# 26<sup>th</sup> World Gas Conference

## 1 – 5 June 2015, Paris, France



**Battle for talents** New Captains, new Seas <sup>©</sup>

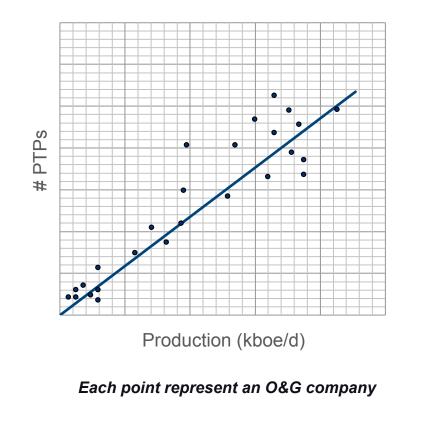
Antoine Rostand Managing Director, SBC



## Long term needs for technical staff remain strong

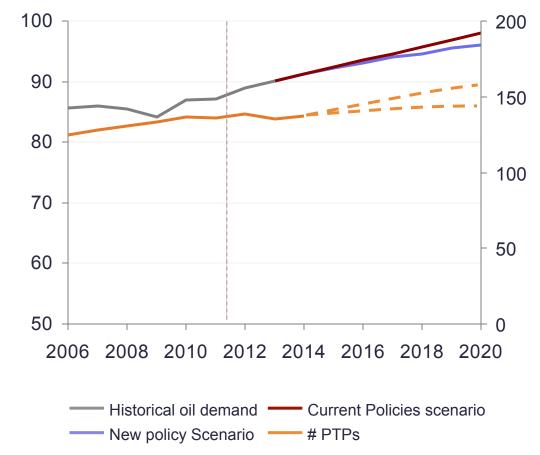
**PTP<sup>1)</sup> VS PRODUCTION** 

# of PTP, production (kboe/d)



# WORLD OIL DEMAND BY SCENARIO AND PTPS CORRELATION

Mbl/d, thousands of PTPs

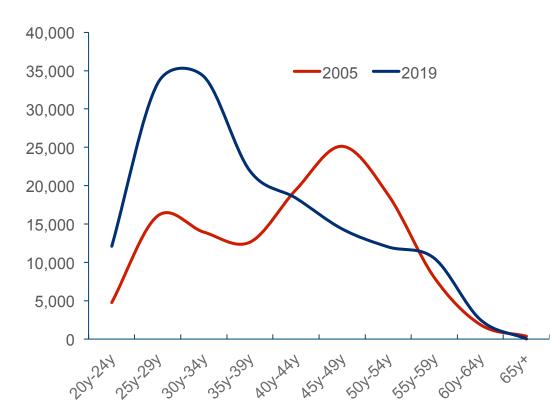


1) PetroTechnical Professionals: Geologists, Geophysicists, Petrophysicists, Drilling and Completion, Reservoirs and Production Engineers

Source: IEA World Energy Outlook 2014, SBC HR Benchmark, SBC Analysis

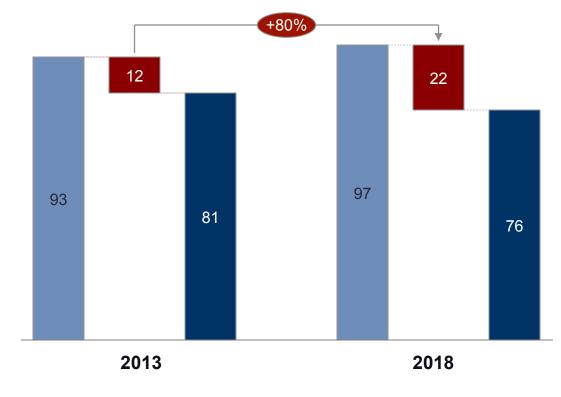
## Talent gap for experienced PTPs will widen

