



## Energy Panel

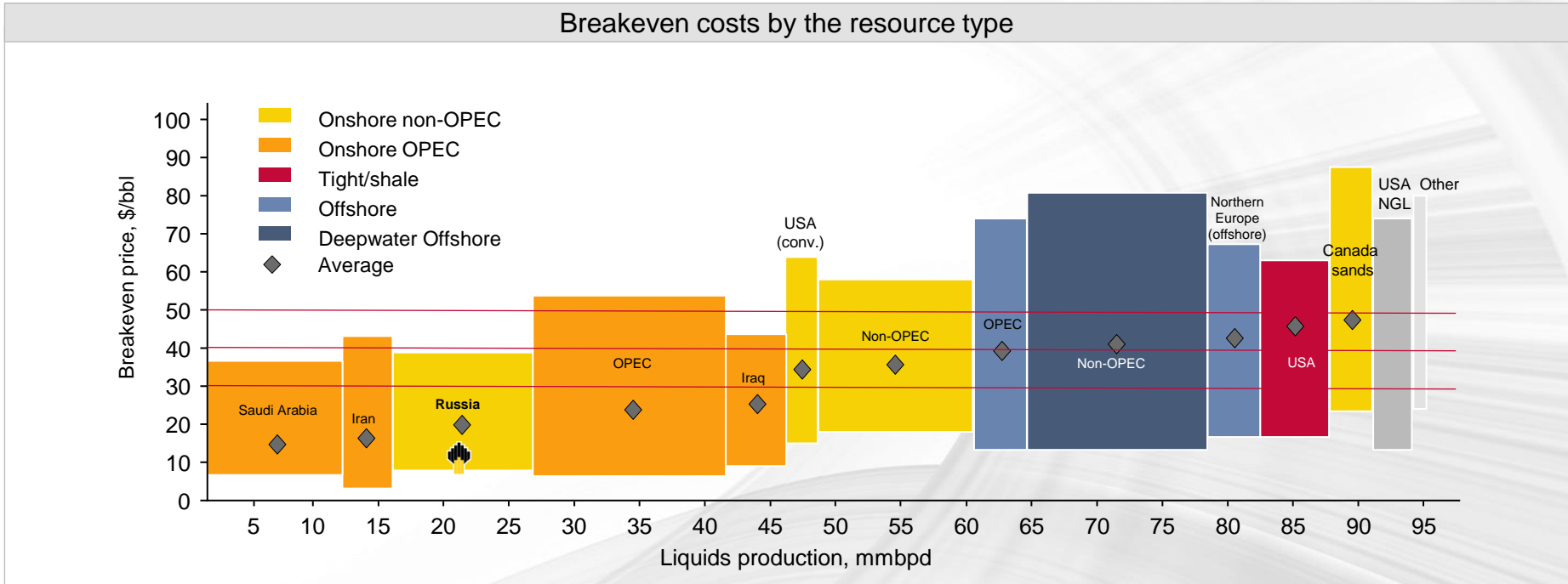
# GLOBAL OIL MARKET – ON THE PATH TO SUSTAINABLE DEVELOPMENT

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Chief Executive Officer

St. Petersburg International Economic Forum

June 2, 2017

# Sustainability of Main Producers in 30-40-50 \$/bbl Scenarios

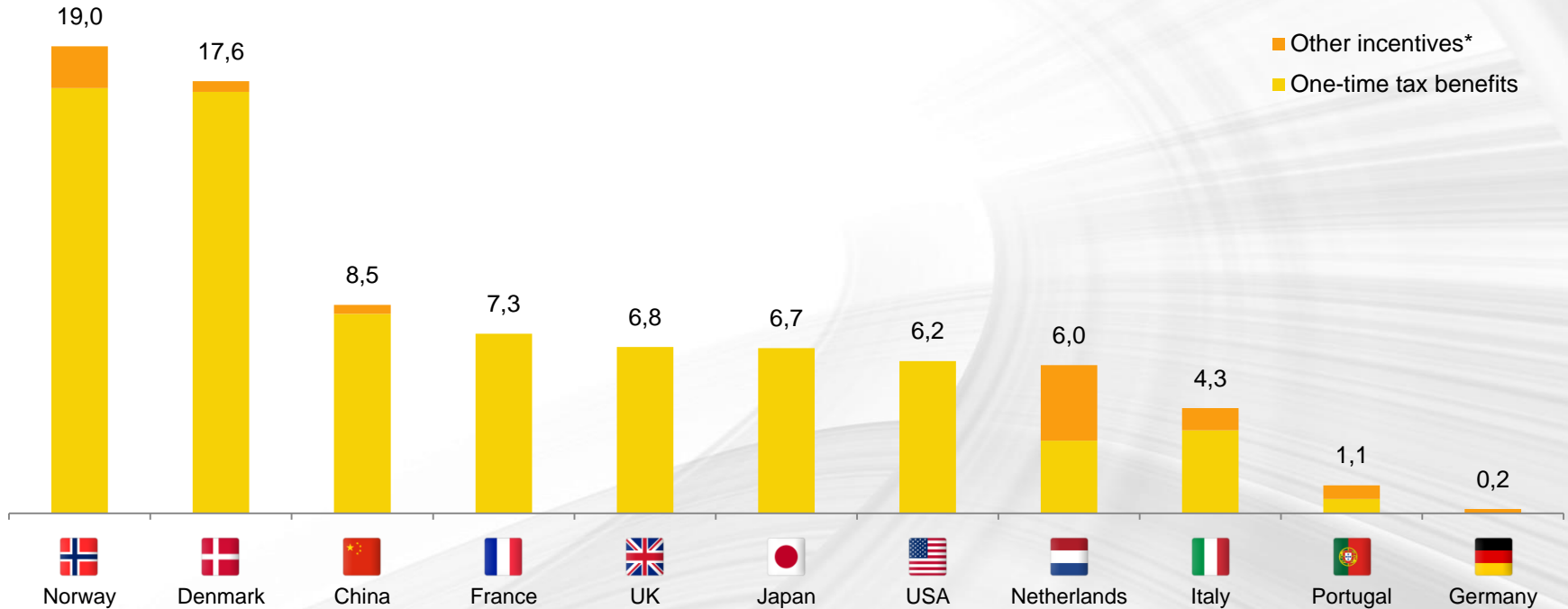


- Heavy oil, Canadian sands, projects in mature basins of Western Africa offshore, North Sea and Gulf of Mexico are not economically viable at long term prices below 50 \$/bbl
- Projects with combined production over 12 mmbpd and investment over \$800 bln will not be sanctioned at prices below 50 \$/bbl

# Fiscal Stimulus to Electric Vehicles Buyers



Economic benefits to EV buyers, thousand \$ per vehicle

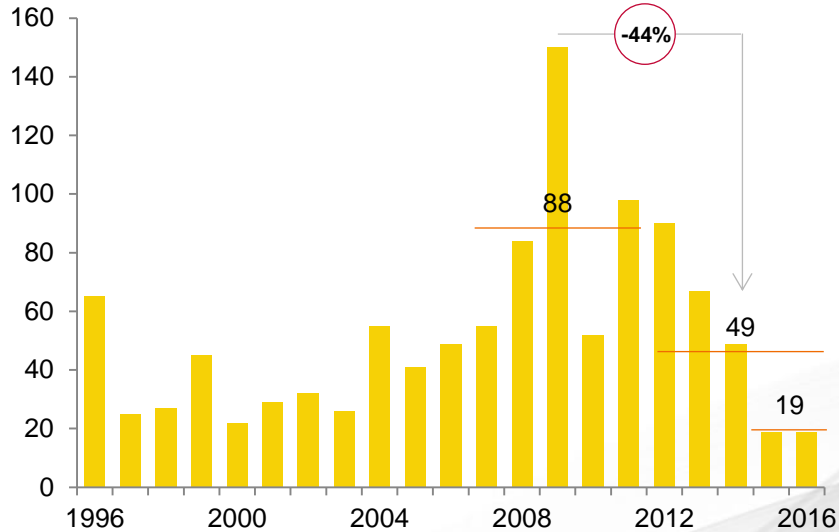


\* Tax and other incentives in the first 5 years of EV usage  
Sources: UBS, Morgan Stanley

