

## EXMAR – OSLO - March 2016

Patrick De Brabandere - COO

# EXMAR Company Introduction

Shipping & Energy Infrastructure Provider



- °1829 shipbuilding
- °1981 shipping
- °2003 floating terminals
- °2003 Listed on Euronext



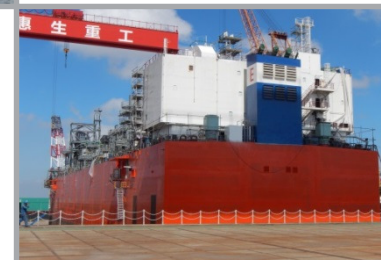
WORLDWIDE presence  
with around 1,700  
EMPLOYEES of diverse  
nationalities



Owning/Operating  
33 LPG carriers  
10 FSRUs  
5 LNGC's  
5 Offshore Units



Newbuilding program of  
6 LPG carriers  
2 FLNG's  
1 FSRU

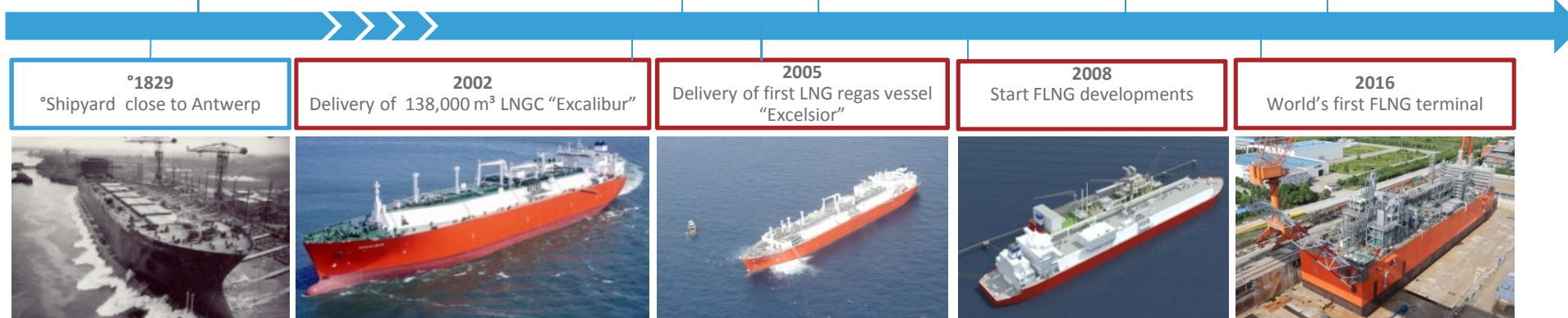


Fully Integrated Group of  
Companies





























# EXMAR Company Introduction

+185 Years of Experience in Marine Industries



# EXMAR Business Overview



Overview of EXMAR NV's divisions				
	LNG	LPG / NH <sub>3</sub>	Offshore	Services
				
EBITDA by segment (2015E)	 45%	 44%	 10%	1%
Overview / business approach	<ul style="list-style-type: none"> <li>LNG transportation, liquefaction, storage and regasification</li> <li>Customized service with significant added value</li> <li>Long-term time-charter contracts of 15+ years</li> <li>Limited opex exposure</li> <li>1<sup>st</sup> class in-house technical management and crewing</li> </ul>	<ul style="list-style-type: none"> <li>Niche position in LPG, chemical gases and ammonia transportation</li> <li>Long-term relationships with blue-chip customers</li> <li>Balance between TC, COA and spot commitments</li> <li>1<sup>st</sup> class in-house technical management and crewing</li> <li>Established 50/50 JV with Teekay LNG to focus on midsize gas carriers</li> </ul>	<ul style="list-style-type: none"> <li>Provides innovative solutions in the field of offshore oil &amp; gas production</li> <li>Cost effective approach with standardized design &amp; engineering</li> <li>Large geographical coverage, with a focus on Gulf of Mexico and West Africa</li> </ul>	<ul style="list-style-type: none"> <li>In-house engineering departments in Antwerp, Houston and Paris with in-house ship management offices in Antwerp and Singapore</li> <li>Provides management services for a multitude of blue-chip clients</li> </ul>
No. vessels (owned / managed only)	6 / 9	33 <sup>1</sup> / 6	3 / 2	n/a
Key customers	   	    	    	    

<sup>1</sup> Includes 6 vessels under construction



## EXMAR around the world



# Company Profile and Strategy



## Strategy

- Provider of industrial marine and energy logistics solutions for transport, regasification and liquefaction within the oil and gas industry
- Transitioning from pure shipping to a provider of a full value chain of infrastructure and integrated logistics to address the industry's need for competitive energy solutions
- Create value by balancing long- and short term operations to counteract volatility in the freight market

### LNG

- Being a full service provider within the LNG value chain
- Bring LNG as a competitive and green alternative to coal and oil to the market
- Maintain a leading position to provide floating LNG infrastructure solutions

### LPG

- Strengthen EXMAR's already substantial commercial portfolio in the midsize segment and stay ahead of the upcoming amendments in environmental legislation
- Looking actively at all ancillary gas transportation sector (ethane, etc.)

