

Young Professional Forum (August 20-21, 2020)

Day 1

Welcome address

Dr. R.K. Malhotra, DG, FIPI



As we are navigating through the crisis of pandemic, businesses are re-orienting themselves. Dr. R.K Malhotra shared in his welcome address that pandemic is unable to dampen the businesses deals which are now getting concluded without physical meetings and handshakes. This time has also given an opportunity for business to re-think structurally and strategically. Young professionals today have time to up-skill and develop more knowledge. In addition, policy landscape is also conducive for young entrepreneurs with opportunities available for start-ups and ‘Atmanirbhar Bharat’ objective. As the energy sector is undergoing transformation phase and carbon emission challenges, this forum will be instrumental for young leaders in re-thinking and re-designing the industry.

Session 1: Energy & price outlook

Jamie Webster, Senior Director, Centre for Energy Impact, BCG (Washington)



To date, 4 COVID-19 driven oil shocks this year
All must be unwound/addressed to bring normality to market

Shock	Type	Current status	Signposts
Social distancing / shutdowns	Demand	Mixed picture, as some countries report higher cases, personal behavior is often overestimating shutdown policies	BCG "Shutdown Oil Demand Index" (SDDI), potential for 2 nd large wave
OPEC+	Supply	OPEC+ increased supply 2 mbbl/d for August, continues to manage for COVID	Compliance, OPEC assessment of market, signs of financial stress would key players
Economic Recession	Demand	10% of countries in recession in 2020, to date still smaller impact than shutdowns	GDP estimates, PMI data, government stimulus
Storage overhang	Storage	Steadily drawn in several months, will take multiple years to reach "normal"	Market structure (Contango), back-operations, Cushing levels, pace of draw

Mr. Jamie Webster shared that this year started with oil prices around 80\$/bbl, and since then there have been four successive shocks; firstly, due to decline in demand due to pandemic shutdown, followed

by increased supply from OPEC+, then economic recession and finally storage overhang. Two tailwinds are expected to help reverse this trend and move towards normalcy; compliance by OPEC+ in supply cuts and rise in demand gradually towards the last quarter of the calendar year, provided pandemic case counts do not rise. Within the OPEC, compliance from all large producers has been high with the exception of Iraq and Nigeria, with which talks continue. Fuels are expected to recover at different rates dependent upon pandemic behavior. While gasoline will recover earlier as personal vehicles will be preferred by public, jet fuel is expected to be last to recover. Although, overall demand recovery from Covid is expected to be slow compared to the Great Recession. Jamie also discussed the fiscal account pressures on small oil producing countries which are heavily reliant on import. Due to pandemic led price shocks, these countries may also see foreign debt burden and forex reserve vulnerabilities. Lastly, he shared the short term and medium-term oil price forecast, with upside potential from OPEC compliance and rapid demand recovery as behaviors return to normal, and downside risk from a second wave of infection and higher OPEC production.

Session 2: Digital the way forward in oil and gas sector
Moderated by **Abhik Chatterjee, BCG**



- Mr. Anand Laxshmivarahan R, Chief Digital Officer, Cairn Oil & Gas, Vedanta Ltd.
- Mr. Shaji Zacharias, Former head of solutions and energy practices, WIPRO
- Mr. Neeraj Sethi, Country Leader India Region, Baker Hughes
- Mr. Nubeel Ansari, Industry Value Advisor (Oil & Gas), SAP India
- Mr. Vikas Prabhu, CIO, Nayara Energy



Mr. Abhik Chatterjee set the agenda of the discussion and put focus on a world that has become pervasive over the last few years, especially due to Covid. He enquired the panelists on how have organizations in the energy business looked to adopt digital. Panelists discussed the adoption of digitalization in oil and gas industry and how they are leveraging digital technologies as a value generator.



Mr. Vikas Prabhu focused on the role of technology and stressed that it should be aligned with business processes, along with digital capability development of people in the organization to ensure sustainability. He also highlighted the need to first capitalize on the data that is already available within organizations (data consumption technologies) before investing in new technologies (data generation technologies).



