

25th world gas conference "Gas: Sustaining Future Global Growth"

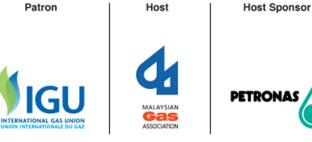
Mapping the Gaps

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06.06.2012

Kuala Lumpur









- Natural gas will continue to play a leading role in the world energy mix , its share growing to 25% by 2035 according to the IEA.
- \$ 8 trillion will be required to deliver production, transportation and LNG infrastructure.
- According to 185 industry leaders interviewed by the Economist, skills shortage is one of major barriers for growth.
- The Malaysian Triennium of International Gas Union decided to create two Task Forces dedicated to Strategic Human Capital and Nurturing Future Generations.
- TF1 dedicated 3 years to understand and map the issues and gaps around recruiting , developing and retaining Talent in the gas industry.
- The French Triennium will create a merged HR Task Force.
- TF1's Triennium detailed report is already available in the WGC proceedings

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Task Force 1 conducted two surveys in 2010-2011: a demographics survey and a detailed HR benchmark survey

- Objective of the Demographic Survey:
 - quantitative approach

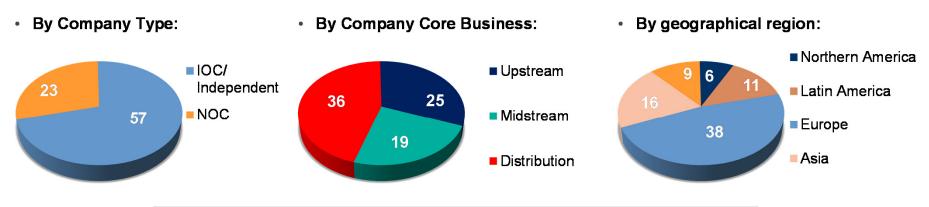
Survey Objectives

- snapshot of the HR resources across the gas value chain
- understand some key issues impacting the industry today and tomorrow
- establish the commonalities and specificities across regions and industry segments
- Objective of the Detailed Survey:
 - in-depth approach
 - detailed information on company stats and policy
 - research best practices

TF1: Demographic Survey



IGU DEMOGRAPHIC SURVEY PARTICIPATION FROM GAS PLAYERS: 80 COMPANIES

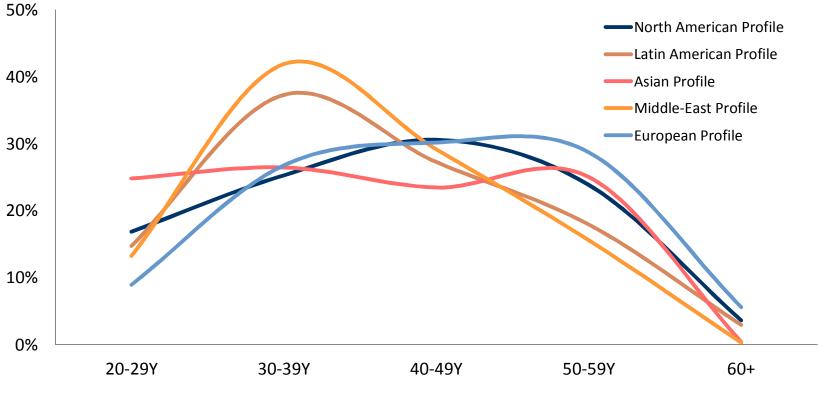


80 companies organised by Geographies and Core Business

	Europe	Middle-East Africa	Asia	N. America	L. America
Upstream	13	-	7	2	3
Midstream	6	4	5	2	2
Distribution	19	5	4	2	6

The gas industry is ageing, particularly in the West

REGIONAL DEMOGRAPHIC PROFILES (TECHNICAL STAFF)