### Offshore

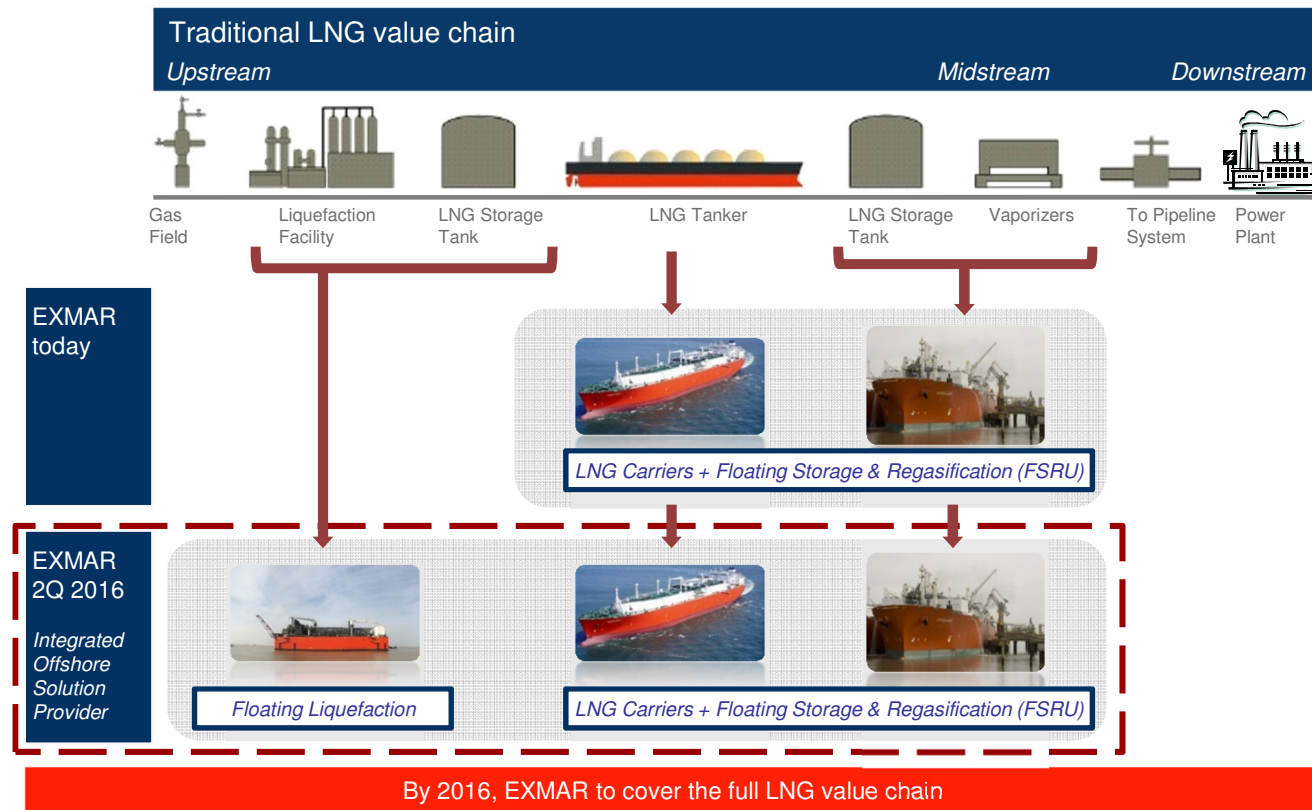
- Develop projects along the E&P value chain with specific focus on offshore floating operations
- Capitalize on the growing Floating Production and Storage Unit market





**Creating Value through the LNG Value Chain**

# Innovating Along the LNG Value Chain





# EXMAR to lease out floating LNG solutions



## Advantages of Floating LNG



Fast track – Enables earlier market access

Competitive – Reduction of CAPEX investment cost

Price-Stable – Reduced risk for cost blowouts

Quality – Controlled shipyard environment

Flexible – Floating asset can be redeployed

Lower risks – safety and environmental conditions

# LNG asset overview EXMAR



## Commitment overview of a diverse and high-quality portfolio

Asset	Type	Delivery	Capacity (m³)	Production Capacity	Ownership	2015	2020	2025	2030	2035
<b>FLNGs</b>										
Caribbean FLNG	FLNG	2016	16,100	0.5 MTPA	100%					
FLNG barge	FLNG	2019	20,000	0.6 MTPA	100%					
<b>FSRUs</b>										
Excelsior	FSRU	2005	138,000	600 mm cu ft. gas	50%					
Excelerate	FSRU	2006	138,000	600 mm cu ft. gas	50%					
Explorer	FSRU	2008	150,900	600 mm cu ft. gas	50%					
Express	FSRU	2009	150,900	600 mm cu ft. gas	50%					
FSRU barge	FSRU	2017	26,000	600 mm cu ft. gas	100%					
<b>LNGCs</b>										
Excalibur	LNG/C	2002	138,000	n.a.	50%					
Excel	LNG/C	2003	138,000	n.a.	50%					

Under construction
 Chartered
 Min revenue undertaking with first class counterpart
 Option
 Uncommitted

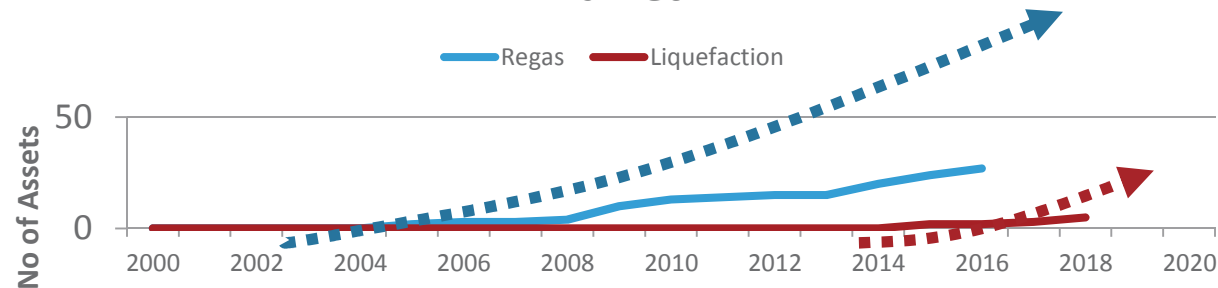


## Floating LNG Infrastructure: From New Concept to Proven Technology



- It took some years before floating regasification (“FSRU”) really took off
- Floating liquefaction (“FLNG”) is only just starting despite lower energy prices

### Development of Floating LNG Infrastructure Market



Source: EXMAR data

Private & Confidential

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# EXMAR Liquefaction Solution

## First Mover Advantage in FLNG

- 2 FLNGs on order
- Caribbean FLNG contract
  - FLNG commissioning to start Q1/2016
  - 15 years contract with Pacific Rubiales
- Supporting several O&G Companies and Project Developers:
  - Studies and technical support in different stages of development
  - Joint Development as FLNG Project Partners
  - Develop Flexible Solutions, Tailored to the Client/Partner's Needs (size, process, mooring, ...)





