

# Investment in FPSO Charter Projects for Petrobras in Brazil



May 14<sup>th</sup>, 2018  
Mitsui & Co., Ltd.

# Agenda

1. Core Business of the Infrastructure Project Business Unit
2. Activities in offshore Oil & Gas infrastructure sector
3. Project Outline
4. What is FPSO?
5. Business Environment
6. MODEC - Strategic Partner for FPSO/FSO Business -
7. Mitsui FPSO/FSO Projects

# 1. Core Business of the Infrastructure Project Business Unit



## Power

Balanced portfolio of  
9.3GW of power generation  
capacity in 20 countries

## Offshore Oil & Gas Infrastructure

MODEC collaboration  
5 countries  
18 FPSOs  
2 million bpd production

©MODEC

## Gas Distribution

Brazil: approx. 30 million m<sup>3</sup>/d  
capacity (roughly 50% of  
domestic supply total)

## 2. Activities in offshore Oil & Gas infrastructure sector



### Strength

- Strong collaborative framework with MODEC
- Abundant project achievements for Petrobras (Brazil)
- Stable earnings from 18 FPSO\*/FSO



### Growth Initiatives

- Raise operating rates, lower costs
- Win new orders for FPSO
- Extend offshore energy domains (subsea business\* etc.)

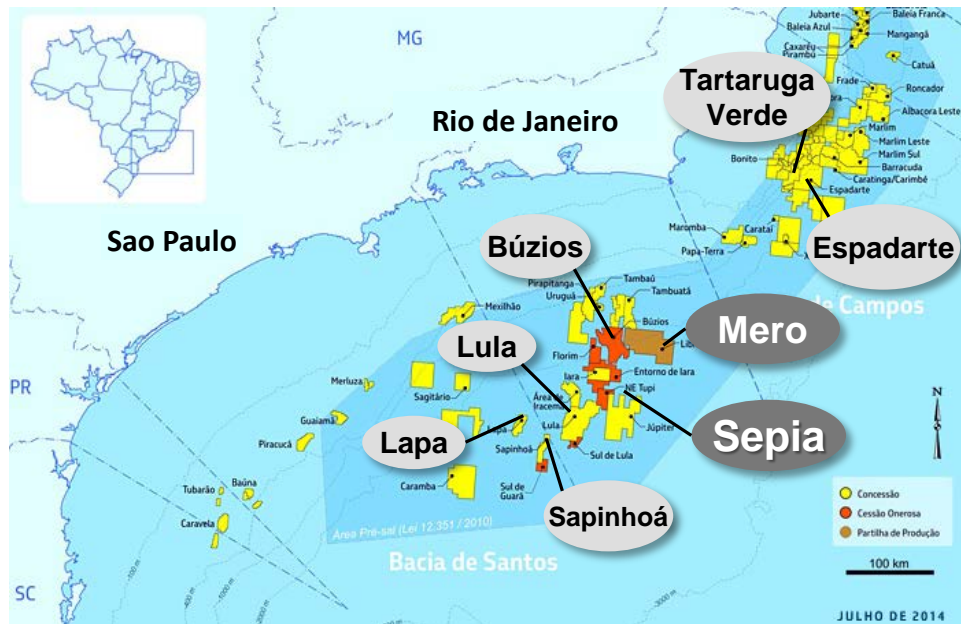
\*FPSO: Floating Production, Storage & Offloading System