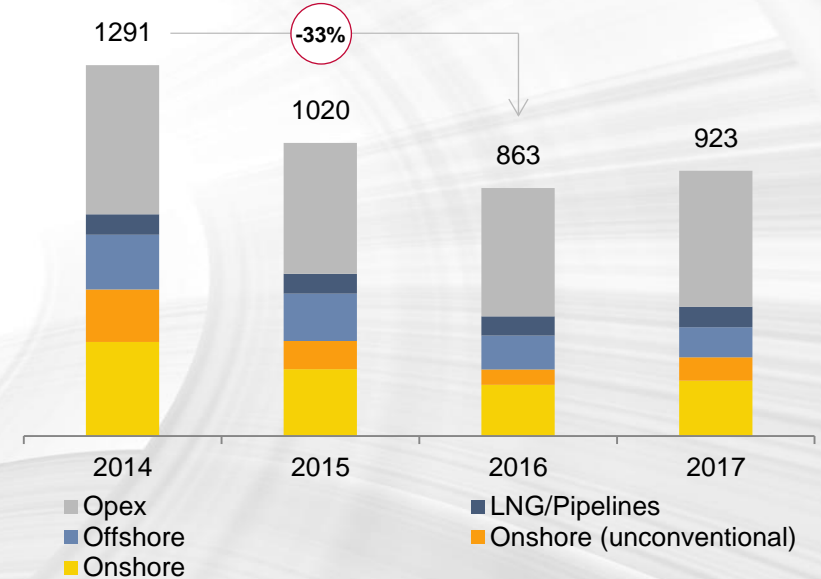
# Investment Optimization



### Oil and Gas Resources of Sanctioned Projects, bln boe



### Global Spending in Exploration and Production, \$ bln

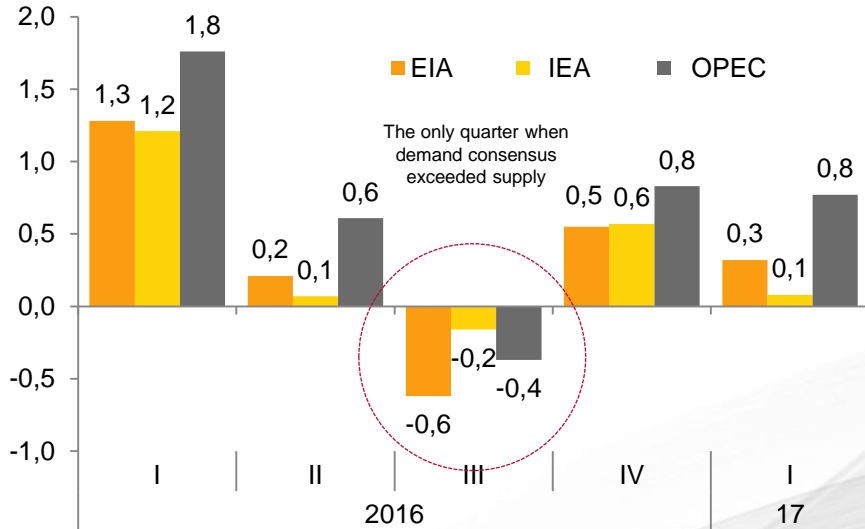


- Steep reduction of new projects launch in 2015 and 2016 after period of prior high activity

# Variation in Estimates of Global Demand & Supply Dynamics Leads to Different Expectations

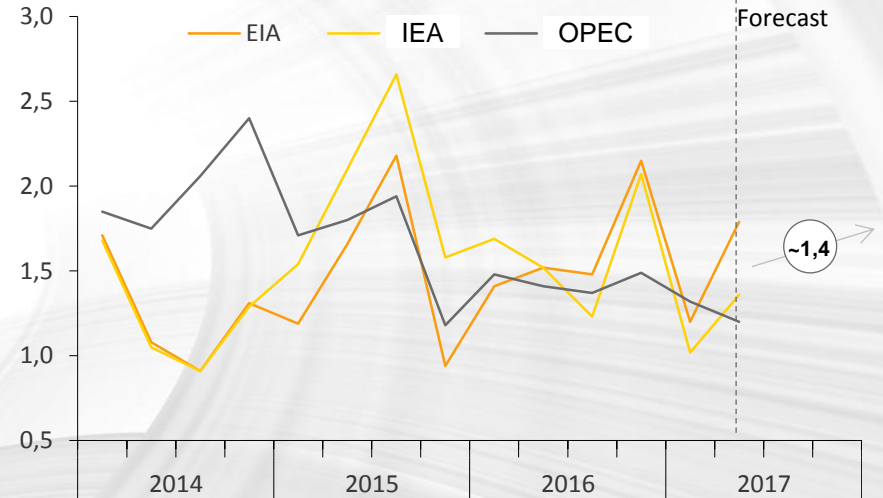


Excess of Global Liquid Hydrocarbons Supply over Demand, mmbpd



- According to leading agencies, scale of oversupply in Q1 2017 significantly varies – from 0.1 to 0.8 mmbpd

Growth of Global Liquid Hydrocarbon Demand (y/y) according to various energy agencies, mmbpd

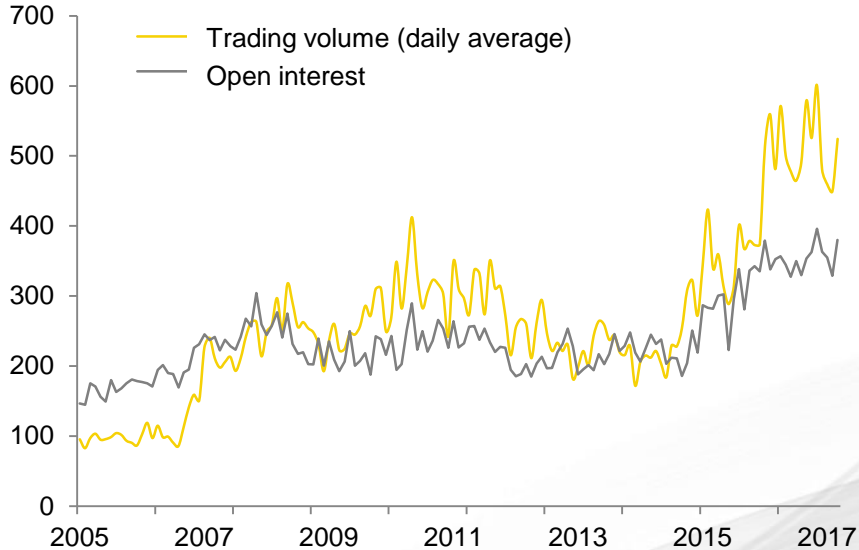


- Estimation of the demand growth forecast by different agencies in the last two years have almost coincided
- Forecasts for Q2 - Q4 2017 vary