# The World's First FLNG is Developed by EXMAR



## Caribbean FLNG project (CFLNG)

- EXMAR to build, operate and maintain the world's first Floating LNG ("FLNG") unit
  - Alternative locations / projects being actively pursued
  - FLNG is cheap, fast and flexible way to monetize gas reserves
- Export capacity: 0.5 MMt per year
  - Storage: 16,100 m<sup>3</sup>
  - Dimensions:
    - Length: 144 m
    - Breadth: 32 m
    - Depth: 20 m
    - Draught: 5.4 m
  - Black & Veatch PRICO® technology
  - EXMAR's proven STS transfer technology

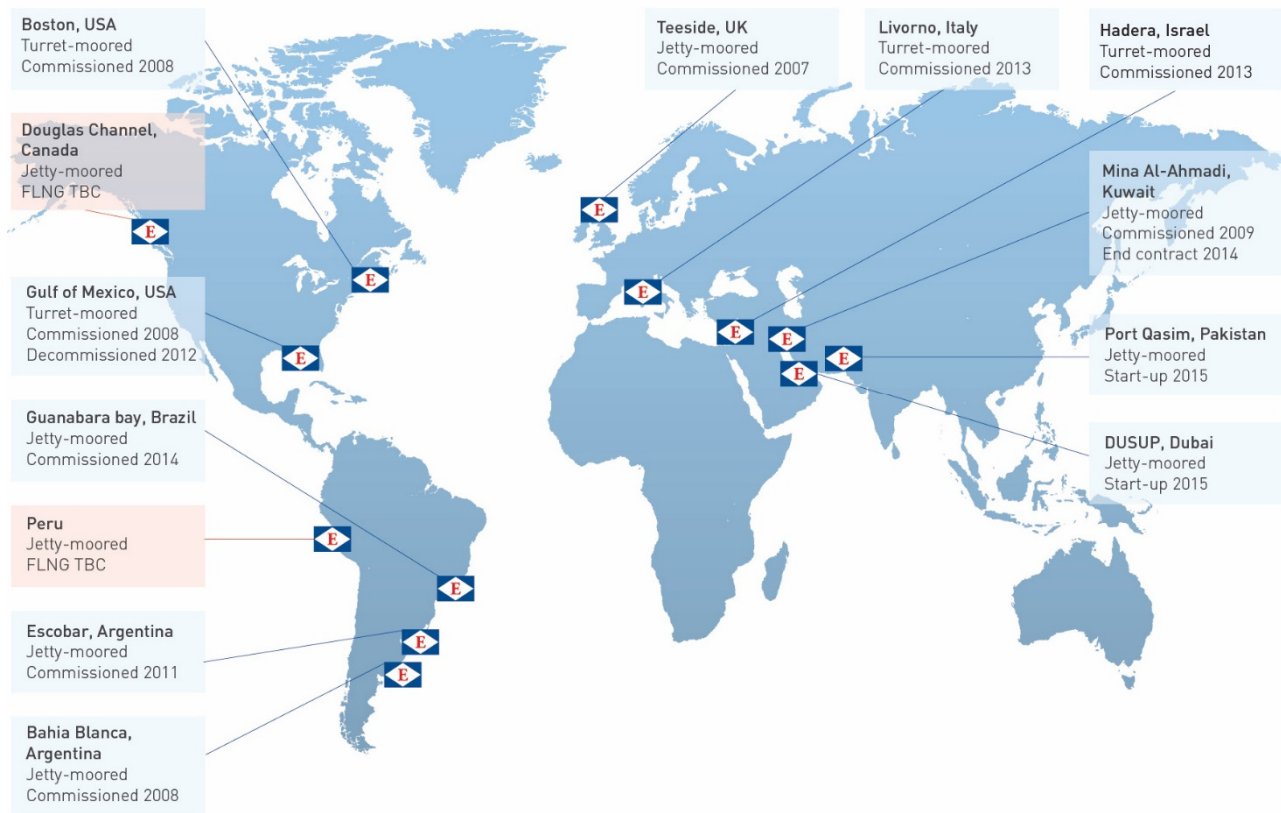


# EXMAR & Floating Regasification



Established player always working on innovative solutions

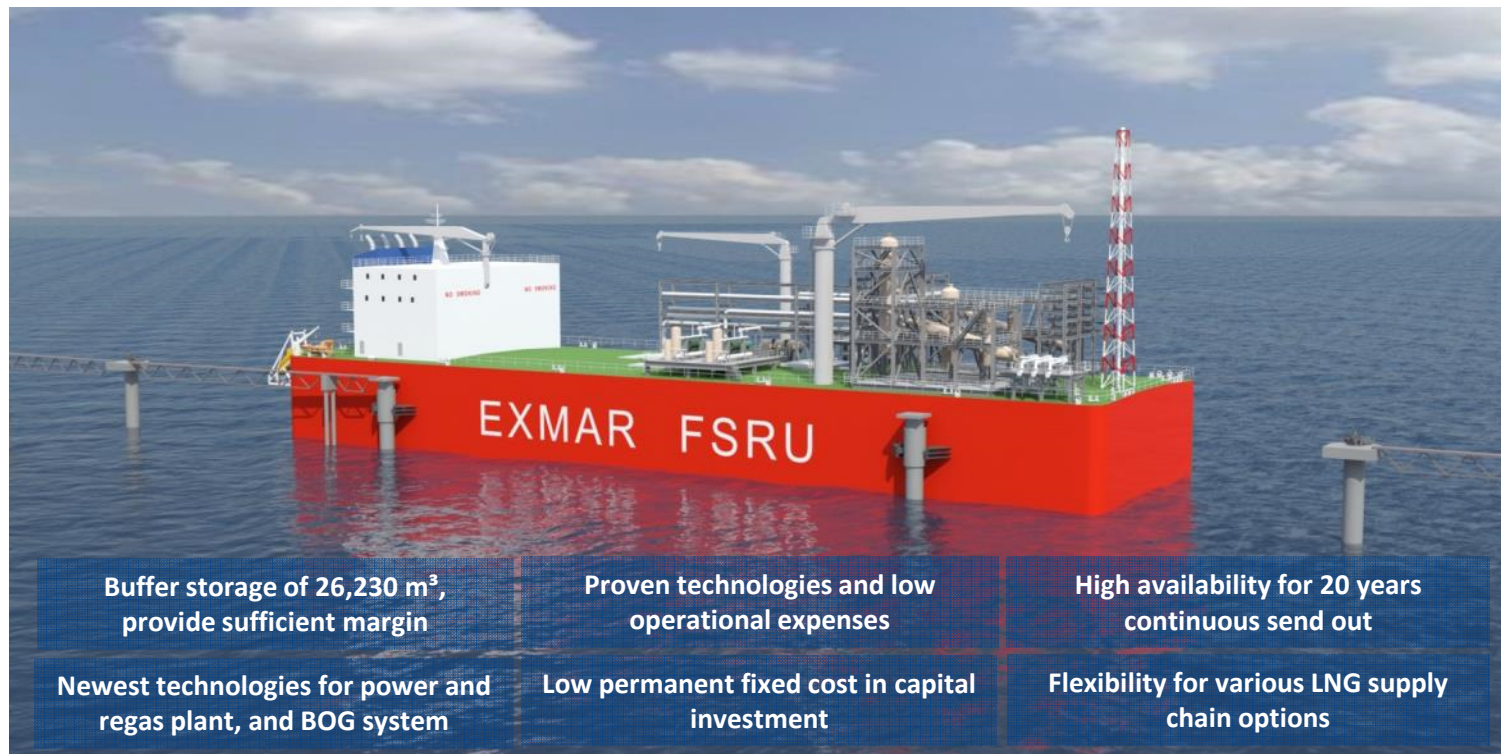
- Pioneered floating regasification solutions, introduced world's first FSRU in 2005
- Currently operating 10 FSRUs
- 1 barge-based FSRU under construction, still commercially available
- Unrivalled track record