Mr. Anand LR discussed how Vedanta has started the digital journey by focusing on some high impact initiatives post internal idea generation exercises. The focus of these projects extends across the value chain, right from exploration and subsurface, production optimization, capital project management, health safety & environment to extracting synergies in corporate functions. Another approach that the organization has taken is to put the business teams on the frontline of digital deployment instead of the traditional approach of having IT teams take charge, thereby incentivizing adoption.



Mr. Neeraj Sethi highlighted that Covid-19 has accelerated the adoption of digitalization to a few months from many years. He explained the key digital trends in the Oil and gas industry are now focused on reducing costs, increasing security and safety as well as reducing carbon footprint. He opined that technologies which increase productivity, enable virtual monitoring and remote operations, reduce manual errors and meet HSE goals will be the major value creators. Hence Automation, AI/ML and data analytics finds wider application in recent times.



Mr. Shaji Zacharias stressed that in upstream, digitalization can improve not only recovery from oil wells, but can enhance production and safety via IOT sensor based automated decision making. In downstream he shared that petroleum companies are using digital to enhance the consumer experience and bring it on par with e-commerce and other consumer businesses.



Mr. Nubeel Ansari from SAP discussed that conversations around digital in O&G have shifted from tech ops to business-driven outcomes. Bringing back the focus to vast data resources that most energy companies already have, he underscored that data analytics along with machine learning, prediction and simulation can be significant value creators.

The session concluded with panelists highlighting levers such as incentive to lead digital initiatives, engaging academia and collaborating with different players in the ecosystem to further drive digitalization.

Session 3: Oil & Gas sector – Looking Beyond COVID-19
Moderated by Mr. Anirban Mukherjee, BCG



- Mr. E. S. Ranganathan, Director (Marketing), GAIL
- Mr. Gautam Reddy, MD, India and Bangladesh, Schlumberger
- Mr. Vinod S. Shenoy, Director (Refineries), HPCL
- Mr. Oscar Quintero, Chief Operating Officer, Cairn Oil & Gas, Vedanta Ltd.
- Mr. Rajesh Kumar Srivastava, Director (Exploration), ONGC



Mr. Anirban Mukherjee set the tone of the discussion by throwing light on how oil and gas industry has now been exposed to changes in demand patterns, compressed margins and change in movement of products. He asked the panel to share their views on some of the medium to long term shifts that the sector can expect to come across.



Mr. R.K. Srivastava highlighted that the sector has been seeing changes since pre-Covid times with focus on climate change and energy transition. Additionally, Covid-19 has led to demand disruption, glut in supply and a fall in oil prices. However, from the context of supporting India's energy security, ONGC continues to focus on planning capex investment and finding new resources in advance. This is because results from exploration today will cater to demand of the future and the investment cycles are long. ONGC is planning to spend about 33% more on exploration this year versus 2019. At the same time, in light of the current scenario, he also

emphasized on the need to reduce spend and increase efficiency. This can be done by digitalization, process centralization, technological enhancement in exploration API and collaborating with other industry players.



Mr. Vinod S. Shenoy shared that despite demand shocks in March and April, post un-lockdown, demand has picked up in India and there is about 70-80% recovery in consumption which is expected to reach 90% in the later part of the calendar year. He also shared that HPCL has been working pre-Covid, towards digitalization and democratization of data which has allowed it to better forecast demand patterns.



Mr. E.S. Ranganathan highlighted that in the gas sector, with decline in prices, players are now expanding portfolio in spot LNG and they expect gas consumption to be normal by end of FY2020-21. But going forward, he sees one important change in the industry, which will have to move away from iron clad contracts and provide more flexibility to suppliers and customers.



Mr. Gautam Reddy highlighted that even though there has been a dip in global oil demand in the short term, the transition out of oil and gas is going to be phased and not a zero-sum game. Especially from an Indian perspective where demand is met primarily from exports, oil production will continue to remain a priority. However going forward, the commercial construct in the industry will change and partners will need to develop appetite for high risk-reward constructs.