### GLOBAL DISTRIBUTION OF PTPS<sup>1</sup>) # of PTPs



#### SUPPLY / DEMAND OF EXPERIENCED PTPS<sup>2</sup>)

Thousands of professionals





1) Excluding China and oilfield service companies

2) Assuming global O&G production would grow by 0.9% a year

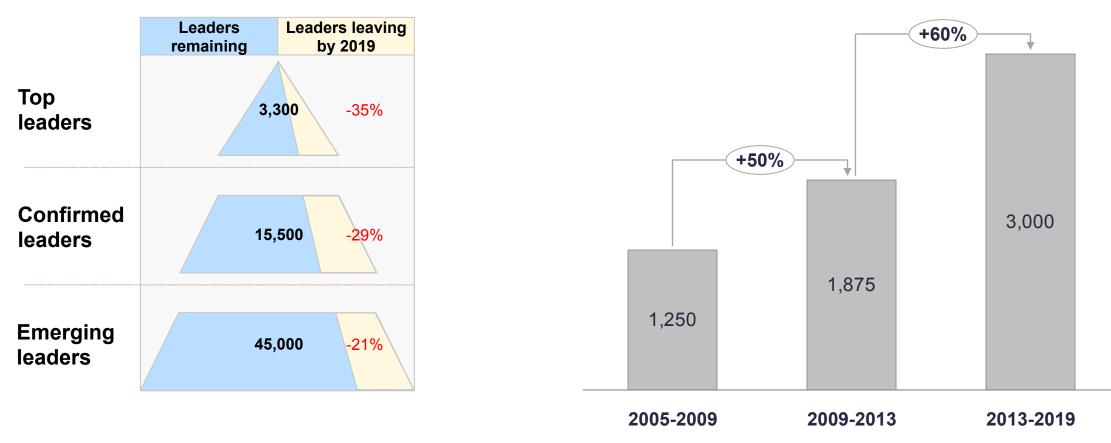
Source: SBC O&G HR Benchmark 2014, New Policies Scenario – IEA, WEO2014, SBC analysis

#### CURRENT LEADERSHIP STRUCTURE<sup>1)</sup>

Number of leaders, 2013-2019

#### ADDITIONAL LEADERS REQUIRED<sup>2)</sup>

Number of additional leaders required, 2013-2019



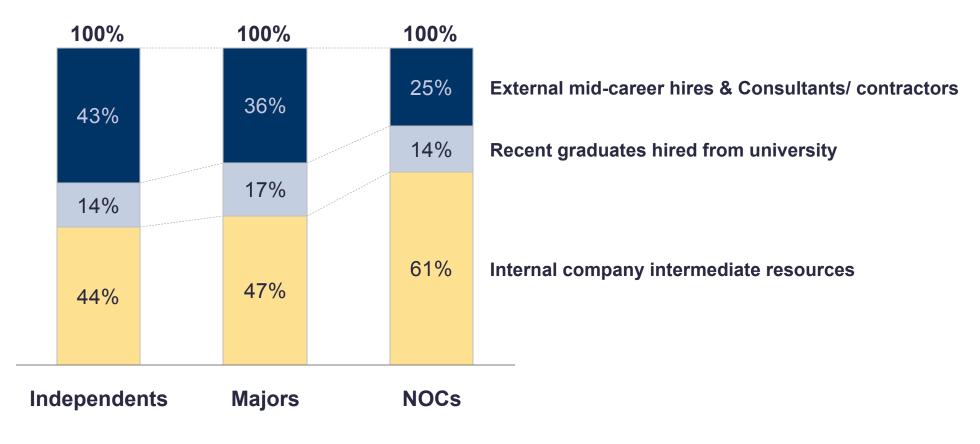
1) Retirement rate at 20% for 55-59 age group, 50% for 60-64 age group, 70% for +65yr; 2%/year attrition for emerging leaders

2) Requirement calculated taking into account industry growth, replacement of top and confirmed leaders and attrition of emerging leaders

Source: SBC O&G HR Benchmark 2014; IEA – WEO 2014, SBC analysis

#### **ORIGIN OF INTERNAL PROJECT TEAM RESOURCES**

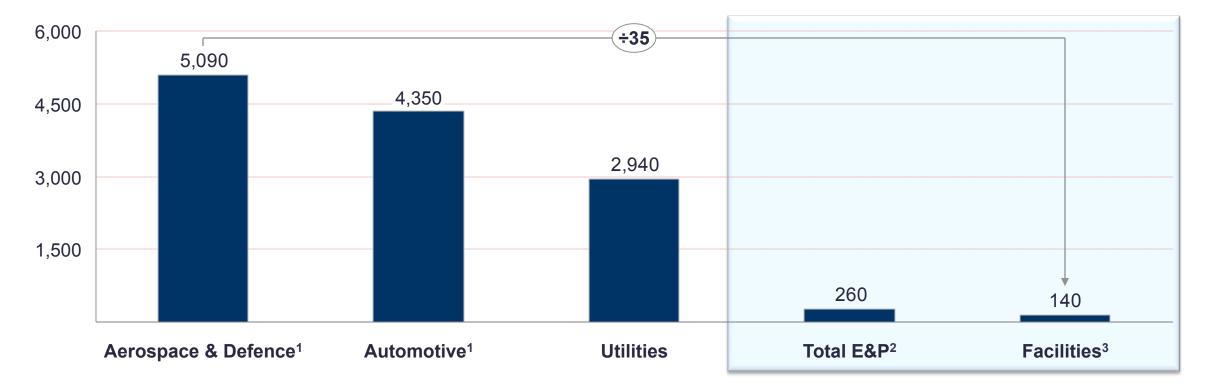
Average of respondents (%)



