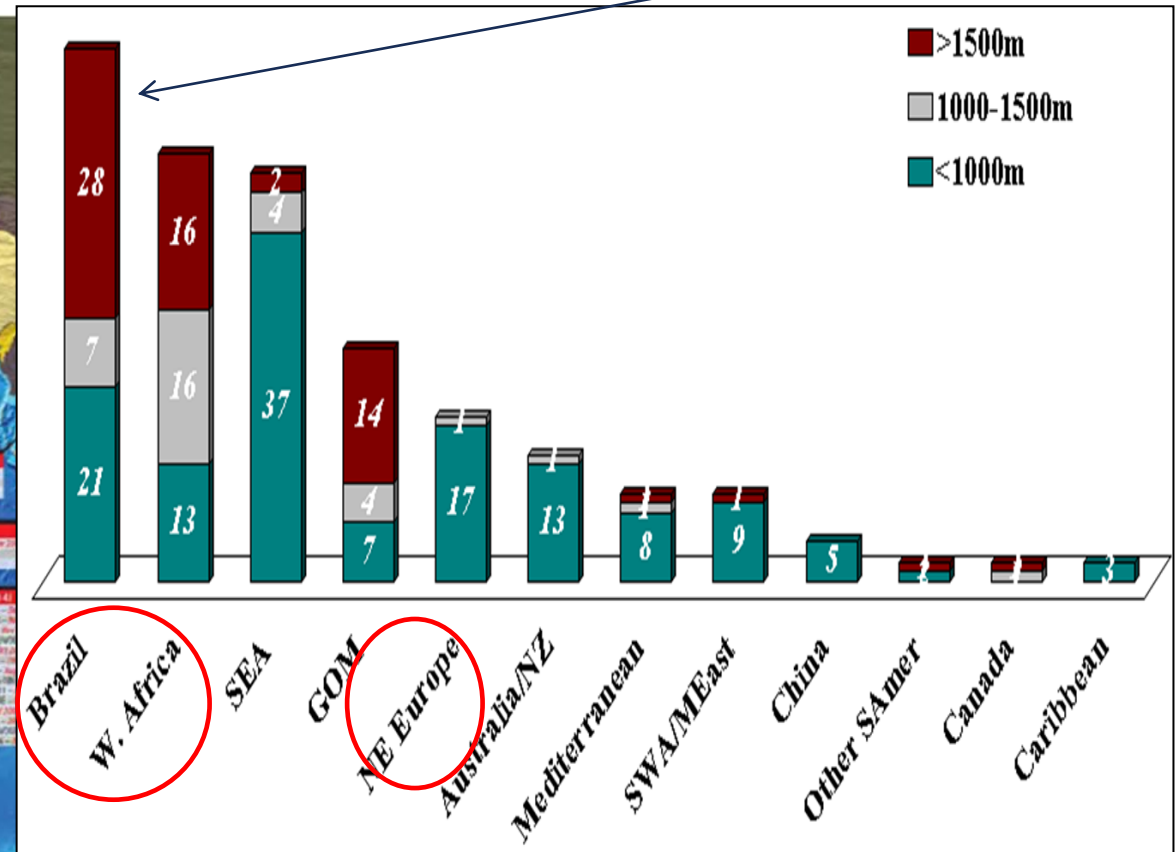


# FOCUS ON ATLANTIC OPPORTUNITIES- 70% OF NEW DISCOVERIES PORTUGUESE SPEAKING COUNTRIES

Current FPSO Installed Base – by Location



NEW PFSO / SPAR'S / TANKERS



# PENICHE – INDUSTRIAL CLUSTER





# WHAT IS THE AMAL MODULAR YARD (AMY) CLUSTER ?



ONE COMPANY  
SYNERGIC  
PARTNERS  
ONE LOCATION  
FULL SERVICES

SOLUTION  
*FAST TRACK*  
PROJECTS

**MODULAR  
FABRICATI  
ON**

OIL &  
GAS

ENERGY

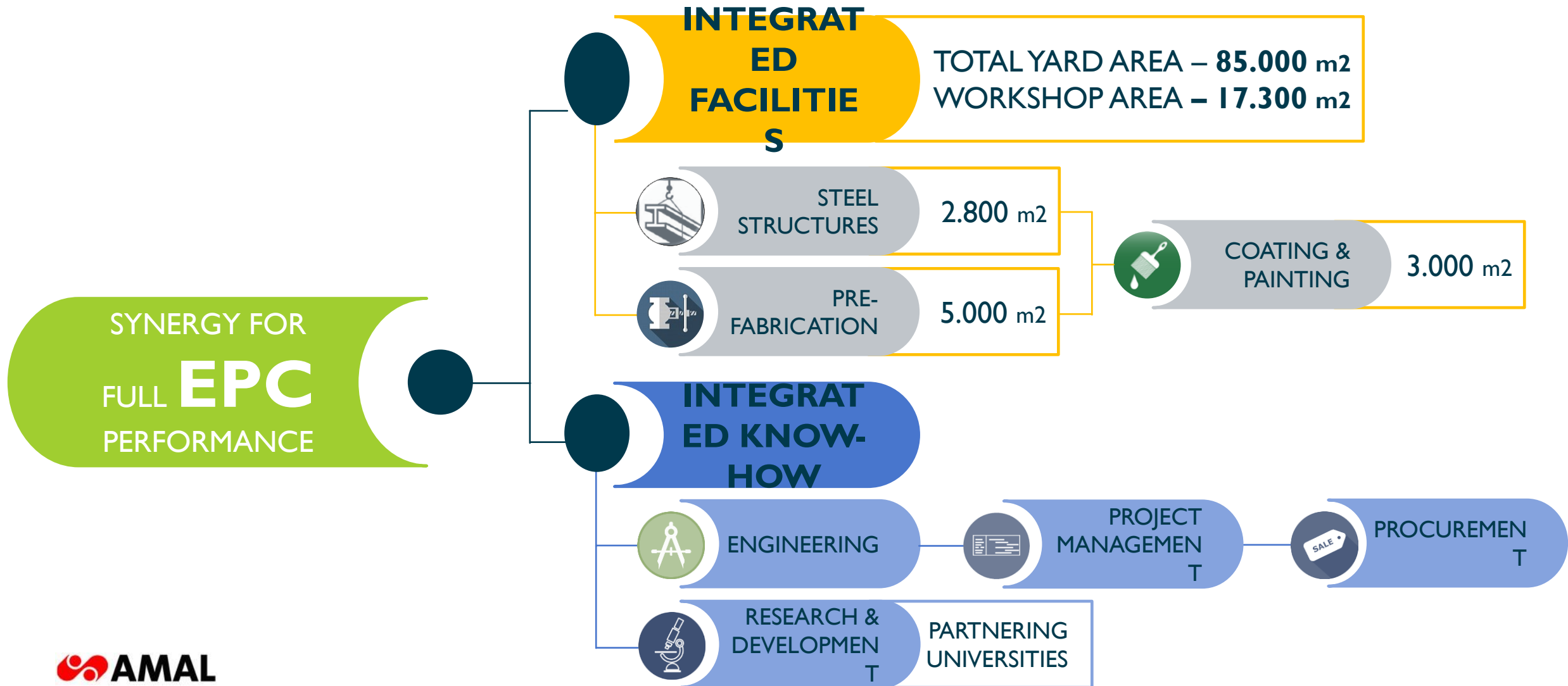
MARITIME

**EXPERT  
PARTNERS**

**PREMIUM  
LOCATIO  
N**

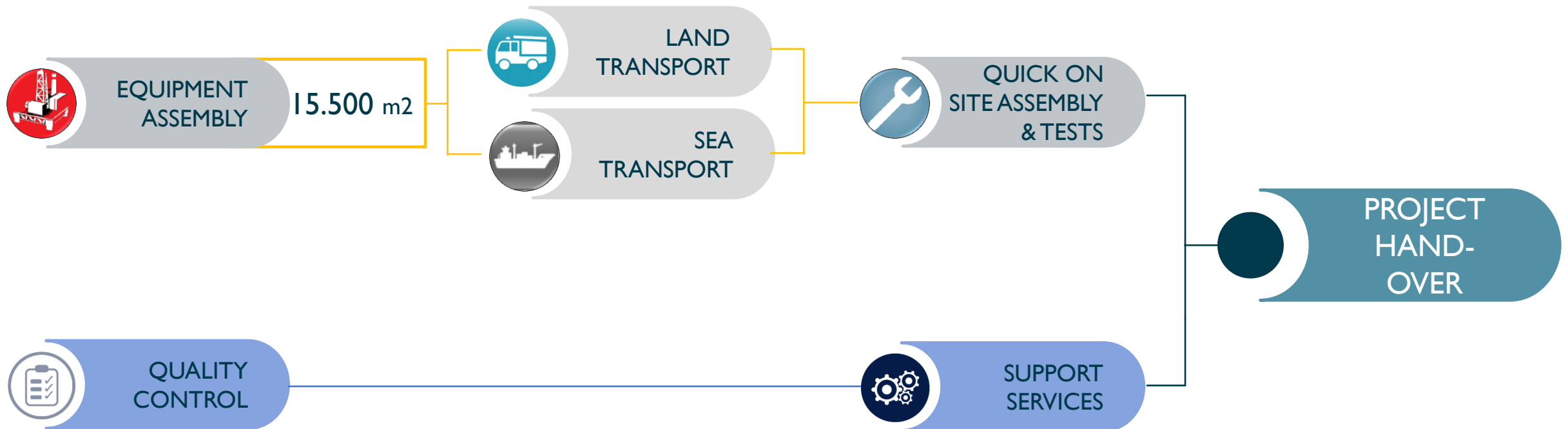


# WHAT IS THE AMAL MODULAR YARD (AMY) CLUSTER ?





# WHAT IS THE AMAL MODULAR YARD (AMY) CLUSTER ?

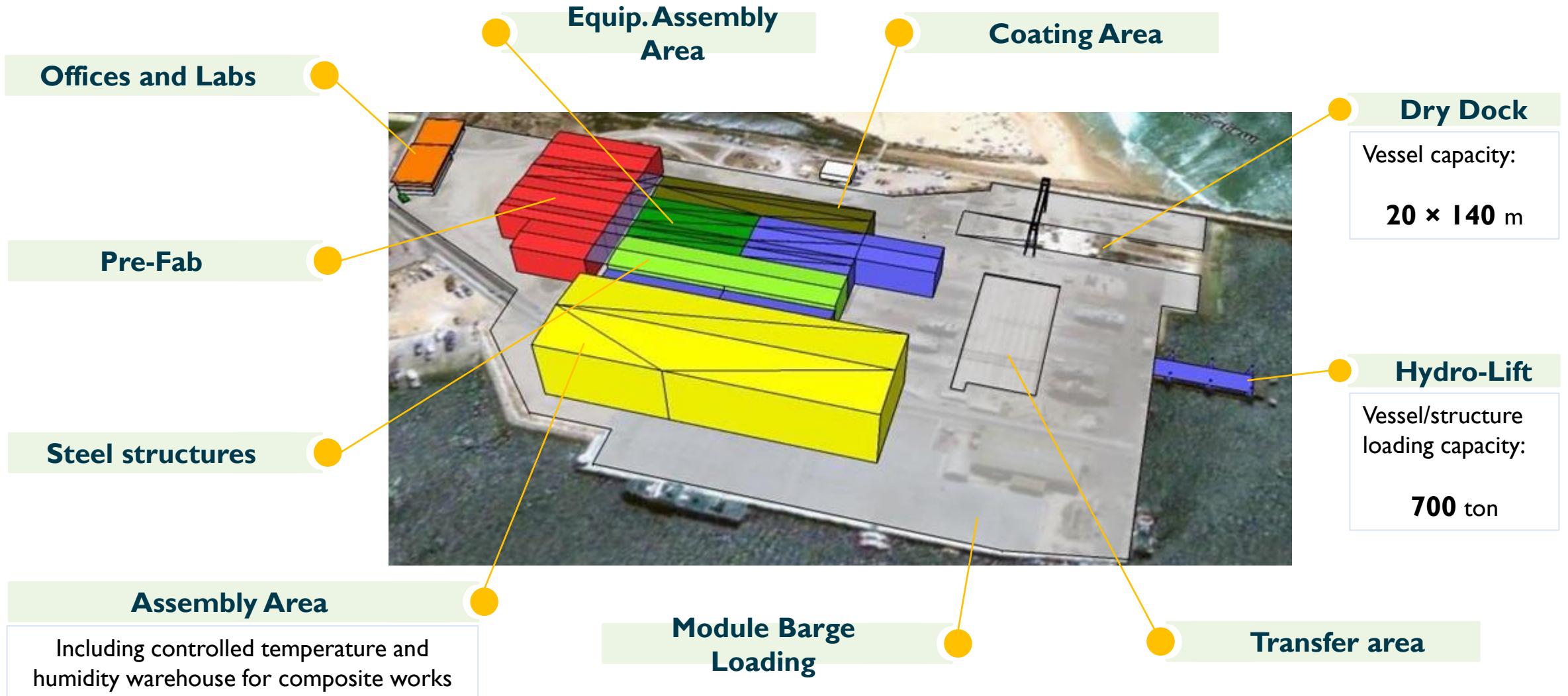