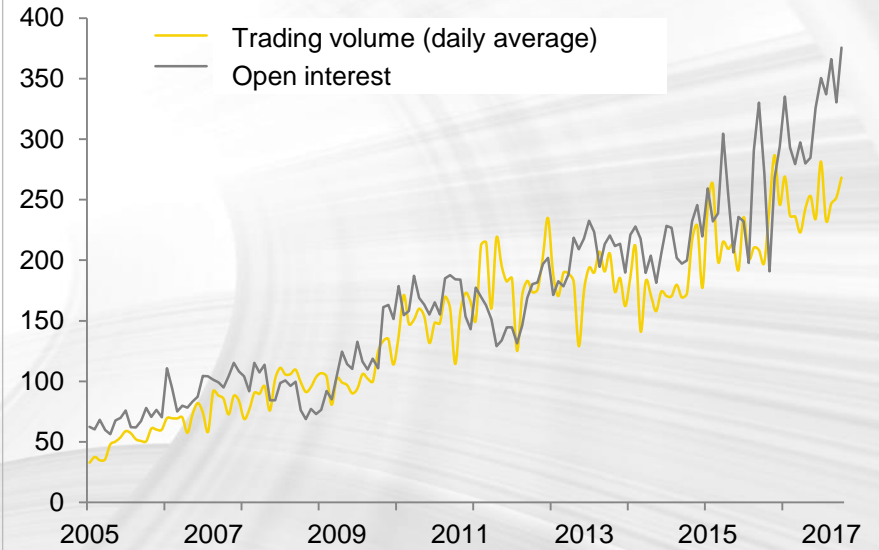
# Oil Futures Trading Volume and Open Interest



Daily trading volumes and Open Interest for WTI  
thousand contracts



Daily trading volumes and Open Interest for Brent  
thousand contracts

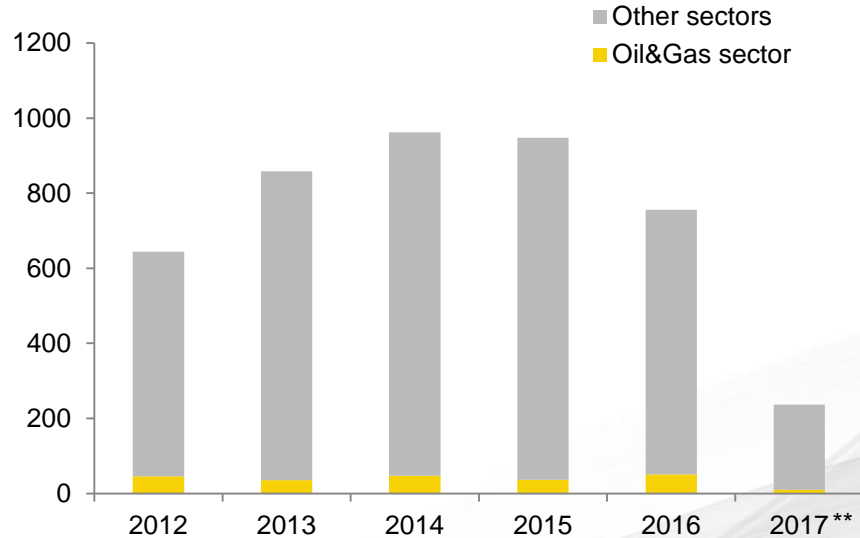


- Brent futures market has significantly increased over the last 10 years
- Current liquidity indicators and frequency in futures trading substantially exceed 2008 numbers

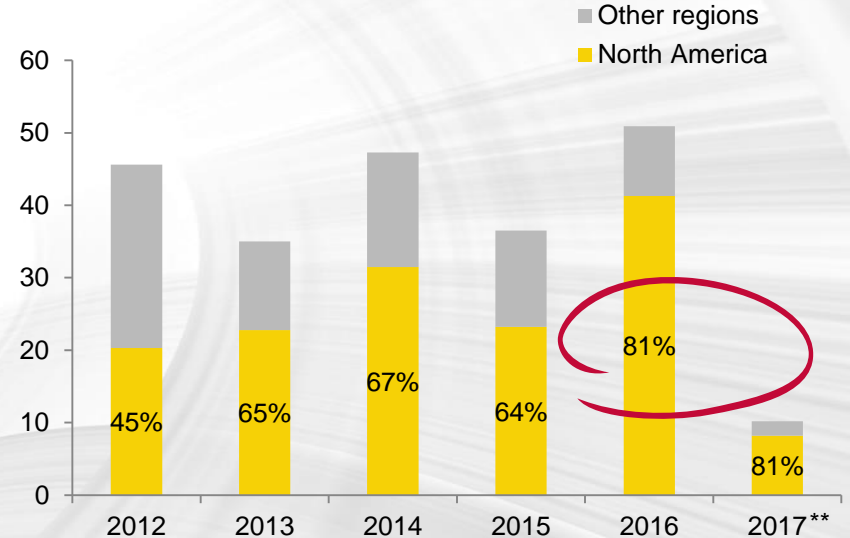
# Equity Raising in Oil & Gas Sector



Global public offerings,  
Jan 2011 – April 2017\*, \$ bln



Oil and gas companies' public offerings,  
Jan 2011 – April 2017\*, \$ bln



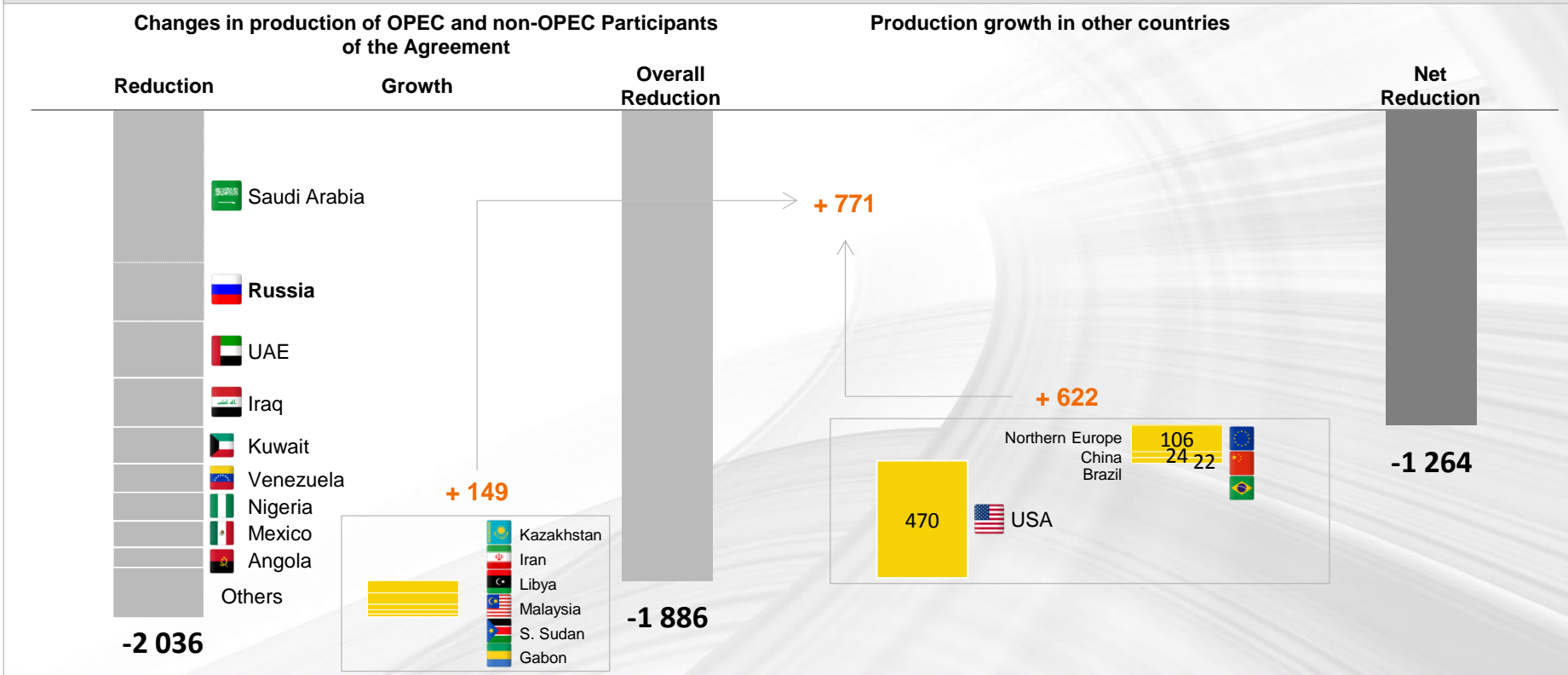
- New equity is not the main source of financing for the most of oil and gas companies



