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18
27 – 30 AUGUST
STAVANGER – NORWAY

INTERNATIONAL MARKETS

Present by NORWEP

BRAZIL SESSION

The information in the present report will support our DeepSea Environment Monitoring Cluster to create strategy and focus for the upcoming challenges and opportunities in deep-sea science, technology and business, in Brazil and Norway.

THE THEME FOR ONS 2018: INNOVATE

Every ONS has a theme, reflecting the current issues, challenges and opportunities of the energy industry. The main theme for ONS 2018 is INNOVATE.

There is one thing the entire energy industry has in common: our approach to challenges. No matter what the problem is, we know it is possible to solve it – if we innovate.

The energy industry has a talent for re-inventing itself, repeatedly, as an answer to whatever challenge lies ahead. The challenges we face now are complicated. They involve the obligation to deliver energy to the world's population, but at the same time to protect the planet. They involve new technology, new forms of leadership and new business models. So, let's innovate!

Technology doesn't just evolve. People innovate.

Finding and producing energy is complex, demanding, expensive and sometimes almost impossible. That is why some oil and gas fields have been left untouched for decades since they were discovered – to give the innovative people of the industry time to overcome the obstacles. By helping technology to evolve. By innovating. Technology development and innovation are part of the energy industry's DNA.

Innovate a clean energy world.

Making energy cheaper, cleaner and better. Not just new technology, but also developing existing solutions further and using them in new ways. Cost reduction has been one of the big tasks for both traditional and new forms of energy.

Stimulate to innovate.

We need leaders who are engineers of the future and facilitate a culture of innovation within their companies. New leadership models and strategies are in high demand to tackle a cyclical market and disruptive trends. Do the leaders of today have the tools and authority to make an impact, or are they restricted by demands to deliver profit soon?

Everyone has an obligation to contribute.

A sustainable and profitable energy industry is what everyone wants and what the world needs. How do we protect the environment and still maintain jobs and competitive businesses? How do we accelerate progress and make a positive impact for the future?

We must innovate.

ABOUT THE NORWEGIAN ENERGY PARTNERS (NORWEP)



NORWEP is the result of a merger between INTSOK and Intpow in 2017. Norwegian Energy Partners is an organization with a clearly defined objective: to support and assist in the internationalization of the Norwegian energy industry. NORWEP is acting as a catalyst for processes between Norwegian industry and international businesses and governments.

The vision of Norwegian Energy Partners is: Strengthening the long-term foundation for wealth-creation and employment in Norwegian energy industries through focused international efforts, building on the collective competitiveness of the partner companies.

Norwegian Energy Partners is a non-commercial foundation with a Board of Directors as its highest body. It is jointly financed by the Norwegian government and industry.

The founders are the Norwegian Shipowners' Association (Norges Rederiforbund), the Federation of Norwegian Industries (Norsk industri), the Norwegian Oil and Gas Association (Norsk olje & gass), Energy Norway (Energi Norge), Statoil, Statkraft, the Norwegian Confederation of Trade Unions (LO), Ministry of Trade, Industry and Fisheries, Ministry of Petroleum and Energy and Ministry of Foreign Affairs.

The main purpose is to strengthen the position and competitiveness of the energy industry internationally and securing increased wealth-creation through committed cooperation. Norwegian Energy Partners is founded on a shared intention of achieving synergies through focused efforts, coordination and managing activities and efforts.

NORWEP's work is based on customer orientation, cooperation, finding solutions, respect, integrity and competence.

THE BRAZIL SESSION

The Brazilian Session during the ONS 2018, was presented by Norwep, which brought to Norway a delegation made up of government institutions such as the Ministry of Mines and Energy (MME), the National Petroleum, Natural Gas and Biofuels Agency (ANP) (APEX), Petrobras, Equinor, among others. They talked about the perspectives, the projects and the opportunities, considering the progress made with the recent changes in the regulatory framework for oil and gas exploration in Brazil.

