HBA OFFSHORE PRIVATE LTD

FUTURE OF FPSO’S IN A LOW COST OIL ENVIRONMENT

Prepared by : ***Hassan Basma***
Founder and CEO

I. INTRODUCTION TO HBA OFFSHORE HOLDINGS

INTRODUCTION TO HBA OFFSHORE HOLDINGS : FIT AT FIFTY

INTRODUCTION TO HBA OFFSHORE HOLDINGS : FIT AT FIFTY

HBA Offshore

ASSET LIGHT
FLOATING PRODUCTION SERVICES

- Concept Selection
- Feed
- Detailed Engineering
- PMT/CMT
- Transport & Installation
- PreCom/Commission
- Start Up
- Operations & Maintenance
- Decommissioning

COMMERCIAL & CORPORATE CONSULTANCY SERVICES

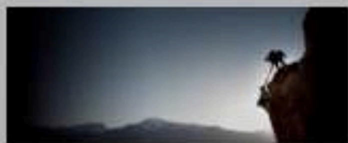
- Board Representation
- Corporate Affairs
- Chartering
- Floater and OSV Asset Warehousing
- Techno commercial OSV Management
- Legal & Secretarial Advice

BUSINESS APPLICATION : BIG DATA, ANALYTIC AND ROBOTICS

- Disruptive Technologies
- Subsea Production
- Automation
- Alternate Construction Material
- Drones & Robotics
- Big Data Analytics

HBA Offshore

3T3S Our Values



TRANSPARENCY AND INTEGRITY

TOTAL VALUE CREATION

TECHNOLOGY CREATING VALUE

SERVICE EXCELLENCE

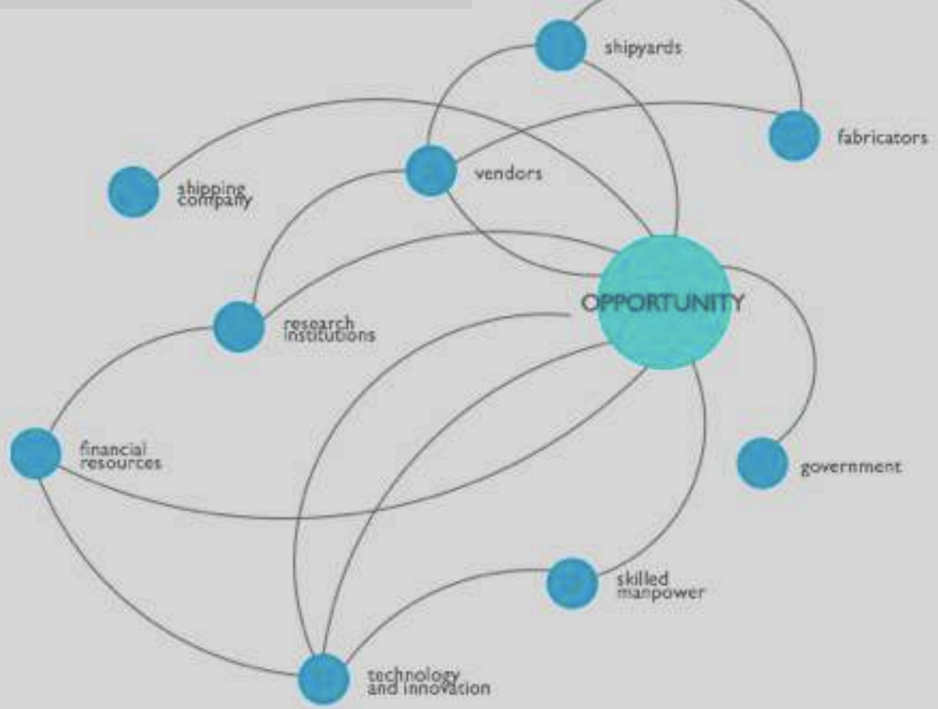
SAFETY MINDSET

SUSTAINABI LITY

How can we assist you ?

In the current challenging environment, optimization in every aspect of your offshore operation is key to survival, let alone success. HBA Offshore brings together its wealth of experience, domain knowledge and network of proven solution providers at every step of offshore operation to give you a bespoke total solution that is fit at "Fifty".

HASSAN BASMA | FOUNDER AND CEO



INTRODUCTION TO HBA OFFSHORE HOLDINGS : STRATEGIC ALLIANCES

HBA Offshore

II. THE NEW OIL PARADIGM

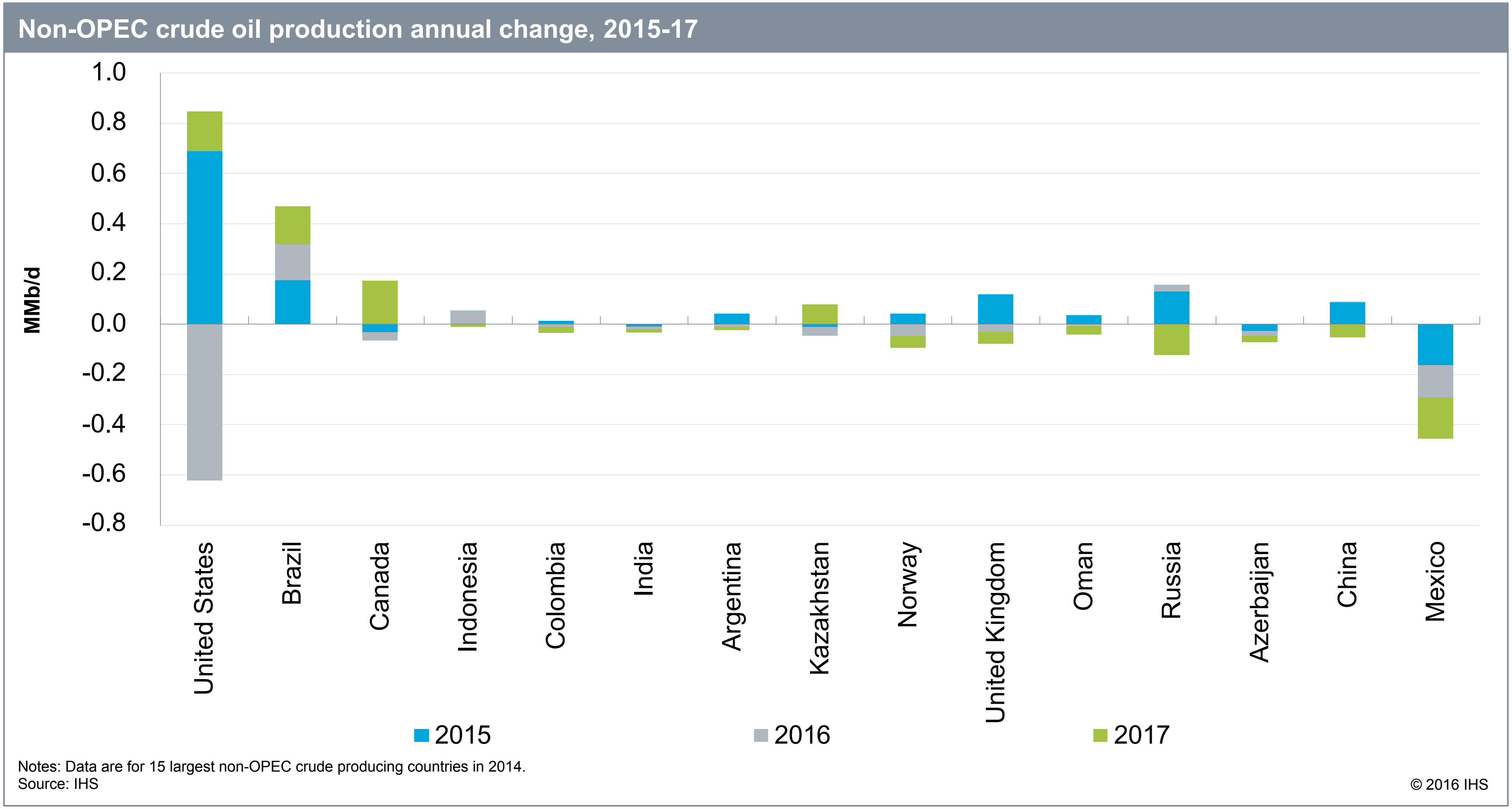
HBA Offshore

Where we are headed: Three distinct scenarios to 2020

Scenario	How long (to beginning of recovery?)	How strong (what will marginal bbl be?)	Description/ key drivers
"New Normal"	2020+	Low cost tight oil	• OPEC grows production by ~6 Mbpd between 2014 and 2020 • Deep water receives less capital; production goes from 8.8 Mbpd in 2014 to 10.4 Mbpd in 2020 • Excess inventory clears in 2019 • The marginal barrel becomes U.S. tight oil with a resulting **2020 price below $50**
"Trouble then Recovery"	2017	Mid-cost tight oil + low-cost deepwater	• OPEC grows production by ~4 Mbpd between 2014 and 2020 • Deep water production goes from 8.8 Mbpd in 2014 to 11.2 Mbpd in 2020 • Excess inventory clears in 2017 • The marginal barrel becomes mid-cost U.S. tight oil with some low-cost deep water resulting in **2020 price between $60-$70**
"Return to the Old Paradigm, but not Old Price"	2016	Mid-cost deepwater	• OPEC grows production by ~2 Mbpd between 2014 and 2020 • Deep water production goes from 8.8 Mbpd in 2014 to 11.6 Mbpd in 2020 • Excess inventory clears in 2016 • The marginal barrel becomes mid-cost deep water with a resulting **2020 price between $75-$85**

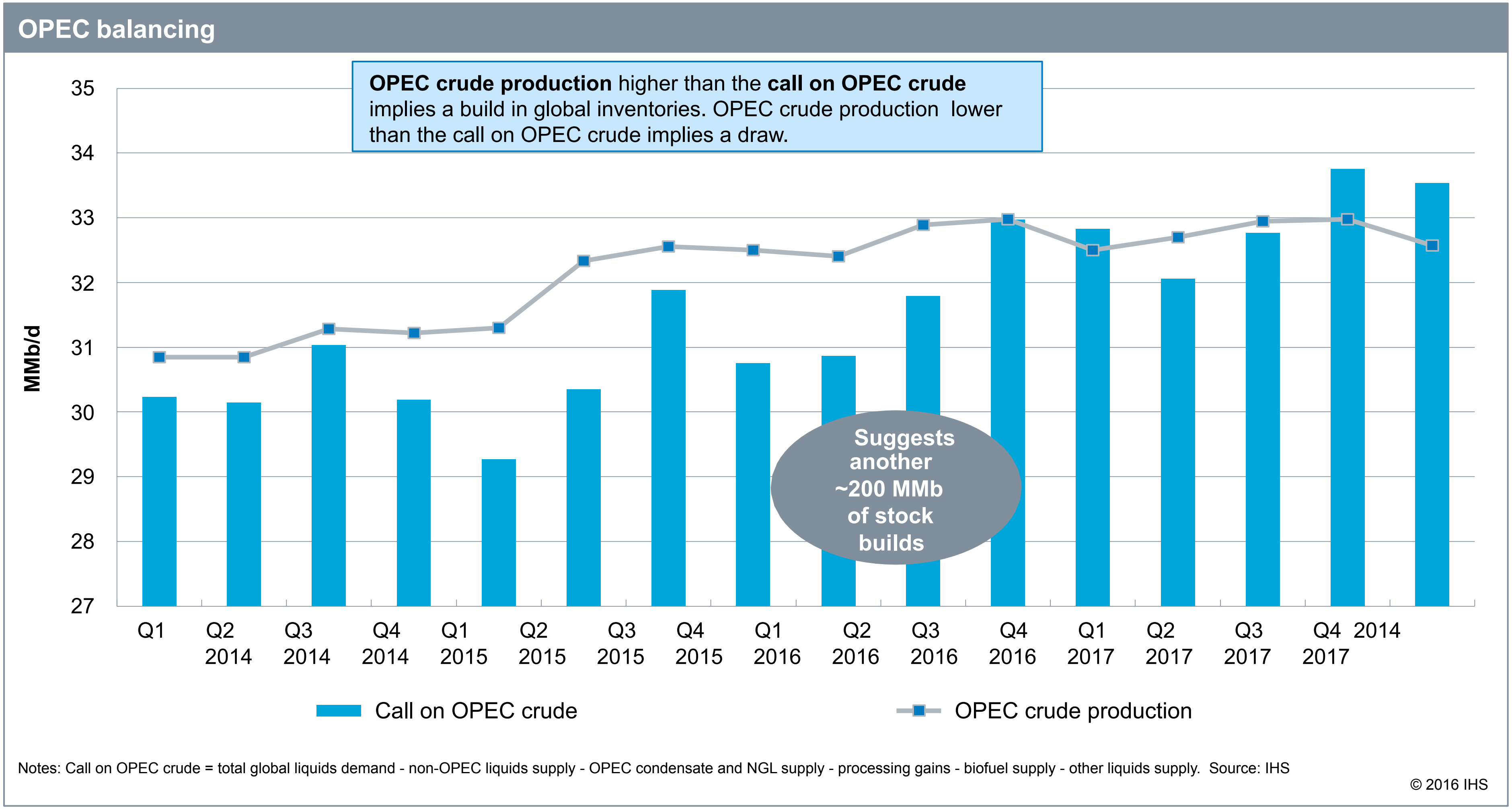
THE NEW OIL PARADIGM: WORLD NON-OPEC CRUDE SUPPLY GROWTH TURNS NEGATIVE AS LACK OF INVESTMENT TAKES HOLD