## Do we have enough qualified engineers?

#### **ENGINEERS & PTP STAFF TO CAPEX RATIO**

Staff members per Billion USD spent, 2013



1: Based on a sample of representative companies on each sector. Considers industry engineers

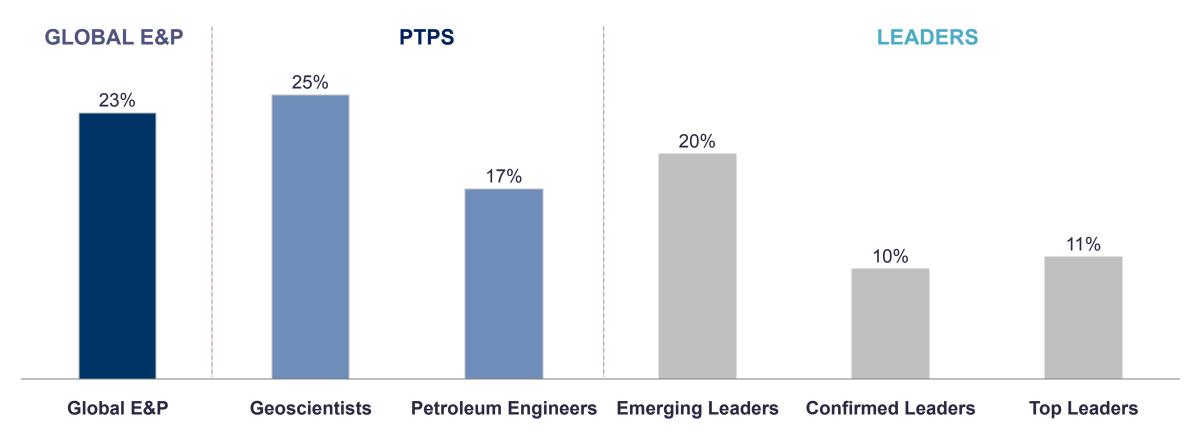
2: E&P Capex/(PTPs + Capital Projects Eng. + Maintenance & Inspection Eng.)

3: Facilities Capex/(Capital Projects Eng. + Maintenance & Inspection Eng.)

Source: Aviation Week, SBC interviews with Airbus executives, SBC HR Forum 2014, SBC Analysis

% OF FEMALE STAFF

#### 2013, average of respondents



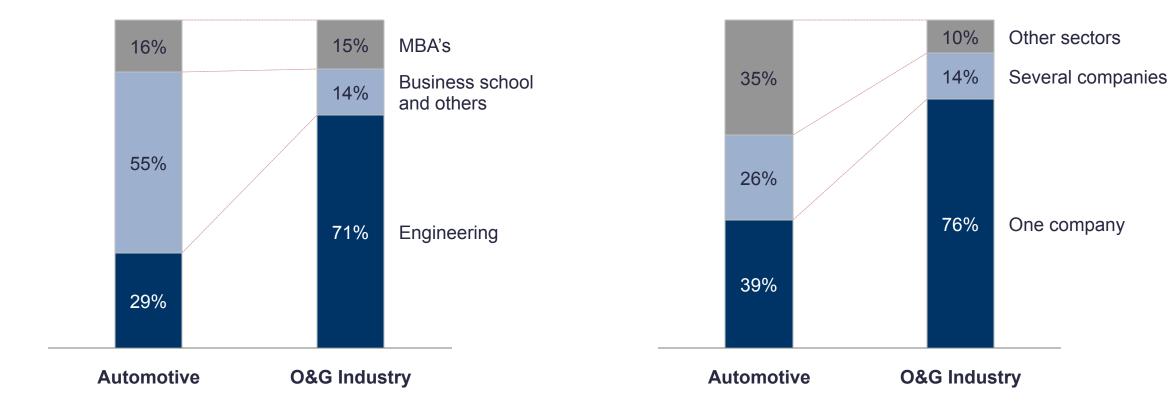
## Are we diverse enough in terms of competencies?

#### AUTOMOTIVE VS. O&G EDUCATION BACKGROUNDS<sup>1)</sup>

#### %

### AUTOMOTIVE VS. O&G EDUCATION CAREERS<sup>2)</sup>

%



1: Based on 15 largest Automotive companies

2: Based on 15 largest Oil and Gas companies

Source: SBC analysis