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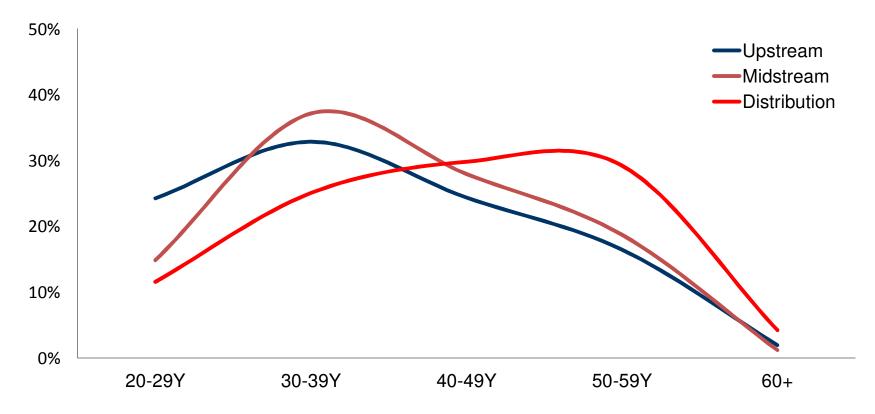
60% of technical staff in the Middle East are below 40 year-old

Source: IGU HR Survey 2012

Note: Technical staff includes Operations & Production and Engineering & Production; Profiles based on weighted average

Distribution companies have an older age profile than Upstream and Midstream companies

DEMOGRAPHIC PROFILES BY CORE-BUSINESS (TECHNICAL STAFF)

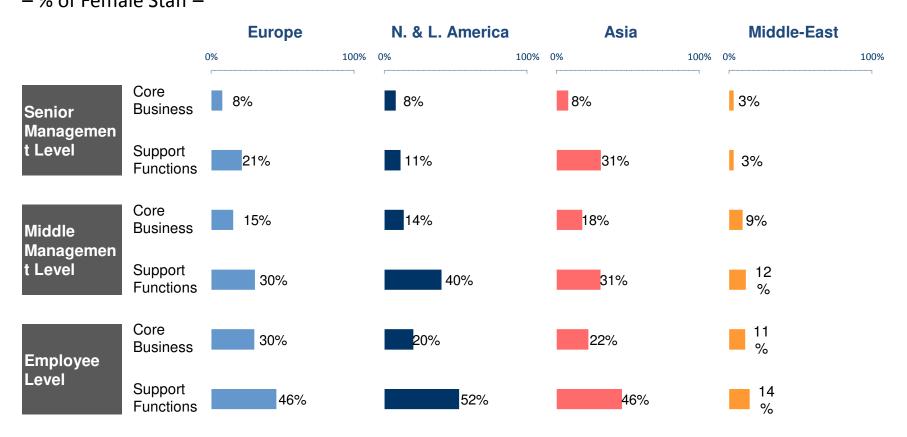


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Source: IGU HR Survey 2012 Note: Technical staff includes Operations & Production and Engineering & Production; Profiles based on weighted average

Proportion of female is low in most regions, especially in the Middle-East, and is lower at senior levels

% OF FEMALE STAFF FOR JOB CATEGORIES – % of Female Staff –



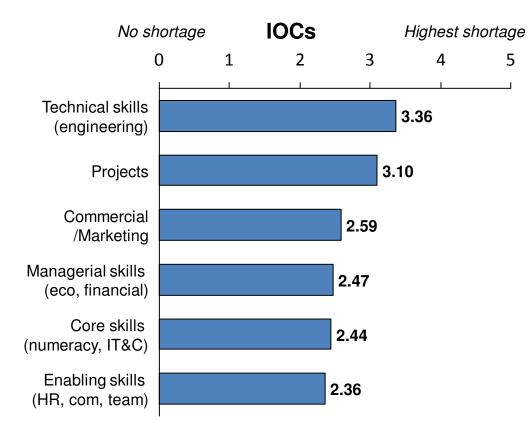
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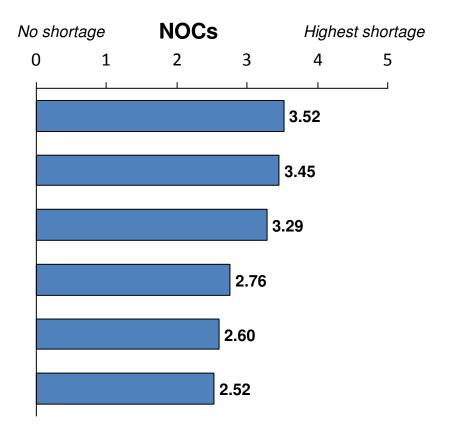
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Gas companies suffer from a shortage in technical, projects and commercial skills, with NOCs suffering more than IOCs