# Production Cut by the Agreement Parties is Mostly Compensated by Production Growth in the USA and Other Countries



Decline in average daily production of crude oil in April 2017 vs. October 2016, thousand bbl/d



Note: Northern Europe includes Norway, UK, the Netherlands and Denmark. Figures for non-OPEC countries also include condensate, while for the USA – NGLs  
 Sources: OPEC, IEA, EIA, CDU TEK, Ministry of Energy of the Russian Federation

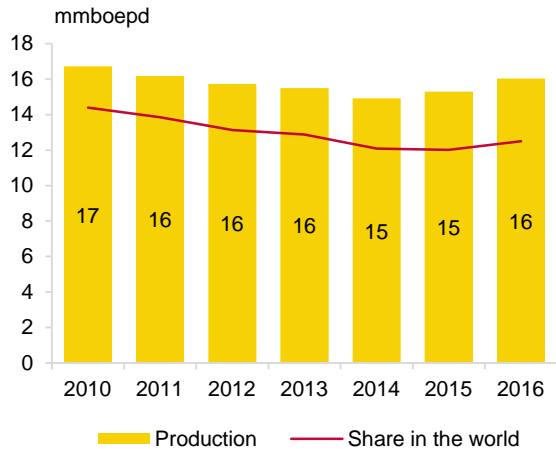


# Challenging Time for Majors' Traditional Business Models

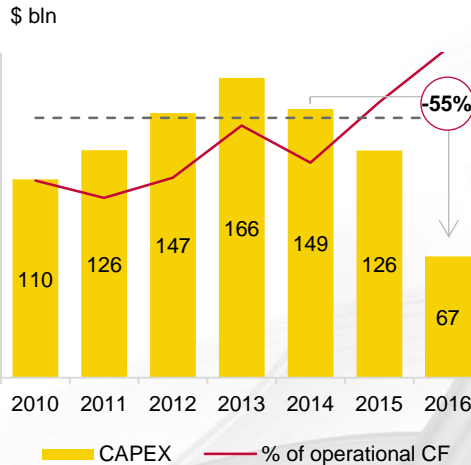


## Key Indicators

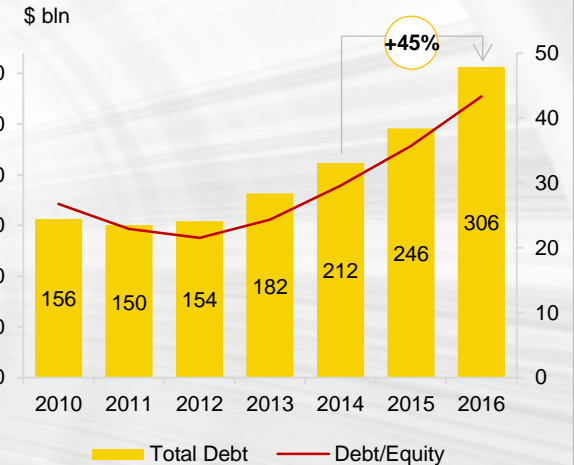
### Hydrocarbons Production



### CAPEX



### Debt

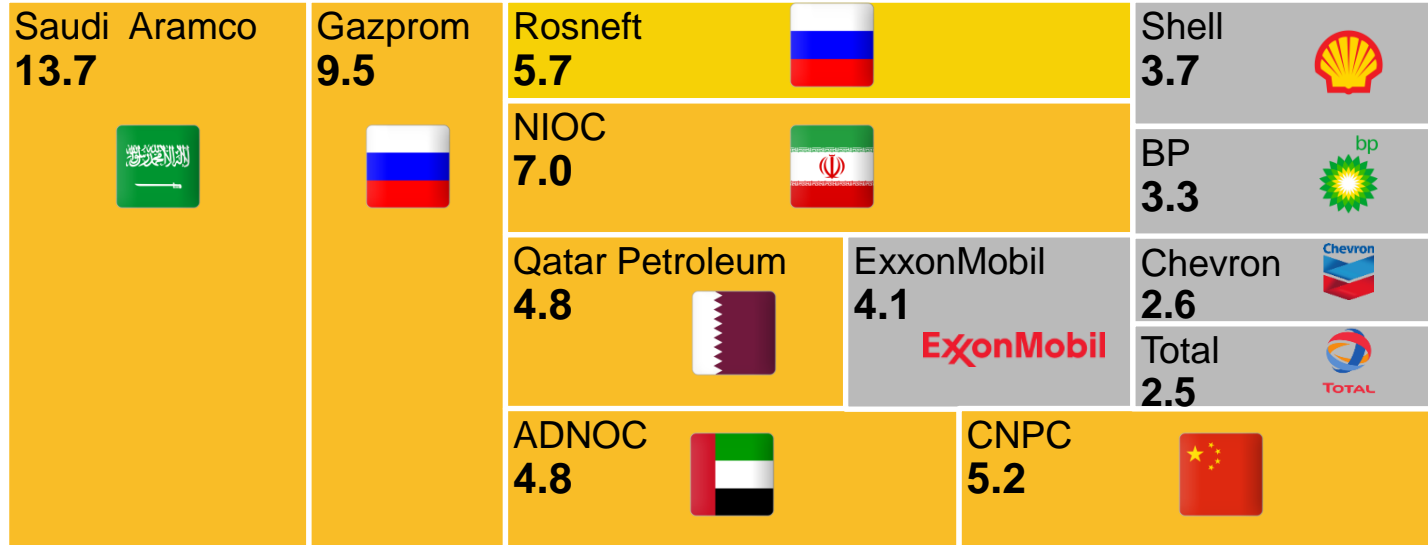


- Low reserves, low R/P rate, production decline
- High OPEX and CAPEX, projects with high breakevens
- High expectations of share buybacks
- Growing debt due to lack of equity

