

“Come sostenere gli investimenti E&P nell’attuale scenario di prezzi”
Auditorium Eni di Via Maritano, 26 - San Donato Milanese
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Il ruolo delle imprese ‘Beni e Servizi’ nello sviluppo dei progetti E&P

Introduzione

Daslav Brkic
*Senior Advisor
Strategy and Innovation
Saipem*

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Today the General Contractors in the oil & gas industry face numerous complex challenges

- Broadly lower demand for new capital investments, particularly in upstream
- Pressure to reduce costs of Capex vs. recent cost explosion
- Decreasing project execution success on mega-projects



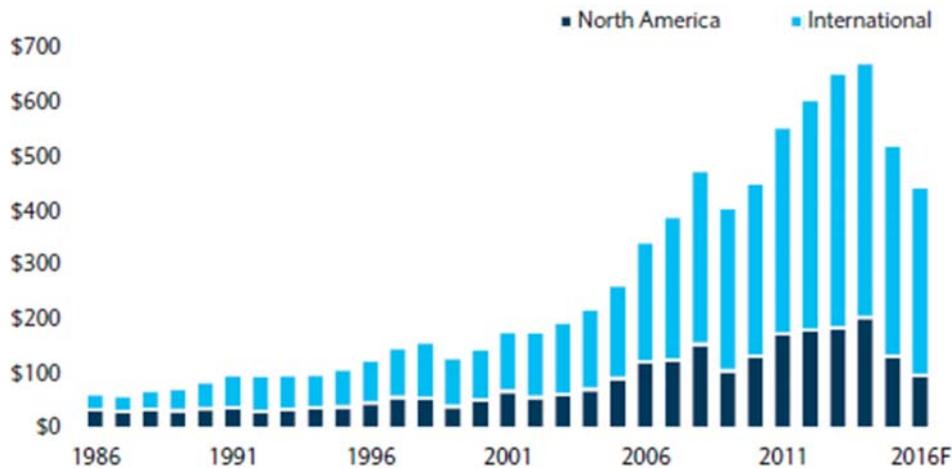
A world turned upside down

- Major market uncertainties
- Shifting markets and opportunities, globally
- Impact of geopolitics
- Often unclear new policies (e.g. Local content, permitting, environmental)

**Emphatic search for lower costs, new execution solutions,
advanced technologies**

We are at the end of a very long growth cycle

Upstream capital investment from 1986 – 2016F, \$bn

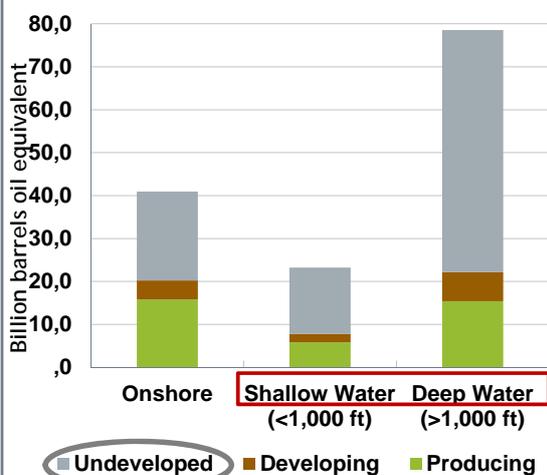


Source: Barclays Research (Febr. 2016)



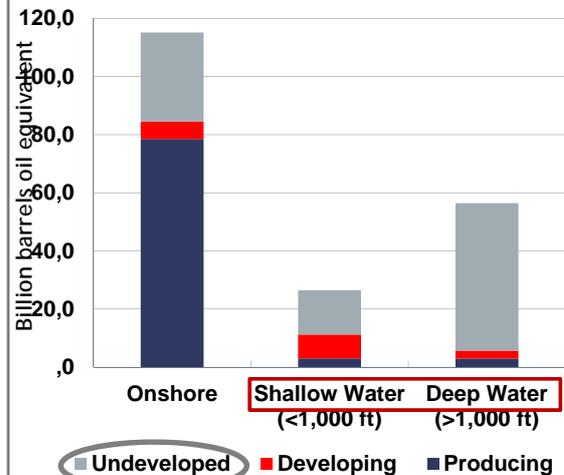
Most oil and many gas reserves - recently discovered but as yet undeveloped - are offshore and in deepwater

