Prices, Production & People

On behalf of
The CWC School for Energy

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Oil Price History – WTI
A “Boom and Bust” industry

- US oil demand peaks
- 2nd Oil Crisis

- US Crude oil production peaks

- 1973 Oil Crisis

- Gulf crises

- "Arab Spring"
- Higher price expectations of producing countries to fund economies

- 2nd Gulf War

- Netback pricing

- Dissolution of USSR

- OPEC Supply growth lags demand

- Global Recession
- Supply increases

- Asian financial crisis
- Iraq increases supply

- China Demand

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International Resources Consulting Ltd
Strong growth in energy industry recruitment

Period of instability, recruitment followed by lay-offs

Strong demand, deep water, new areas, unconventionals
The Great “crew change”

By 2015, E&P industry will have achieved its “crew change” transition

Schlumberger Oil and Gas HR Benchmarking Study 2012

• Surge in demand with Deepwater and unconventionals
• Loss of 22,000 skilled workers by 2012
• Net loss of 5,500
• Cost increases and project delays
• Major company increasing mid career recruiting strategy by 60%

Some developing nations have set national recruitment targets as high as 85% although may not be achievable. Shortage of skilled, senior mentors who are being lost from the industry.

Schlumberger metric “Time to Autonomy” up to 14 yrs

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As oil price rises so does demand for workers - UK

• UKCS report: Rise in number of core and non-core workers as oil prices rise.
• Incremental production schemes, additional maintenance to prolong production
• Recruitment in entry level greater than those in 55-65 group

Source: UKCS workforce demographics report

• Majority (84%) of offshore workers drawn from UK, well educated and trained and within easy access to offshore logistics bases
• UK workers increasingly source overseas assignments especially in developing countries with high wage premium

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Demand for Manpower correlated to Oil Price and Growth in Shale O&G

- Growth in US oil and gas personnel driven by oil prices and also demand for Oil and Gas shale unconventional exploitation which is more labour intensive.

- Demand largely satisfied by domestic labour pool with average retirement age increasing 58 to 58.5 2010 - 2011
- Salaries and hourly rates increased significantly
- US oil production at highest level since 1992

Energy Consumption has risen by 50% in 20 years

The contribution of liquid fuels has declined from 39% to 33% of the Total Primary Energy Supply

Natural gas and Coal have become more prominent (22 → 24% and 27 → 30%)

Source BP Energy Outlook 2030: Jan 2013
The contribution of renewable “Green” energy to the energy mix has been significant, but fossil fuels are expected to remain dominant for the foreseeable future.

The demand for Natural Gas as a low carbon fuel is increasing.

Natural Gas is no longer a “nuisance” and unanticipated consequence of searching for oil, but a goal in itself.

Major new gas finds around the world are driving global trade in LNG.

Natural Gas Prices trend with Oil

Crude Price Equivalent

Source BP World Statistics 2012
Energy Trends and Growth Of Natural Gas

Energy Consumption set to rise by 36% over next two decades with Natural Gas adding both absolute values and relative contribution.

LNG growth 8% pa and doubles every 10 years. LNG expected to grow from 10% total gas demand to 15% by 2030. Demand growth projections 2017+ price sensitive.

Source: BP Energy Outlook 2030: Jan 2013

Source: Patricia Roberts

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The LNG Energy Sector HR Challenge

Petro-technical skill sets will be a challenge to satisfy with rising demand for talent at the same time as falling numbers of highly skilled staff.

But LNG also requires the business skills which can make multi-billion dollar developments commercially successful.

Strategists, Economists, Marketers, Negotiators
.....and realistic expectations of new resource-rich nations

When new and significant energy resources are found the expectation of both politicians and population at large increases rapidly

Multi-billion dollar LNG projects can take 15 years to pay down initial investment

Unreasonable expectations of host country government and populations must be tempered with enlightenment and education
Gas Recruitment Education & Training - GREaT

RECRUITMENT

EDUCATION

TRAINING

ADD VALUE

INVEST

RETENTION
BUSINESS GROWTH
EFFICIENCY
COMPETITIVE EDGE

International Resources Consulting Ltd
The challenges to GREaT

**RECRUITMENT**

Multiple phases of oil price boom and bust have led to a “Hire and Fire” culture within the Energy Industry.

As demand for energy industry skills declined in the 80’s and 90’s, university courses also declined. Petroleum Engineering 75% decline 1983 – 2006.

Focus on climate change and “Green Energy” has made traditional fossil fuel industry less attractive as a career.

Dual career couples may be financially disadvantaged even in premium locations.

Security issues drive up costs and reduce attractiveness of remote locations in developing countries.
The challenges to GREaT

Non-Technical staff recruited from wider talent pool and often have limited understanding of the energy industry

Poor communication can lead to inefficiencies and misunderstandings, especially if in different locations

HR is often responsible for organizing training courses, yet may lack the depth of understanding

Broader education in the energy sector is critical to career development in building effective multi-discipline teams

In developing countries the political representatives who are responsible for the legal and regulatory regime may be lacking in understanding of the industry

In developing countries, public enlightenment education is critical to manage unrealistic expectations

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The purpose of Training is to develop a specific skill set or expertise to apply to the current position.

As the technical requirements of deep water and the exploitation of unconventional reservoirs (shale oil and gas, Coal Seam Gas) increase, retraining is critical.

The needs of technical staff can overshadow the needs of commercial and financial staff. Critical skills of negotiating, strategic thinking and finance can be overlooked even though they are critical to profitability.

There is an overall shortage of talent as demand rises.
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- Focus on Africa,
  - NOG, G of G, E.Africa, N.Africa
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- Deep Water, Technology, Projects
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Thank you