

**E&P** Projects

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### Disclaimer

This document may contain forward-looking information on the Group (including objectives and trends), as well as forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, notably with respect to the financial condition, results of operations, business, strategy and plans of TOTAL. These data do not represent forecasts within the meaning of European Regulation No. 809/2004.

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Financial information by business segment is reported in accordance with the internal reporting system and shows internal segment information that is used to manage and measure the performance of TOTAL. Performance indicators excluding the adjustment items, such as adjusted operating income, adjusted net operating income, and adjusted net income are meant to facilitate the analysis of the financial performance and the comparison of income between periods. These adjustment items include:

#### (i) Special items

Due to their unusual nature or particular significance, certain transactions qualified as "special items" are excluded from the business segment figures. In general, special items relate to transactions that are significant, infrequent or unusual. However, in certain instances, transactions such as restructuring costs or asset disposals, which are not considered to be representative of the normal course of business, may be qualified as special items although they may have occurred within prior years or are likely to occur again within the coming years.

#### (ii) Inventory valuation effect

The adjusted results of the Refining & Chemicals and Marketing & Services segments are presented according to the replacement cost method. This method is used to assess the segments' performance and facilitate the comparability of the segments' performance with those of its competitors.

In the replacement cost method, which approximates the LIFO (Last-In, First-Out) method, the variation of inventory values in the statement of income is, depending on the nature of the inventory, determined using either the month-end price differentials between one period and another or the average prices of the period rather than the historical value. The inventory valuation effect is the difference between the results according to the FIFO (First-In, First-Out) and the replacement cost.

#### (iii) Effect of changes in fair value

The effect of changes in fair value presented as an adjustment item reflects for some transactions differences between internal measures of performance used by TOTAL's management and the accounting for these transactions under IFRS.

IFRS requires that trading inventories be recorded at their fair value using period-end spot prices. In order to best reflect the management of economic exposure through derivative transactions, internal indicators used to measure performance include valuations of trading inventories based on forward prices.

Furthermore, TOTAL, in its trading activities, enters into storage contracts, which future effects are recorded at fair value in Group's internal economic performance. IFRS precludes recognition of this fair value effect.

The adjusted results (adjusted operating income, adjusted net operating income, adjusted net income) are defined as replacement cost results, adjusted for special items, excluding the effect of changes in fair value.

Cautionary Note to U.S. Investors – The SEC permits oil and gas companies, in their filings with the SEC, to separately disclose proved, probable and possible reserves that a company has determined in accordance with SEC rules. We may use certain terms in this presentation, such as resources, that the SEC's guidelines strictly prohibit us from including in filings with the SEC. U.S. investors are urged to consider closely the disclosure in our Form 20-F, File N° 1-10888, available from us at 2, Place Jean Millier – Arche Nord Coupole/Regnault –92078 Paris-La Défense Cedex, France, or at our website: <a href="total.com">total.com</a>. You can also obtain this form from the SEC by calling 1-800-SEC-0330 or on the SEC's website: <a href="total.com">total.com</a>.



# Sanctioning high return projects in low cost environment 13 FIDs by end-2018

Main project FIDs
Working interest, 100% capacity

TOTAL projects			
Absheron 1	Azerbaijan	40% op.	35 kboe/d
Vaca Muerta	Argentina	41% op.	100 kboe/d
Halfaya 3	Iraq	22.5%	200 kb/d
Libra 1	Brazil	20%	150 kb/d
South Pars 11*	Iran	50.1% op.	370 kboe/d
Zinia 2	Angola	40% op.	40 kb/d
Kashagan CC01	Kazakhstan	16.8%	80 kb/d
Lake Albert	Uganda	44.1% op.	230 kb/d
lkike	Nigeria	40% op.	45 kb/d
Libra 2	Brazil	20%	150 kb/d
Fenix	Argentina	37.5% op.	60 kboe/d