Conventional **oil** fields, volumes discovered 2004-13 = 145 billion boe



Note: Data excludes Canada onshore, US lower-48 onshore, and US shallow water. Source: IHS © 2015 IHS

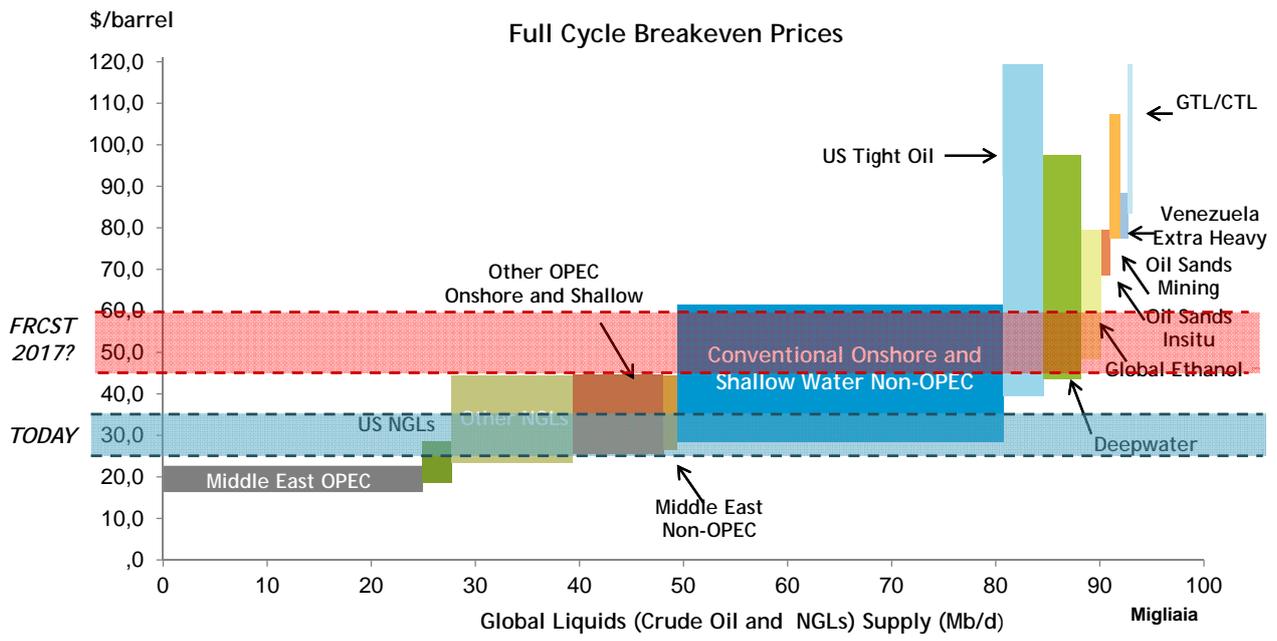
Conventional **gas** fields, volumes discovered 2004-13 = 198 billion boe



Note: Data excludes Canada onshore, US lower-48 onshore, and US shallow water. Source: IHS © 2015 IHS