HBA Offshore



THE NEW OIL PARADIGM : THE CALL ON OPEC SHOWS A BALANCE EMERGING IN 2H2016

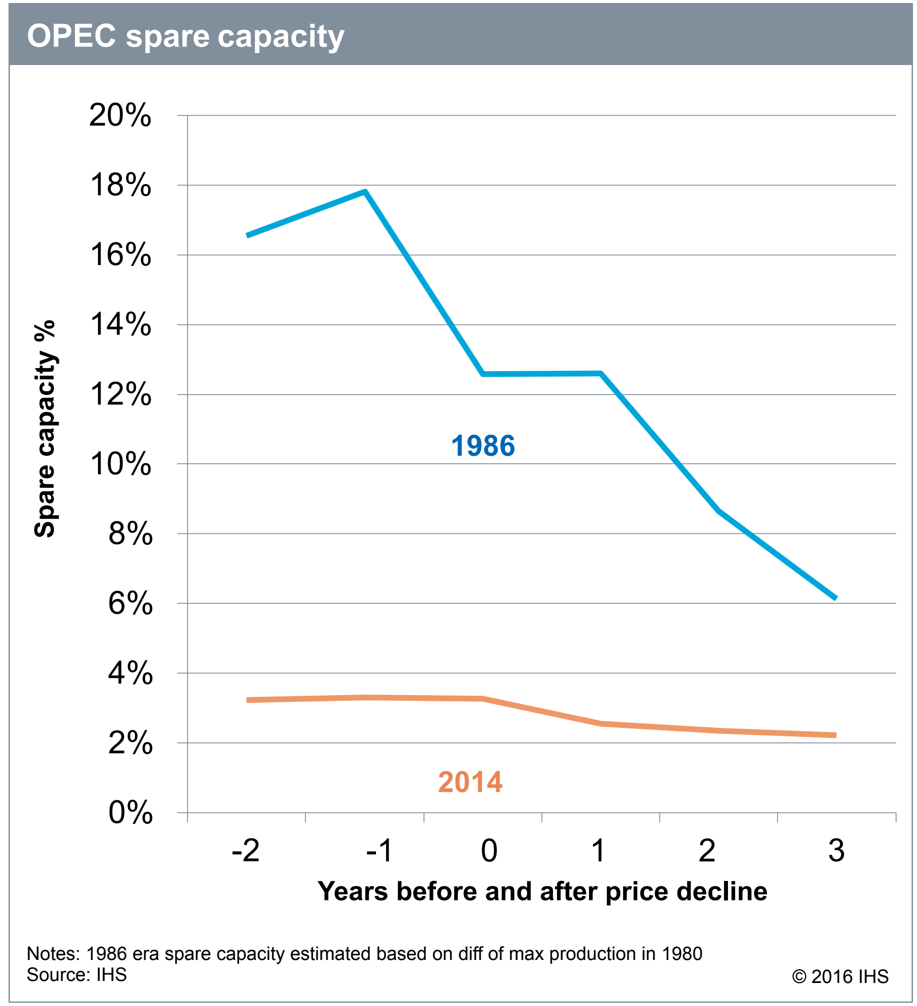
HBA Offshore



THE NEW OIL PARADIGM : THIS IS NOT 1986, OPEC HAS ALREADY EXHAUSTED ITS SPARE CAPACITY

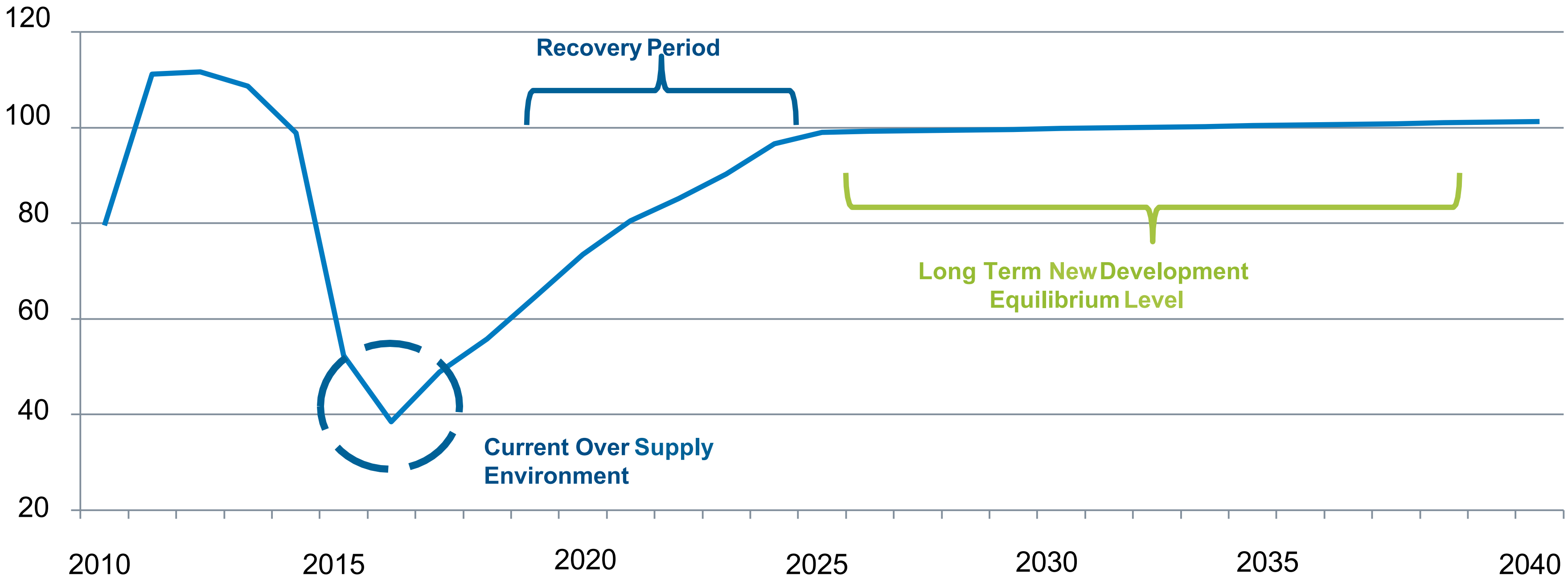
HBA Offshore

- After pushing its production to 10.7 MMb/d in 1980 to offset Iran-Iraq war, Saudi cut sharply to balance the market, reaching 3.6 MMb/d in 1985.
- Saudi Arabia increased production in 1986 to gain market share, slowly reducing capacity overtime and keeping the over supplied for many years.
- The market will soon approach spare capacity levels that pushed prices above $100/b in 2008.
- The market has completely changed since 2008 – this low spare capacity level will force the market to lean on available stocks and reactive US production to offset any shortfalls.



THE NEW OIL PARADIGM : BRENT PRICE LONG-TERM OUTLOOK

Brent price outlook in constant dollars per barrel



Source: IHS

- IHS price outlook calls for a gradual recovery to $70+ per barrel in constant dollar terms by the end of this decade as oversupply is removed from the market
- Under-investment in new resource development during 2015-2017 results in price restoration during 2018- 2024, and then pricing returns to IHS view of long-term new resource finding and development costs post- 2025

THE NEW OIL PARADIGM : KEY MESSAGE FOR THE GLOBAL CRUDE OIL MARKET - SEEKING THE MARGINAL BARREL

HBA Offshore

- Given the increase in OPEC output and resilience of US production in 2015, a low price is needed to trigger a market adjustment and the price decline is about stressing enough producers in order to reduce investment sufficiently to impact production to the level required to balance the market.

- Despite the high interest, there is unlikely to be an OPEC/non-OPEC production cut. The expected arrival of Iranian barrels may be slower than anticipated but their looming presence will make any cut difficult to effect.

- US supply is forecast to reach a low of ~8.3 MMb/d this summer, 1.4 MMb/d lower than the April 2015 peak, as low prices suffocate producers' ability to fund operations. Should prices move above $45/b, US production will stop falling, likely requiring a sub $20/b price to finally clear the oversupply.

- Chinese and global equity sell-offs have cast doubt on continued demand growth. Our 2016 demand growth forecast is 1.2 MMb/d, lower than 2015 but still strong historically as gasoline demand growth continues, though at a reduced rate.

- Stocks continue to accumulate, with ~200 MMb to go before balance is reached. This may prompt floating storage to be triggered, with some traders having already secured options to do so.

- Brent is forecast to average $38.49/b in 2016 and $48.87/b in 2017, with remaining downside risks in 2016 if demand under performs or supply is stronger than expected, along with an acute upside risk once supply moves into alignment with demand given very low OPEC spare capacity.

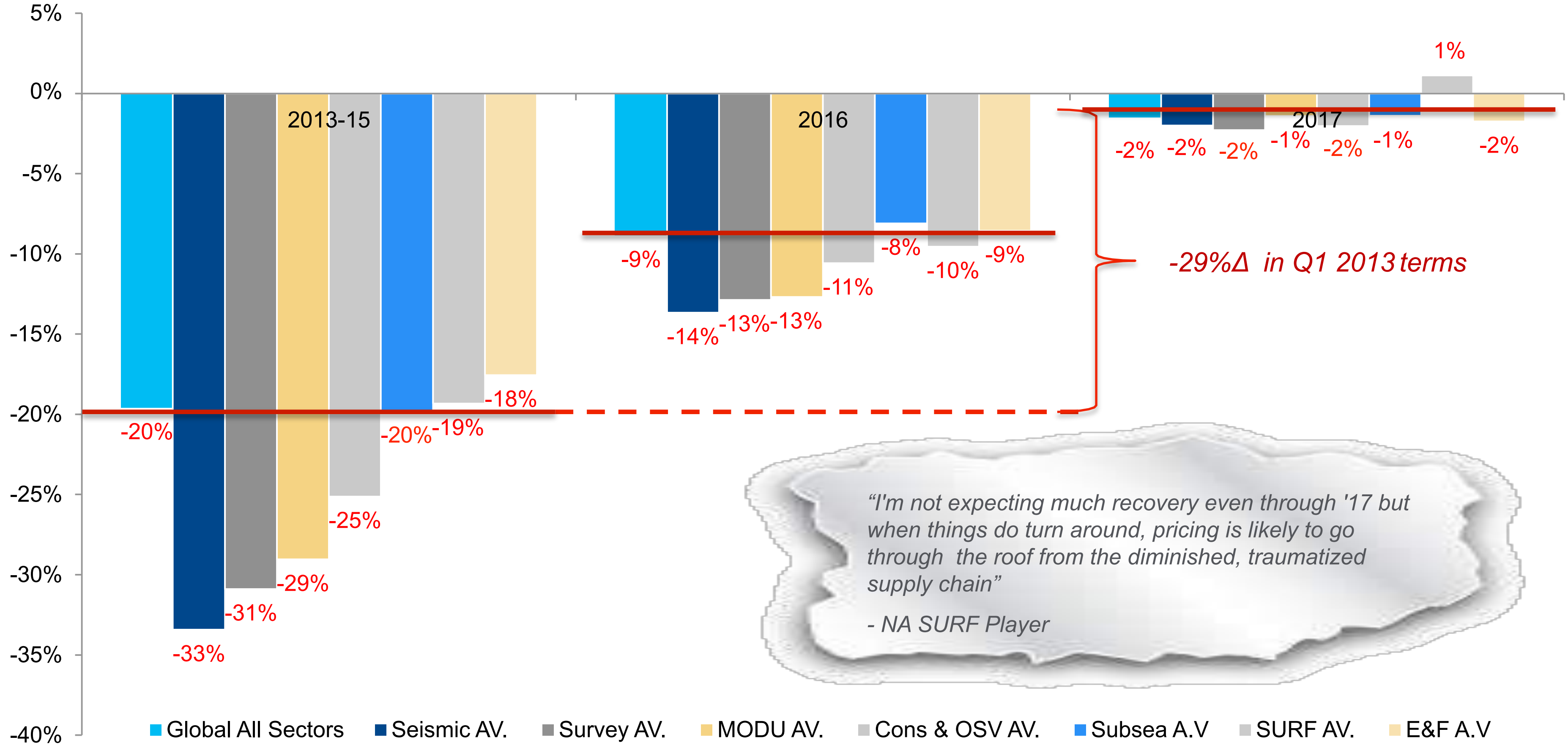
III. COST DEFLATION

COST DEFLATION (2013-2017) IN CONTRAST

HBA Offshore

General market sentiment points to H2 2017 for pricing improvements – considerable risk associated with sustained depressed oil price.