PROGRAM:

13:00 Welcome and introduction



Gunn Vik, Director, Norwegian Energy Partners

13:10 Opening of the Brazilian session

Ingvil Smines Tybring-Gjedde, Deputy Minister of Oil and Energy

13:25 Brazil market update

Adhemar Freire, Country Manager, Norwegian Energy Partners

13:45 Brazil Oil & Gas: Challenges and the way forward

Mr Marcio Felix, Deputy Minister of Mines and Energy

14:15 The Brazilian O&G Industry: Improvements, goals and opportunities

Felipe Kury, Director, ANP

14:45 Networking break

15:15 Equinor: Projects in Brazil and the strategy to grow

Anders Opedal, CEO Equinor do Brasil

15:45 How to do business with Petrobras/Projects and best prospects

Dimitrios Chalela Magalhães, Gen. Manager Procurement Strategy and Supplier Base Management, Petrobras

16:30 Investment opportunities and support foreign companies: Apex-Brasil services

Luiz Carvalho, Coordinator, Brazilian Trade and Investment Promotion Agency (Apex-Brasil)

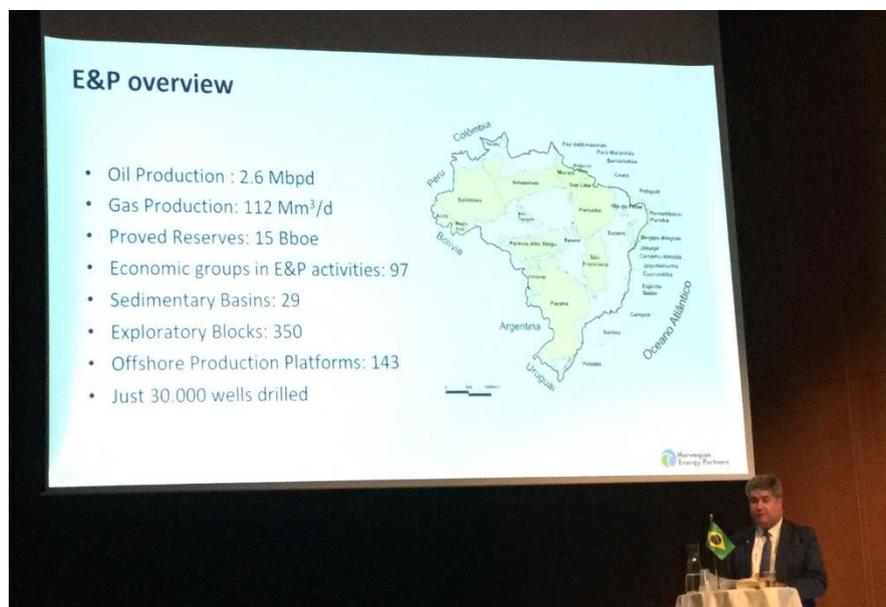
17:00 Close of session

THE BRAZIL MARKET UPDATE

Adhemar Ferreira presented the Brazilian updating, Oil and Gas market overview, opportunities, priority projects followed by Norwep and discussed challenges of the new rules of the Brazilian oil & gas sector and its impacts on the maritime offshore industry.

Norway has one of the biggest merchant fleets in the world, and Brazil is the main market for Norwegian shipowners outside of the North Sea. New players are entering the maritime industry in Brazil, with new investments, and higher oil price is also improving the scenario. But since 2016 Brazil had a lower economic growth than expected and the fiscal imbalance is still challenging. The upcoming presidential elections also creates uncertainties

Despite the country crises and challenges as corruption, complex legal and regular framework, complex tax regime and barriers to importation, the country is keeping the inflation under control, the leasing is reduced, the growing participation in bidding round and permanent bidding round are bringing optimism for future collaboration for the oil and gas market in Brazil.



Adhemar Freire, Country Manager, Norwep

The Research & Development Projects are becoming stronger with more funds and the post-salt decline will open a market for oil recovery and decommissioning projects. For that subsea technology will be essential.