\*Subsea business : Service business for subsea oil and gas production equipment

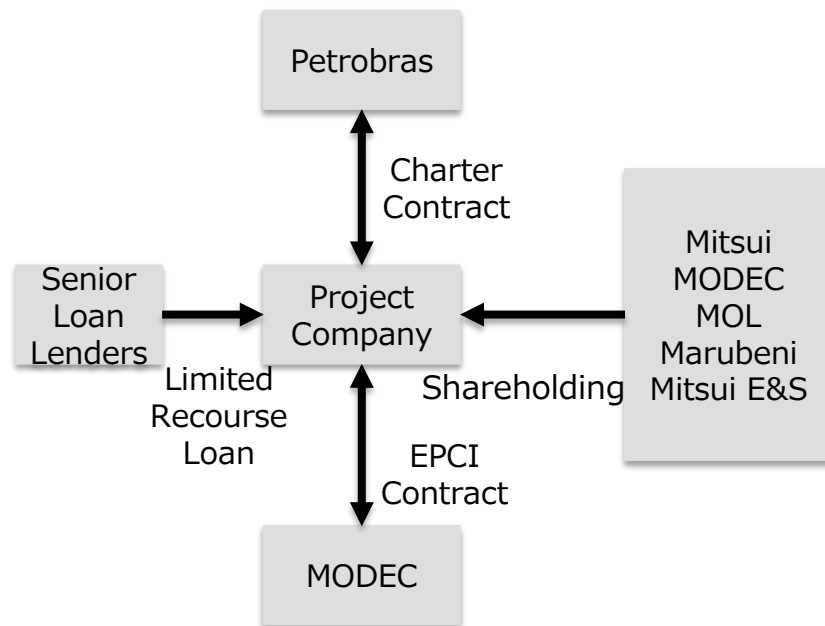
### 3. Project Outline

Mitsui is participating in two project companies for a long-term charter business for the purpose of providing FPSOs for use in the Sepia field and Mero field off the coast of Brazil operated by Petrobras. Mitsui's equity interest in both FPSO projects is 32.4%.

#### <Field Location>



#### <Project Structure>



# 3. Project Outline



	FPSO for Sepia field	FPSO for Mero (former Libra) field
<b>Participation Date</b>	Jan 9 <sup>th</sup> , 2018	May 11 <sup>th</sup> , 2018
<b>Field</b>	Sepia pre-salt field, in Santos Basin (Offshore Brazil)	Mero pre-salt field, in Santos Basin (Offshore Brazil)
<b>Field Owner</b>	Petrobras	Libra Consortium (Petrobras 40%、Shell 20%、Total 20%、CNPC 10%、CNOOC 10%)
<b>Charterer/ Operator</b>	Petrobras	Petrobras
<b>FPSO Major Specification</b>	Vessel type : VLCC Conversion Storage Capacity : 1,400,000bbls Oil Production : 180,000bbls/day Gas Treatment : 6,000,000Sm3/day	Vessel type : VLCC Conversion Storage Capacity : 1,400,000bbls Oil Production : 180,000bbls/day Gas Treatment : 12,000,000Sm3/day
<b>Contract Term</b>	Firm 21 years	Firm 22 years
<b>Shareholding Ratio</b>	Mitsui : 32.4% MODEC : 20.1% MOL : 20.6% Marubeni : 17.6% Mitsui E&S : 9.3%	same as on the left