5







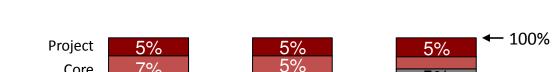
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Over the next 10 years, gas companies do not expect technical talent gap to reduce

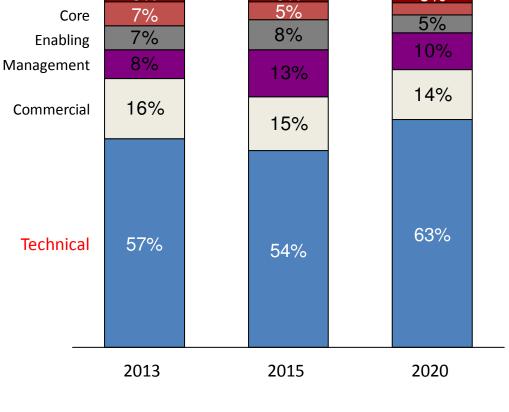
Categories includes:

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- Project: project management
- Core: numeracy; IT;
 procurement & logistics
 - Enabling: HR; communication; team building; leadership
 - Management: strategy, economical & financial; asset management
 - Commercial: sales & marketing; planning & business development
 - Technical: engineers; operations; constructions & experts



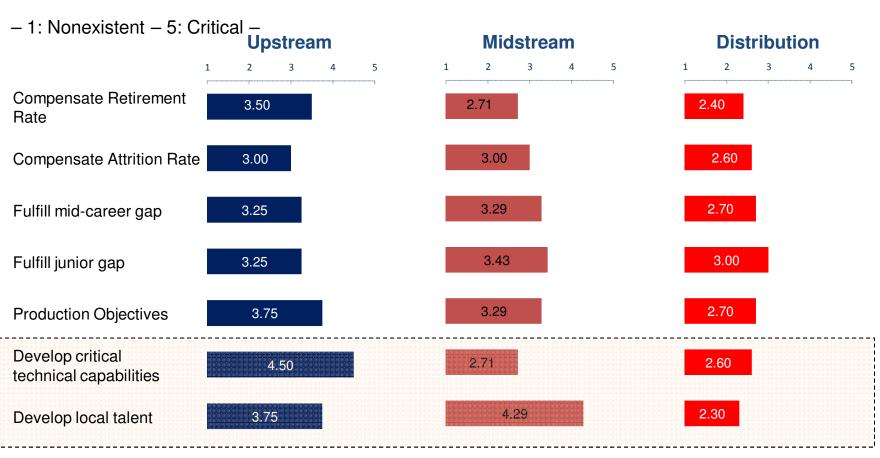
TOP SKILLS SHORTAGES EXPECTED BY GAS COMPANIES



Critical capabilities and local talent are key elements driving manpower plans



WHAT ARE THE DRIVERS TAKEN INTO CONSIDERATION IN YOUR COMPANY'S MANPOWER PLANS?

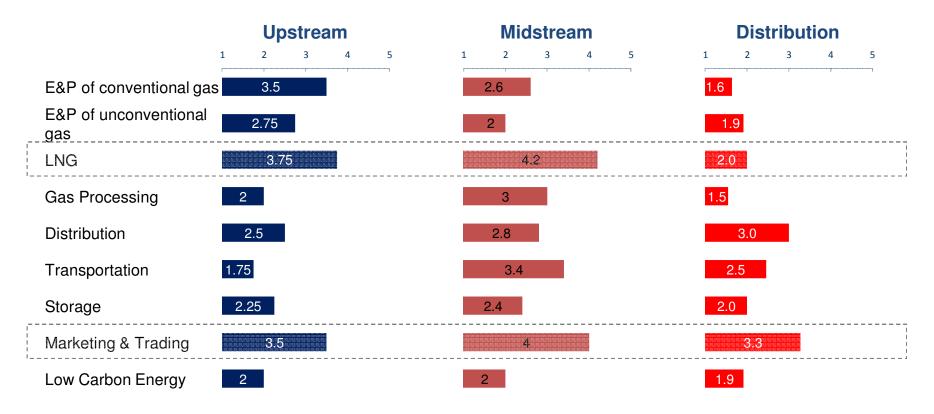


LNG and Marketing & Trading are the key capabilities that companies seek to develop

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WHAT ARE THE LONG TERM CAPABILITIES AT A 2 TO 10 YEARS HORIZON CRITICAL TO ACHIEVE YOUR BUSINESS PORTFOLIO?