Expected Evolution of Future Cost Deflation 2013-2017 (% YoY)



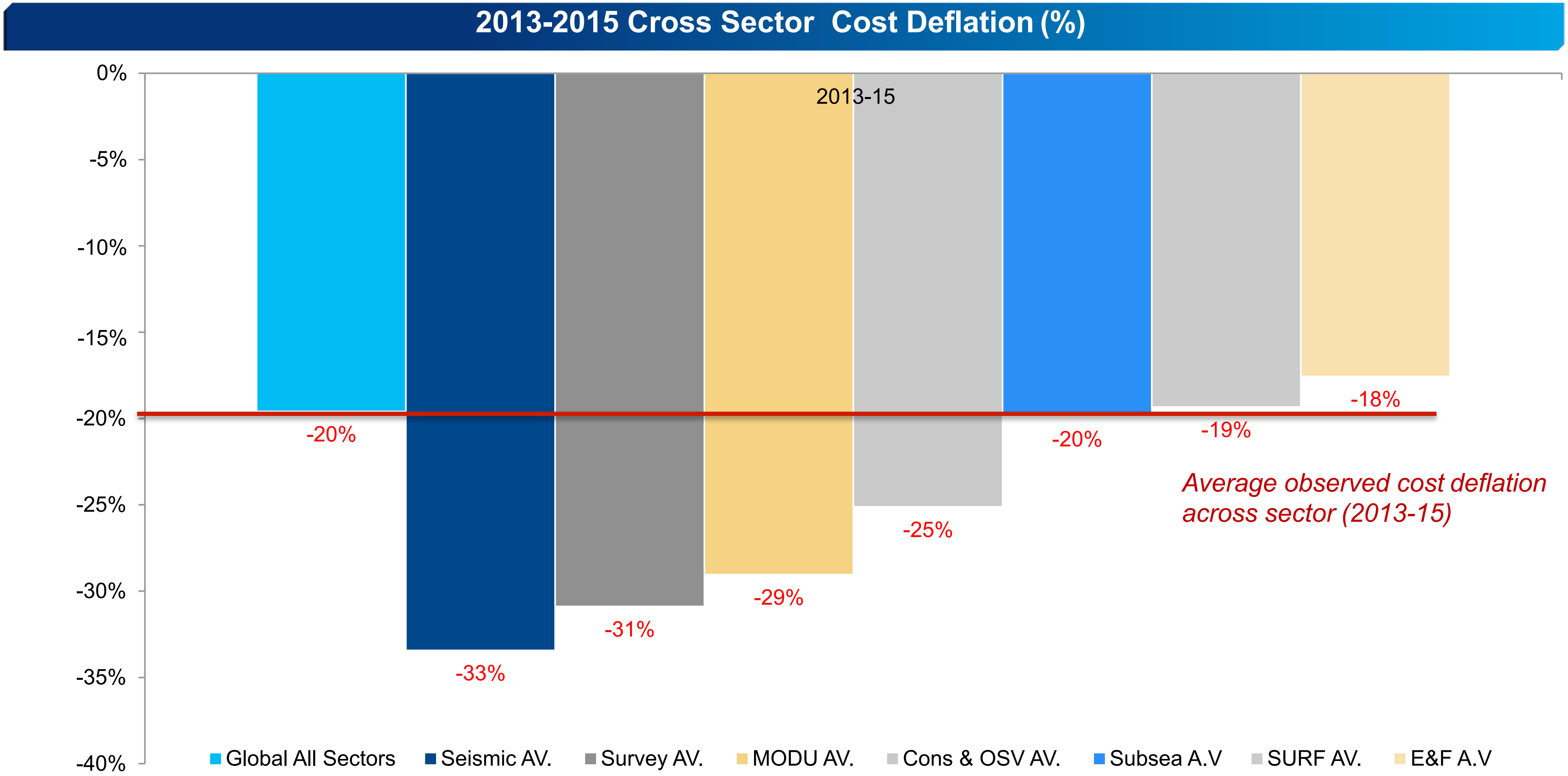
Source: Infield Dec. 2015 Cost Survey

COST DEFLATION : RECENT SECTOR (2013 – 2015)

HBA Offshore

Seismic, survey, drilling and construction/installation services hardest hit.

Subsea, SURF & Engineering/Fab. all performing around the c.-20% average.



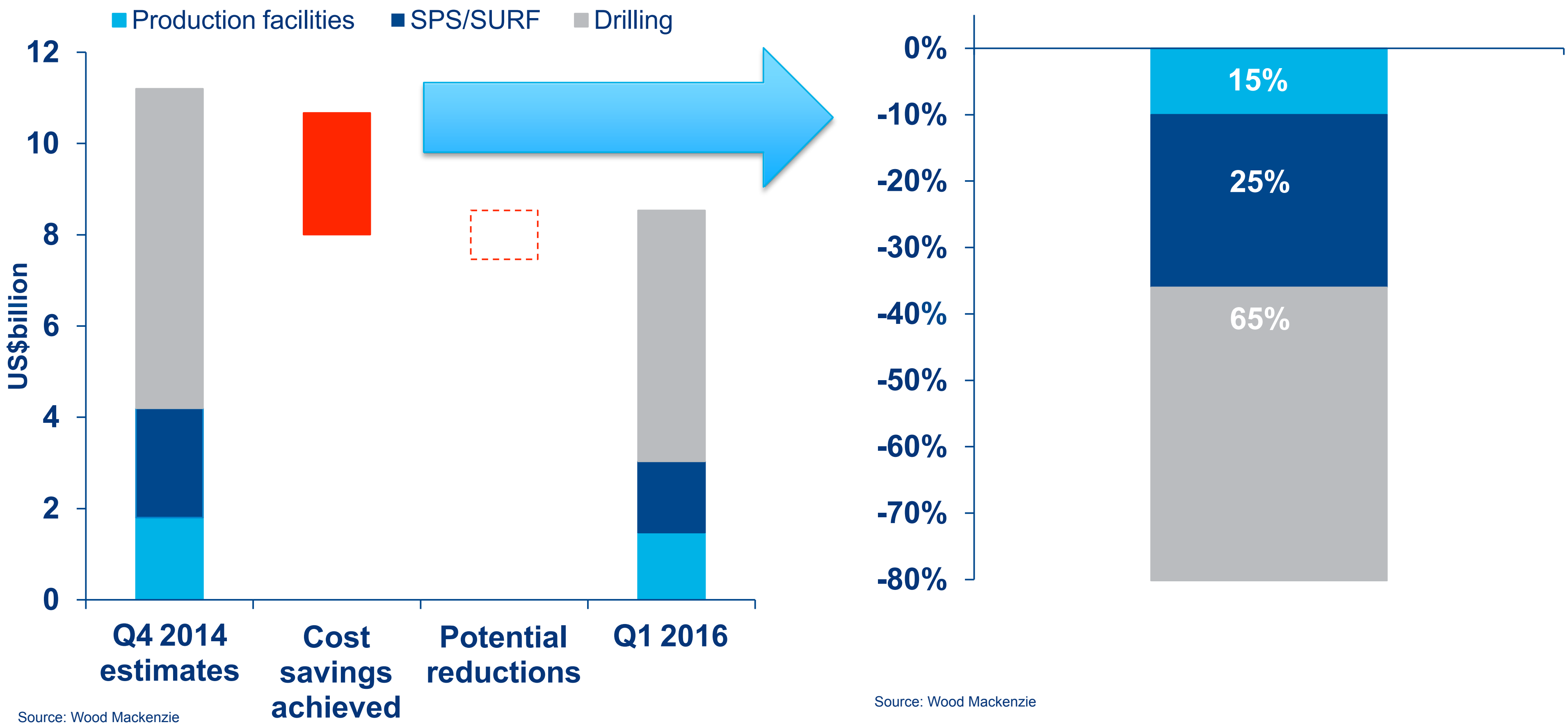
Source: Infield Dec. 2015 Cost Survey

Prices benchmarked against Q1 2013. Costs fixed in US$ terms to eliminate regional currency fluctuations

COST DEFLATION : CASE STUDY – MAD DOG PHASE II

Cost reductions being achieved through collaboration efforts in some segments.

Mad Dog: Q4 2014 costs vs 2016 view



Source: Wood Mackenzie

Source: Wood Mackenzie

IV. CAPEX & OPEX EXPENDITURE FORECAST AND TRENDS

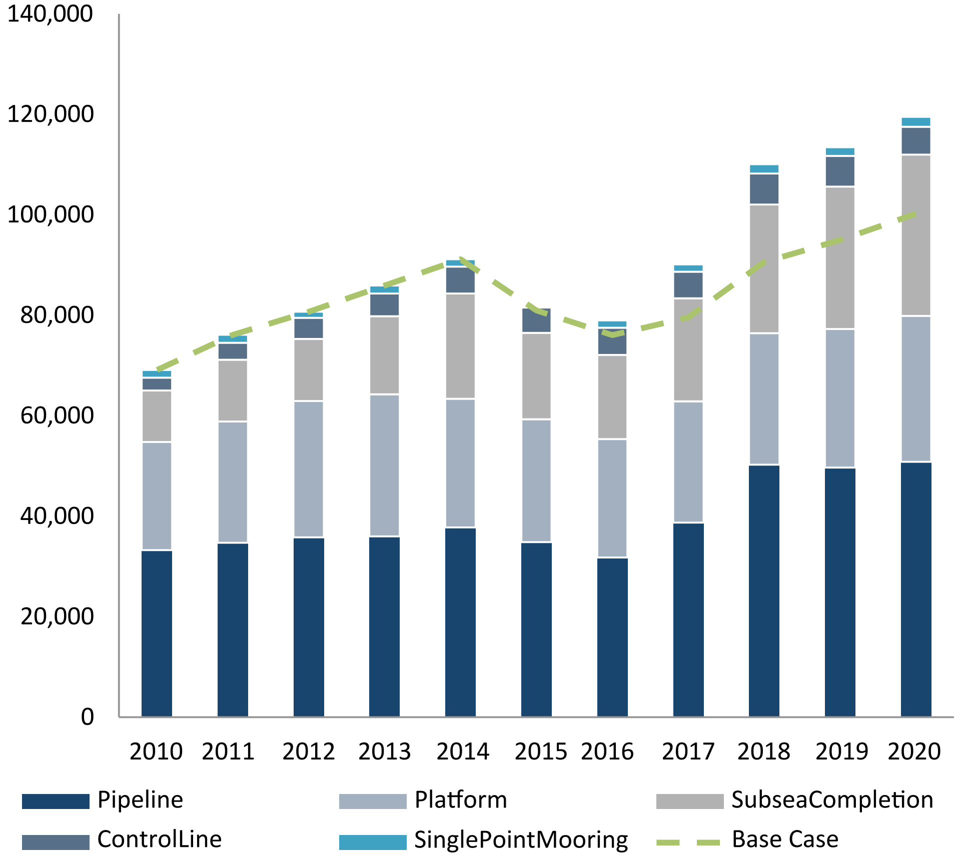
CAPEX & OPEX EXPENDITURE FORECAST AND TRENDS : OFFSHORE INFRASTRUCTURE EPIC CAPEX BY CONSTRUCTION TYPE & STATUS

HBA Offshore

65% of the market is focused on commoditised conventional spend.

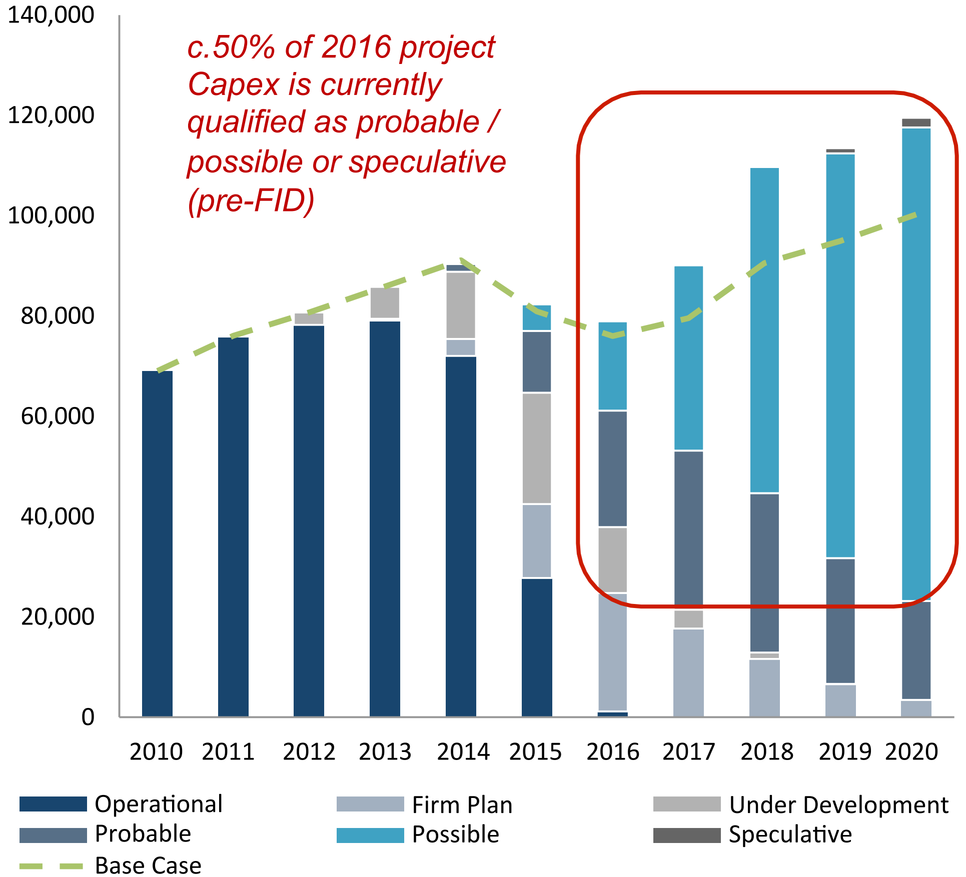
A large proportion (>50%) of future activity is currently uncertain at current oil prices.