# National Companies – Becoming Stronger

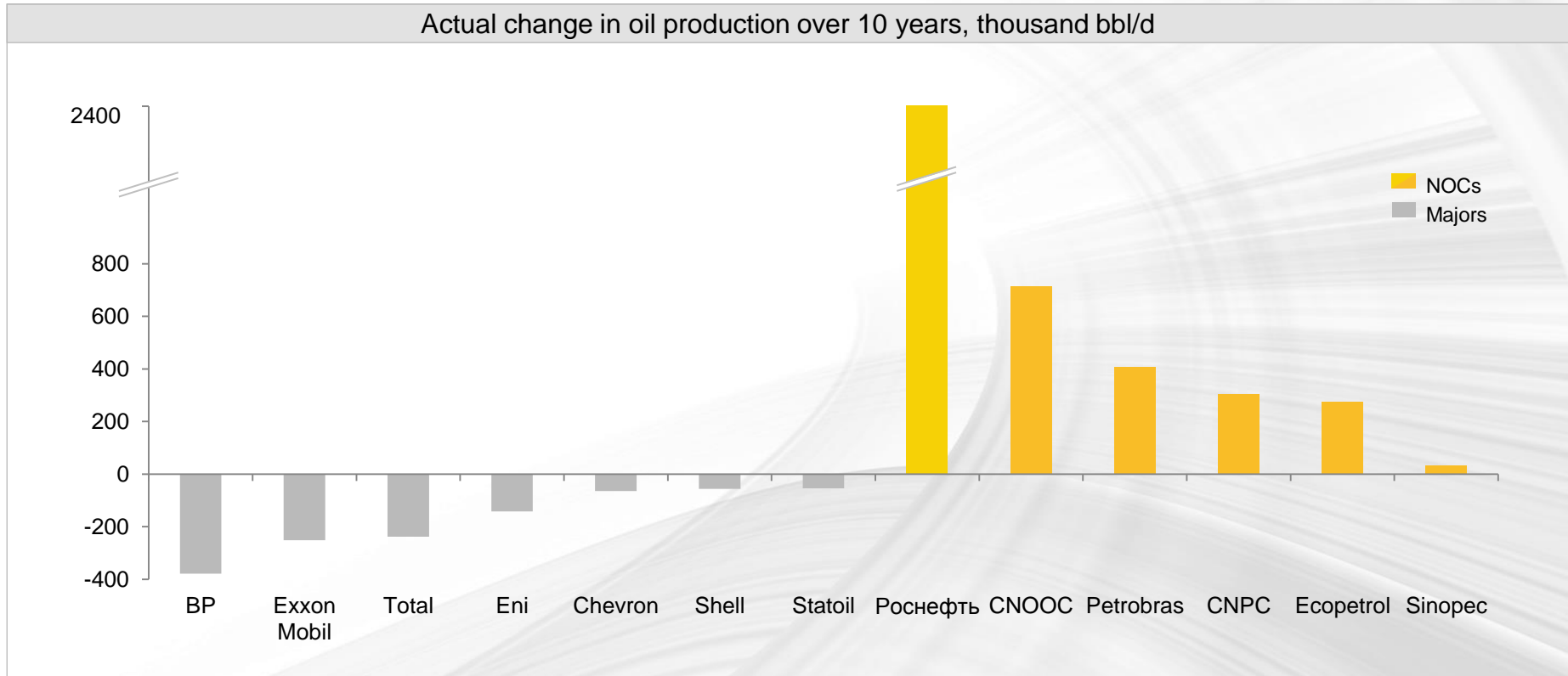


Hydrocarbon production by the largest oil and gas companies, mmboepd



- Pattern of national oil and gas companies becomes more and more apparent
- They are not only holders of large resource base, but also new active players shaping the global market

# Unlike Majors National Oil Companies Increased Production Over the Past 10 Years



# Tax Take Reduction in Saudi Arabia – Stimulus to New Investments



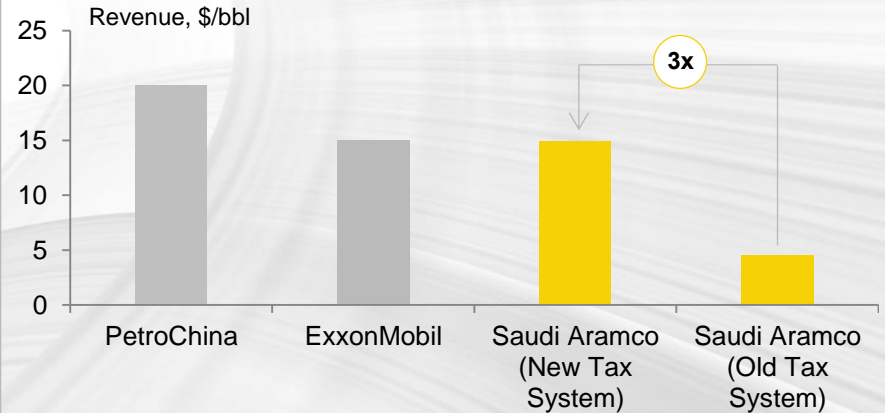
## Non-Oil Revenues Growth in Saudi Arabia



## Government Support to IPO

- 1 Corporate tax reduction from 85% to 50% is leading to 3 times increase in Saudi Aramco's profitability
- 2 Financial restructuring
- 3 Other initiatives to raise oil price

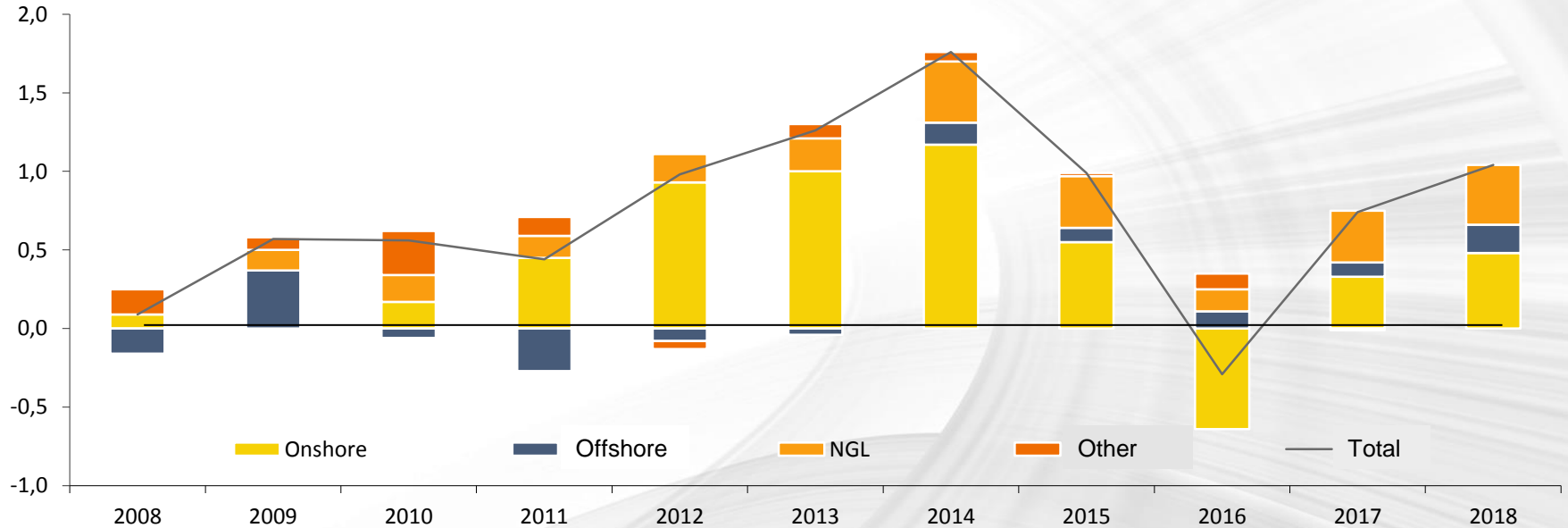
## Saudi Aramco's Profitability Increased after Tax Changes