# MODULE YARD- PORTUGAL





# WHAT IS THE AMAL MODULAR YARD (AMY) CLUSTER ?



## WHO IS THE AMAL MODULAR YARD (AMY) CLUSTER ?

### EXPERT PARTNERS

AMAL

**CLUSTER DEVELOPER AND COORDINATOR**

EPC contractor | Plant and Equipment Supplier & Erection| Piping

TCPI

**CLUSTER PARTNER**

Electrical Contractor | Electrical, Instrumentation & Control

ENP

**CLUSTER PARTNER**

Ship Building| Repair Services

TECHNOEDIF

**CLUSTER PARTNER**

Engineering Services | Process Industry | Energy Industry



# AMAL Group – MAIN REFERENCES



Project Scope : FPSOs' construction  
AMAL Scope: Fabrication, Supply and Installation of 3 modules for the FPSOs'  
Client: General Electric  
Location: Itajaí, Brazil



Project Scope :Limbe Refinery Major Revamping  
AMAL Scope: Construction of Storage Tanks; Offsites;  
Piping Prefabrication; Interconnecting and Underground Piping;  
Equipment Installation; Heaters Erection  
Client : SONARA / Foster Wheeler  
Location: Limbe, Cameroon



Project Scope :Porto's Refinery conversion project  
AMAL Scope: Erection of the Visbreaker Unit  
Client : Galp Energia  
Location: Porto, Portugal



Project Scope :Construction of the Oceanic Terminal of Cabinda  
AMAL Scope: Construction of Storage Tanks, LPG Tanks, Sea-line and Pipeline  
Client : Sonangol  
Location: Cabinda, Angola