Phased Offshore Capex (US$m) by Infrastructure



Source: Infield Systems OFPEX Forecast

Phased Offshore Capex (US$m) by Status[1]



Source: Infield Systems OFPEX Forecast

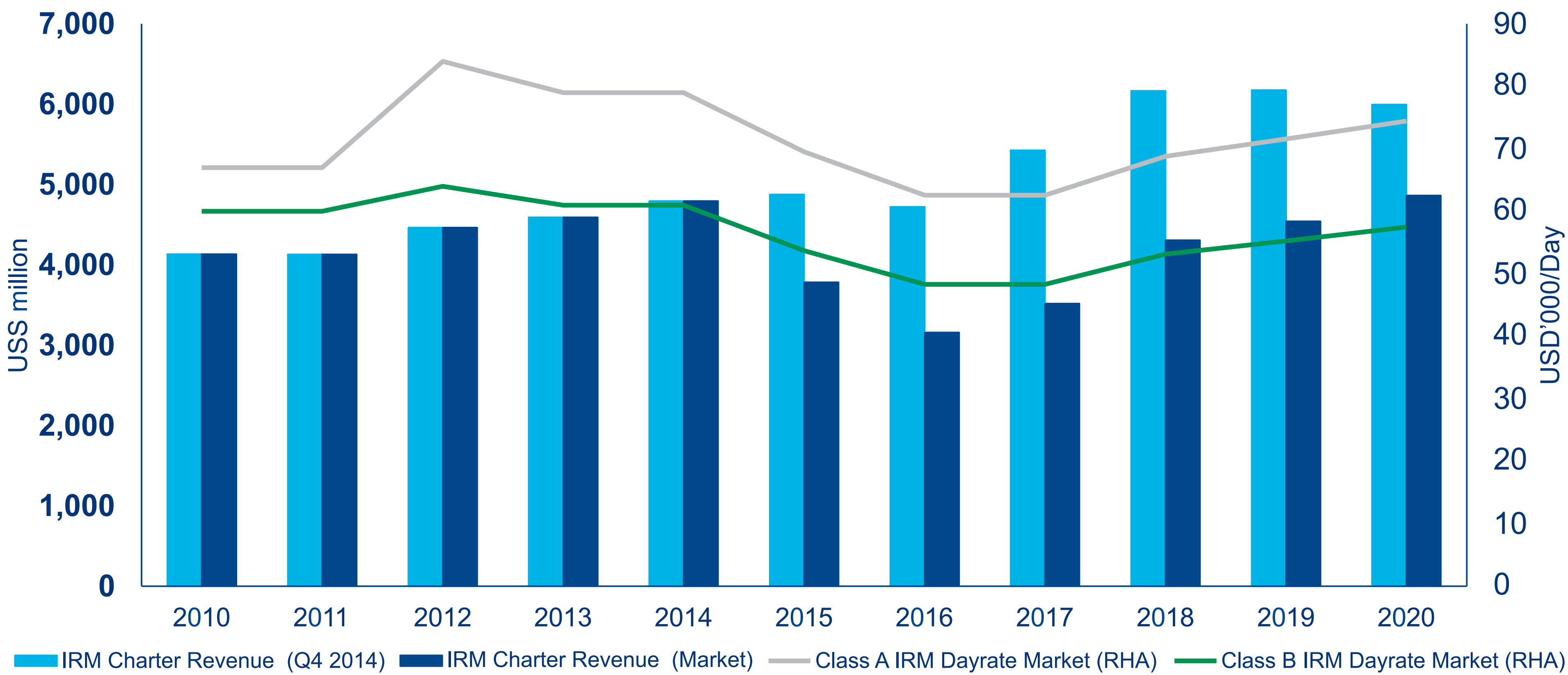
1. Status definitions & probabilities: firm plan – contracts awarded (80%), Probable (60%), Possible (40%), Spec. (20%)

CAPEX & OPEX EXPENDITURE FORECAST : IRM MARKETS – CAN OPERATORS DO MORE FOR LESS WITH OPERATING BUDGETS?

HBA Offshore

35% reduction in IRM Opex over the past 15 months

IRM Opex Comparison (Q4 2014 vs Q1 2016)



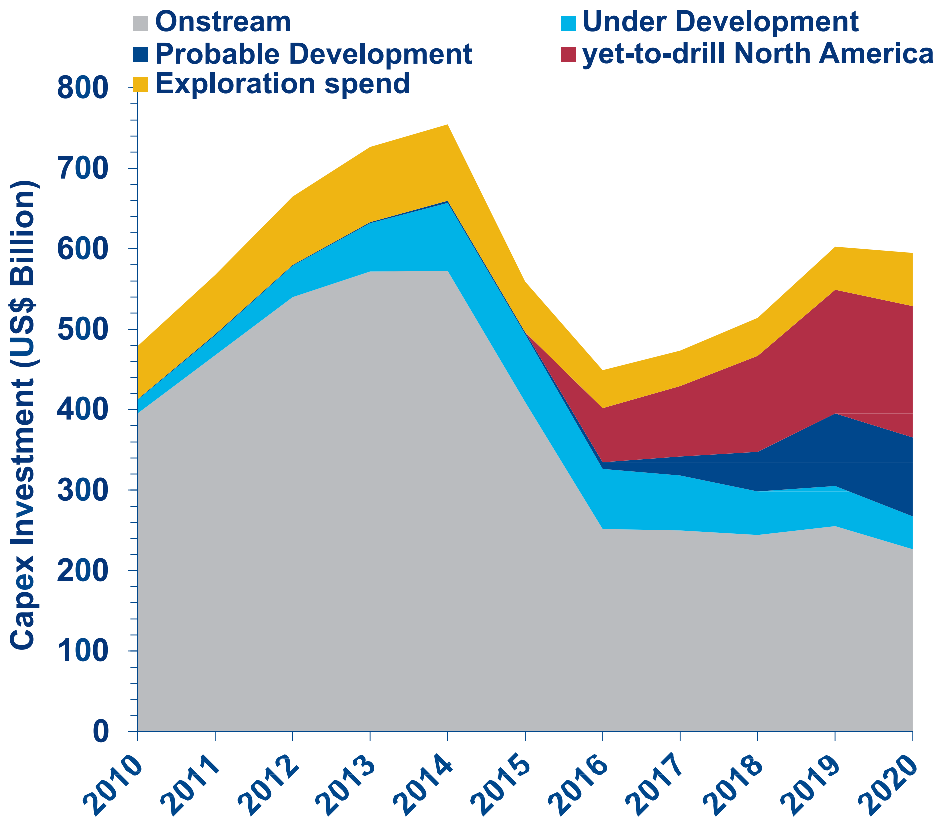
Source: Wood Mackenzie

10

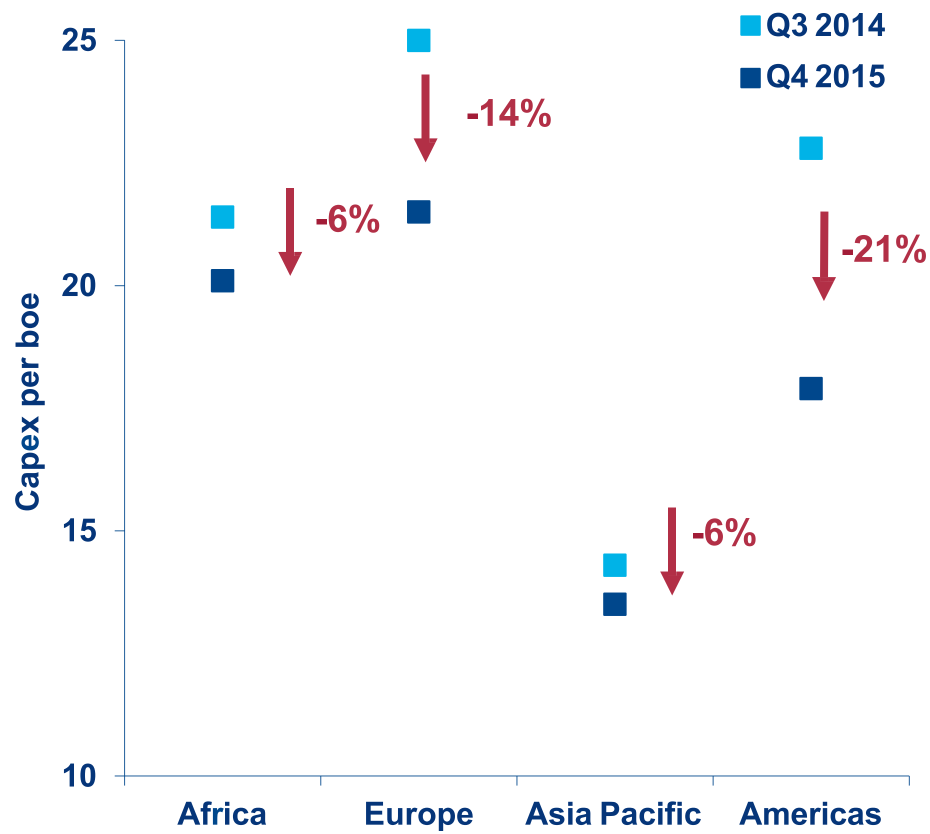
CAPEX & OPEX EXPENDITURE FORECAST : UPSTREAM INVESTMENTS TO FALL 40% FROM PEAK

Budget cuts, project deferrals, efficiencies and supply chain reductions

Global upstream spend



Changes in capex/boe by region (Q3 2014 v Q4 2015)



Source: Wood Mackenzie. Forecast of trend for development costs based on Wood Mackenzie database

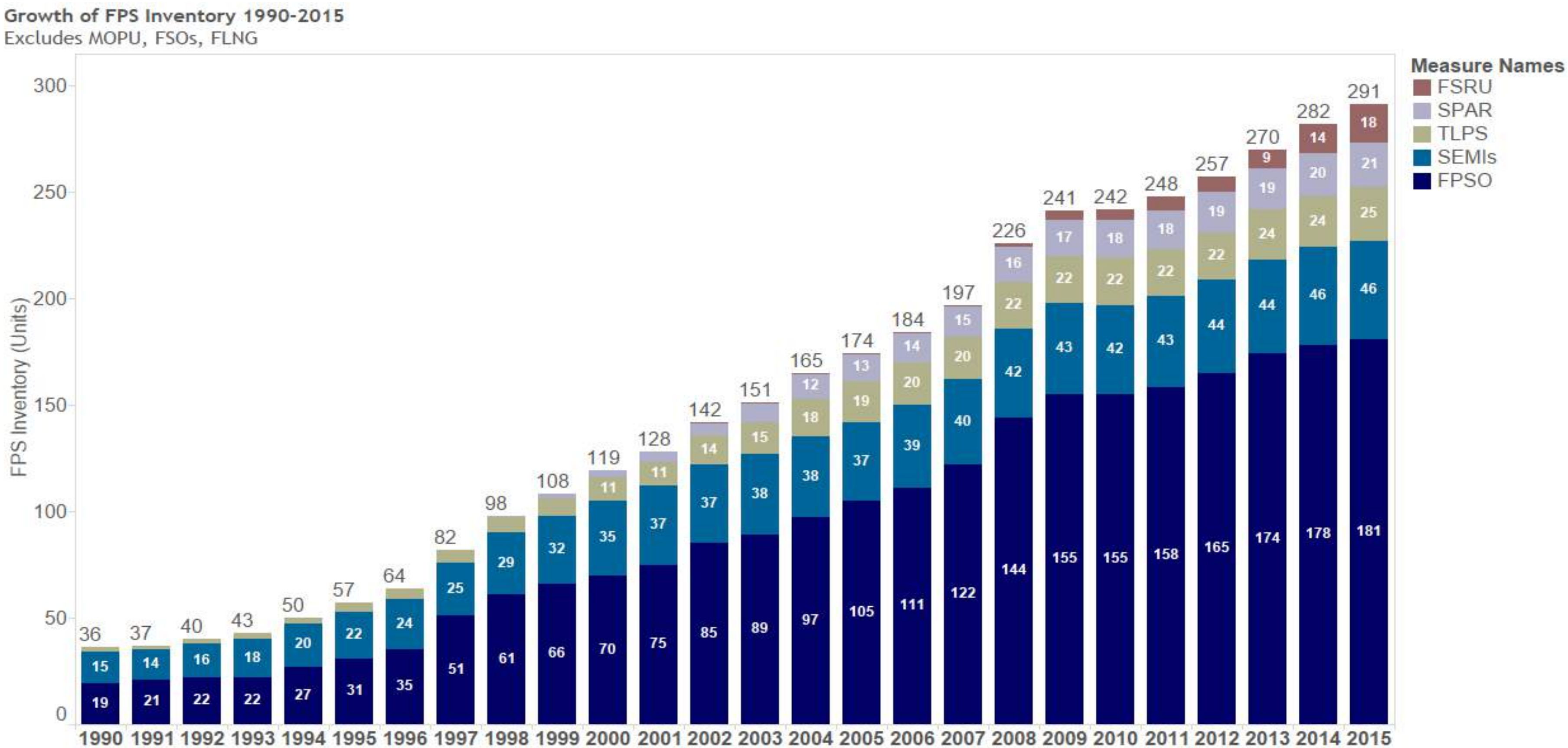
HBA Offshore

V. FPSO MARKET STATUS

FPSO MARKET STATUS : FLOATING PRODUCTION SYSTEMS IN OPERATION

HBA Offshore

700% Growth since 1990



- FPSOs are the most successful FPS unit type, growing 850% from 1990 to 2015
- FSRUs in operation have grown from 2 to 18 (2008-2015). Another 11 are on order
- The first FLNG units are scheduled to begin operation in 2016. 8 units on order