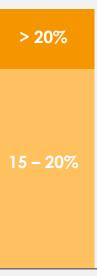
### **MAERSK OIL projects**

Tyra future	Denmark	31.2% op.
Johan Sverdrup 2	Norway	8.44%

<sup>\*</sup> Award of EPC contract

Net capacity & IRR for TOTAL projects at 50 \$/b kboe/d net





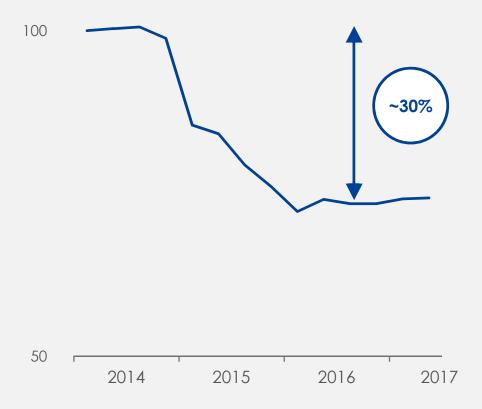
Average Capex < 8 \$/boe



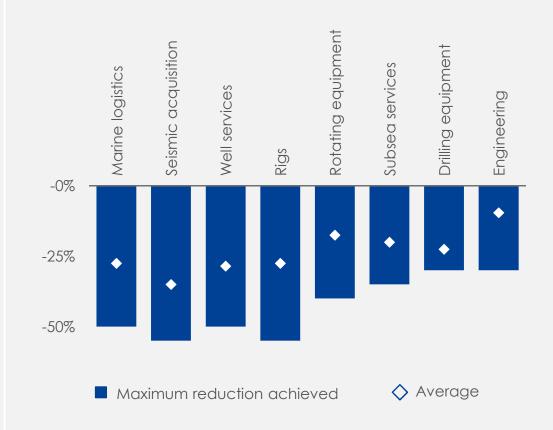
## Leveraging new organization to keep reducing costs

Decrease of capital costs

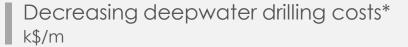
Upstream Capital Cost Index - IHS - CERA - Q2-2017

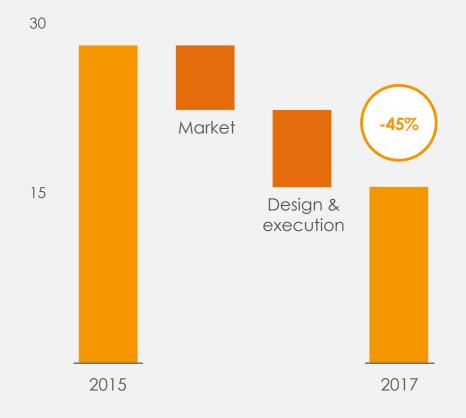


Reductions achieved through renegotiation and new tenders vs. 2014



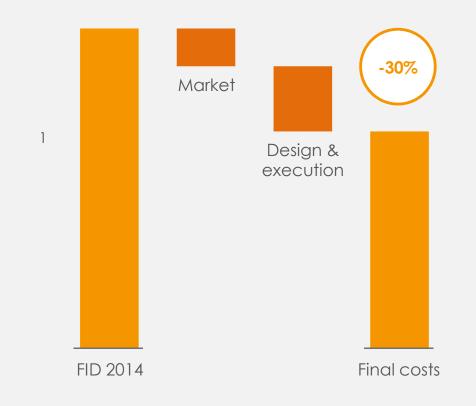
## Improving performance to sustainably reduce costs





**-25 days/well** in 2017 vs. 2015

Decreasing subsea costs: Edradour-Glenlivet B\$



<sup>\*</sup> Based on operated deep water drilling activity on Moho-Nord, Egina and Kaombo