# Growth of Liquids Production in the USA will Intensify in 2017-2018



Structure of liquids production growth (YoY) in the USA, mmbpd

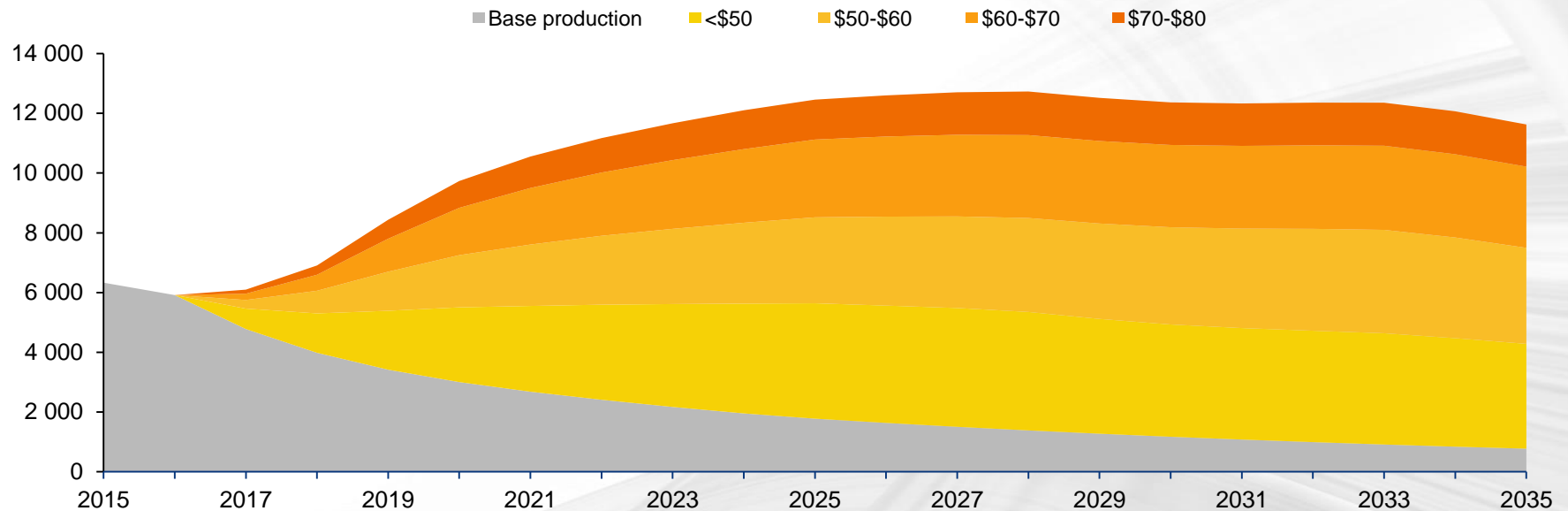


- By September 2016 liquids production in the USA has declined by 0.8-1 mmbpd from the peak level of April 2015, but in 2016 YoY – only by 0.3 mmbpd
- Shale production was the main factor of this decrease, declining by about 0.6-0.7 mmbpd

# Conditions for Production Growth in the USA



Oil and liquids production in the USA (excluding Alaska and the Gulf of Mexico), thousand bbl/d



- Sustainable growth in the USA is only possible with oil price higher than 50 \$/bbl
- Nevertheless, many projects in the USA are profitable at 30-40 \$/bbl
- Companies actively use hedging strategies to increase production

# An Increase In Shale Productivity in the USA



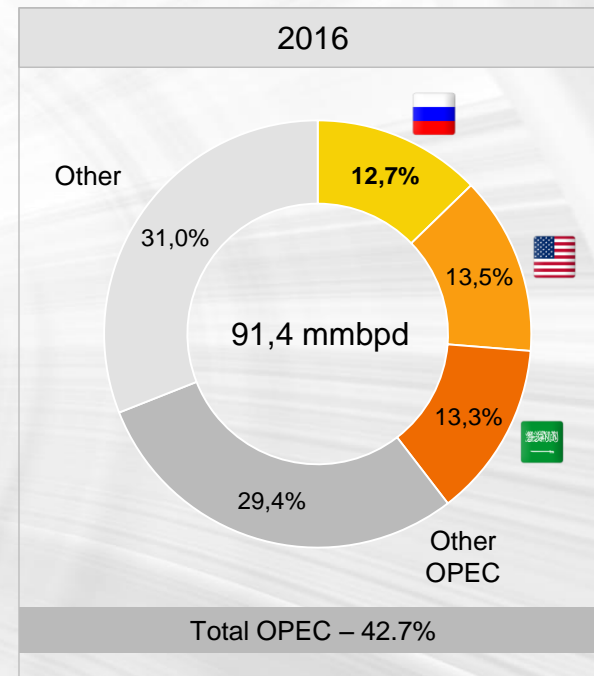
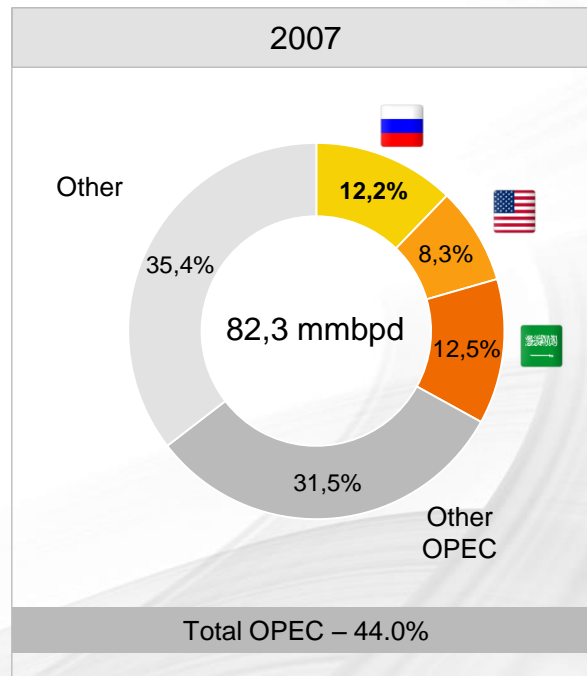
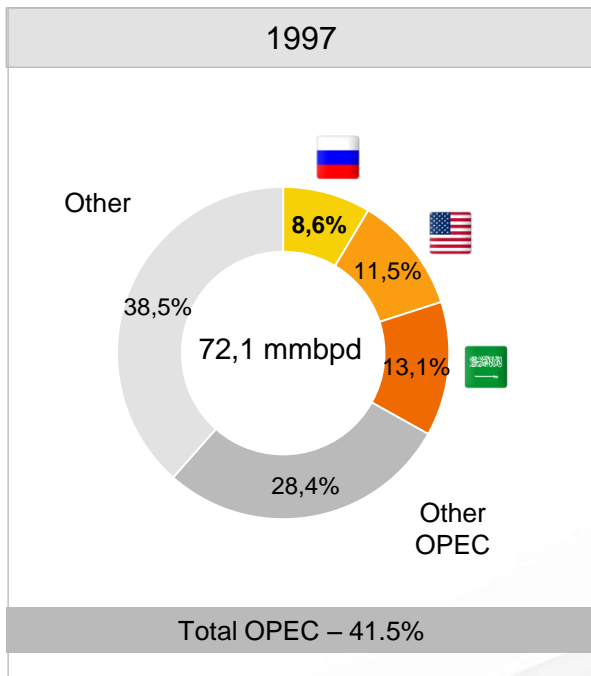
	2014	2016	Change
Investments, \$ bln	124	36	-71%
Horizontal wells	1 030	322	-69%
Wells completed	22 750	8 930	-60%
Number of drilling rigs older than 2011	72%	28%	-44%
Number of stages per well	23	32	+39%

## Increase In Shale Productivity In the USA

Cost of 1 mmbpd of production increase, \$ bln	59	30	-49%
Drilling footage per rig, thousand meters per year	41	61	+47%
Initial production rate, bbl/1000 feet of horizontal lateral well	38	42	+11%