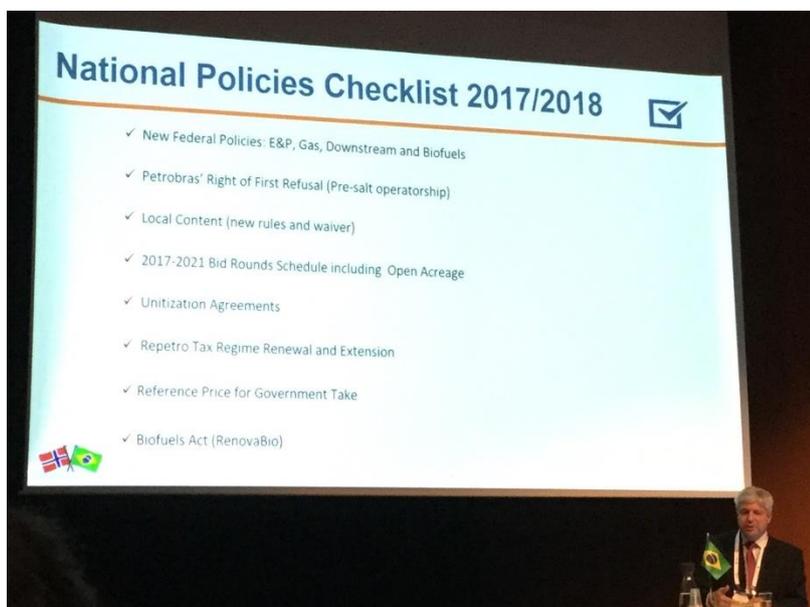
The pre-salt and the new regulation have brought important opportunities for long term projects in Brazil.

BRAZIL OIL&GAS: CHALLENGES AND THE WAY FORWARD

Marcio Felix, presented the national policies and the Brazilian regulatory framework, which are opening the market and improving the capacity of the country to recover from the last years' political and economic crises.

Brazil is urgent to get new investments and the offshore sector stands out as the most economically robust oil province in the world, today. The productivity on pre-salt shows that Brazil still explores only circa 5% of what can be done.

Transfers of rights renegotiation and special bidding rounds, together with the government transition are challenges for international investments. However, Brazil has a tradition to respect the past contracts and ANP is committed to keep the same framework.



Marcio Felix, Deputy Minister of Mines and Energy

Despite the last years, Brazil O&G market is still growing and is expected to see new economic growth. Continuous and sustainable investment are becoming forces for greater harmony among stakeholders in the energy sector.

The O&G market is expecting more diversity of agents, liquidity, competition, transparency and good practices to the country's growth.

The Pre-salt bid round agenda will promote new investments, more collaboration and is creating a "wave" of optimism and new opportunities in all sectors related to oil and gas production and exploration.

THE BRAZILIAN O&G INDUSTRY: IMPROVEMENTS, GOALS AND OPPORTUNITIES

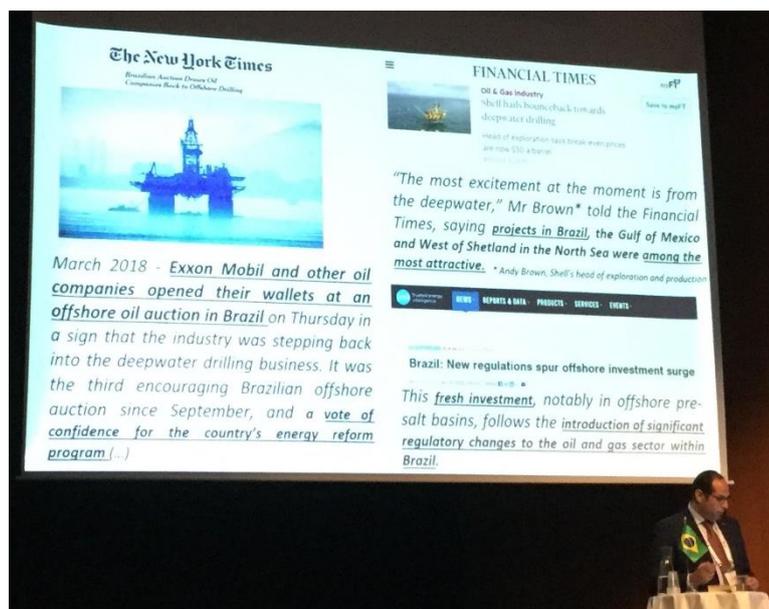
Felipe Kury show the ANP' s long term strategy and commitment with the future of oil and gas market in Brazil to create value through a develop, diverse and competitive market.

ANP main objective is to promote a predictable and stable regulatory framework, that attracts new investment and accelerate the development of the pre-salt, conventional offshore and onshore E&P environment.

Brazil can't afford explore the resources alone and ANP has change the main regulatory frameworks with new simplified contract, new local content rules, bidding schedules, extension exploratory phases, royalties' and collateral burden reduction.

ANP is catching up the last years gap of bidding rounds and supporting greater competition for better results:

- ✓ Attracting the right players with giants' fields, matures fields and unconventional resources.
- ✓ Maximizing the production with more diversity of players, new RD&I focus and financing opportunities.
- ✓ Increasing the E&P activities with the pre-salt development, improve of mature fields and recovery factor, and expediting environmental licensing.
- ✓ Creating a secondary market to attract mid/small size companies.