# TCPI – COMPANY ID



## WORLD PRESENCE

Europe, Africa and Central  
and South America

## WORK FORCE

552 Direct

## HYSTORY

Founded in Lisbon, 1986

## CERTIFICATIONS

ISO 9001 / ISO 14001 /  
OSHAS 18001 / MASE /  
SCC\*\*2008/5.1/VCA

## SCOPE OF SERVICES

ELECTRICAL, INSTRUMENTATION, CONTROL AND AUTOMATION SERVICES

### INDUSTRIAL I&C



### AUTOMATION SYSTEMS



### ELECTRICAL SYSTEMS



## KEY INDICATORS

2014 Income:  
**38.788 k€**

Productive capacity:  
**1.024.212 hours/year**

## CLIENTS





# ENP – COMPANY ID



## WORLD PRESENCE

Portugal

## WORK FORCE

60 Direct

## HYSTORY

Founded in Peniche, 1994

## CERTIFICATIONS

ISO 9001

## SCOPE OF SERVICES

### SHIPBUILDING AND REPAIR SERVICES

#### WORK/UTILITY



#### MILITARY/SURVEILLANCE



#### PASSENGERS



#### FISHING



## KEY INDICATORS

Capacity:

**Hydrolift: 700 ton  
& 50m ships**

**Slipway for up to  
100m ships**

## CLIENTS



# ENP – MAIN REFERENCES



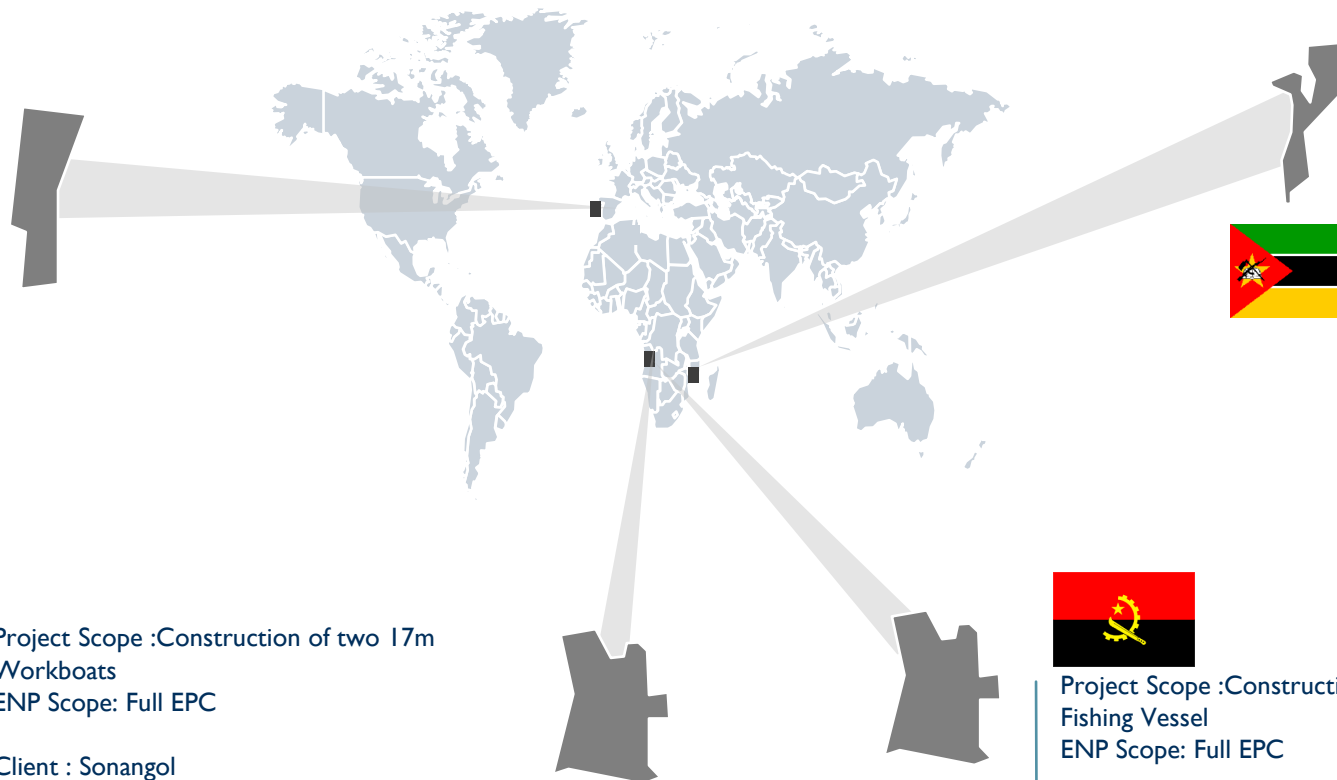
Project Scope : Oil Tanker Construction  
ENP Scope: Equipment supply and assembly

Client: Galp / Sacor Marítima  
Location: Portugal



Project Scope :Construction of two 17m Workboats  
ENP Scope: Full EPC

Client : Sonangol  
Location: Angola



Project Scope : Construction of two 56m Landing Vessels  
ENP Scope: Full EPC

Client : Mozambique Government  
Location: Mozambique



Project Scope :Construction of a 27m Fishing Vessel  
ENP Scope: Full EPC

Client : Socipesca  
Location: Angola





# TECHNOEDIF – COMPANY ID



## WORLD PRESENCE

Europe, Africa, Middle East,  
Asia and South America

## WORK FORCE

200 Direct

## HYSTORY

Founded in Lisbon, 1965

## CERTIFICATIONS

ISO 9001 / ISO 14001 / OSHAS  
18001

## SCOPE OF SERVICES

ENGINEERING SERVICES FOR THE PROCESS AND ENERGY INDUSTRY

O&G /  
PETROCHEMICAL



ENERGY



PULP AND PAPER



OTHER PROCESS IND.