## FSRU barge on a stand alone basis



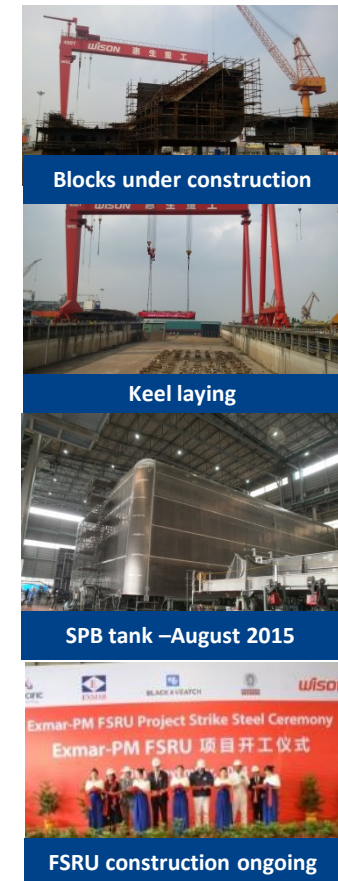
Already under construction, cost efficient and tailored



## Fast track solution: first gas Q2 2017

Timely delivery guaranteed

Key Milestones	Dates	
Contract Award	02/2014	✓
Detailed Engineering Start	04/2014	✓
Production Engineering Start	06/2014	✓
Steel Cutting	11/2014	✓
Keel Laying	10/2015	✓
Cargo tanks installed	12/2015	✓
Delivery	Q2 2017	



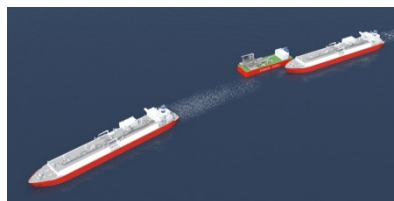


## Small is beautiful



EXMAR's FSRU barge perfectly fits the needs of today's market

- 26,000 m<sup>3</sup> FSRU barge lowers overall costs while increasing flexibility for our customers
- Both small AND large scale projects can be served by this unit (25-600 mmscfd)
- Storage volume can be tailored according project needs:
  - Small scale supply chain
  - Floating storage unit (FSU)
- Cheap tonnage from the market can be utilized as storage
- The unit is currently under construction at Wison's Shipyard in Nantong, China





Swan LNG

## P15-015 Jafrabad LNG Port Project Presentation



- Partnership on equal basis between SWAN Energy Limited and EXMAR
- Site selection
  - Proximity to the NG market (Gujarat, New Delhi and North of India)
  - Lower pipeline cost to reach the prime market (compared to Dahej and Hazira)
  - Short connection to the grid (6 km to the existing pipeline grid)
  - Proximity to LNG supply (Qatar, Mozambique, Iran?)
- Project Status:
  - **Concession** given by the State of Gujarat for 30 years (build – own – operate – transfer (price to be determined by an independent expert after 30));
  - **Environmental Clearance** has been obtained in 2013;
  - Studies have been made for the EPC of the marine infrastructure and dredging and tender process is underway with experienced **EPC Contractors**;
  - Discussions with **Indian / International banks** ongoing (80/20 – INR loan);
  - **Heads of agreement** signed. Negotiations on the Regas Agreements on take-or-pay basis with 4 major Indian Oil & Gas companies in progress
  - FID expected mid-2016
  - Start-up operations expected early 2020