Felipe Cury, Director, ANP

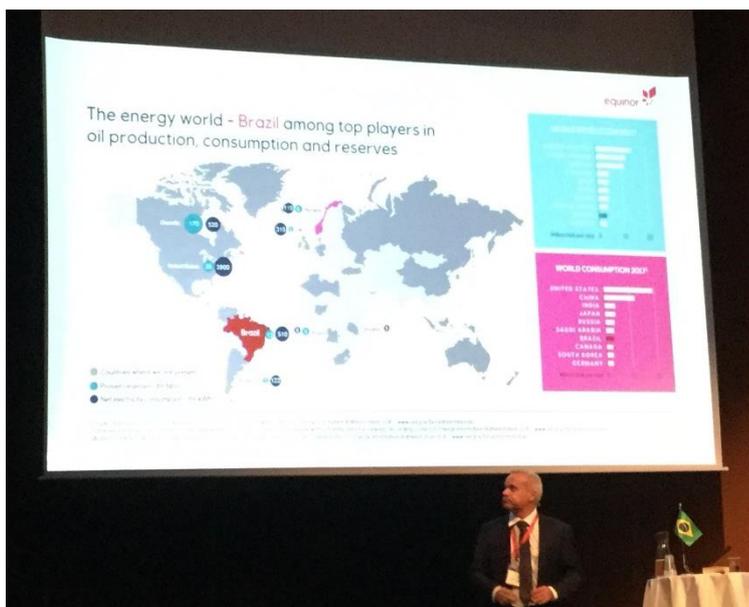
ANP and IBAMA are joining efforts to build a consistent and unique E&P Data base.

EQUINOR: PROJECTS IN BRAZIL AND THE STRATEGY TO GROW

Anders Opedal presented the Equinor focus on competence building and patience to work constantly as the company keys for success in Brazil.

Equinor builds up capabilities to make business in Brazil by gathering competence with agencies and suppliers. 90% of Equinor's competence comes from local supply chain. The Peregrino field was the trigger point and the Peregrino Phase 2 is the deepest and first pre-salt project of the company.

Together with Petrobras, Equinor will bring more investments and innovation for oil recovery in Campos Basin. And together with other norwegian company they will start to invest in solar energy in Ceara Basin. Anders also believes that the gas power will be an important energy source to the future of Brazil.



Anders Opedal, CEO, Equinor do Brasil

Equinor strategy in Brazil is to develop safe and sustainable value growth. And the company perspectives to 2030 includes high investments and activity level.

The new regulatory and supplier dimension, the most prominent deep-water environment and the constant focus in partnership will support all the brazilian needs for oil and gas development in short and long terms.

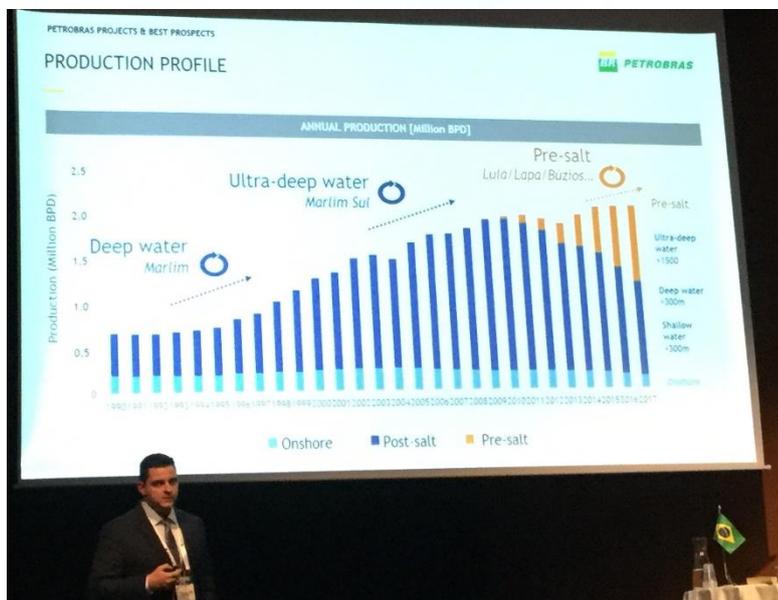
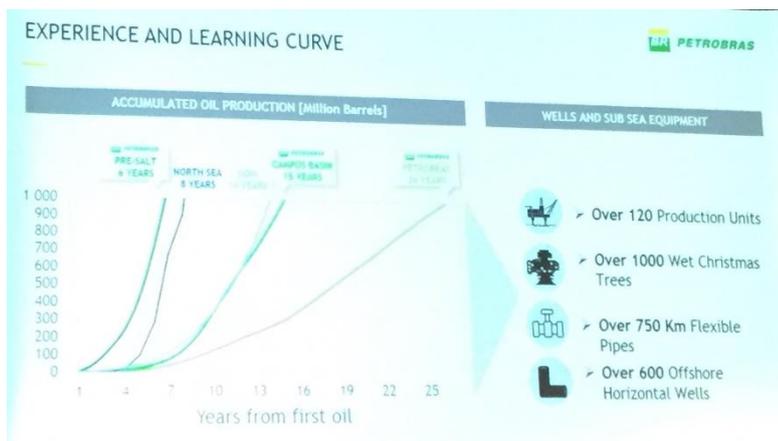
HOW TO DO BUSINESS WITH PETROBRAS/PROJECTS AND BEST PROSPECTS