## KEY INDICATORS

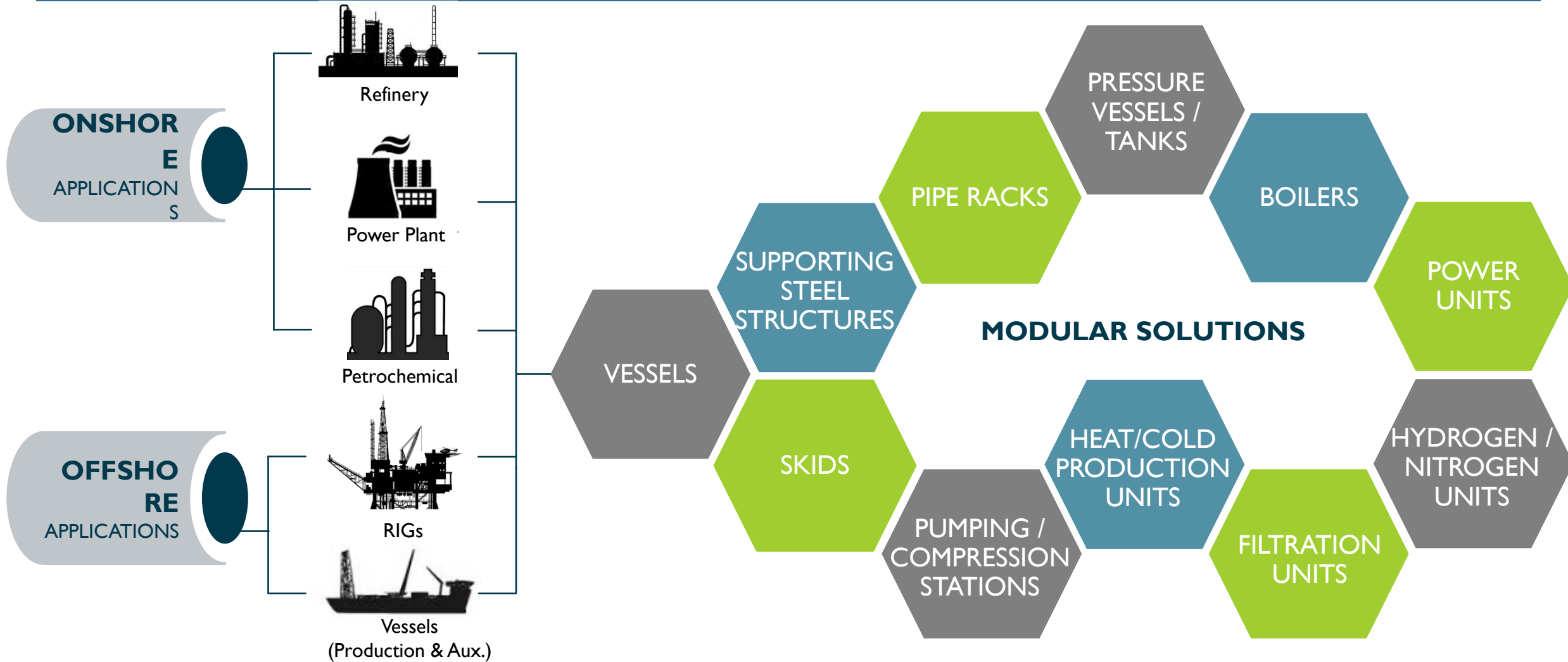
2014 Income:  
**11.000 k€**

2014 Production  
Volume:  
**280.000 hours**

## CLIENTS

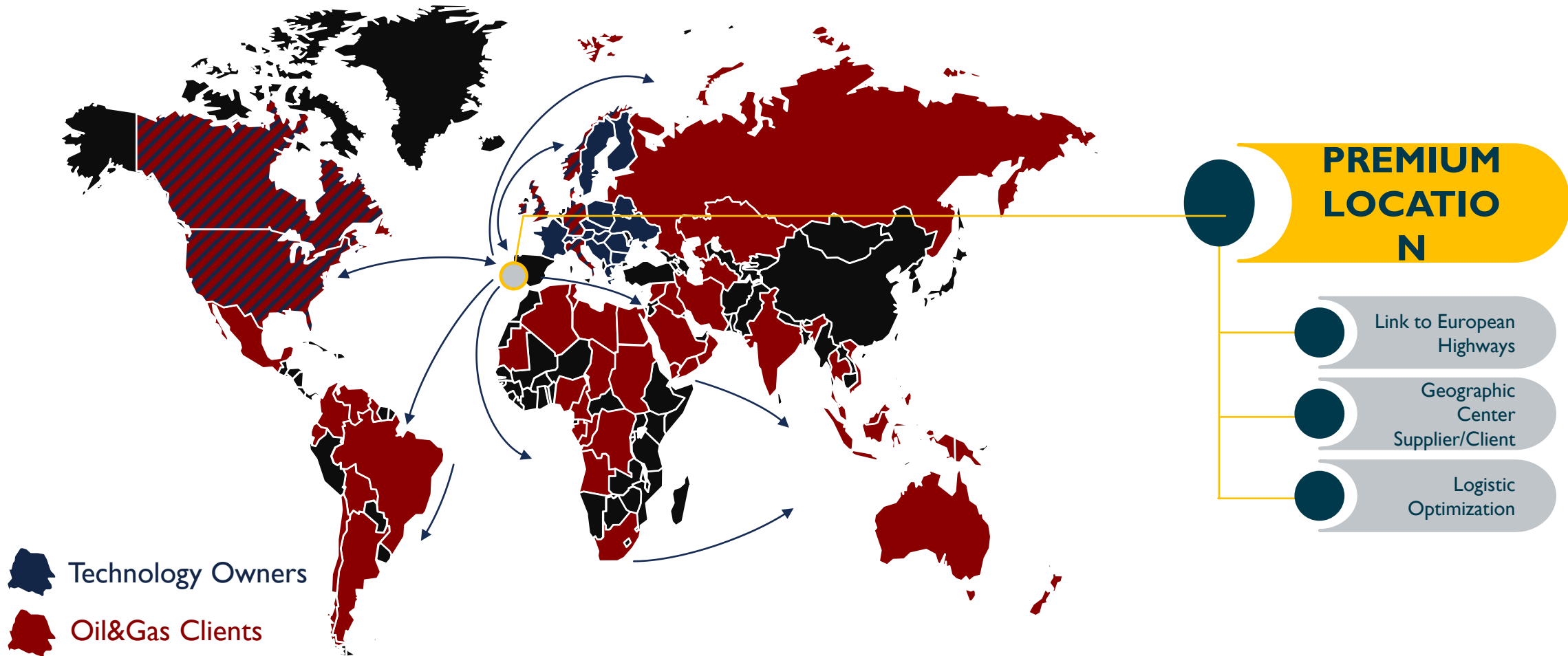


# WHAT DOES AMAL MODULAR YARD (AMY) OFFER ?





# WHY CHOOSE AMAL MODULAR YARD?



# WHY CHOOSE AMAL MODULAR YARD?

TECH  
NICAL

COMMERCIAL  
ADVANT  
AGE

IMPROVED  
WORKS  
CONTROL

IMPROVED  
QUALITY  
CONTROL

STANDARD  
METHODS