# Jafrabad LNG Port Project

## Terminal layout

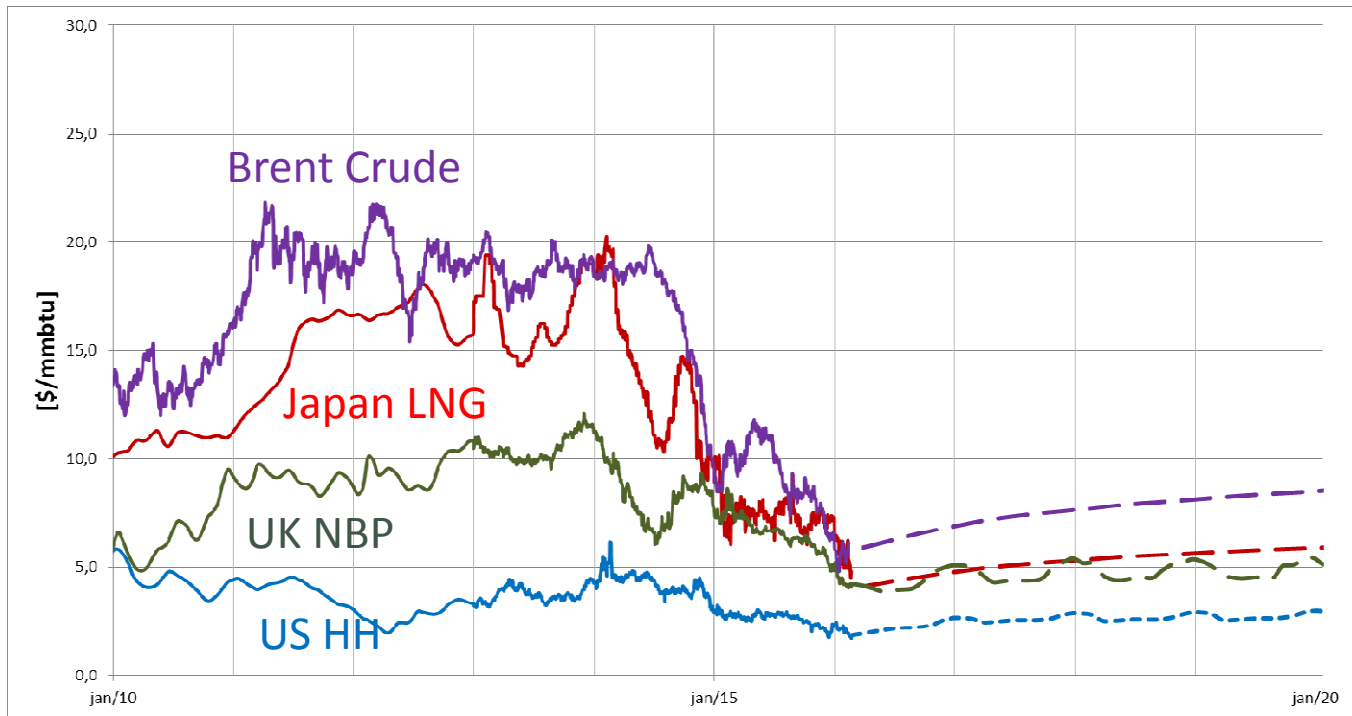


- 2.2 km breakwater, protecting the terminal from strong winds, current, ciltation, monsoon, ...;
- 1 Jetty for the permanent mooring of 1 5MTPA FSRU + 1 FSU and capable of receiving LNGCs up to Q-Max sizes;
- 1 Jetty for the permanent mooring of 1 5 million tons per year (MTPA) FSRU (in phase 2);
- Onshore receiving facilities, accommodation, firefighting station, ...
- Capital and maintenance dredging needed to receive any LNGCs irrespective of tide.