## 4. What is FPSO?

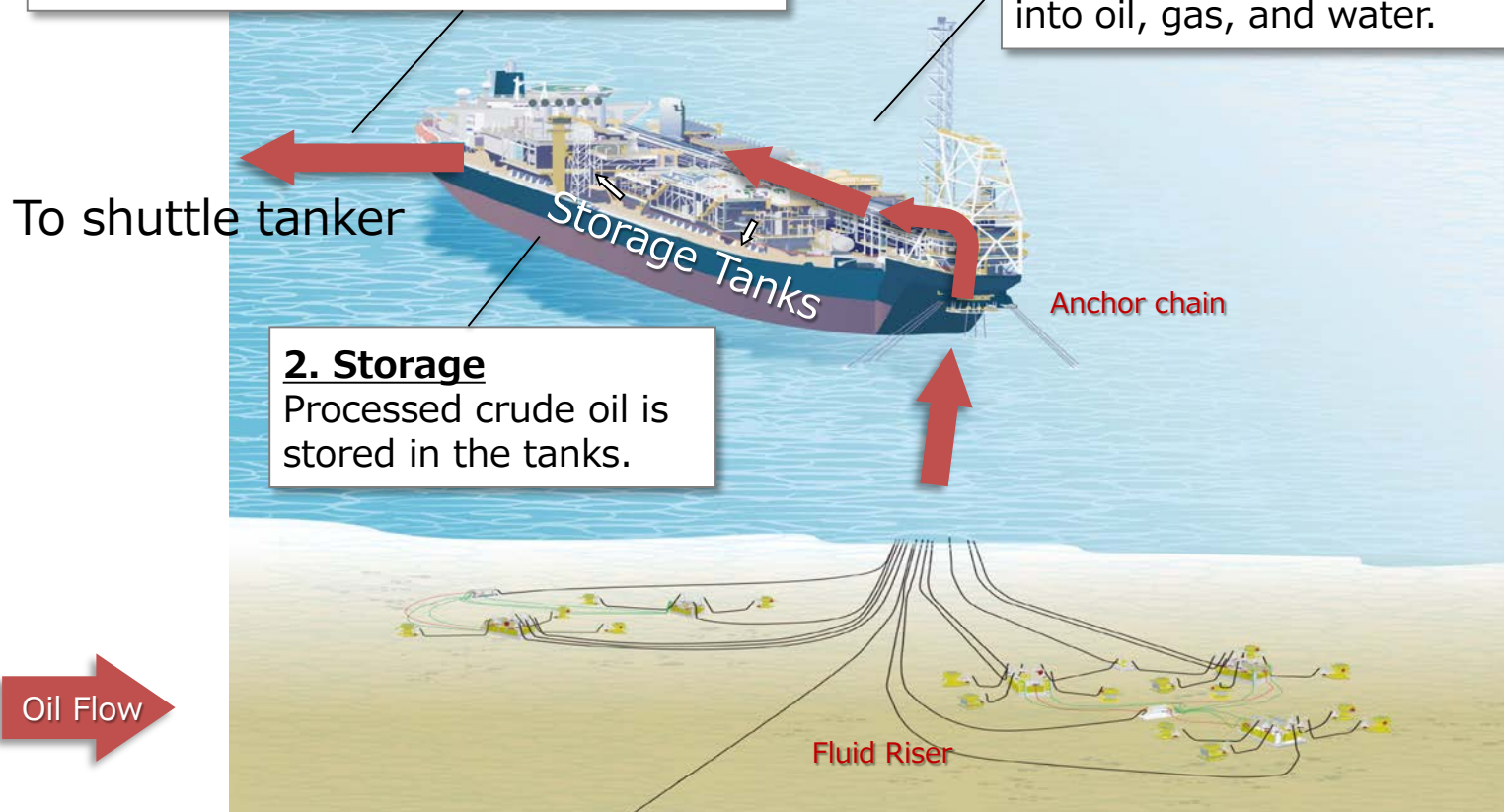
FPSO = Floating, Production, Storage and Offloading System

