Change in the Energy Industry and its Supply Chain

19 November 2019

Overview

Access for Women in Energy (AccessWIE), in collaboration with Nexant and Women in Leadership in Latin Amereca (WILL), organised a breakfast briefing event on the Change in the Energy Industry and its Supply Chain. The event took place in the City Conference Model Room in London on 19 November 2019.

The discussion started with welcoming remarks from **Ms. Anna Ibbotson**, Vice President, Energy & Chemicals Advisory, Nexant, and followed by insightful presentations from the following speakers:

- **Lord Howell**, Co-Chairman of AccessWIE and Former Secretary of State for Energy in the UK, discussed key opportunities and challenges, arising in the era of energy transition, and the role of technology and governments in moving the industry transformation forward.
- **Dr Carole Nakhle**, CEO of Crystol Energy and Director of AccessWIE, took the audience through fundamental challenges in oil markets, implications on oil prices and a new strategic direction of traditional major oil producers.
- **Ieda Gomes**, Co-Chairwoman of AccessWIE and Director of WILL, examined natural gas supply and demand trends. Mrs Gomes highlighted the role of LNG in addressing power shortages in emerging markets and options and hurdles for gas and renewable energy.
- **Silvia Pavoni**, Economics Editor at the Banker and Director of WILL, talked about Environmental, Social and Governance (ESG) factors reshaping finance, climate change-related risks and financial disclosures, as well as policy actions and regulation.

The speakers (from left to right): Lord David Howell; Ieda Gomes; Dr Carole Nakhle; and Silvia Pavoni.

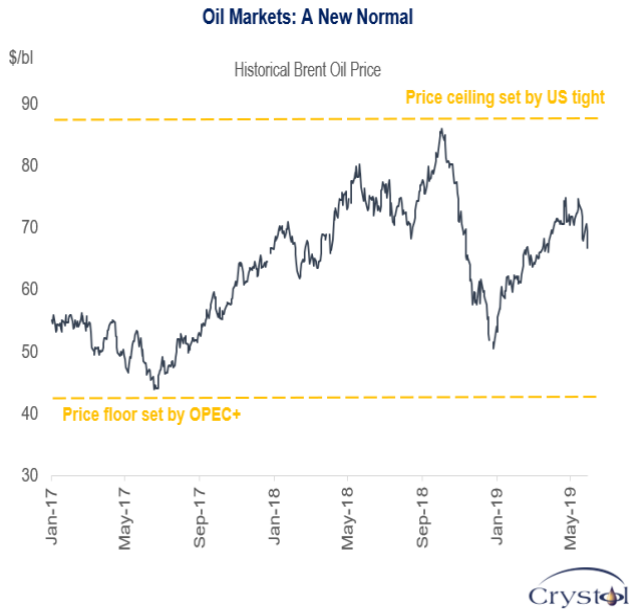
The following sections summarise the key highlights of the discussion.

Energy Transition

- International Oil and Gas Companies (IOCs) are facing increasing political and public pressure to accelerate the energy transition to move faster towards 'greener and cleaner' future and deliver what has been promised.
- However, despite all the efforts and promises, global energy remains overwhelmingly oil, gas and coal-based and both the 1.5°C temperature increase limit set by the Intergovernmental Panel on Climate Change (IPCC) and 2°C approved by the Paris Agreement are simply unattainable in the current circumstances. For example, although demand for electric vehicles is expected to grow in the future, the current fleet is heavily dominated by diesel and petrol cars: only 7 million out of 1.2 billion units are electric - less than 1%!
- The Energy Transition is under a big question as many countries, volunteered to curtail emissions, are not big emitters. For instance, the UK is estimated to produce less than 1% of the total world`s emissions and any further reduction will be negligible on a global scale. In its turn, the US, a large emitter, has reportedly decided to withdraw from the Paris Climate Agreement. China, India and Saudi Arabia are still massive polluters and are not even close to what the UK and some other European peers have achieved.
- Technological and operational advances are the key instruments to decarbonise the industry and to find a balance between rising world`s energy needs and reducing GHG emissions. For example, new nuclear technologies such as Small Modular Reactors (SMR) should be deployed more widely as they provide steady, carbon free power.
- The energy sector is challenged by mass protests against the 'climate crime', especially among the younger generation, causing not only work disruptions but potentially a dramatic talents and skills shortage.
- As environmental concerns are gaining momentum, it is becoming a critical element of election campaigns across the globe. Looking at the UK political arena, most of the leading parties have been traditionally focused on tackling economy, crime and international relationships problems. However, the importance of climate change programmes has been recognised and the climate issue will become pivotal to win more votes, particularly in the younger community.

Fundamental Changes to the Oil Markets

- Only a few years ago, the mere threat to close the Strait of Hormuz, the most strategic waterway for oil trade, would send oil prices rocketing and create a widespread panic globally.
- Today, several back-to-back attacks on oil tankers took place in the Strait, in addition to major attacks on Saudi Arabia's oil processing facilities, at a time when record supply disruptions are noted elsewhere, yet the oil market barely took notice.
- Clearly something fundamental has changed and oil markets seem to have found a new normal, largely thanks to the shale revolution in North America, which not only resulted in plentiful supplies but also more flexible supplies at a time when demand is struggling.
- Such a simple yet powerful feature has created new dynamics among major oil producers, especially in the Middle East and within OPEC, as they face the rapidly rising competition particularly from the US, forcing them to rethink their strategies.