## Libra: worldclass deepwater development

Driving down breakeven



Capturing **deflation** 

## Simplifying development concepts and improving execution

Libra vs. Clov: -40% Capex per boe/d

Reserves of 3 to 4 Bboe

### Libra L1

- FID 2017 / First Oil 2021
- Production of 150 kb/d
- Technical costs < 20 \$/b

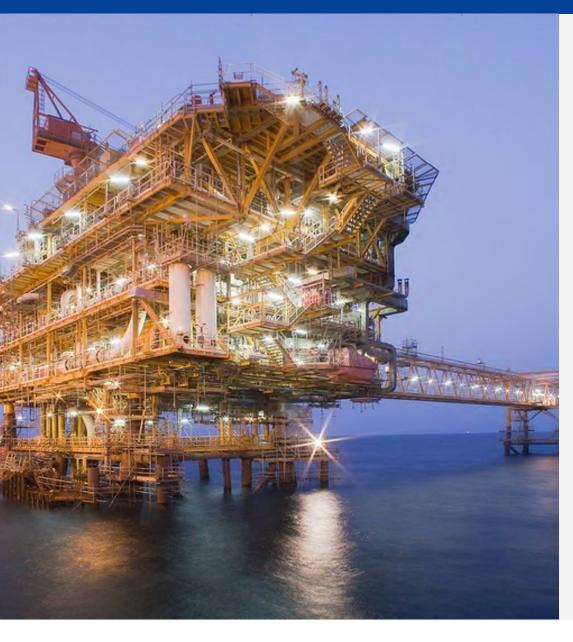
### Libra L2

- FID 2018
- Production of 150 kb/d



## South Pars 11: giant low cost gas development

First mover advantage



Reserves > 2 Bboe

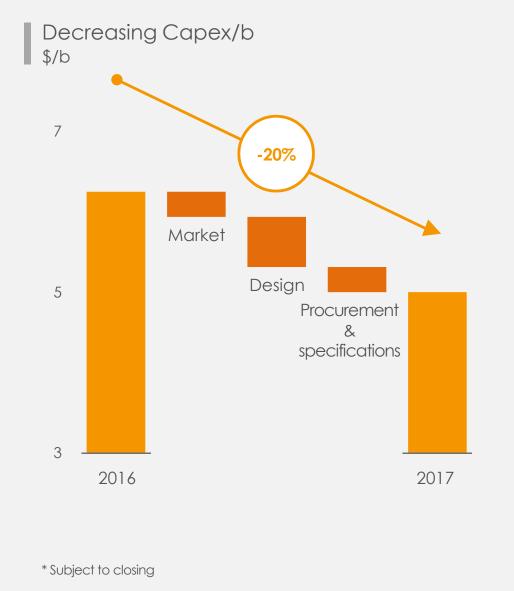
EPC contract award by end-2017

First gas 2021

Production 2 Bcf/d

Technical costs < 4 \$/boe

# Uganda, optimizing design and capturing deflation FID 2018, start-up 2021, Total 44%\*, operator



### > 1 billion barrels

230 kb/d 100% production capacity

Upstream technical costs ~ 11 \$/b

Targeting 20% upstream Capex reduction

- Simplifying and standardizing design
- Optimizing contractual strategies

### **Project status**

- Tilenga FEED: Ph 1 completed in July 2017, Ph 2 ongoing
- Pipeline FEED: completed by end 2017
- Export pipeline route through Tanzania, ground breaking August 2017

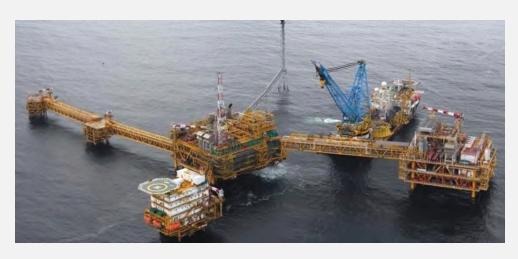


# Sanctioning high return conventional satellite developments Standardizing and simplifying designs, accelerating projects

Argentina, Fenix Total 37.5% Op.



Nigeria, Ikike Total 40% Op.