### 3. Offloading

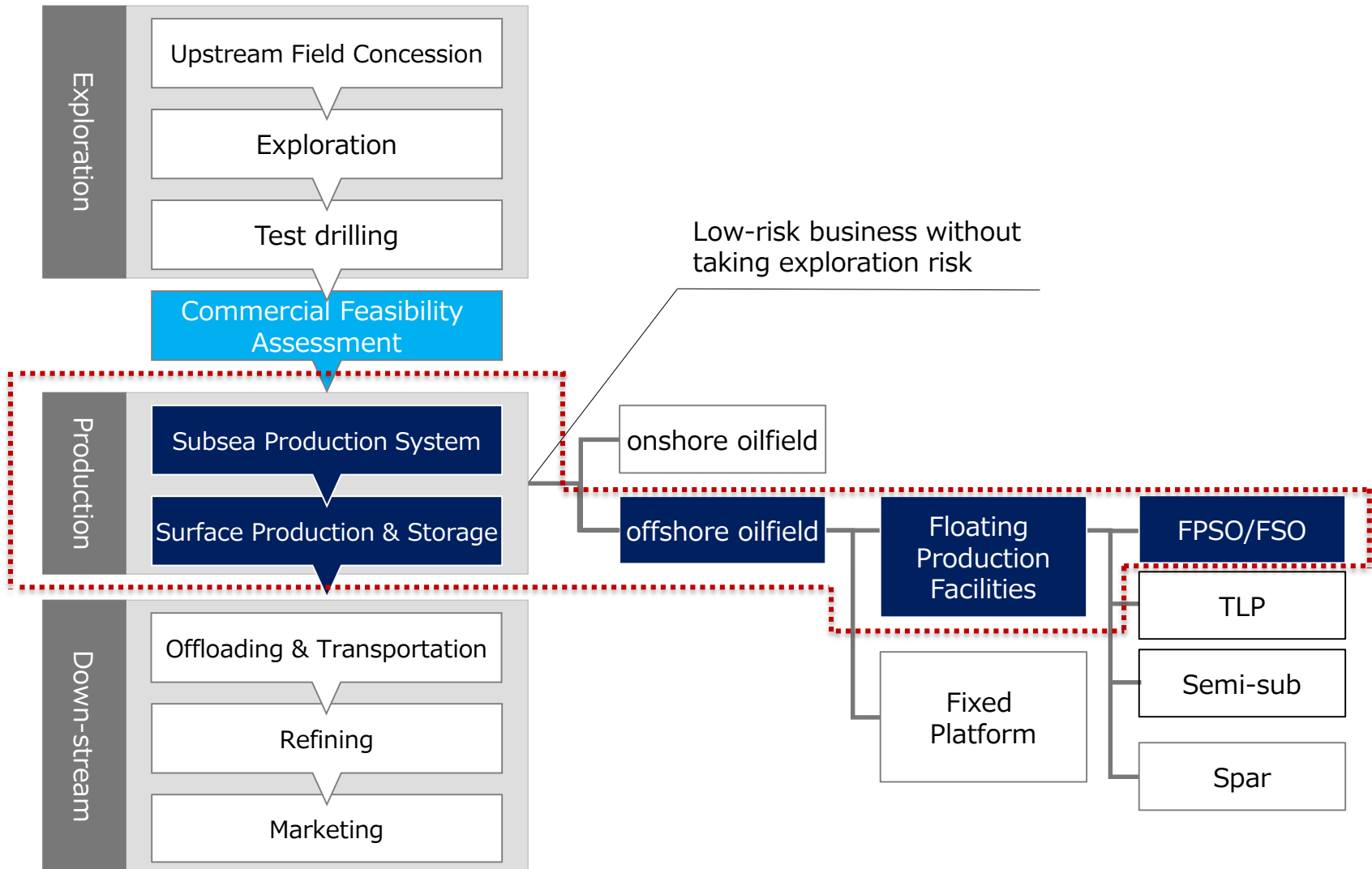
Crude oil stored in the tanks is periodically offloaded to shuttle tankers.

### 1. Production (Process system)

The fluid from the reservoir is separated into oil, gas, and water.