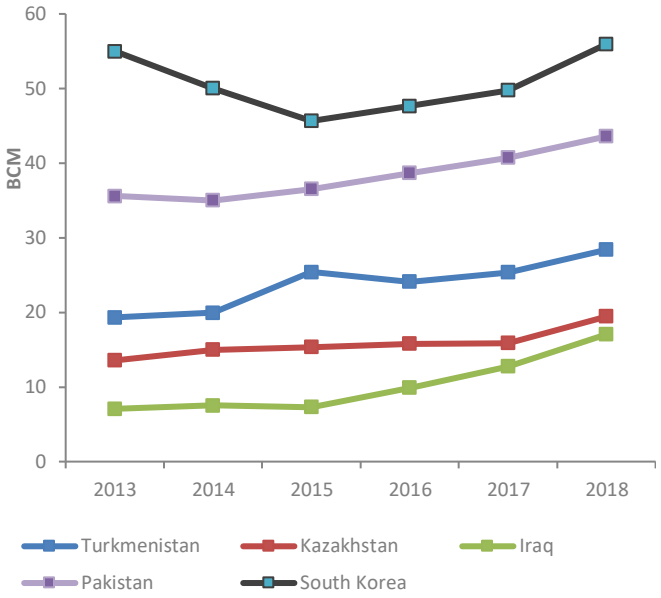


- It has also had major implications on the role of external actors in the Middle East with players such as Russia, China and India acquiring an increasingly more prominent role, driven by both commercial and political interests.
- On the positive side, the new market conditions have improved the business environment for oil companies in terms of access to new opportunities and more lenient fiscal terms, as the global competition for capital intensifies.

The Role of Natural Gas in Emerging Markets

- The growth in renewable energy and natural gas consumption have hit a record in 2018, but not enough to abate CO2 emissions, estimated to have surged by 2%.
- Renewables have remained the fastest growing source of energy. Its impact on emerging markets is still unclear, but certainly it will contribute to volatility in gas demand for power generation.
- A robust increase in gas consumption (+5.3%) was boosted by Asia, the US and the Middle East. It was particularly the result of lowered gas and LNG prices and dwindling domestic production in some emerging countries.
- The unprecedented gas market oversupply, largely driven by US unconventional production, pushed prices down. LNG prices dropped to US$3.30-5.30/MMBtu in 2019, whereas US Henry Hub moved around US$2.50-3/MMBtu.
- Consumption ramped up in select Central Asian markets, e.g. Turkmenistan and Kazakhstan demonstrated a two-digit increase. Demand in Iraq outstripped production and the government has decided to implement a gas flaring reduction programme for economic and environmental reasons.
- China`s LNG imports steepened in the last year, however, the growth was less than anticipated. The gas market also faces a significant uncertainty around the Celestial Empire`s longer-term ability to absorb all planned LNG supplies flowing from all over the world and competing with pipeline gas deliveries and domestic production.
- Some global gas consumption was dampened by a lower-than-expected growth of demand in India and increasing production and volatility in power markets in Argentina and Brazil.
- China managed to reduce coal`s share in its energy mix, albeit absolute coal consumption continued to rise.

Markets Showing Robust Gas Consumption Growth



- The global coal demand growth has also notably slowed down, however, it is still an important source of energy in certain emerging markets, including India and some other parts of Asia.
- n the medium term (2024-2025), emerging markets are expected to make up more than half of the global LNG demand. They are projected to consume ca. 262 Bcm at a 8.7% CAGR (Compounded Annual Growth Rate) compared to 2018. Nevertheless, the US should remain a key driver for gas demand.
- In China, coal-fired power plants will be gradually replaced with gas-fired power plants gas; the Middle East is forecasted to expand power generation capacity; industrial consumption within the region will support the growth of gas demand. Brazil has a significant gas potential as large volumes are currently being re-injected due to technical limitations and since all gas cannot find a home. Brazil may take off by 2025 providing 5,000 MW of additional flexible LNG power.

- The energy market is expected to be challenged by the surplus of LNG until 2025-2026 and the surging number of FSRU projects has already become a new normal for the energy market: around 17 and 51 FSRUs are being constructed and planned respectively – in addition to already existing 29 units in operation.
- All scenarios for 2040 predict slowing demand for oil products and robust demand for natural gas and renewables.

The Evolving Landscape of Energy Financing

- Shareholders are putting increasing pressure not only on oil and gas companies but also on their financiers to make them address climate issues and strengthen climate-related financial disclosures.
- In 2017, eight central banks and supervisors established a Network for Greening the Financial System (NGFS), which has since expanded to forty-two members, representing five continents. A fast-growing coalition was created to help achieve ambitious environmental goals and mobilise green and low-carbon investments.
- Some of the financial players have started to take decisive actions. For example, the European Investment Bank has recently announced that it will stop financing fossil fuel energy projects from the end of 2021 to align with the Paris agreement.
- It is clear, that ESG factors are becoming a top priority for banks, including large lenders to the energy sector, but this is a new area and the majority have yet to figure out how to incorporate ESG in their businesses and management framework.

Q&A

Networking Reception