FPSO MARKET STATUS : CURRENT STATUS

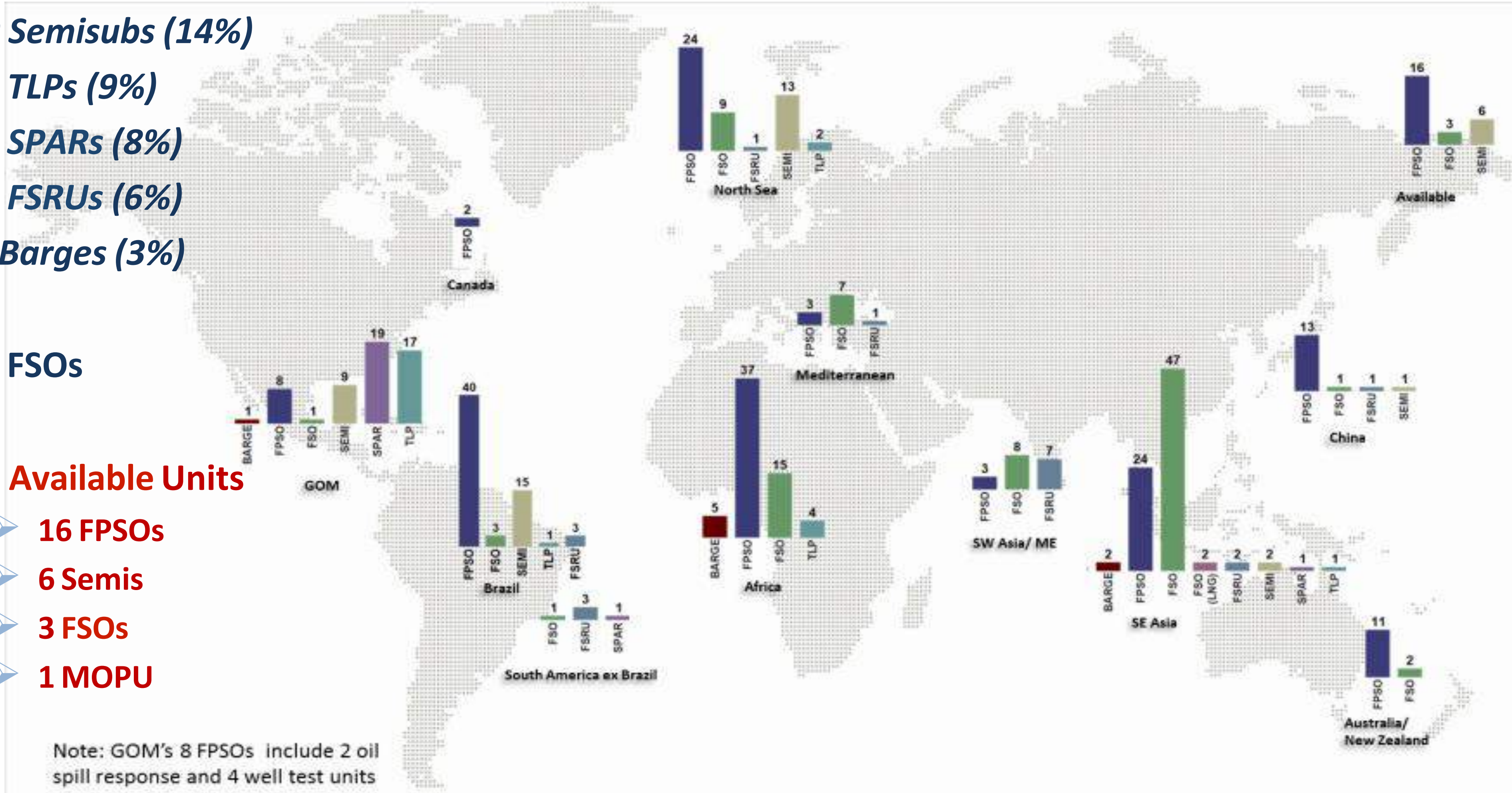
HBA Offshore

277 FPS & 96 FSO In Operation + 26 Available

- ***165 FPSOs (60%)***
- ***40 Semisubs (14%)***
- ***25 TLPs (9%)***
- ***21 SPARs (8%)***
- ***18 FSRUs (6%)***
- ***8 Barges (3%)***

- **96 FSOs**

- **26 Available Units**
  - **16 FPSOs**
  - **6 Semis**
  - **3 FSOs**
  - **1 MOPU**



EMA 2016-2020 FPS Outlook Report- Jan 2016

HBA Offshore

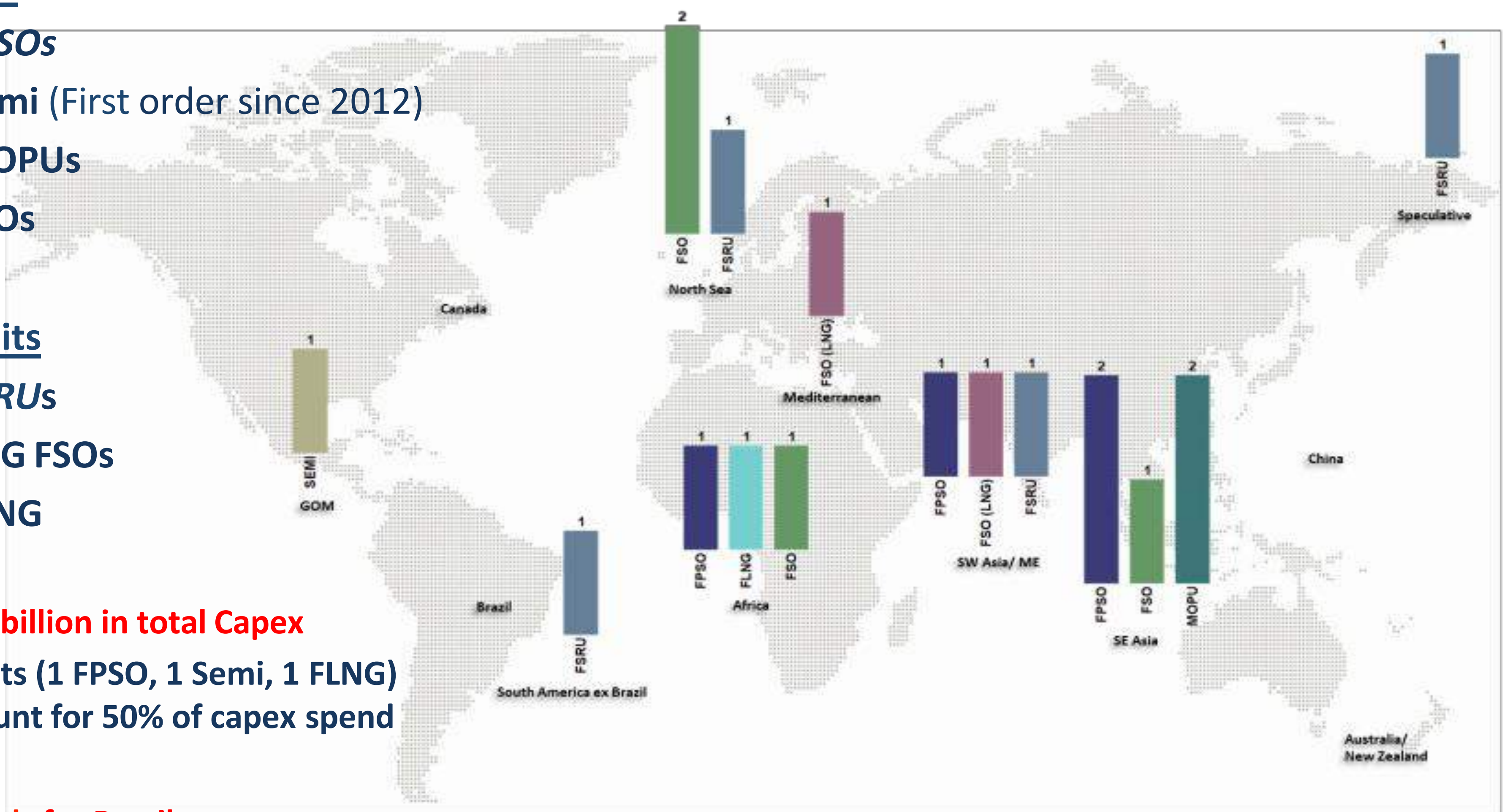
11 Oil Units + 6 LNG Units Awarded

Oil Units

- ***4 FPSOs***
- ***1* Semi** (First order since 2012)
- **2 MOPUs**
- **4 FSOs**