Mr. Oscar Quintero stressed the need to identify low risk sites and becoming more efficient in drilling and extraction process. He also focused on the relevance and need for digitalization, AI/ML and automated systems to improve efficiency. Last but not the least, he stressed on the importance of the 'people first' approach to ensure successful project outcomes.

Panelists agreed that India is in a unique position and will continue to produce oil. This however, should be parallel to the energy transition alongside renewable and clean fuel. In order to prepare for future, leveraging new technologies and collaborating to bring best talent pool will be key to driving efficiency with visible results and increased success rate. To produce efficiently and cost optimally - strategic and prioritized investment, capital expenditure discipline, efficient operations coupled with enablers such as skills, economies of scale and digitalization will be crucial to gain competitive advantage in oil and gas exploration. To conclude, panelists discussed that the necessity to create an

enabling system, the way of deploying technology, digitalization and human resource will be key success factors going forward.

Day 2

Session 1: Energy transition

Moderator: Mr. Vishal Mehta, BCG



- Mr. Vipul Tuli, MD, Sembcorp
- Mr. Mahesh Koli, CEO, Greenko
- Ms. Vartika Shukla, Director (Technical), EIL
- Mr. Maheep Jain. Executive Director, Everstone
- Dr. R. K. Malhotra, Director General, FIPI



Mr. Vishal Mehta set the stage by highlighting multiple transitions happening in the energy sector such as oil to gas, coal to renewables and debate between electric vehicles and hydrogen fuel cells. He invited the panelists to share their opinions, separate hype from the reality and shed some light on how the future of tomorrow looks like.



Dr. R. K. Malhotra expressed that energy transition has been a continuous process, but given the aspiration of the country, growth of green energy will be parallel to oil and gas industry. But the focus will have to be in

making fossil fuels cleaner and capturing carbon. Reducing carbon footprint is critical for the industry. He also talked about the promise of the Hydrogen economy given increasing efficiency of electrolysis, familiarity of customers in filling up their vehicles with CNG and the challenges EVs face due to scarce and hazardous mining of Lithium and Cobalt.



Mr. Vipul Tuli shared that on the power side the transition between fossil fuel and renewables is certain but is still playing out and it is important to take a 10-20 year view given the long investment cycles. He shared that renewables will need support from conventional energy in the interim while it scales up from the current 10% share in India. He also highlighted need for clarity around offtake and payment systems to reduce merchant risk, which is important to drive in large renewables investments.



Mr. Mahesh Kolli discussed how renewable energy is maturing fast and is now capable of supporting energy demands with development of storage technologies. He also shared that renewables plus storage is now cheaper than coal and is capable of delivering like-to-like dispatchable, schedulable and flexible energy without any fossil fuel integration. He believes India is far ahead of OECD markets and has a strong entrepreneurial streak.



Mr. Vartika Shukla stressed how India's energy demand is projected to grow up to fourfold. To meet this demand every form of feedstock will be required. According to her, industry focus is shifting to carbon neutral and recyclable feedstock. This has also reflected in her organization's involvement, shifting from being primarily in hydrocarbons to renewables like biomass. She shared that EIL has been working with many bio-refineries for production of second-generation ethanol.



mobility will require.

Mr. Maheep Jain brought focus to the e-mobility sector and the disruptions it has been causing. E-mobility solutions have become commercially profitable and no more rely on subsidies. Because of this it is seeing mass scale deployment, which is catching up in India as well. The oil companies have assets which can aid the transition and create commercial value, for example with large scale charging and swapping infrastructure that e-

E-mobility was a hotly contested topic between the panelists. Panelists expressed their diverse viewpoints between use cases such as commercially viable e-auto fleet to the edge of hydrogen fuel cells over electric vehicles. The need of life cycle assessments of different technology was understood to be the need of the hour to assess overall impact and take a calculated bet between EV and Hydrogen fuel

cells. The session concluded with panelists unanimously agreeing on increasing confidence in green energy in upstream side of the value chain and transformations pacing up on the utility side.

Session 2: Leadership in post COVID world – What do Leaders have to say
Moderator: Mr. Kaustav Mukherjee, BCG



Mr. Sarthak Behuria, Chairman, Reliance BP Mobility Ltd (RBML)
Mr. Shashi Mukundan, President and Senior VP, BP Group
Mr. Prabhat Singh, Managing Director & CEO, Petronet LNG
Mr. Ravi Pandit, KPIT Technologies Ltd.