STABLE SOCIAL  
ENVIRONMENT

MANPOWER  
AVAILABILITY

LESS NEED OF  
INTERFACES

TRANSPORT &  
LOGISTICAL  
OPTIMIZATION

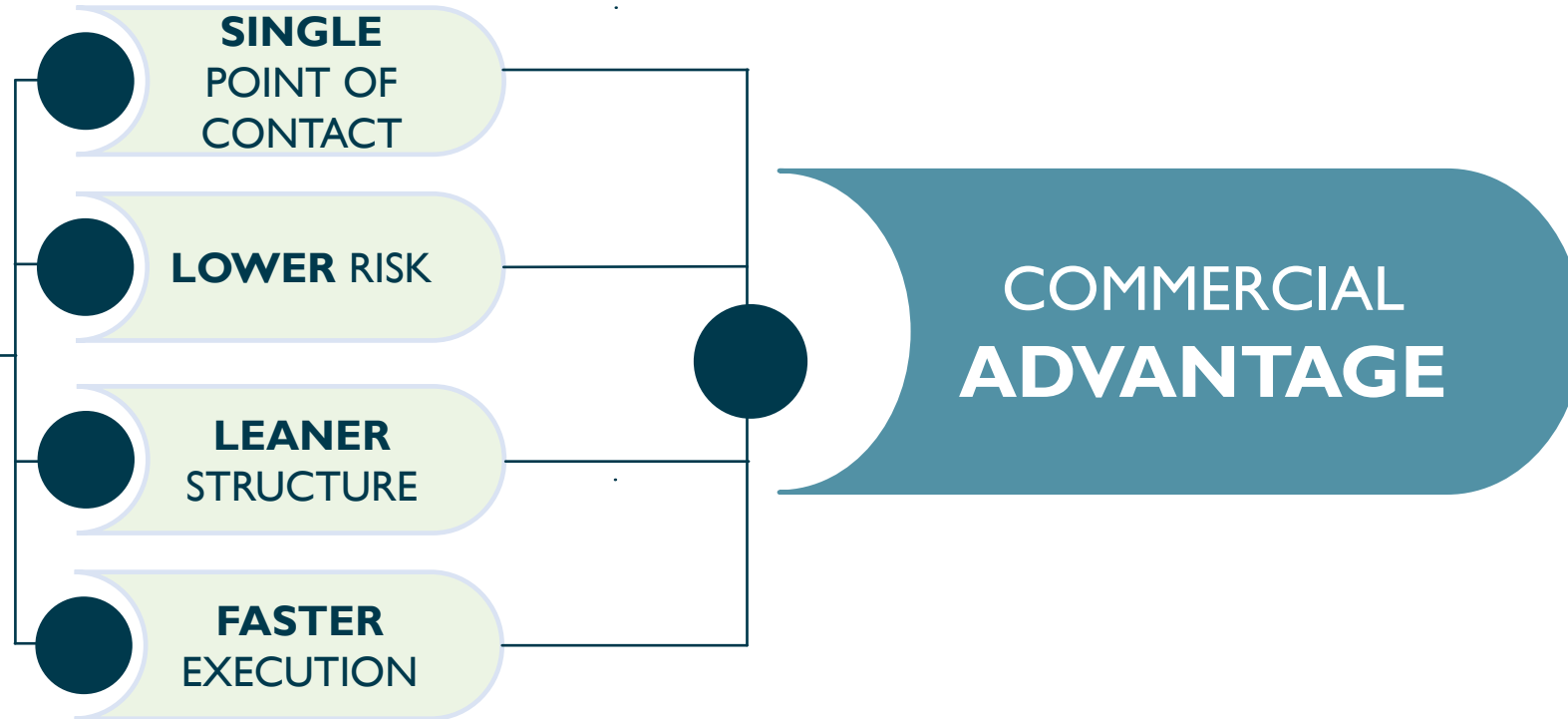
OPTIMIZED  
MODULAR  
EXPEDITION

IMPROVED  
CONSTRUCTABIL  
ITY

LESS REWORK



## WHY CHOOSE AMAL MODULAR YARD?

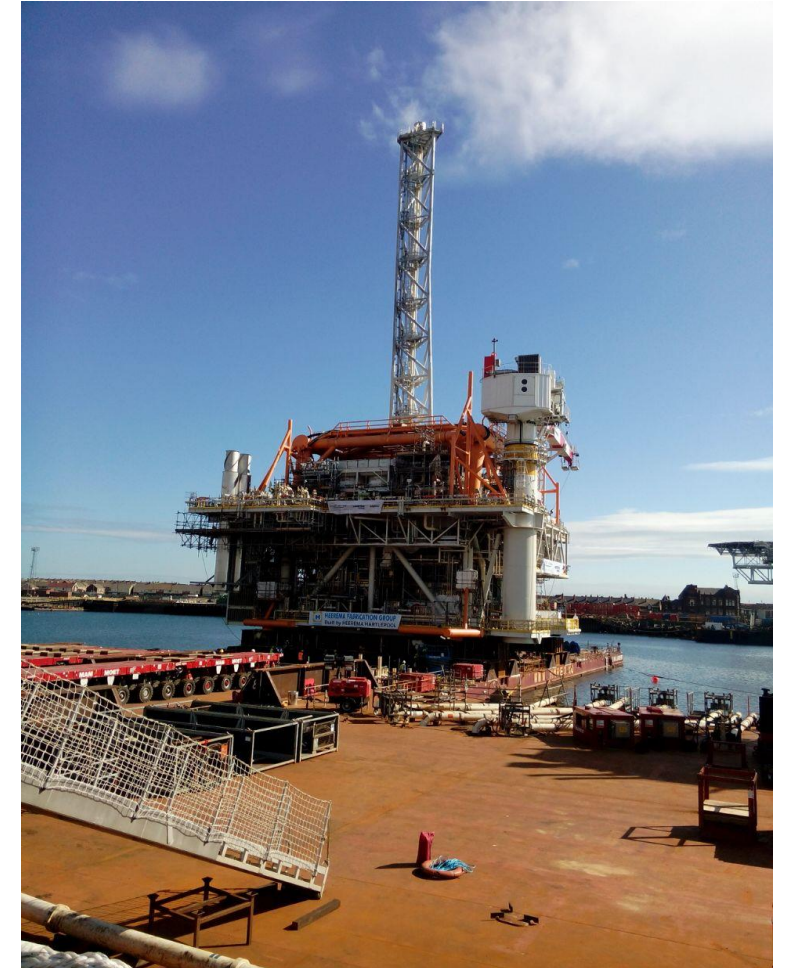


# ALBA PROJECT MARATHON- OFFSHORE PLATFORM





# CYGNUS PROJECT- GDF SUEZ- OFFSHORE PLATFORM





# CRUDE HEATERS & PIPING WORKS - NESTE OIL





# HYCO 3 MODULES AND GAS PLANT ASSEMBLED, AIR LIQUIDE, ESTARREJA













I confirm that I have dealt with AMAL- construcoes metalicas, s.a. for the prefabrication and installation of stainless steel, duplex and titanium pipespools for the BP Valhall Project in 2008 - 2009 during which time they have provided us with excellent performance, schedule wise as well as quality wise.