# Over the Past 20 Years Share of Russia, Saudi Arabia and the USA in the Market Increased to 39.5%



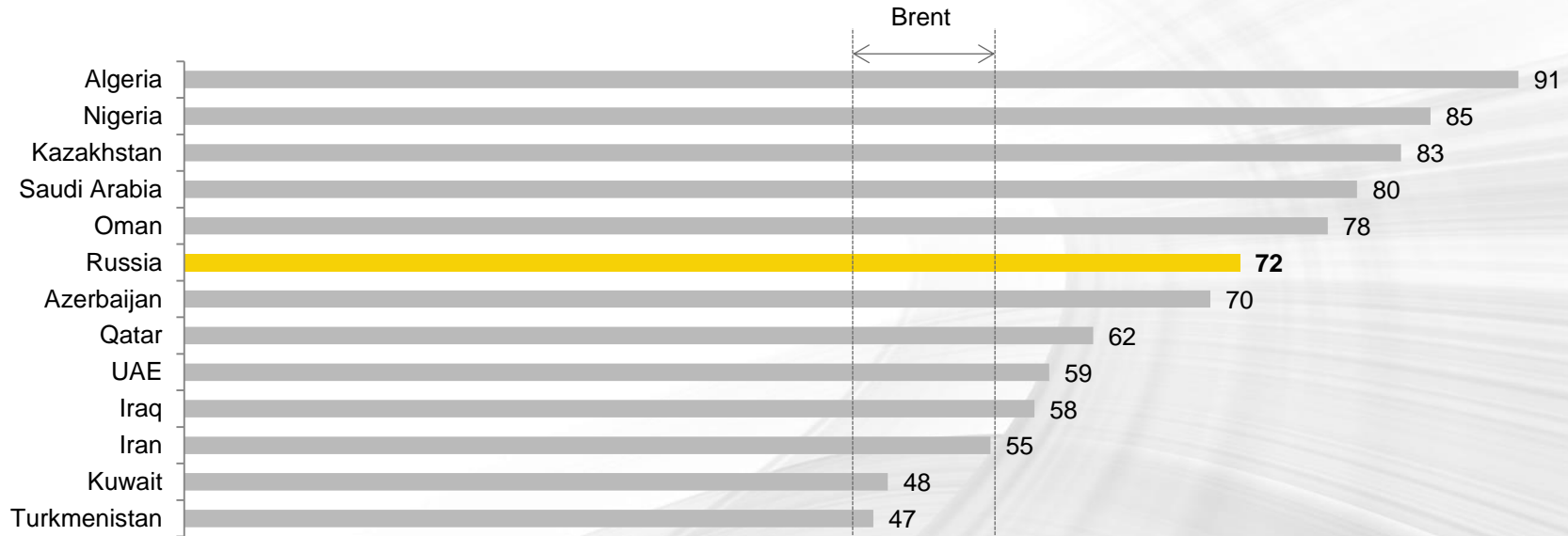
Note. Production includes oil, condensate and other types of liquid hydrocarbons, incl. LPG (pentanes, ethane-ethylene fraction, propane, propylene and others). The OPEC countries' extraction is given by the historical composition of the member countries of the organization for the corresponding year.