LNG Units

- ***3 FSRUs***
- **2 LNG FSOs**
- ***1* FLNG**



Over $7 billion in total Capex

- **3 units (1 FPSO, 1 Semi, 1 FLNG) account for 50% of capex spend**

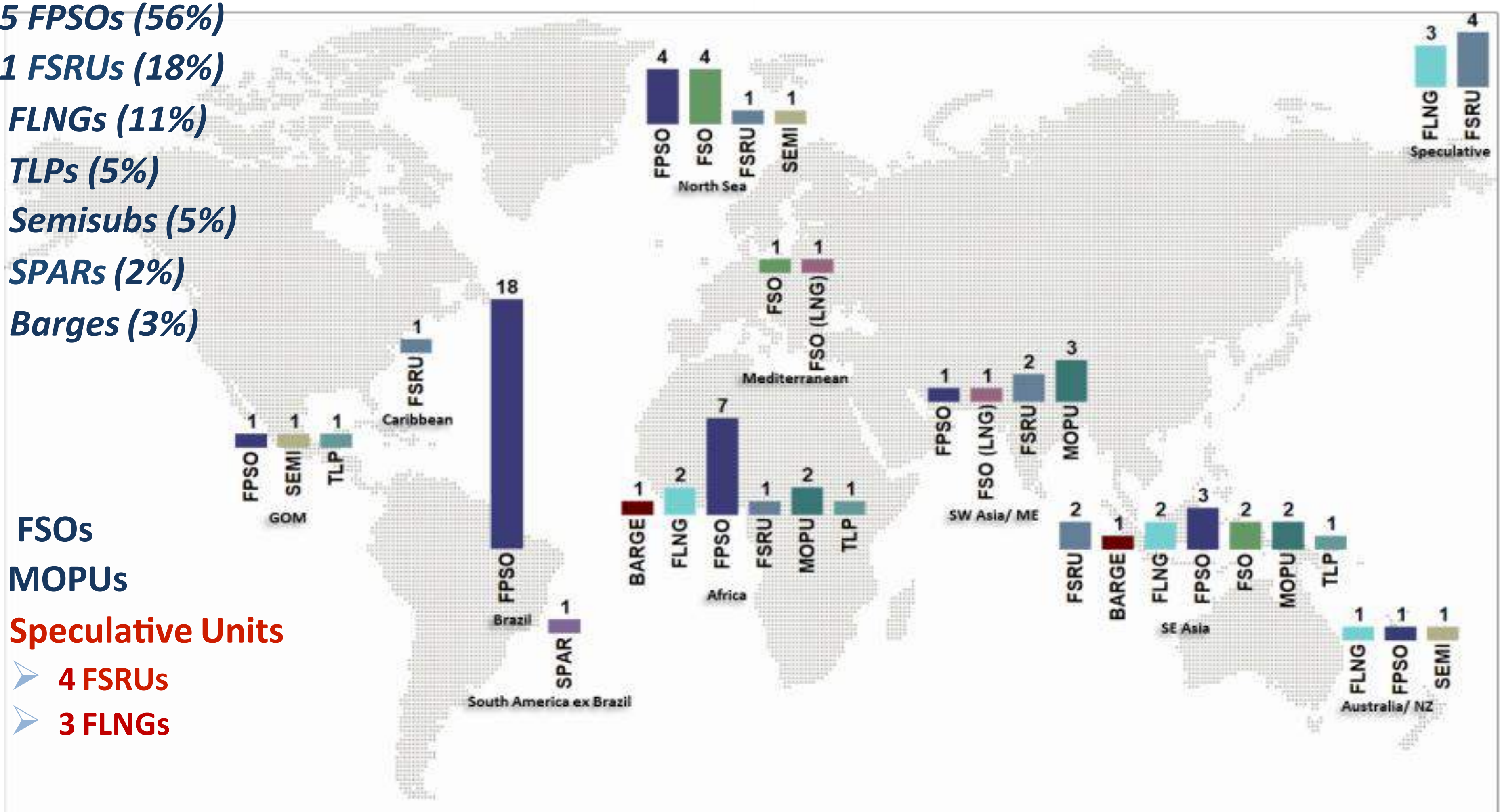
No awards for Brazil

FPSO MARKET STATUS : CURRENT 63 FPS + 9 FSO + 7 MOPUS ON ORDER

HBA Offshore

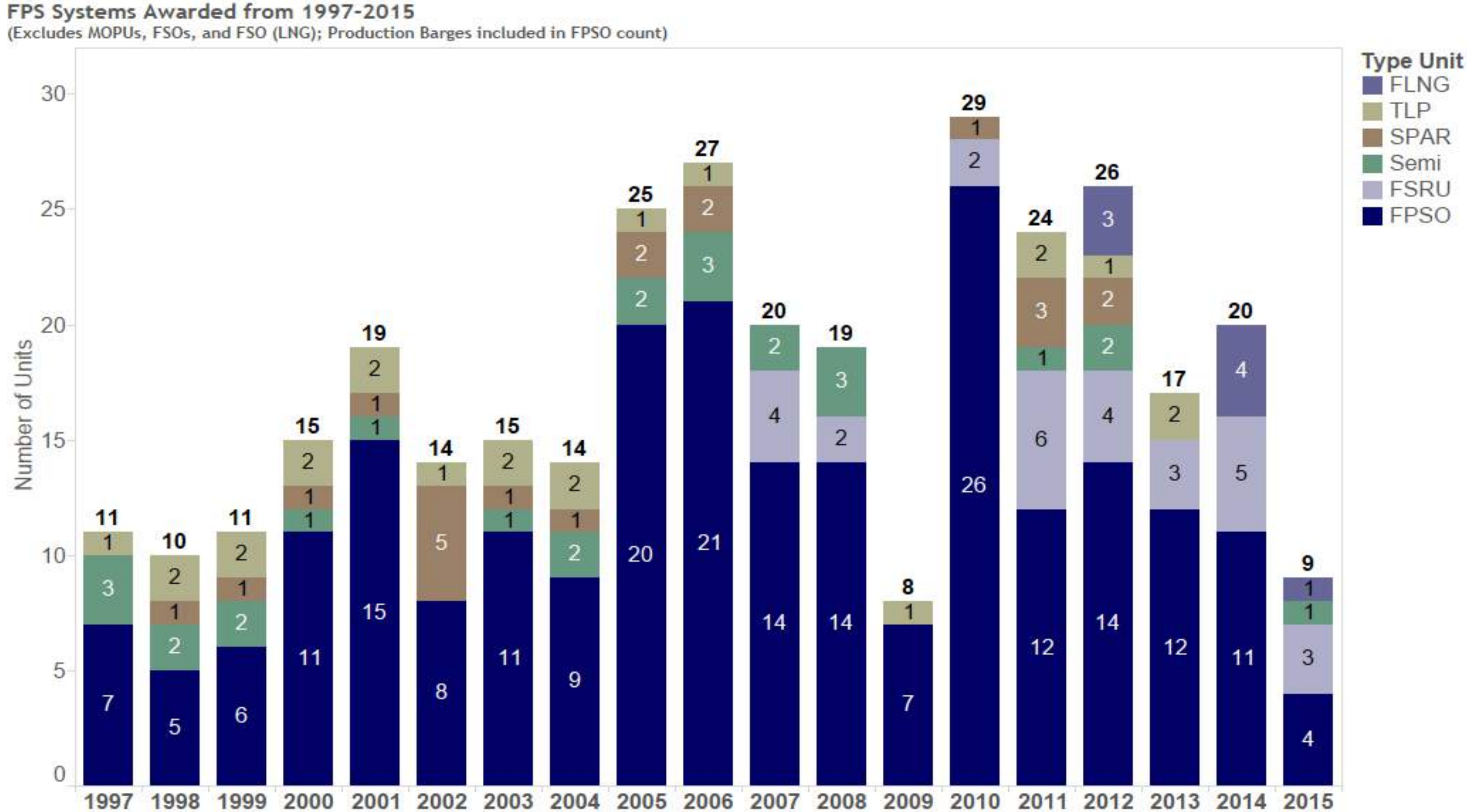
- 35 FPSOs (56%)
- 11 FSRUs (18%)
- 8 FLNGs (11%)
- 3 TLPs (5%)
- 3 Semisubs (5%)
- 1 SPARs (2%)
- 2 Barges (3%)

- 9 FSOs
- 7 MOPUs
- 7 Speculative Units
  - 4 FSRUs
  - 3 FLNGs



FPSO MARKET STATUS : FPS AWARDS SINCE 1997. 2015 WAS THE WORST YEAR SINCE 2009

HBA Offshore

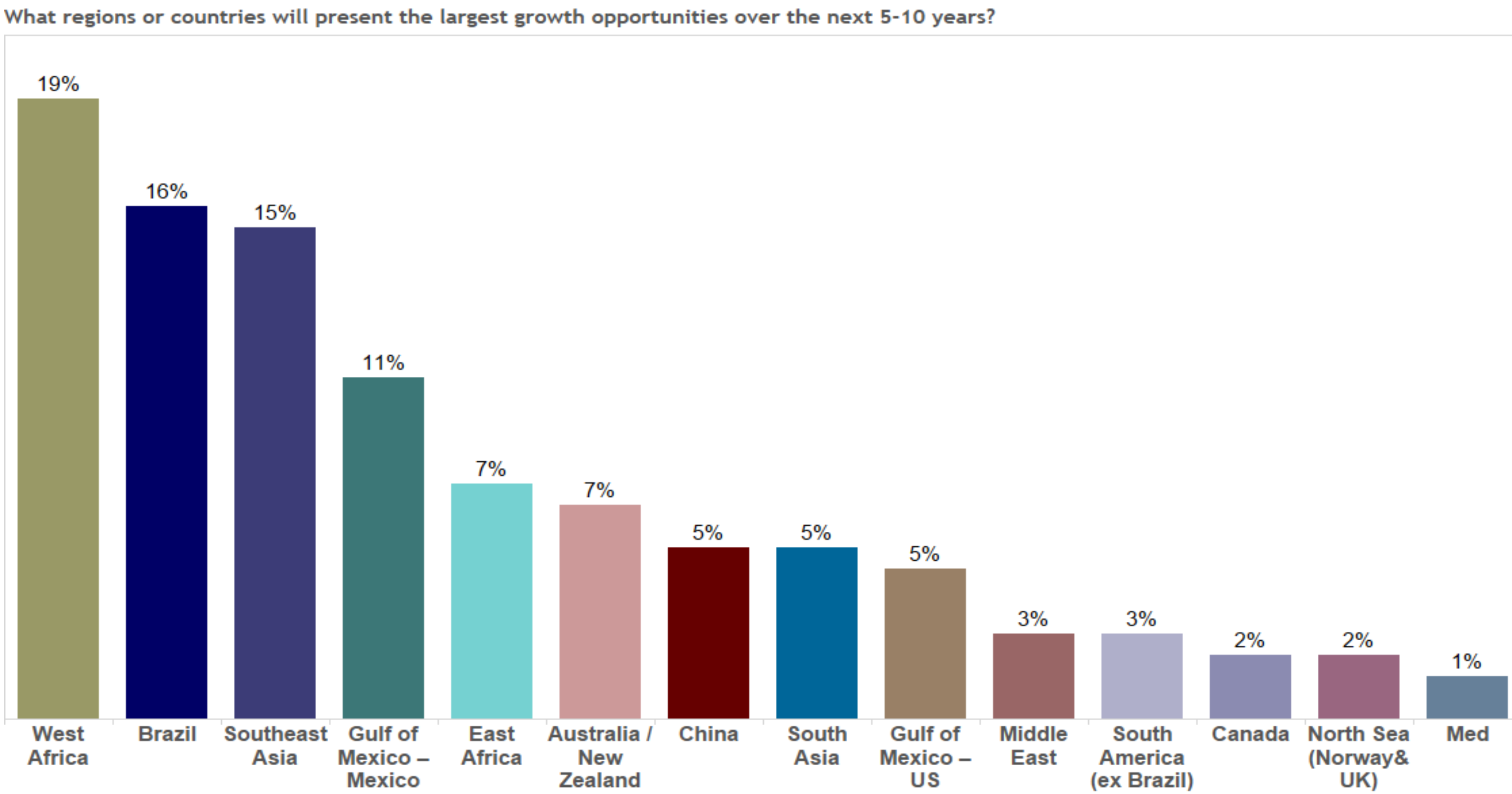


- **FPSO Orders at historical low** (Only **4** units awarded, all in **Q1** 2015)
- **6 LNG-related units were ordered (1 FLNG, 3 FSRUs, 2 LNG FSOs)**
  - **This is first year LNG-related units orders out numbered FPSOs**
- **First Production Semi ordered since 2012, but no TLP or SPAR Orders for past two years**

VI. INDUSTRY SENTIMENT

INDUSTRY SENTIMENT : SURVEY – ATTRACTIVE GROWTH REGIONS

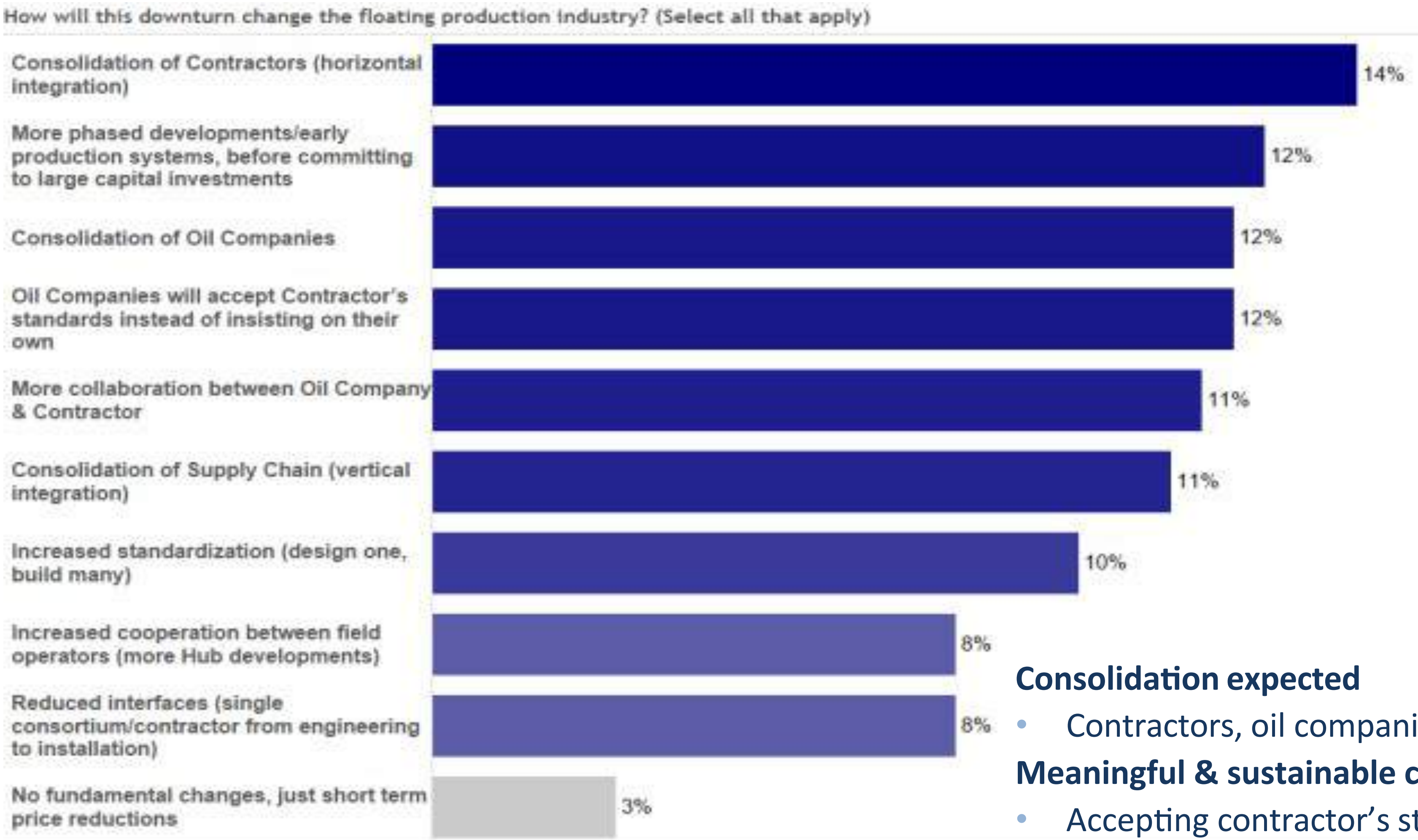
HBA Offshore



- **Brazil and Africa continue to be most attractive offshore project regions**
  - However, there is less optimism for Brazil, due to Petrobras spending cuts and politics
- **Australia and China moved up to 6th and 7th position respectively from 8th and 10th position last year**