# 4. What is FPSO?



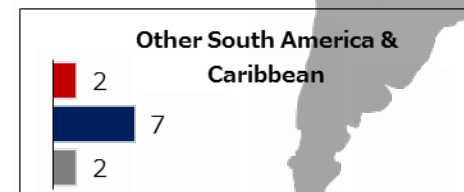
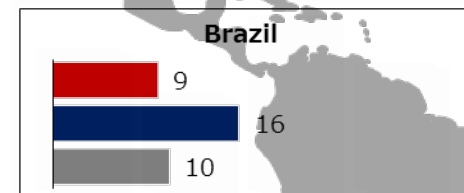
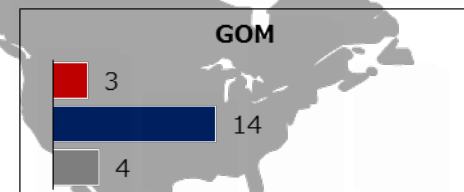
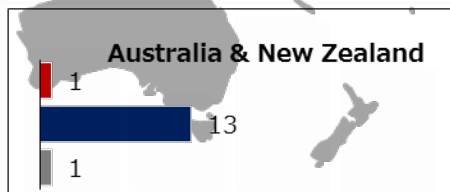
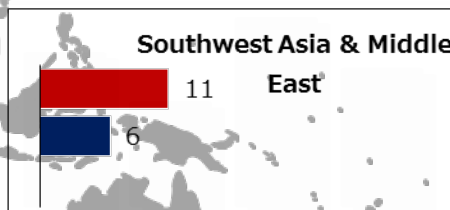
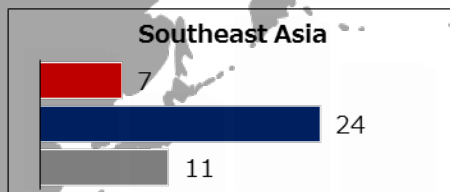
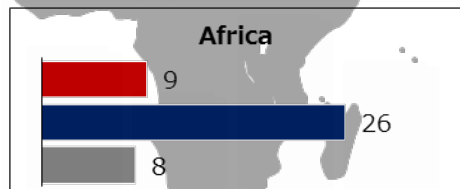
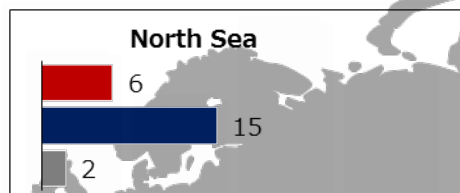
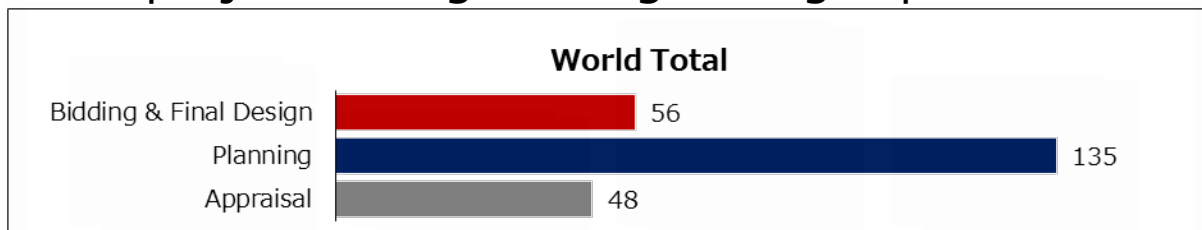


# 5. Business Environment



- Numbers of projects using floating oil & gas production facilities -

(as of September 2017)