# Energy markets today



## Gas, LNG and Oil Prices Converging

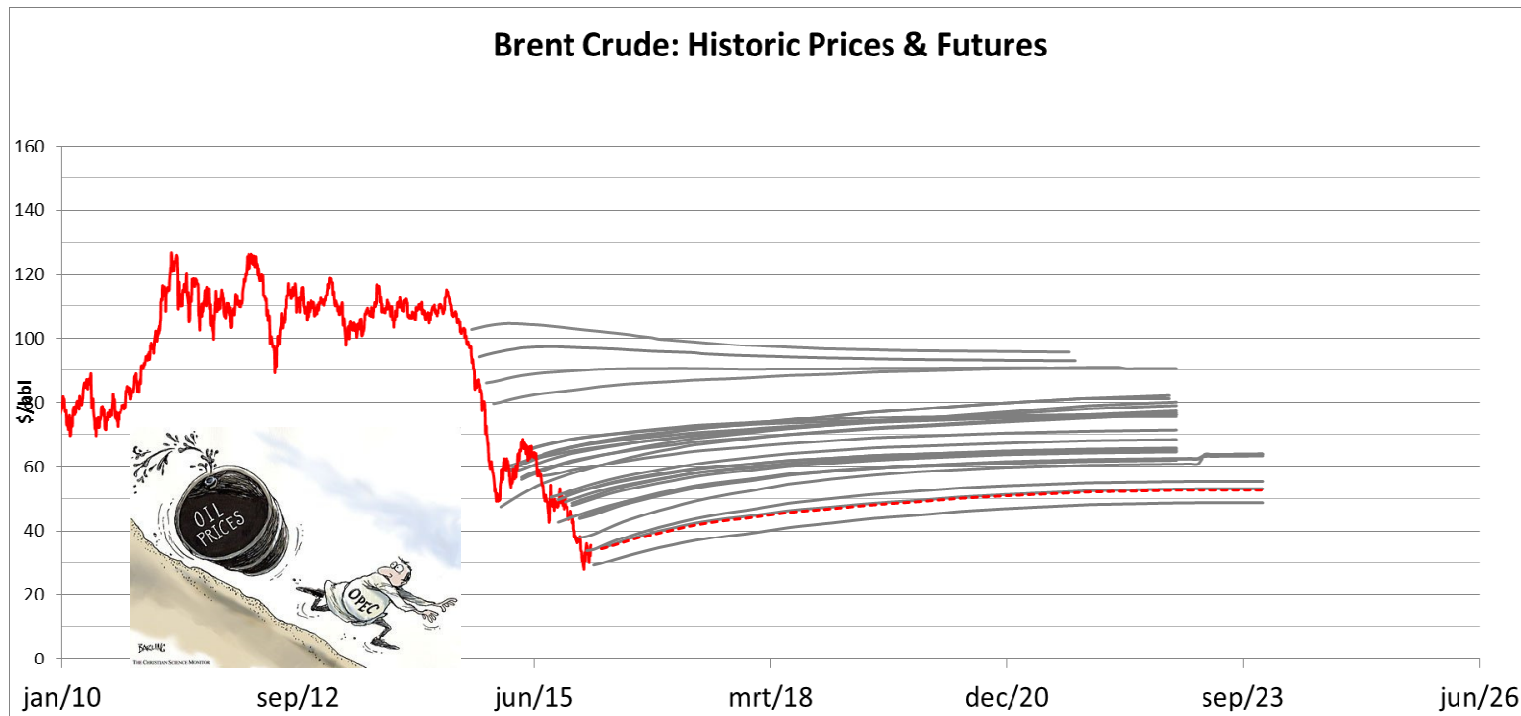




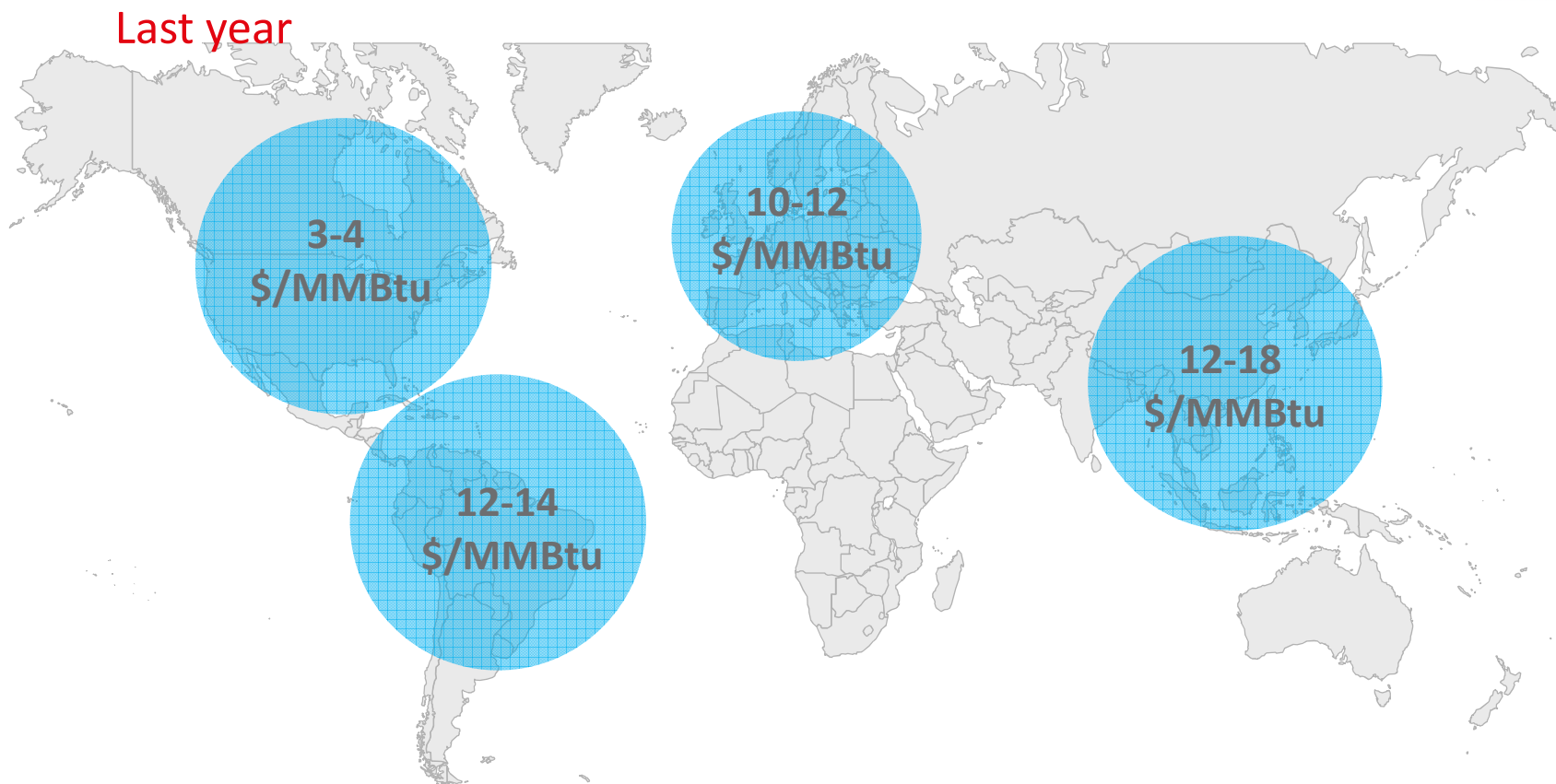
# Energy markets: Plummeting oil prices



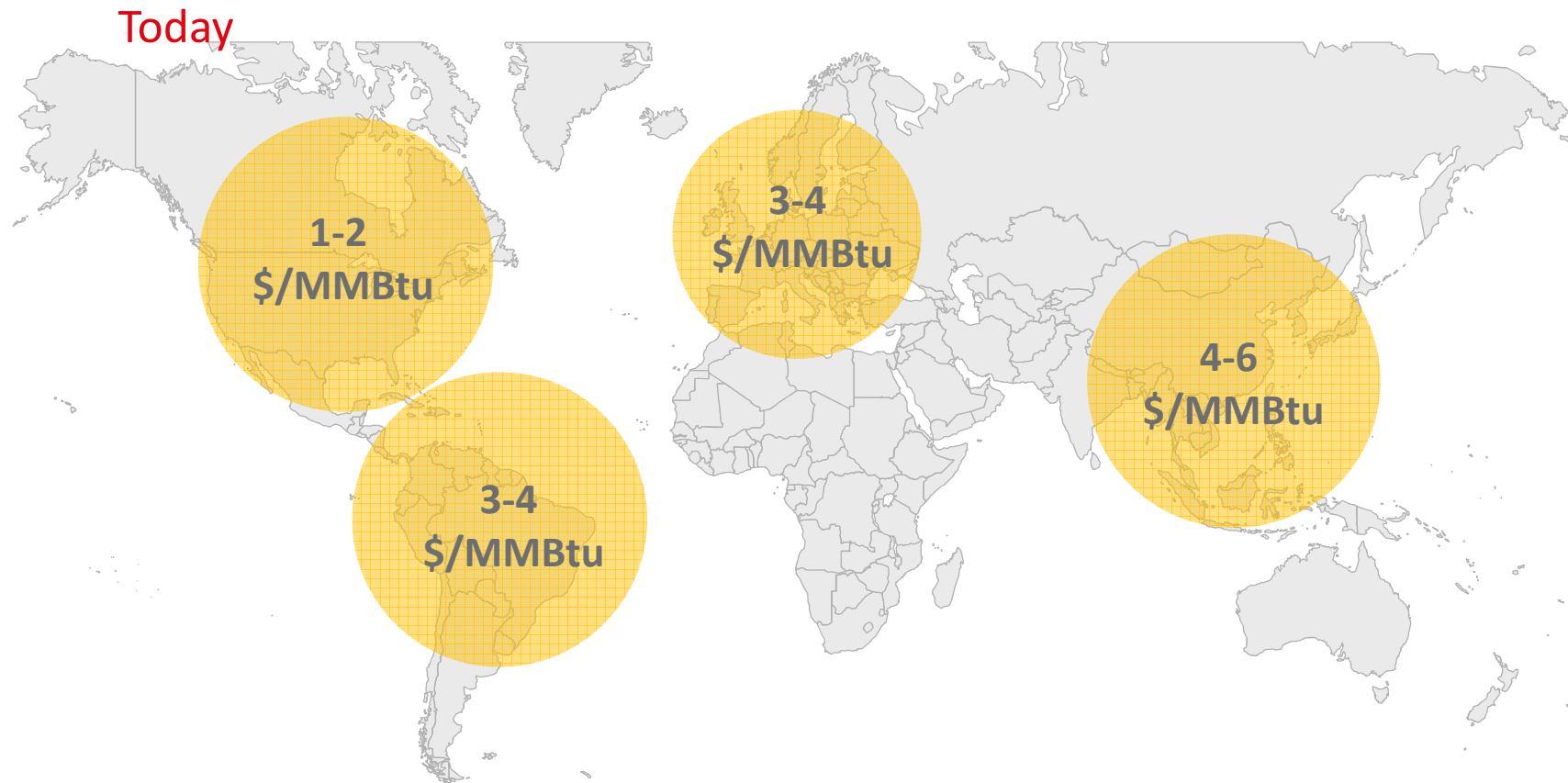
## Brent Crude: Historic Prices & Futures