Tie-back to existing onshore facilities (6 wells)

**FID 2018** / Start-up: 2020

60 kboe/d production

Reserves of 270 Mboe

Technical costs < 6 \$/boe

**Tie-back** to Amenam (5 wells)

**FID 2018** / Start-up: 2020

50 kboe/d production

**Reserves of 70 Mboe** 

Technical costs ~10 \$/boe

## Short cycle development opportunities

More than 20 projects providing Capex flexibility





## Short cycle: developing top-tier Vaca Muerta assets

Strongly positioned in dry gas, wet gas and oil windows



324,000 net acres with > 1.4 Bboe resources

Launched Aguada Pichana Ph1 to feed existing **100 kboe/d** plant

- Initial well productivity > 2.5 Mcf/d\*
- < 2 \$/MBtu technical costs using existing facilities</li>

**Excellent results** from **wet gas** pilot wells, in line with US plays

Decreasing costs for future developments

\* Normalized at 1000 ft lateral length



## Restarting profitable infill projects with quick pay back

Deepwater and conventional offshore

Angola, Block 17 infills 6 wells



• Production ~ 50 kboe/d

• IRR > 25%

Qatar, Al Shaheen infills > 50 wells



Production > 60 kb/d

• IRR > 25%

Nigeria, Akpo infills 5 wells



Production ~ 30 kboe/d

• IRR > 25%



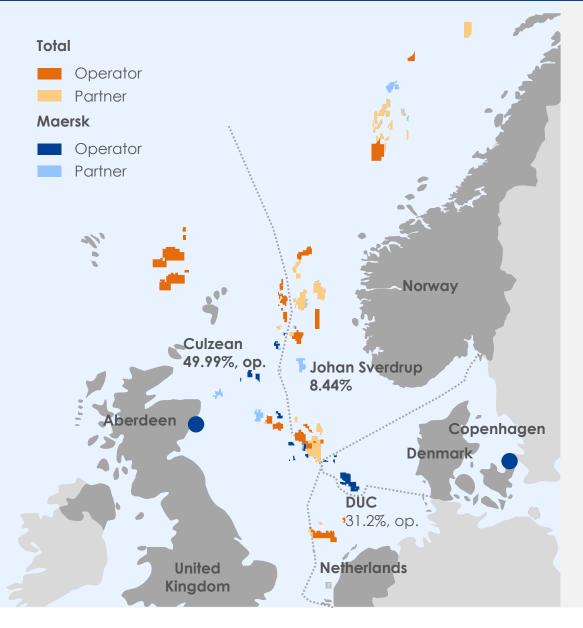
UK, Elgin Franklin infills 6 wells

- Production ~ 20 kboe/d
- IRR > 25%



## High quality projects brought by Maersk Oil

2<sup>nd</sup> largest operator in North Sea



2 major projects under development

### Johan Sverdrup Ph1

- 440 kb/d, 8.4%
- Start-up in 2019
- Giant oil field

### Culzean

- 100 kboe/d, 50%
- Start-up in 2019
- Creating HP/HT hub with Elgin-Franklin

Major upcoming FIDs

### Tyra redevelopment

- 55 kboe/d, 31%
- Start-up 2020+

### Johan Sverdrup Ph2

- 220 kb/d, 8.4%
- Start-up 2022

Subject to closing



## Next wave of giant developments

Feeding 2022+ production

PNG, Papua LNG Total 31% Op.



### Reserves > 1 Bboe

Production plateau > 150 kboe/d
Onshore gas, low breakeven project
Status

- Upstream: pre-project studies ongoing
- LNG plant: discussions ongoing to reduce costs by maximizing synergies with PNG LNG

Nigeria, Owowo Total 18%



### Reserves ~1 Bboe

Production plateau > 150 kb/d

Low technical costs: producing through the existing Usan FPSO (deepwater development)
Status

- Successful appraisal supports FID
- Preparing to submit development plan by end 2017



## Discipline, growth and cash

### Reducing breakeven and sanctioning new projects

E&P Free cash flow\*, incl. 1 B\$/y net resource acquisition B\$, at 50 \$/b



Capturing **deflation** and improving **performance** to **reduce costs** 

Growing production at 5% per year to 2022

Decreasing Capex intensity and increasing free cash flow

<sup>\*</sup> Subject to closing of Maersk Oil acquisition