Dimitrios Chalela Magalhães, presented the upcoming and ongoing Petrobras' projects for equipment's and services.

Petrobras have been investing strongly in subsea system and technology. The company strategy pack together the technical and commercial sides.

There are important demands for geotechnical, geological and oceanographic for business plan from 2018 to 2022:

- ✓ Geological and geotechnical research (in-situ testing, sample collection, laboratory tests)
- ✓ Acquisition and processing of high resolution seismic data, with water depth between 2000 and 3000m
- ✓ Acquisition and processing of meteorological, oceanographic, environmental and acoustic data



Dimitrios Chalela Magalhães, General Manager Petrobras

INVESTMENTS OPPORTUNITIES IN BRAZIL AND HOW BRAZILIAN GOVERNAMENT MAY SUPPORT FOREIGN COMPANIES

Luiz Carvalho, demonstrated how the experts can promote products and services, support the internationalization of brazilian enterprises and how to attract investment from FDI (Foreign Direct Investment) and Private Capital.

APEX has 3 offices in Brazil and the priority sector in line with the brazilian national development policy is to support the investment in new projects in energy sector and help with the marketing of the companies in Brazil. Streamlining and innovation were highlighted as key elements going forward.

A reduction in operational income triggered a discussion on innovation and technological development to reduce cost and shows signs of improvement in the market. Brazil still among the top 10 of oil production in the world. Corporation innovation will increase innovation in services, science and suppliers.

- ✓ APEX proposal for O&G Corporate Innovation:
- ✓ Start-ups Screening and Mapping
- ✓ Outreaching global Corporate and Venture Capital Worldwide
- ✓ Design a Start-up Portfolio
- ✓ Select Start-ups training and Investors curation
- ✓ Content selection for Corporate Venture in Brazil O6G
- ✓ Strategic agenda for investors



Luiz Carvalho, Coordinator, APEX Brazil

THE BRAZILIAN AND NORWEGIAN COLLABORATION HOLDS FUTURE OPPORTUNITIES.

The long-standing trading partner, Norway is currently the eighth largest investor in Brazil, contributing significantly to economic development and the creation of more than half a million direct, indirect and induced jobs in the country. By 2016, Norwegian Companies invested in Brazil total US \$ 21.3 billion - an increase of 27.6% between 2013 and 2016. Norway's participation in the total foreign direct investment index in Brazil increased by 3.76% between 2011 and 2016.

More than a hundred Norwegian companies operate in Brazil. The oil and gas and maritime sectors are the main routes for investments - accounting for 53% of this market share - and in 2016 led to investments of US \$ 1.85 billion in the country.

Innovation is the only way to re-think, to work with more efficiency, better performance and to prove the ability to delivery knowledge and competence.

Brazil have been showing the signs of crises recovery and norwegian companies shall strength their business in the O&G market in Brazil.

Brazilian companies have the know how in technological knowledge and competence to support the upcoming challenges in the E&P sector.

Challenges become opportunity!

The revolution in regulations and the new deep-water fields has brought the new opportunities for the norwegian and brazilian collaboration to increase and to improve the blue economy.