- 1: Nonexistent - 5: Critical -



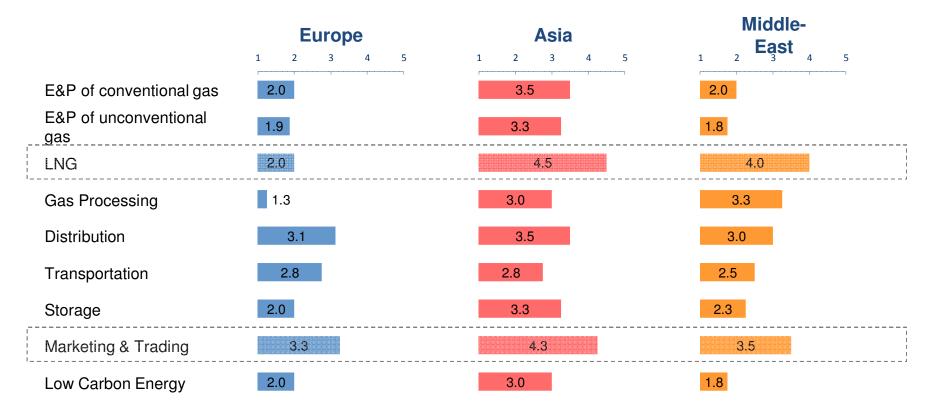
LNG capability is critical for Asia and Middle East, Marketing and Trading is essential in most regions

WHAT ARE THE LONG TERM CAPABILITIES AT A 2 TO 10 YEARS HORIZON CRITICAL TO ACHIEVE YOUR BUSINESS PORTFOLIO?

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- 1: Nonexistent - 5: Critical -

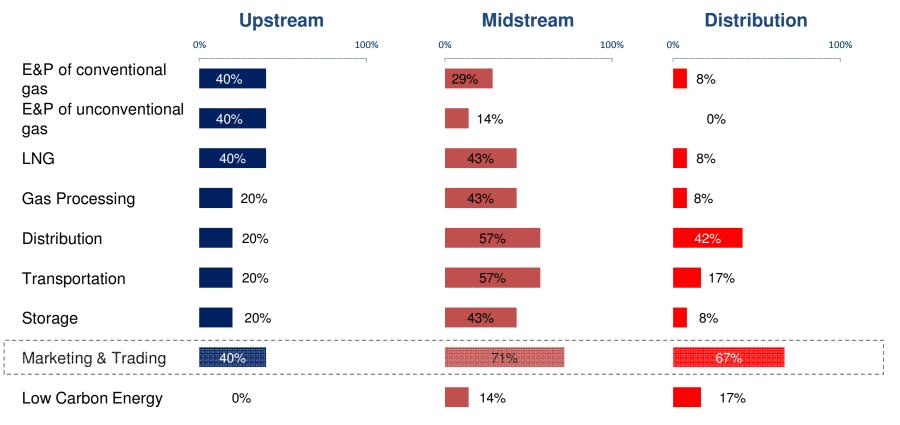


Marketing and Trading is a critical priority for graduate recruitment. LNG and E&P are also important