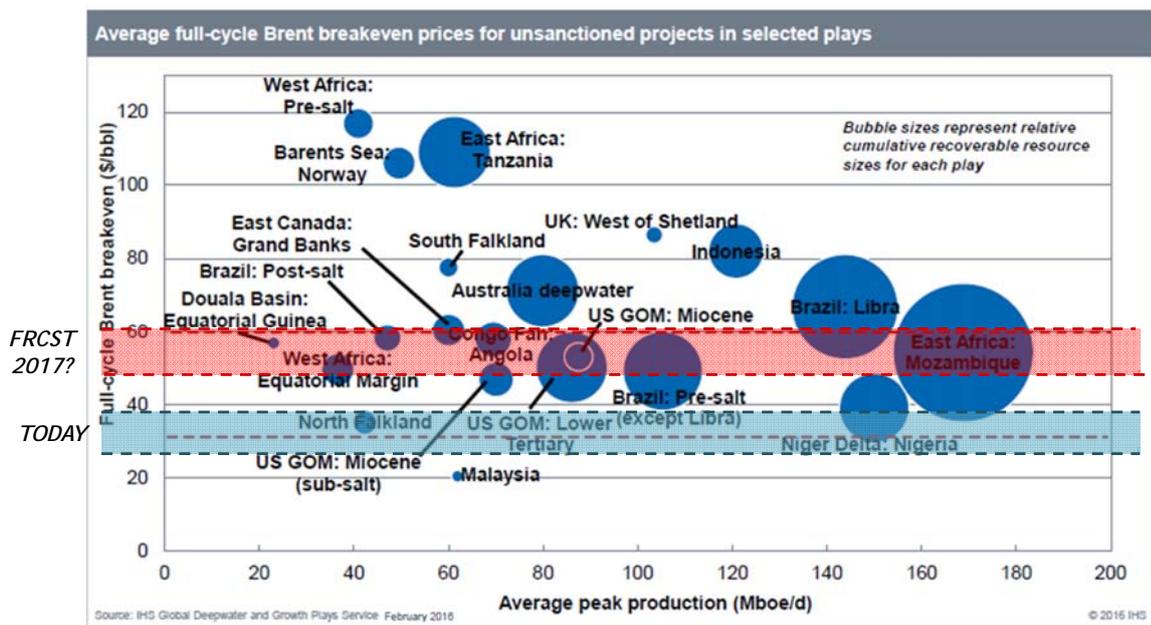
How can new projects offshore and in deepwater be economical? (1/2)



Source: IHS Global Deepwater & Growth Play Service (April 2015)



How can new projects offshore and in deepwater be economical? (2/2)



Source: IHS Global Deepwater and Growth Plays Service: February 2016



Cost Reduction?

To make new investments viable today, **drastic cost-reductions** are needed

- Some unit cost reduction has materialized in 2015, but costs are expected to rise again in the medium term

Overall onshore and offshore cost evolution ^(o)

2014	2015	2016	2017	2018
-1 ÷ 2 %	-11 %	+3 %	+7 %	+5 %



- Supply chain savings** based on 'squeezing' the service sector are possible, but probably limited to ~ **10 ÷ 15 %** (vs. 2014 levels)
- Saipem is 'playing its part' with new cost-cutting programs, new strategies and approaches



^(o) Selection of industry indices

Saipem's new strategic pillars

1 Business portfolio refocus	2 De-risking	3 Cost optimization and process efficiency	4 Technology innovation	5 Debt reduction and capital discipline
Maintain state-of-the-art fleet	Top-management engagement on significant decisions	"Fit for the future" 1.3 - 1.5 B€ cumulative savings	Enhanced innovation effort	Capital increase
Disposals	Selectivity	G&A optimization	- Proprietary technologies	New credit facilities
Rationalization, 'right-sizing'	More E, less C	Eliminate overcapacity	- Overall systems design and execution	Improved working capital management
Commercial thrust: FLNG, Partnerships, harsh environments, higher value-added services	Alternative contractual schemes	Geographical footprint		Calibrated capex level
	Reinforced risk management			