Mr. Kaustav Mukherjee opened the session by establishing that disruptions such as Covid-19, fast paced transitions, the intergenerational equity and aspirations of younger people, needs a new breed of leadership and vantage point of looking at things. He asked the panelists to share what does leadership mean for them and how has it evolved over the years.



Mr. Shashi Mukundan emphasized that in challenging times such as these, leaders need to lead from the front, be genuine, flexible and empathetic, build trust with people and overcommunicate. He also stressed that in times of disruption, personal priorities outrank professional priorities for people and business should respond similarly by being 'people first'. This creates a symbiotic relationship in the long run which benefits both employees and organization. He also talked about servant leadership at BP which encourages leaders to be not only outcome focused but also empathetic, inclusive and willing to listen and learn. Servant leadership is a shift from managing people to empowering people.



Mr. Sarthank Behuria discussed the challenges of evaluating performance and career progression in the Covid world especially for frontline employees or customer facing roles. He also talked about the skillsets that organizations and leaders need to develop in an increasingly remote and digital world. Although oil and gas industry started late in inducting digital and maturity is yet to be seen, Covid has led to rapid adoption of ecommerce and there might be an opportunity in regulated delivery of diesel for non-transport requirements such as pumps and gensets.



Mr. Prabhat Singh brought to focus the diversity of today's workforce from Baby boomers, GenX to Millennials and GenZ and the challenges it presents for leaders, in terms of behaviors and requirements of workforce varying with age groups. He highlighted the shift from compliance led and relationship driven team of the past to capability and career opportunity driven teams of today. Given the pandemic induced remote working construct, young professionals have seamlessly adopted to it and this calls for the leaders to introspect, train themselves in new technologies, embed themselves in the new system and endeavor to understand the perspective of the younger generation. This will allow organizations and leaders to be aligned with the behavior and aspirations of today's workforce.



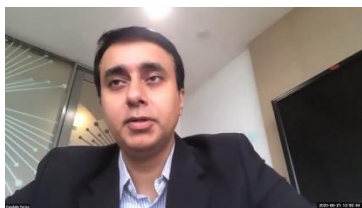
Mr. Ravi Pandit highlighted how the leaders of tomorrow need to think and act differently versus the leaders of yesterday. COVID has heightened the consciousness around intergeneration equity and sustainability to help create a better living environment. Therefore, as a leader one must be sensitive, inclusive and accommodating of different viewpoints. This has pushed leadership attributes from hierarchical model to empowering people. Leaders of tomorrow need to flexible in approach, have the ability to lead and follow at the same time, be sensitive to the environment and understand well that change is the only constant.

The session concluded with panelists highlighting that approach for leaders has shifted from prescriptive to co-creative approach, aspects such as essence of the business security, societal responsibility and value systems.

Session 3: Owning your career: Managing growth & relationships in the Digital World
Moderator: Mr. Kaustubh Verma, BCG

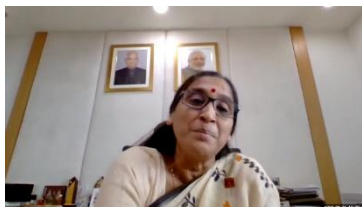


- Ms. Alka Mittal, Director (HR), ONGC
- Mr. Harsh Bhosale, Chief People Officer, Nayara Energy
- Mr. S. K. Bose, Executive Director I/C HR, IOCL
- Mr. Rajiv Bahl, Director (Finance), FIPI



times like these.

Mr. Kaustubh Verma opened the panel for discussion by putting spotlight on the people who make up the oil and gas industry. He talked about how Covid has created a world of uncertainty, which is in addition to disruption the sector has already been going through on account of lower oil prices and drop in demand due to energy transition. He requested the panels to share how the leaders are seeing future of oil and gas workforce, and how can one own and grow their career and manage relationships in



Dr. Alka Mittal threw light on how different trends are shaping the workplace in oil & gas sector. She explained that the industry is becoming increasingly global and interconnected, leading to new opportunities. Data and digital technologies have also exploded, creating demand for special skillsets. On the interpersonal side of things, oil companies are increasingly going through a demographic shift towards a younger workforce which prefers a clear visibility into their career growth. Dr. Mittal also encouraged the young professionals, especially women, and shared three tips to build a long and successful career; aspire high, continuously upgrade skillset and be confident.