HIGH PRIORITY FOR 2011 GRADUATES RECRUITMENT

-% of respondents -

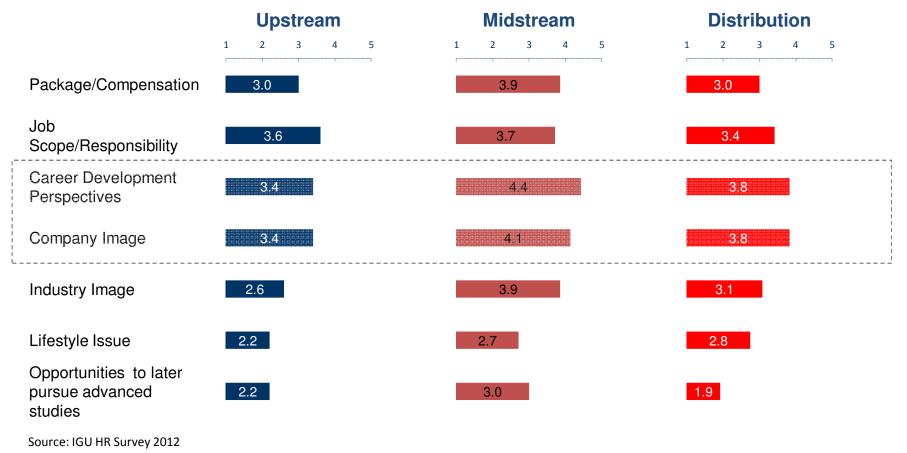


Career development and company image are attractive factors for fresh graduates

MAIN FACTORS DRIVING FRESH GRADUATE RECRUITS TO ENTER YOUR COMPANY

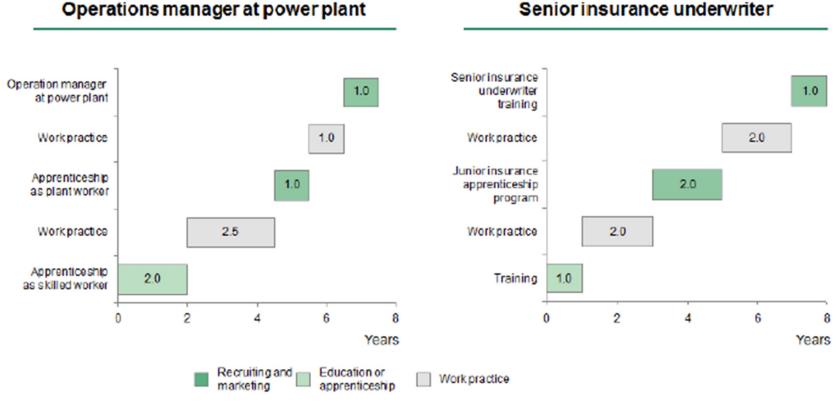
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- 1: Nonexistent - 5: Critical -



It takes at least 8 years to develop key career capabilities





Senior insurance underwriter

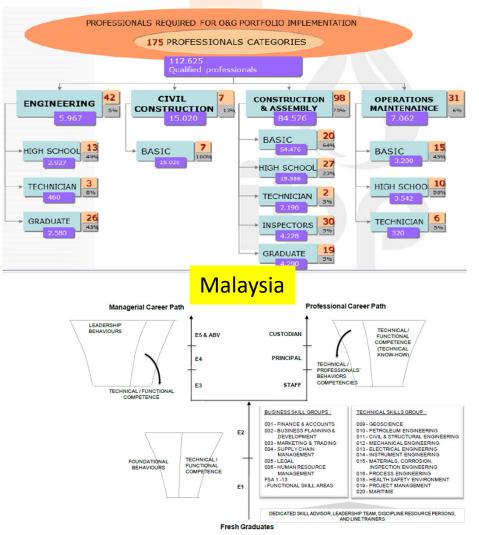
Source: BCG analysis.

Source: Boston Consulting Group

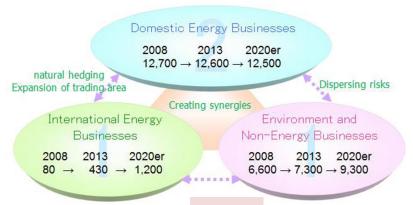
The industry is waking up to attract young people



Brazil



Japan



Spain





TF1 – summary & key findings

- Gas is the "fuel of the future" people are a key element to deliver this growth
- Challenges are different across regions:
 - gas industry is exciting in Middle East, Asia and Americas whereas Europe faces ageing workforce and debate around "environmental" agenda
 - several countries have set target for hiring "local" talent but it is difficult to find experienced talent in ME and Latin America
 - number of companies working closely with universities to "develop" talent
 - companies with ambition to go "international" challenge of not enough local talent
- Talent attraction perspective of youth
 - young people want to make an impact
 - companies should show social responsibility and respect for nature
 - fast career growth with challenges at young age
 - endeavor to recruit more women in workforce
 - work-life balance & competitive remuneration