INDUSTRY SENTIMENT : SURVEY – DOWNTURN WILL RESULTS IN FUNDAMENTAL CHANGES

HBA Offshore



Consolidation expected

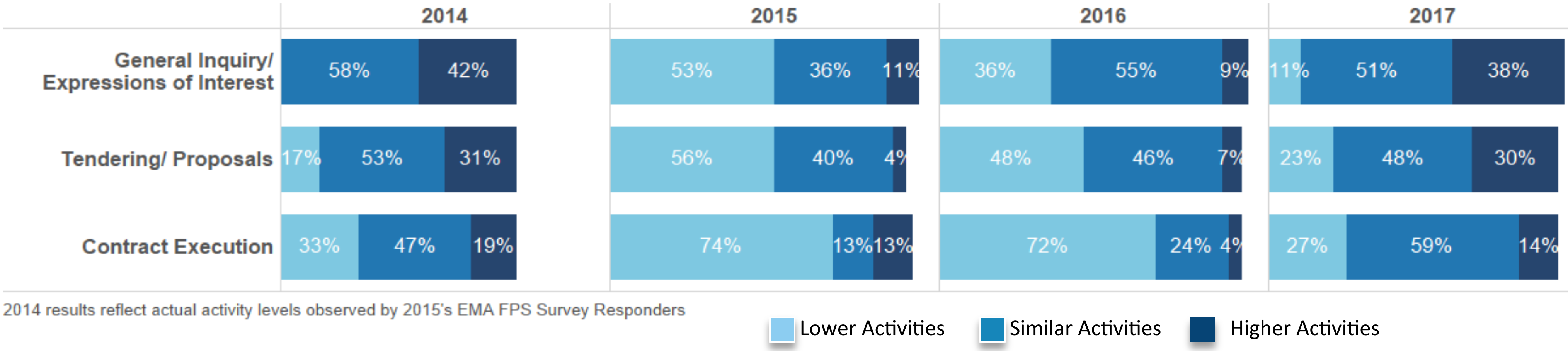
- Contractors, oil companies, supply chain

Meaningful & sustainable cost savings:

- Accepting contractor's standards
- Increased collaboration with contractors
- Standardization

HBA Offshore

How do you view your activity level for the following areas in 2015, and looking forward to 2016, 2017 and beyond?



- **Compared to last year, respondents steeply downgraded expectations across the board**
- **74% reported low levels of project execution in 2015 vs 33% in 2014**
  - Similar levels are expected for 2016
  - Only 4% are expecting to be very busy in 2016 as backlogs are worked though
- **Expectations for recovery are more subdued, but activity is expected to increase by 2017**

VII. FPSO LONG TERM OUTLOOK

FPSO LONG TERM OUTLOOK FOR THE FPSO MARKET REMAINS POSITIVE

HBA Offshore

FPSO spending to reach US$66 billion in the next 5 Years

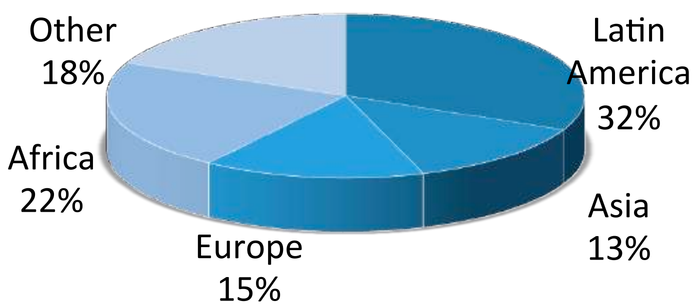
In spite of the collapse of the oil price in Q4 2015, capital spending on Floating Production is expected to remain relatively buoyant, reaching US$81bn 2015-19:

- New fields will always be needed to replace depleted fields – so spending will rebound
- Demand in the coming three years will come from West Africa, SEA and Brazil

Risks to this view include:

- PETROBRAS political problems will lead to significant delays or cancellations
- Low oil prices will lead to delayed projects
- Financing will be challenging for independent E&P companies
- Costs need to come down sharply if projects are to progress.
- Secondhand FPSOs will play an increasingly important role for both contractors and operators. Over 30 will become available for relocation, putting downward pressure on margins

Floating solutions capex, 2015-2019 , US$81bn

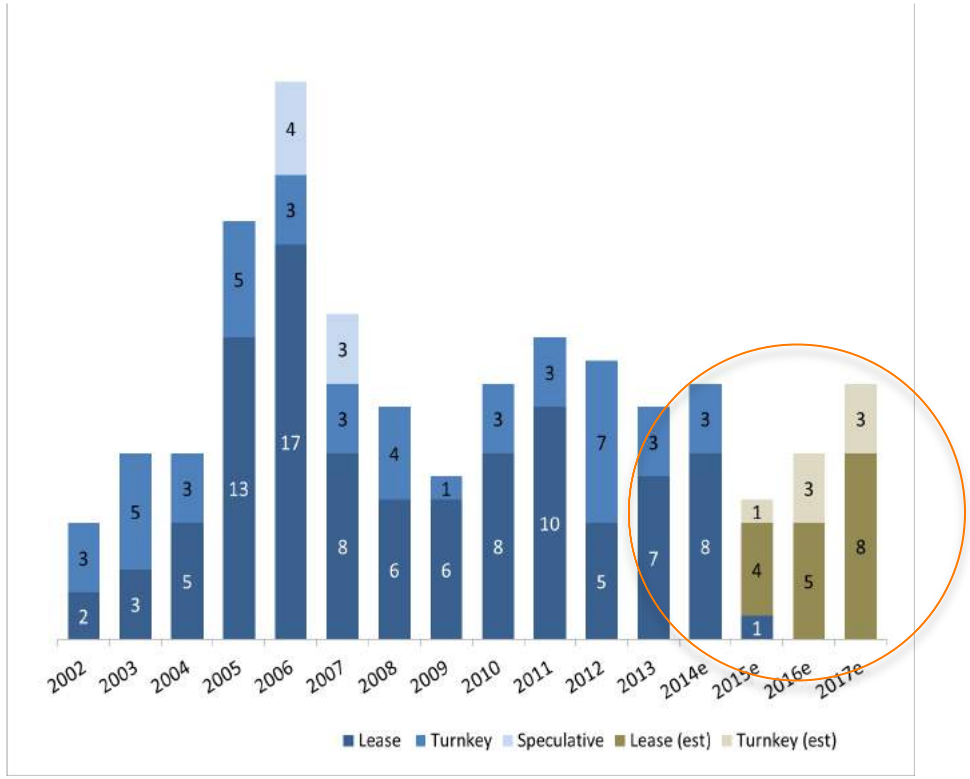


Source: SBM, Douglas Westwood, 2015

Rebound in FPSO deliveries post recovery

Year	Orders in Down Year	Orders in Rebound Year
2004-05	9 orders	20 orders
2009-10	7 orders	26 orders
2017-19	Average of 13 awards per year expected	

FPSO Contracts Awarded

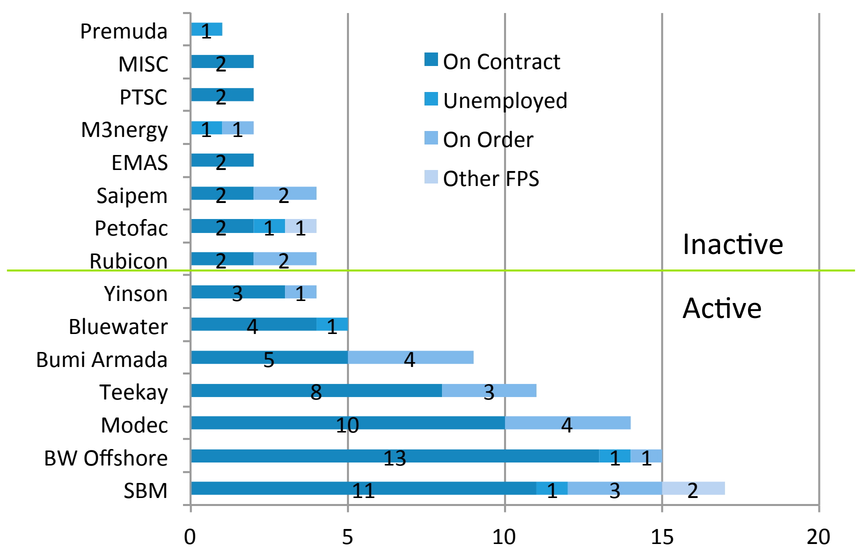


FPSO LONG TERM OUTLOOK PRESENTS INSIGNIFICANT MARKET OPPORTUNITY

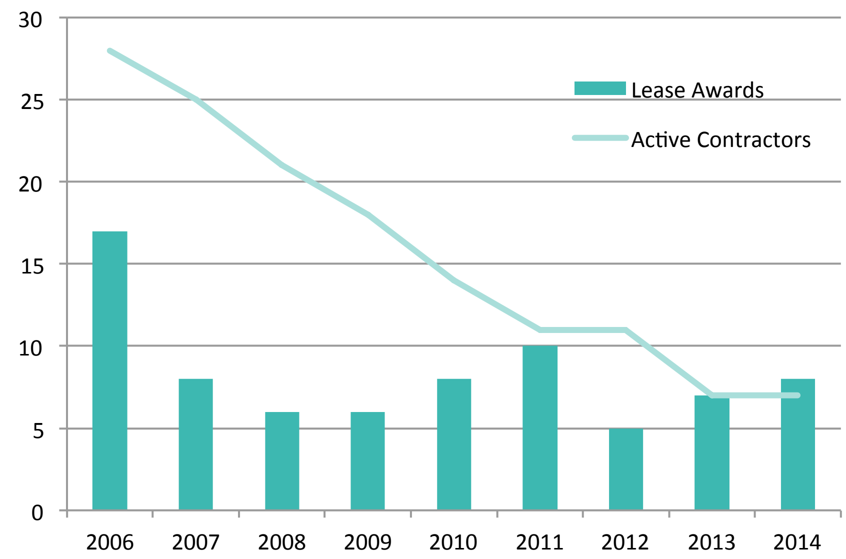
HBA Offshore

- The number of FPSOs for relocation and redeployment is large and presents a potential opportunity to address the Capex gap given that their initial values have been substantially written off.
- This is a tight market where contractors' balance sheets have been progressively weakened and where Oil Companies' operational cashflow has been eroded. There exists a window of opportunity to transform this into a value proposition and bridge the gap between contractors and Oil Companies.
- Each of the FPSO lease operators has at least 1 FPSO due for relocation in the next three years, putting a strain on their balance sheets.
- Contractors who have taken high residual values are ill equipped to cut cost and redeploy such vessels and Oil Companies pushing for early cash flows create a need to provide a cost efficient FPSO quickly and with good asset integrity and reliability.
- Existing operating leases are difficult to renegotiate in a form acceptable to an infrastructure fund. As such a NewCo or a turnaround company helmed by experienced personnel and a new business model stands to benefit from the lower cost of capital offered by the infrastructure funds and gain a first mover advantage.
- As OilCo's scramble to cut costs, lease and operate FPSO contractors may find themselves squeezed between their clients and their yards. In such a situation the yards become more powerful. As such, yards must be aligned with FPSO lease contractors more than before.
- Contractors must carry out a whole sale review of their cost structures, assess their capital structure and funding to arrive at a clear understanding of their cost of capital and that of their value chain. Such cost restructuring is not easy for most companies due to established norms