## 6. MODEC - Strategic Partner for FPSO/FSO Business -



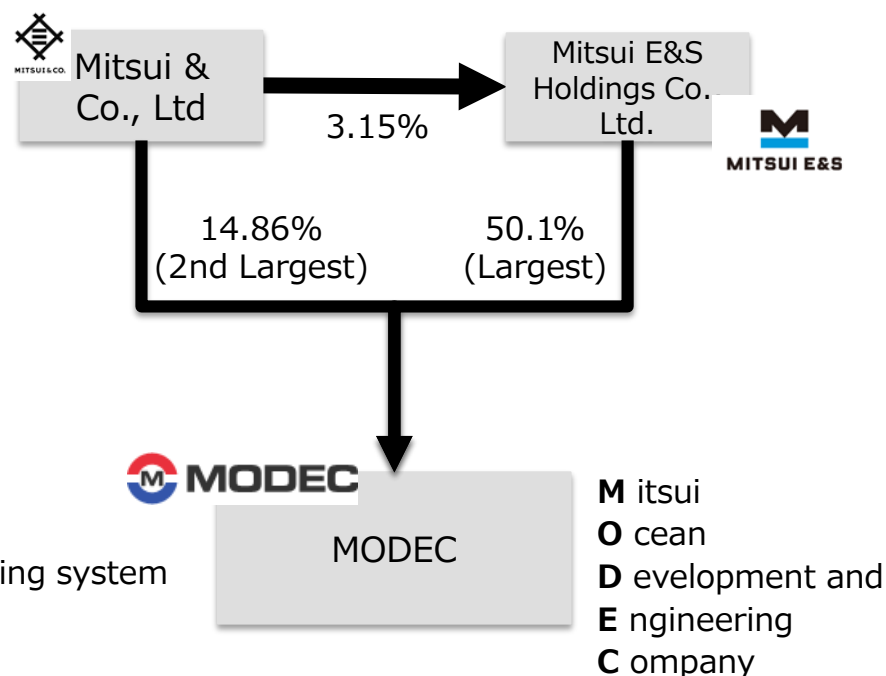
<b>Company Name</b>	MODEC, Inc.
<b>Capital</b>	30,122.49 million yen
<b>No. of Employees*</b>	157 (Consolidated: 4,065) * Including contract employees
<b>Main Business**</b>	Own, Operation and EPCI of FPSO, FSO, FLNGs, TLPs, Semi-Submersibles, Mooring Systems and new technologies which will meet the challenges of oil and gas production floaters.

### Financials

(mil JPY)	2014/12	2015/12	2016/12	2017/12
Revenue	378,523	295,596	229,987	191,182
Net Profit	5,422	5,824	21,012	19,454
Total Asset	348,447	354,464	333,249	321,165
Net Asset	109,631	114,983	134,609	148,387

**\*\* FPSO** : FPSO - Floating Production, Storage and Offloading system  
**FSO** : Floating Storage and Offloading system  
**FLNG** : Floating LNG  
**TLP** : Tension Leg Platform

### Shareholding Structure (2018/4/1)



# 7. Mitsui FPSO/FSO Projects

## Southeast Asia

### Time Charter



FSO  
Rang Dong MV17



FSO  
Rong Doi MV12



## Contract terminated



FPSO  
Stybarrow Venture MV16

## West Africa

### Time Charter



FPSO  
Baobab Ivoirien MV10



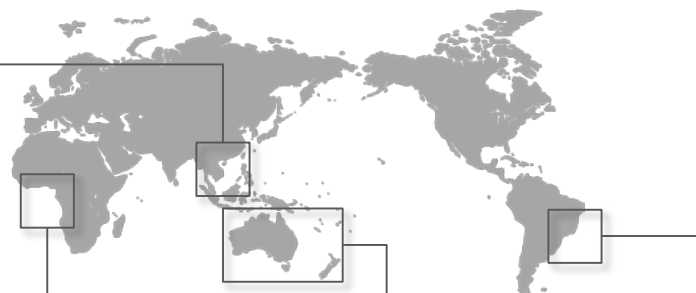
FPSO  
Prof. John Evans Atta Mills



As of May 2018

### Time Charter (Own & Operate)

Under Operation	14 units	11 FPSOs 3 FSOs
Under Construction	3 FPSOs	
Contract Terminated	1 FPSO	



## Oceania

### Time Charter



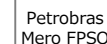
FPSO  
MODEC Venture 11



## Brazil



### Time Charter



FPSO Guanabara MV31



FPSO Carioca MV30



FPSO Cidade de Campos dos  
Goytacazes MV29



FPSO  
Cidade de Caraguatatuba MV27



FPSO  
Cidade de Itaguaí MV26



FPSO  
Cidade de Mangaratiba MV24



FPSO  
Cidade de São Paulo MV23



FPSO  
Cidade de Angra dos Reis  
MV22



FPSO  
Cidade de Santos MV20



FPSO  
Cidade de Niterói MV18



FSO  
Cidade de Macaé MV15



FPSO  
Cidade do Rio de Janeiro MV14

360° business innovation.



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