Their work has been a major factor in our completion of the project, helping it to become a success for Heerema and BP.

I can confidently recommend AMAL s.a. as a solid and reliable partner and experts in their field.

Yours faithfully

Frank van Zantvoort

Construction Manager

Heerema Zwijndrecht BV

## ***Recommendation Letter***

# **OFFSHORE PLATFORM NORWAY (Piping Work)**

## **HEREEMA-VALHALL**

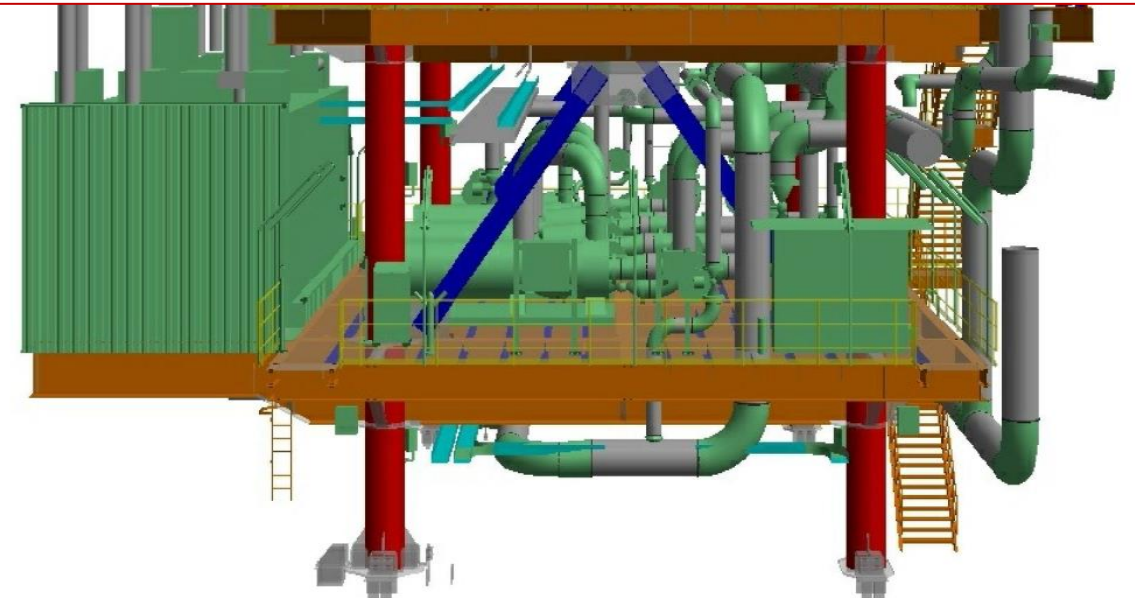
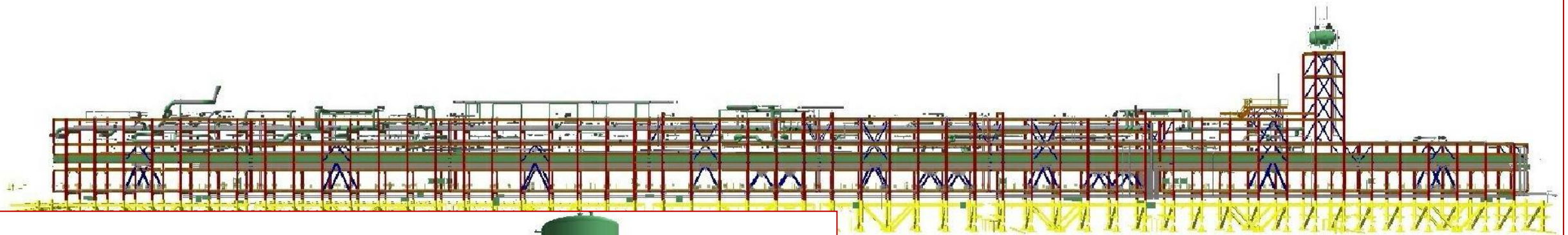




# TALISMAN- MONTROSE PROJECT



# INTEGRA/ GE- PIPE RACK MODULE AND ELECTRIC





# EMPTY LAND...TO A MODULE YARD IN LESS THAN 6 MONTHS ( WITH PROJECT ON GOING)



# INFRASTRUCTURE- OFFICE AND WAREHOUSE





# GROWTH-DEVELOPMENT STRATEGY

## CCC- AMAL STRATEGIC PLAN

- *Construir ( Construction)- Consolidar ( Consolidate)- Crescer ( Growth);*
- *Sustain Current network / locations;*
- *Ensure stable workload;*
- *Enhance efficiency / cost levels / proficiencies;*
- *Consolidate fabrication plants in Algeria and Mozambique;*
- *Develop strategic partnerships with major EPC contractors and Oil & Gas Contractor in Modular Solutions;*



# ***SUSTAINABILITY***





*End of Presentation.*  
*Thank You. AMAL*

**ZERO ACCIDENTS.....NO HARM TO THE ENVIRONMENT**