Fleets of active and inactive FPSO players



The number of active FPSO players has declined



FPSO LONG TERM OUTLOOK THE FPSO VALUE CHAIN IS BROKEN

HBA Offshore

Time Delays and Cost Overruns on Example Projects

Reason for Delay (months)	A	B	C	D	E	F	G	H	I	Totals
Operator Contracting			14							14
Material Costs	6			2						8
Engineering Scope	1	1	4	8	1	0.5	2	1	2	20.5
Yard Availability		2	7	3	2	2		6		22
Raw Material Process	1		4							5
Equipment Package	1		2	4		0.5			2	9.5
Integration	3	1.5	3		3	1		8	9	28.5
Subsea Equipment										0
Equipment Installation			0.5				6			6.5
Commissioning	1	1					6	3		11
Financing					3					3
Political/unpreventable			18							18
Total Delay	13	6	52	17	9	4	14	18	13	146
Original Cost	5060	35	88	375	80	90	500	132	420	6780
Actual Cost	6200	44	132	675	190	240	1017	200	669	9367
% Overrun	23%	26%	50%	80%	138%	167%	103%	52%	59%	38%

Source: Douglas Westwood

FPSO LONG TERM OUTLOOK OPPORTUNITY TO CHANGE THE BUSINESS MODEL FOR FPSOs

HBA Offshore

Cost Reduction Potential	• Cost deflation analysis shows deepwater and LNG have significant cost reduction potential. • Cost deflation potential FPSO 10-12%, equipment 15%, equipment rental 12-15%. • Deepwater projects have the largest potential to gain from cost deflation as many projects breakeven are at 80$/bbl. A 10-15% cost deflation can render these opportunities economical. • Such a cost deflation requires major realignment and a paradigm shift.
Re-alignment of Costs and Returns Needed	• As OilCo's scramble to cut costs, lease and operate FPSO contractors are squeezed between their clients and their yards. • Contractors must carry out a whole sale review of their cost structures, assess their capital structure and funding to arrive at a clear understanding of their cost of capital and that of their value chain. Such cost restructuring is not easy for most companies due to established norms. • Yards must be better aligned with FPSO lease contractors than before.
Opportunity in Depreciated FPSOs	• Oil Companies operational cash flow has been eroded, forcing capex reductions, while contractors' balance sheets have been progressively weakened. There is a window of opportunity to transform this into a value proposition and bridge the gap between contractors and Oil Companies. • Contractors who have taken high residual values are ill equipped to cut cost and redeploy such vessels. • Oil Companies pushing for early cash flows create a need to provide a cost efficient FPSO quickly, and with good asset integrity and reliability. • The number of FPSOs for relocation and redeployment is large and presents a potential opportunity to address the capex gap given that initial values have been substantially depreciated.
Infra Fund/ MLP	• Existing operating leases are difficult to renegotiate in a form acceptable to an infrastructure fund. • A NewCo or turnaround company that is helmed by experienced personnel , and starts from the premise that all assets will be owned by a fund, stands to benefit from a lower cost of capital. We have agreements in place with infastructure fund(s) to purchase FPSOs we identify, while still paying us the O&M revenues for those vessels,
Risk Mitigation by HBA	• There are 4 major causes for cost over-runs on FPSO developments. We believe we have addressed each of the major issues: Engineering (we will own our own team); Yard availability (we will have a preferred partnership with a Yard); Integration (strong project management and partnership with the Yard); and Commissioning (strong project management and partnership with the Yard).

FPSO LONG TERM OUTLOOK OFFSHORE VALUATIONS SUBDUED, SHARE PRICES WEAK

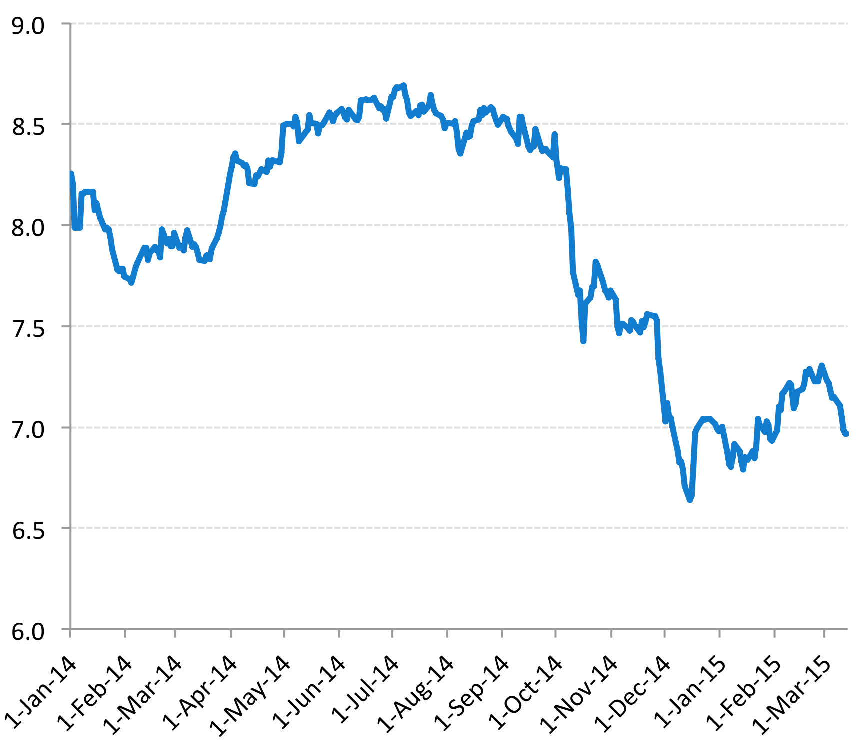
HBA Offshore

Valuations across the sector have come down with OSVs generally dragging the sector lower

- Share prices and valuations are down but not yet distressed.
- Valuations multiples have declined as well as forecast earnings, so while EV/EBITDA multiples have only declined from 8 to 7x, share prices have corrected by an average of -34% in the past 12 months.

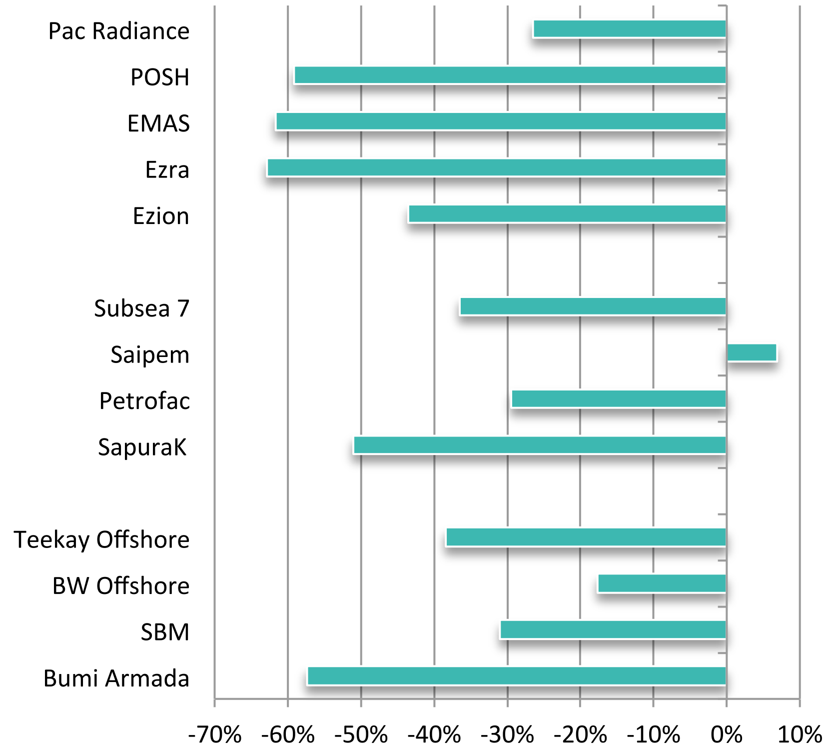
.

Average EV/EBITDA of FPSO, integrated services and OSV companies



Source: Thomson

Share price performance since 2014



Source: Bloomberg. EMAS and POSH, since IPO

VIII. KEY TAKE AWAYS

KEY TAKE AWAYS: OPERATOR CONTRACTING STRATEGY & THE SUPPLY CHAIN RESPONSE

HBA Offshore

Reaching Equilibrium – how quickly can it be achieved?

Supply Chain Response	• Price deflation has primarily hit supply chain margins. While some operational efficiencies have been found, considerable supply chain optimisation is still to be made to satisfy further cost reduction. • Consolidate, deliberate & facilitate: Concept to first oil – Pre FEED / FEED to EPIC. 30% cost saving touted but hasn't materialised. • "Fit for purpose and NOT standardisation of kit" – NA subsea OEM. • Changing the Operator mind set – redefining equipment specifications without compromising safety OR operational performance. This is where the work is to be done over the coming 18 months.
Capex & Margin Expectation	• 2016 **Capex down c.10% YoY** compared to 2015 – continued pricing pressure applied to the supply chain; **9% incremental cost reduction on 2015**. • **Additional pressure applied to supply chain margins (2016 & 2017 H1)** – those most at risk operating across the drilling, construction/install seismic and survey sectors. The ratio of backlog to new booked work will reduce.
Consolidation & M&A	• Supply chain operational efficiency has to increase – **further M&A activity expected through 2016** with a particular focus on LoF engineering and project management. • Operators are aware of the requirement to preserve an effective and diverse supply chain while having to tighten the thumb screws – **an overly traumatised supply chain will quickly drive up prices through the recovery cycle**; that balance is being lost/ miss-managed at the operator level.

KEY TAKE AWAYS: OPERATOR CONTRACTING STRATEGY : 2016/18 THINGS TO WATCH & TAKE AWAYS

HBA Offshore

Reaching Equilibrium – how quickly can it be achieved?

Fit for Purpose Rather than Standardisation	• **The next 18 months will see the supply chain apply "fit for purpose"** solutions to development requirements – this needs a **change of mind set and approach from primarily the IOCs**. • The balance between the supply chain side (margins, operational effectiveness) & the operator side (budgets, equipment / project specs), **has to shift in favour of the supply chain – and to be driven by the supply chain**.
Capex VS. Opex	• Further supply chain **Capex / Opex balance readjustment required** – Life on field (LOF) isn't sexy but still pays. • 2017 is expected to produce opportunities for engineering, subsea and SURF focused players, though these are expected to be small they do install positivity.
New Contracting Methods	• Risk sharing • Oil Securities • Transparent bidding
Financial Efficiency	• Change to MLP • Business Trust • Infrastructure funds looking for accumulators

DISCLAIMERS

LEGAL INFORMATION

This document has been prepared by the Company solely for selected recipients for information purposes only. These materials are given to you solely for your own use and information and no part of this document may be copied, reproduced. redistributed or passed on, directly or indirectly, to any other person (whether within or outside your organization/firm) or published, or otherwise disclosed, in whole or in part, in any manner and for any purpose with the prior consent of the Company. Any forwarding, distribution or reproduction of this document in whole or in part is unauthorized.

The information contained in this document has not been independently verified. No representation, warranty or undertaking, express or implied, is made by the Company or any of its affiliates, advisers or representatives as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of such information or opinions presented or contained herein. The information contained in this document should be considered in the context of the circumstances prevailing at the time, is subject to change without notice and the Company makes no undertaking to update the information in this document to reflect any developments that occur after the date of the presentation. It is not the Company's intention to provide, and you may not rely on these materials as providing, a complete or comprehensive analysis of the Company, or its financial or trading position or prospects. Neither of the Company nor any of its affiliates, advisers or representatives accept any responsibility or have any liability whatsoever (in negligence or otherwise) for any loss howsoever arising from any use of this document or its contents or otherwise arising in connection with this document.

This document may contains statements that reflect the Company's current intent, beliefs and expectations about the future as of the respective dates indicated herein. These forward-looking statements are not guarantees of future performance and are based on a number of assumptions about the Company's operations and factors beyond the Company's control and are subject to significant risks and uncertainties, and accordingly, actual results may differ materially from those described in these forward-looking statements. Neither the Company nor any of its affiliates, advisers or representatives has any obligation, nor do they undertake, to update these forward-looking statements for any events or developments including the occurrence of unanticipated events that occur subsequent to such dates.

This document does not constitute, in whole or in part, an offer for subscription or for sale or invitation to purchase or subscribe for any securities for sale in the United States, Hong Kong, Singapore or anywhere else. No part of this document shall form the basis of or be relied upon in connection with any contract or commitment whatsoever. Specifically, and without limiting the foregoing, these materials do not constitute, nor are they intended to constitute a "prospectus' within the meaning of the U.S. Securities Act of 1933, as amended, and the regulations enacted thereunder. No securities may be sold in the United States without registration with the United States Securities and Exchange Commission except pursuant to an exemption from, or in a transaction not subject to, such registration. The Company has not registered and does not intend to register any shares or conduct a public offering of securities in the United States, Hong Kong, Singapore or anywhere else. The distribution of this document in other jurisdictions may be restricted by law, and persons into whose possession this document comes should inform themselves of, and observe, any such restrictions.