Source: BP Statistical Review, Wood Mackenzie

# Oil Producing Countries' Budget Deficit

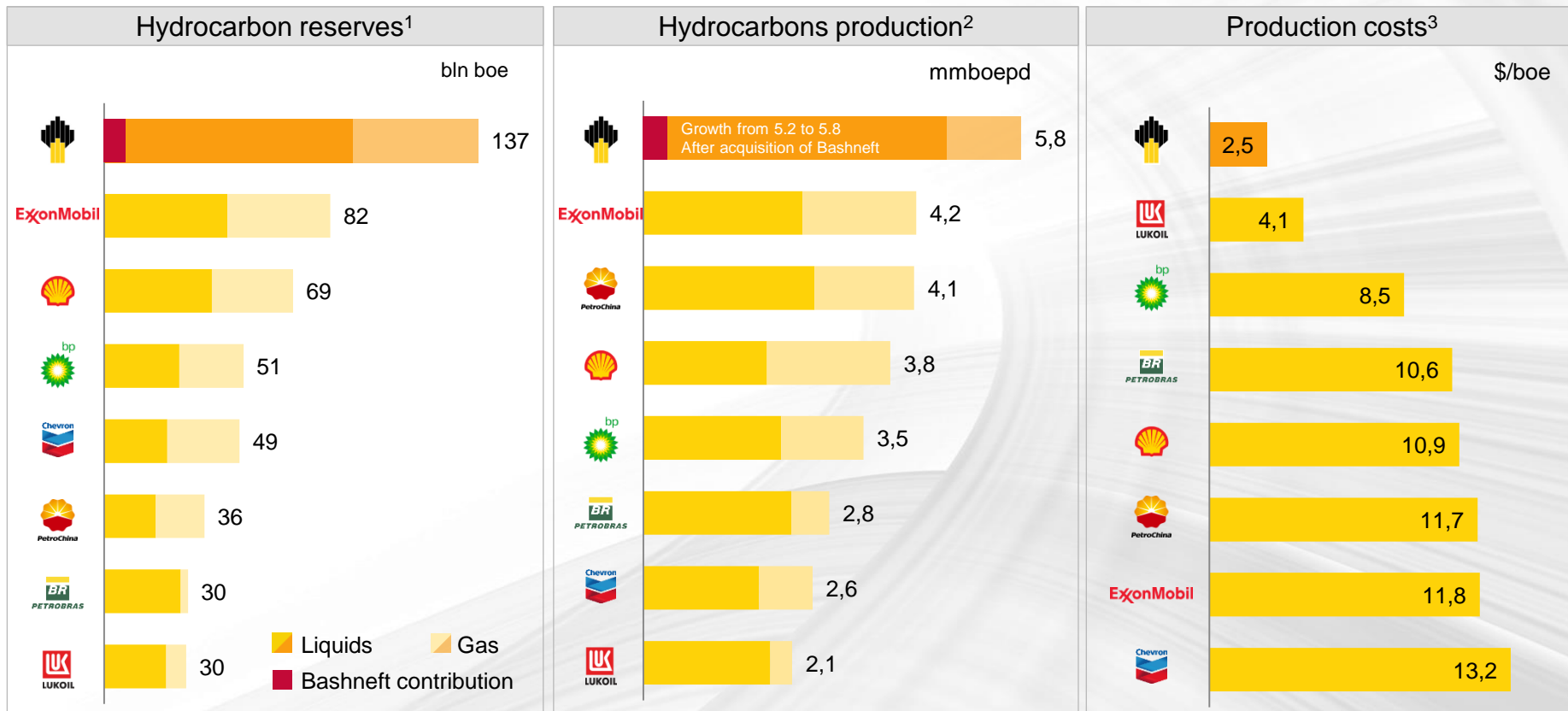


Oil price required for budget balance in 2016, \$/bbl



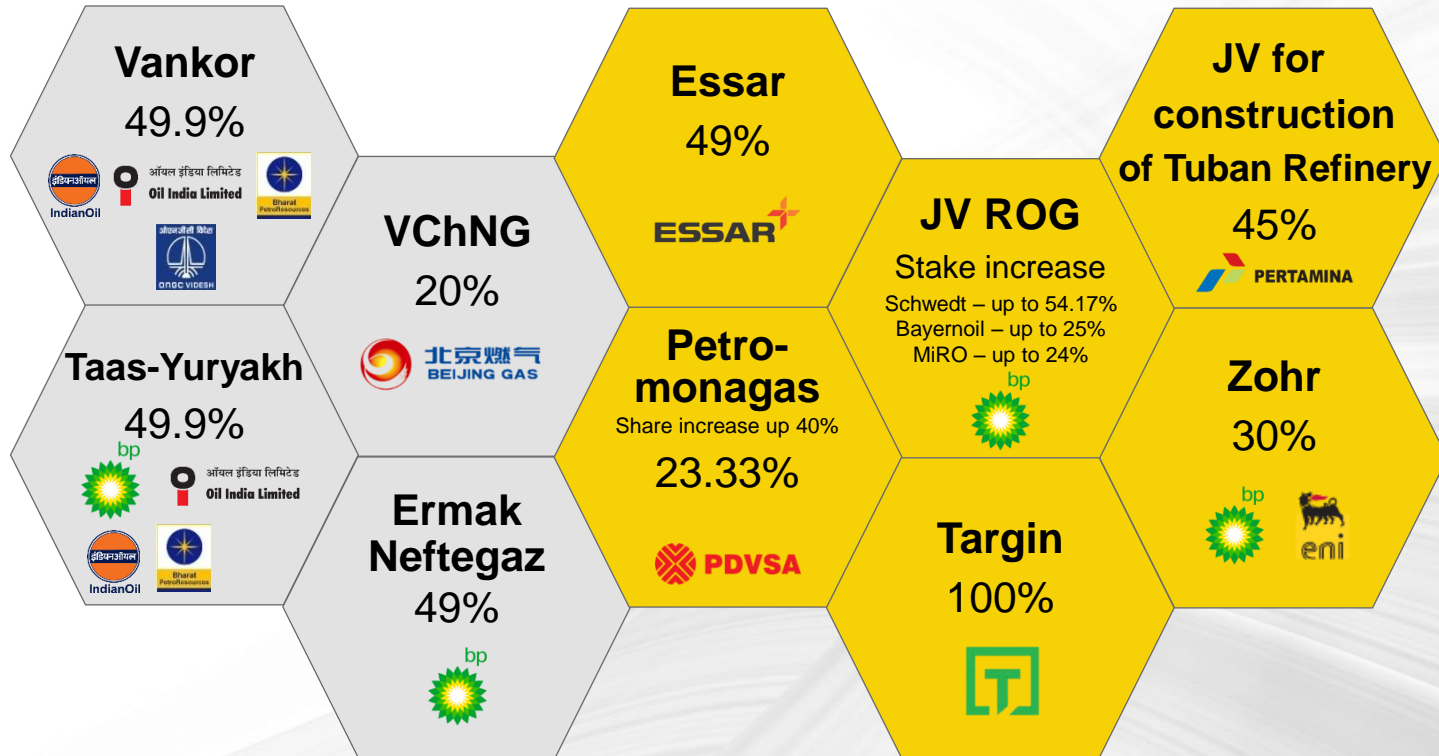
- State budgets of the main oil exporting countries remain in deficit at current price

# Leader Among Public Companies



Note: (1) Rosneft AB1C1+B2C2 reserves under Russian classification as of 01 January 2017 (incl. Bashneft), data for other companies is taken from Wood Mackenzie reserve estimates including commercial and sub-commercial reserves; (2) Lukoil's data – preliminary operating results for 1Q 2017; (3) Rosneft and Petrobras data for 1Q 2017, other companies – 2016 data.

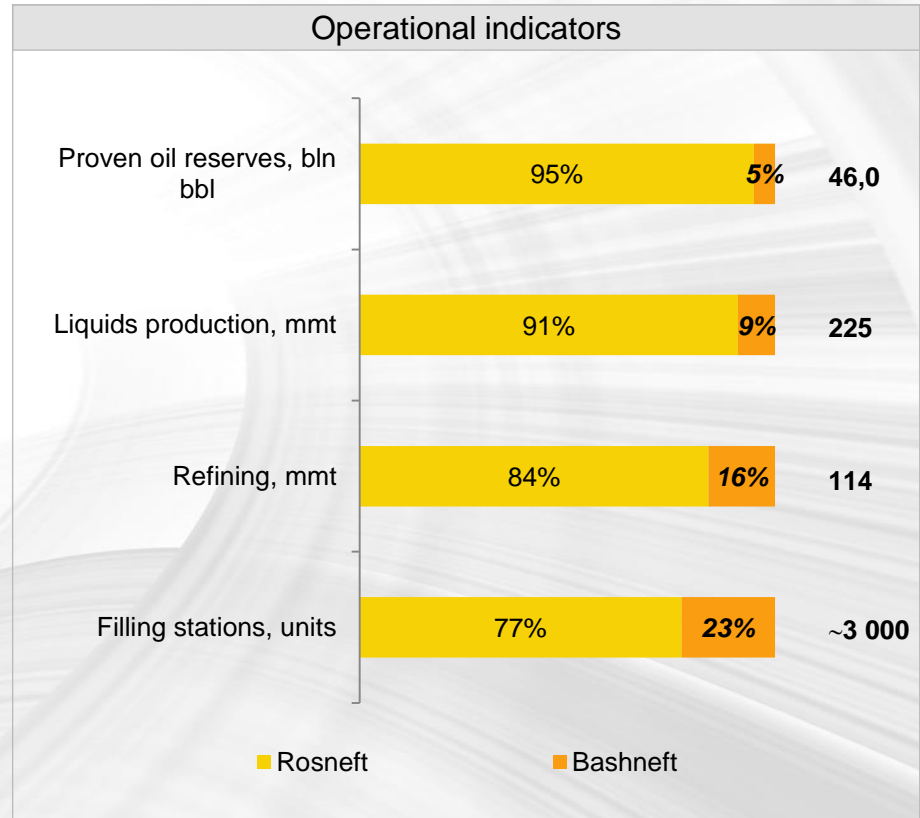
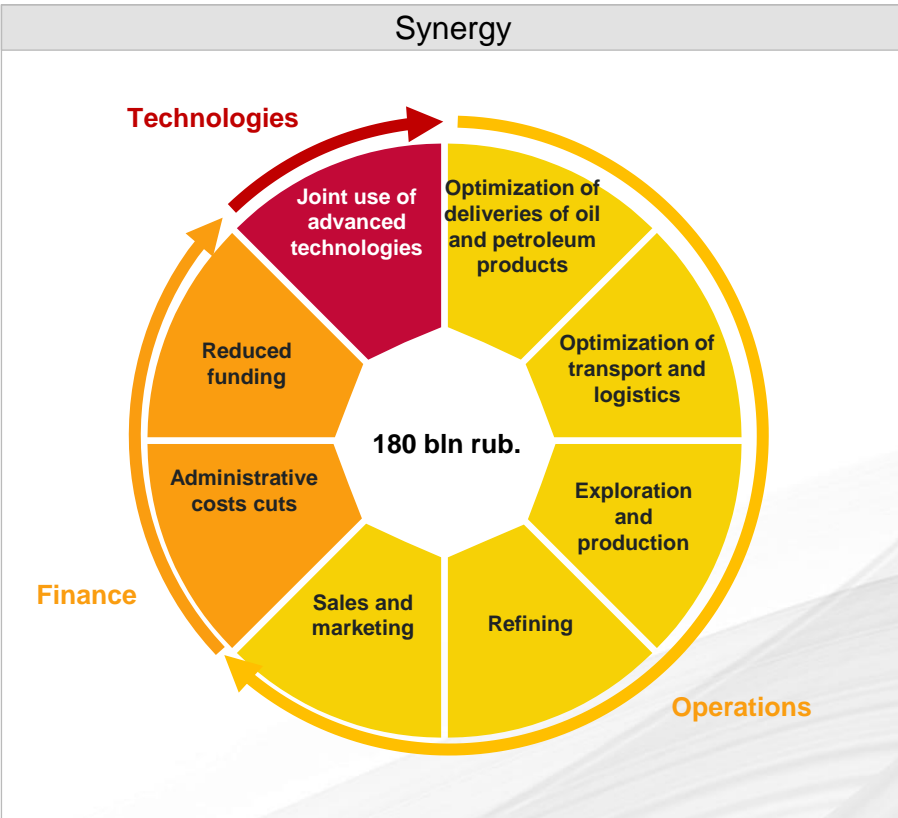
# Integration Enhancement



Setting up JV

Expanding presence

# Improvement of the Company's Performance Due to Synergy



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