Mr. Harsh Bhosale expressed that Covid has simply accelerated the changes that the industry would have experienced 5-10 years down the line, and that the oil & gas sector has responded very well to the challenges. Going forward, remote working is here to stay. This is expected to bring global opportunities for professionals because of location agnostic working constructs. But this would also bring competition from low cost skilled employee as the talent market becomes a global market place. Increase in diversity of workforce is another benefit expected to come from the current situation. Women are expected to get huge opportunities to participate in an increasingly location agnostic oil and gas industry and benefit from increased flexibility options for young mothers.



Mr. S.K. Bose discussed how IOCL has adopted to the new normal of working, built relationships and delivered business outcomes in challenging times of the pandemic. He shared how the organization has been long focused on digitization. Business use cases where digitization can improve process efficiency had already been identified. When the pandemic struck, IOCL was already comfortable with digital systems and change management. Another focus area was to ensure that the customers did not suffer and end-to-end supply chain of essentials like LPG cylinders was maintained thereby building deep customer trust. For its employees, IOCL set up telemedicine facilities with empaneled roster of doctors for digital consultations, thereby not only ensuring safety of its employees but also safeguarding business continuity. He also threw light on the rewarding career prospects that oil & gas industry provides STEM students and encouraged them to choose a career, packed with opportunities to experiment and tackle challenges early on.

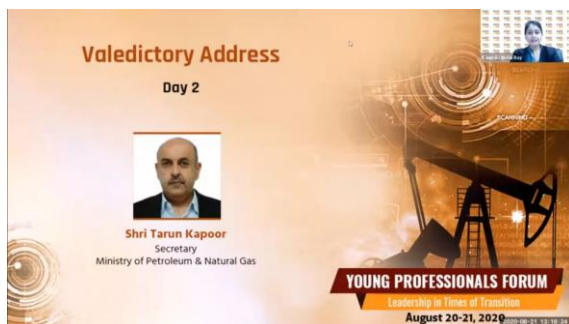


Mr. Rajiv Bahl emphasized the importance of building human relationships inside and outside workplace and shared three mantras for the same. First, given the demographic shifts in the workforce, leaders must realize the importance of involving youth at every level of decision making and make them feel connected to the organization. Secondly, given the diversity at workplace and globalization, it is becoming increasingly important to be in harmony with co-workers, community and the environment, and respect differences in language, culture and experiences. Finally, leaders must embrace the idea that if they take care of their people, people will support and grow the organization.

Panelists discussed that oil and gas industry continues to develop strong leadership, communication, relationship building, and systems to be resilient in challenges. But there is a growing need to invest in

people, gender diversity and upskilling efforts. Panelists concluded the session with encouraging and welcome notes to young workforce entering the oil and gas industry.

**Valedictory address by Chief Guest
Mr. Tarun Kapoor, Secretary, MoPNG**



Mr Tarun Kapoor underscored that oil and gas sector, although competing with renewable energy, is here to stay. Young professionals in this scenario have ample growth opportunities. India is pursuing growth in the upstream sector and trying to address challenges to ramp up the production. The sector has been opened for participation from not just public sector but from private players too. Many initiatives are also taken to address information and data dearth for both on-shore and off-shore segments in the sector. India is also on the pathway to become gas-based economy. This would require synergies from both senior leaderships and young professional to solve technical and commercial problems. India also has plans to expand refineries which would act as a multiplier for petrochemicals and help reducing import bills. The oil and gas industry is currently in a transition phase with increased focus on carbon emissions and digitalization. There are many different areas within oil and gas industry such as customer centricity, digital solutions, biofuels, e-mobility and converging with renewable energy that can benefit from solutions different skillset by younger generation.