## Gas & LNG Pricing Environment



## Gas & LNG Pricing Environment



## Illustrating the current impact of low prices



Only highly competitive (F)LNG projects will be able to compete!

	TODAY	LAST YEAR
115% Henry Hub	2,3	4,4
Liquefaction@3\$/mmbtu	3,0	3,0
Shipping from US GOM (spot)	1,3	2,4
<b>TOTAL COST</b>	<b>6,6</b>	<b>9,8</b>
<b>Asian spot prices</b>	<b>6,0</b>	<b>15</b>
<b>MARGIN</b>	<b>-0,6</b>	<b>+ 5,2</b>





## EXMAR LPG Activities

# EXMAR LPG Shipping



## Business Approach

- Niche position in LPG, ammonia and chemical gases transportation
- Focus on midsize carriers
- Long-term relationships with blue-chip customers
- Balance between Time-Charter, COA and spot commitments
- 1<sup>st</sup> class in-house ship management and crewing

## First class client base



# LPG Activities

## LPG Fleet



### Owner/Operator of LPG carriers

- Transportation of LPG, Chemical Gases and Ammonia;
- Flexible commercial proposition; (Time-Charter, COA and spot commitments);
- VLGC and MGCs integrated in a JV with Teekay LNG (February 2013)



### Fleet of 33 LPG carriers (Owned and Time-Chartered):

- 1 VLGC (85,000 m<sup>3</sup>);
- 22 LPG/NH<sup>3</sup> Midsize (38,000 m<sup>3</sup>);
- 1 Semi-Refrigerated (12,000 m<sup>3</sup>);
- 10 Pressurized (3,500 – 5,000 m<sup>3</sup>)

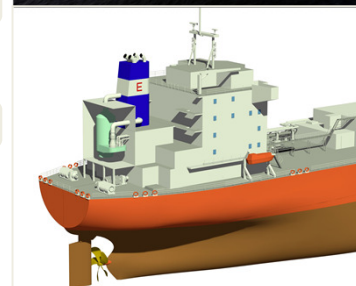


### Market leader in Midsize segment (20,000 - 40,000 m<sup>3</sup>):

- Transports 14% of the world's seaborne Ammonia

### Newbuilding program of 12 midsize vessels (38,000 m<sup>3</sup>):

- 4 newbuild vessels at HHI and 2 at Hanjin (HHIC) have been delivered
- 6 vessels under construction with Hanjin

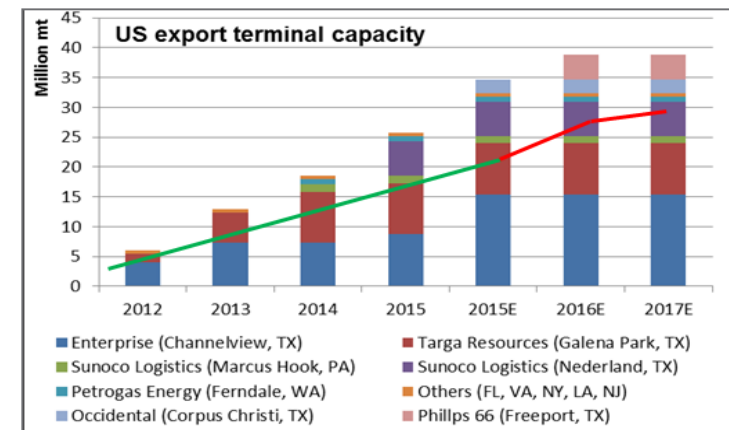




# LPG Market Outlook



- **General Market Developments: Another quantum leap in US LPG exports has driven the market to historical heights**
  - The combination of a strong Chinese LPG import expansion with a rapidly increasing portion of it sourced ex USA has been the main driver to comfortably absorb as many 30 VLGC delivered during 2015.
  - Except for small Pressurized tonnage, all segments have enjoyed historically high freight / hire markets on the back of virtually full capacity utilization.
  - However, a major newbuilding wave will hit the market throughout '16 / '17 and it remains to be seen whether export volumes and trading patterns in various segments will be able to digest the latter by way of a soft landing or not.
  - **Exmar currently has an average TC employment coverage of 72% across the LPG fleet for 2016**
- **Seaborne LPG demand: LPG trading continues to dominate the market mainly based on**
  - Substantially increasing US terminal capacity and export volumes
  - China's rapidly expanding long-haul imports ex USA
  - Steadily growing Indian LPG imports
- **Seaborne Ammonia demand : A gradual change in trading patterns should improve on otherwise slow growth prospects :**
  - Export growth forecasts remain modest in volume but are likely to go together with a shift in trading patterns, which should positively impact trading liquidity and vessel utilization
  - The foreseen substantial reduction of US imports is expected to re-route Ammonia traditionally being sourced ex Caribbean and Black Sea to other outlets as far as East of Suez

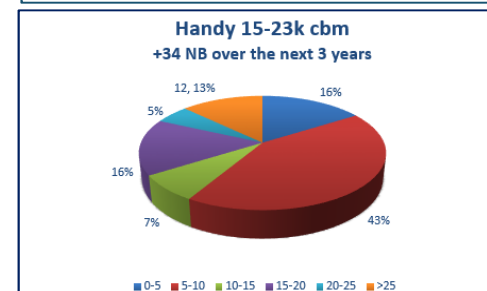
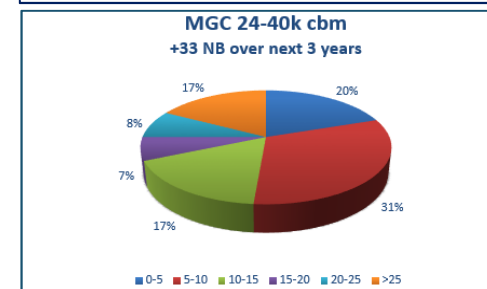
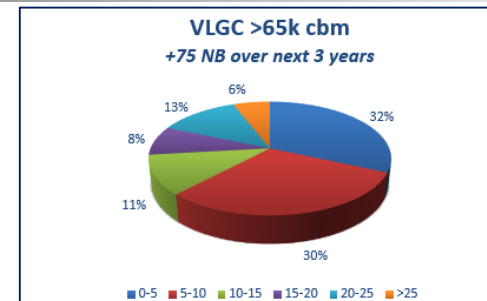
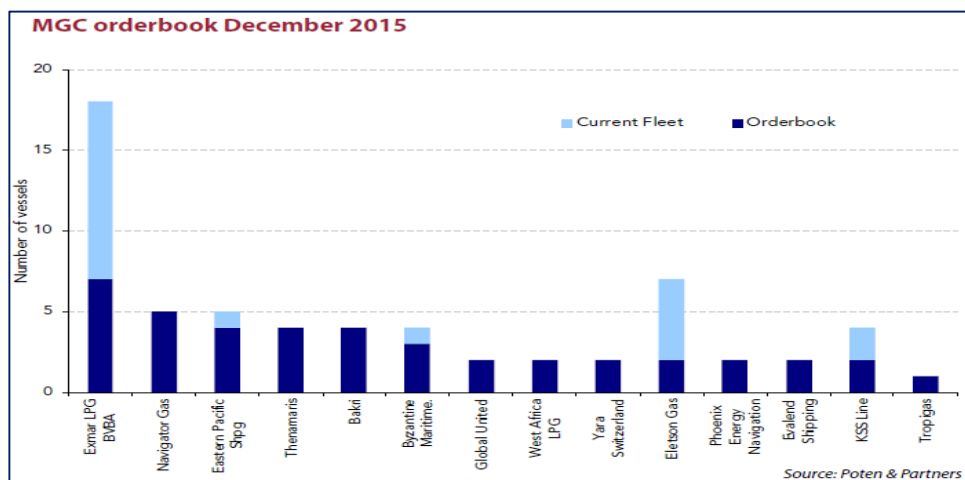




## 2.3. LPG - Overall Fleet Supply (VLGC – Midsize – Handysize)

**Bullish market expectations + aggressive financial conditions have led to an excessive orderbook**

- The combined proportion of newbuildings (to be) delivered within '16 - '19 is the largest ever within a 3-year period:
  - 75 VLGC = 37 % (of which 40 scheduled within Dec '16 excl. 7 VLEC)
  - 33 Midsize = 43 % (excl. 4x 27,000 m<sup>3</sup> + 7x 35 - 36,000 m<sup>3</sup> Ethane carriers) (\*)
  - 34 Handysize = 36 % (incl. 17 Ethylene carriers)
- Such orderbook will unavoidably affect vessel utilization and spark strong competition not only within but also between various segments





## EXMAR Offshore Activities

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# EXMAR Offshore



## Business Approach

- Provides engineering and design services, asset leasing and operating and management services
- Cost effective approach with standardized design & engineering
- Large geographical coverage, with a focus on Gulf of Mexico and West Africa

## First class client base

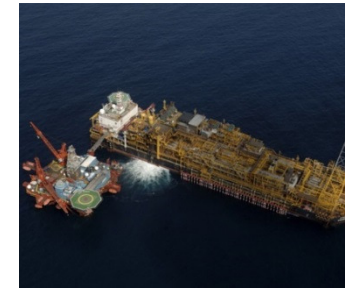


# EXMAR's Activities in the Offshore Sector



## Build, own, operate model

- Owned assets: 3 accommodation barges
- Development of FPSO's and FSO's
- Development of Semi-submersible platforms
- Development of Accommodation barges



## Services

- Pre-Operations Engineering
- Marine and Maintenance Services
- Operational Services
- Staffing and Technical Services
- Procurement and Logistical Services
- Asset Integrity Management



# Conclusions

## EXMAR and Floating LNG solutions



35 years experience  
in gas shipping and  
handling with 40+  
vessels



Pioneer in the oil &  
gas industry with  
strong in-house  
engineering teams

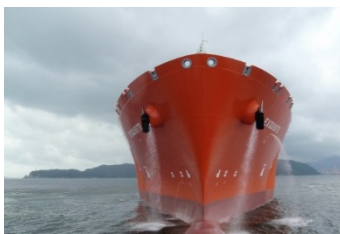


World's first  
FLNG to be  
delivered 1H 2016

Turnkey floating  
LNG solutions,  
tailored to the  
needs of the client



Innovation and  
Investment to  
create  
Shareholders' Value



Market leader in  
LPG midsize  
segment

Benefitting from a  
unique position in  
growing markets







**Do you have any question?  
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