Towards an improved project execution approach

- "Saipem Digital Contractor"
Focus on capitalization of Information and Intellectual Assets
- Supply chain management overhaul
Digitalization, Post-order management, Material tracking solutions, training for supervision
- 'Vendor Federation and Fidelization' to reduce costs, allow easier data transfer, standardization and reuse
- New execution and contracting strategies
- Management process overhaul
Focus on organizational structure, leadership and human behavior



Way Forward

To achieve the desired goals, a new collaborative approach is required

- To ensure that new projects will be economically viable,
further cost improvements
will have to be obtained from optimized and innovative project design and execution approaches
- With Owner Companies
- With Suppliers
- With Partners



Intensify Owner-Contractor cooperation and mutual trust

Only a tighter E&C/Owner cooperation will improve execution cost and project success



- Set and clearly communicate Owner's project goals
- Maximize investments in Pre-FEED and FEED
Then stop any changes
- Encourage design competitions, if desired
- Utilize experienced contractors with thorough construction experience
- Form integrated teams with "win-win" objectives throughout project execution
- Involve critical equipment vendors and certification companies throughout the process
- Join forces to broaden vendors lists

The most critical factors of project success
are decided before starting EPC

Maximize the application of standardized solutions

From the earliest project phases

- Reach consensus on common industry specifications, reduce personal or company preferences
At least for key components or 'units'
- **Right-size:** Update the standards, reduce traditional conservatism and 'design fat'
- Avoid repeatedly re-qualifying each time the same technologies and solutions for similar situations ("Prototype syndrome")
- Modularize, standardize as much as possible

Share the risks

Particularly in high risk contexts



- All risks cannot be apportioned only to one side
- Jointly review and optimize **open-book** price estimates and project execution schemes
- Hybrid, '**convertible**' schemes could be a good alternative in today's uncertain situations
- Maintain a "**win-win**" attitude throughout the entire project execution process

Intensify joint innovation efforts

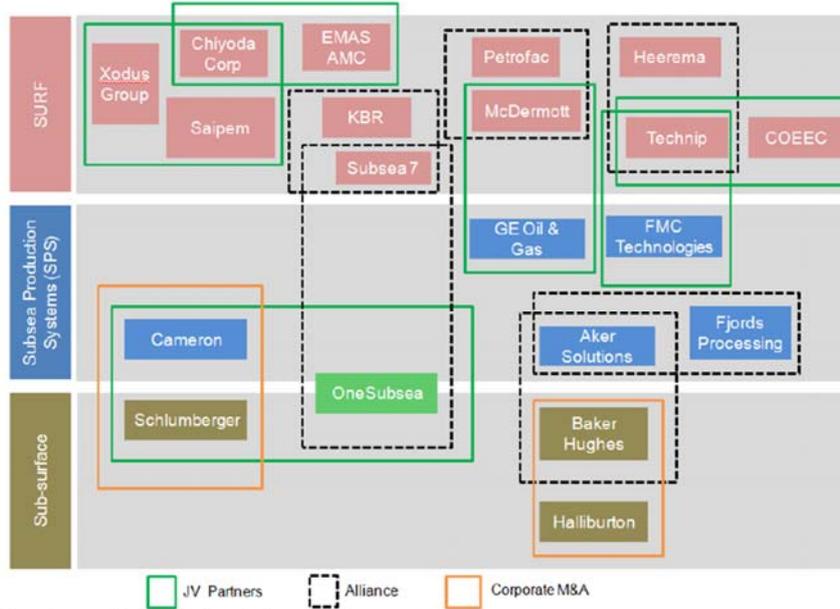


- Most advanced mega-projects today are based on "new" or "breakthrough" technologies
- Gradually the R&D effort is being outsourced to contractors and suppliers
- **Sharing Oil Companies' needs, criteria, targets is essential for the service providers**
Goals, feedback, certification, guidance

Oil Companies' guidance to contractors and suppliers is essential in new technology development

With complementary partners, alliances can result in better and cheaper solutions

Major subsea development Alliances



Source: Company data, Macquarie Research, November 2015

... leading the way to the newest one:

