

CMA Subhash Kumar

Director (Finance) and
Chairman & Managing Director (Additional Charge)
Oil and Natural Gas Corporation Limited (ONGC)
New Delhi

Mr. Subhash Kumar has assumed the additional charge of the post of Chairman and Managing Director (CMD) of Oil and Natural Gas Corporation Limited (ONGC) with effect from 1st April 2021.

Mr. Kumar is an industry veteran with over 36 years of professional experience in diverse activities across the Exploration & Production (E&P)

value-chain. He joined ONGC in 1985 as a Finance and Accounts Officer. After initially working in Jammu and Dehradun, Mr. Kumar grew up along the hierarchy and served in different capacities in ONGC and the group companies.

Mr. Kumar served as the Chief Financial Officer (CFO) of Mansarovar Energy Colombia Limited, a 50:50 joint venture of ONGC Videsh and Sinopec of China - from September 2006 to March 2010. Also had a long stint at overseas arm ONGC Videsh from April 2010 to March 2015 where he successfully steered company's Business Development, Finance and Budget and Treasury Planning and Portfolio Management Groups. During his tenure with ONGC Videsh, Mr. Kumar was associated with key acquisitions and expansion of company's footprint from a single asset company in 2001 into a company with global presence. He played a key role in the evaluation and acquisition of several overseas assets. Mr. Kumar

joined back ONGC in July 2016 as the Chief Commercial and Head Treasury and he played a key role in evaluation, negotiation, and concluding outstanding issues pertaining to the organization. During 2017, Mr Subhash Kumar has also served a brief stint with Petronet LNG Limited as its Director (Finance). Mr. Subhash Kumar has also served as Director on the Board of ONGC Group Companies viz. Mangalore Refinery And Petrochemicals Limited, Hindustan Petroleum Corporation Limited, Petronet MHB Limited, ONGC Tripura Power Company and ONGC Petro Additions Limited.

Mr. Subhash Kumar has championed the issues relating to various JV's and group entities at Board level. He has successfully led transformation of all JV and Group Companies into a cohesive group, implemented entity-specific action plan, resulting in significant increase in their contribution to the ONGC Group. Shri Kumar was instrumental in setting

up Euro Medium Term Note (EMTN) Program of ONGC/ ONGC Videsh for US\$ 2 billion on 27th August, 2019 which was listed on Singapore Stock Exchange and subsequently on India International Exchange (India INX). ONGC priced its maiden offering of USD bonds amounting to US \$300 million at an attractive coupon of 3.375% per annum payable semi-annually which was the tightest coupon for 10 year or longer tenor offering from India ever achieved by any Indian Corporate

Mr. Kumar is a Fellow Member of Institute of Cost Accountants of India and Associate Member of ICSI. He is an alumni of Panjab University, Chandigarh, from where he obtained his Bachelor's and Master's degrees in Commerce with Gold Medal. As an avid sportsperson and fitness enthusiast, he is also a popular personality within ONGC employees, having served as an office bearer of ONGC's Officers' Association.

1. How would you describe your journey as Director (Finance) of Maharatna ONGC, the largest crude oil and natural gas Company in India? What has been one of the most challenging tasks for you till date?

- Eventful, exciting and challenging, to put it succinctly. At the same time, it's been an incredibly rewarding and humbling experience – I have unlearned and learnt a lot too in this journey. Today, ONGC is, by far, the most important E&P player in the country's energy arena – the Group too is a hugely significant energy entity given the scale and extent of its operational presence in the value-chain. Suffice to say, the role comes with huge responsibility. Ours is a capital-intensive business and even under the most optimal situations the risk-quotient is on the higher side. So managing its affairs during the pandemic has been a challenge of a lifetime – it's an unprecedented event that has put to test the most robust and comprehensive of plans and strategies, very often rendering most of them redundant and necessitating urgent real time recalibrations. It's difficult to sustain operations while navigating the serious logistical and supply-chain bottlenecks in the wake of the sudden disruption, and then we have to reconcile with the tragic loss of lives within the organization as well. Nothing prepares you for such an event, ever; however, despite the overwhelming chaos and anxiety of the times, ONGC Group, as a unit, have continued to successfully deliver our business mandate of sustaining critical supplies of oil and gas to the nation while adding value to the organization.

At the same time, this period has been a highly satisfying one too, as the Company has striven to contribute meaningfully to the society at large in this hour of crisis through contributions to PM Cares Fund and extensive CSR outreach initiatives. ONGC has been extending all possible support to those most in need of support in the community, especially around our operational areas.

In terms of manpower dynamics the period has been one of discovery. The organization rose as a unit to fight the scourge of virus and walls of hierarchy collapsed. Technology stepped in as an enabler leading to realization that even without meeting in person the business could be transacted with little impact on productivity.

2. What were the significant achievements of ONGC that deserve mention over the past couple of years?

- In a year during which our operations were massively hamstrung by the pandemic, managing to sustain standalone domestic hydrocarbon output just a few percentage points shy of last year's (FY'20) output is an impressive feat for the company. It was also a year in which we put the Bengal Basin on the production map of the country – making it the eighth, and the first such since the 80s, producing basin overall. In a development that pre-dates the digital working ecosystem that the pandemic ushered in, ONGC went 'paperless' across the organization with its Digitization, Integration and Standardization, by Harnessing Automation (DISHA) initiative, helping us cut down on

our carbon footprint while improving our productivity. Energy Strategy 2040, adopted for execution in 2019, ONGC's blueprint for evolution in tomorrow's energy landscape is another milestone that we have achieved in recent past and much of what it has espoused remains just as relevant, and probably even more so, in the post-pandemic scenario as the world looks towards a low carbon future.

3. In February 2021, ONGC announced that by May 2021, it would increase natural gas output from a KG basin block to 2.5-3 million standard cubic meters per day. How close are you to your goal?

- ONGC had plans to increase gas production from its U1 field in KG Basin by May 2021 by undertaking offshore subsea construction activities during fair weather season of 2021. However, due to spurt of COVID-19 infections in Europe during 2020-21, from where the bulk of subsea equipment were to be procured, manufacturing and supply chain disruptions occurred resulting in considerable delay in the arrival of subsea critical components necessary for bringing the field into production. The second wave of COVID-19 in India has also forced shutdowns in fabrication yards on multiple occasions in past 2-3 months. Hooking up of subsea hardware, earlier planned by end April 2021, has shifted to June 2021 due to the above reasons and the commissioning work of U1 field of KG-98/2 is now expected to be completed by July 2021 if there are no major disruptions in the planned activities. We expect natural gas output from KG basin to substantially increase once these activities

are completed.

4. ONGC has been an active participant in the National Gas Hydrate Programmes (NGHPs) and effective production of Gas Hydrate can turn India's fortunes in the future, by making the country "Aatmanirbhar" in the energy sector. How successful has it proved?

- ONGC, has been carrying out research on gas hydrates since early 90's prior to inception of NGHP in 1995. ONGC has contributed significantly in the planning and execution of NGHP-01 in 2006 and the entire execution of NGHP R&D Expedition 02 in 2015.

The results of NGHP-02 are encouraging and dispersed gas hydrates have been discovered in KG deep offshore areas. The success of NGHP-02 culminated in the formation of a dedicated Institute "Gas Hydrate Research & Technology Centre" (GHRTC) by ONGC at Panvel in 2016, with a multidisciplinary team of dedicated Scientists and Engineers to focus on Gas Hydrate Research for exploration and potential exploitation of gas. The team has identified various prospects in KG, Mahanadi and Kaveri offshore areas.

Exploitation of Gas from Gas Hydrates has remained a challenge world-wide till date, limited to pilot production testing for few days by Japan, China and USA. Commercial production from gas hydrates is yet to materialize globally but we have a much better understanding of the technology today and gas hydrates have the potential to produce gas in an environment friendly, cost effective and sustained manner.

So, while it may be too early to talk of commercial production, the potential of this technology is huge.

5. What are the key challenges faced by the company in terms of global competition, consumer behaviour and technological innovation? What steps have been taken to address these challenges?

- In our energy world, we have called this impending period of change the 'Transition' – not so much as impending as it is already current and happening. While most conversation tends to center on renewables, EVs and Digitalisation etc, it is broader than that in practice. Given the varying levels of development and the distinctive growth propensities for respective countries/ regions/economic blocs, more than oil and gas being stamped out I foresee a role for all forms of energy sources particularly in a country like India where the average energy consumption per capita is only one third the global average. Our energy needs are only going to expand at least for the next couple

of decades. Oil and gas will remain relevant as proven and stable energy sources for years to come – but as a business the industry will most certainly undergo changes to be in step with the times. Our operations will have to be more sustainable and resilient – not just from an energy intensity or carbon footprint standpoint, which of course are primary planks of this shift, but also will need to become much safer, more digitalized, more inclusive and diverse, socially responsive and equitable.

At ONGC, we do not look at it as a hurdle or challenge but as an opportunity to redefine ourselves and our business, a window for evolution per se and technology will play a decisive role in this transformation. For growth in our domestic upstream business and to cater to our growing domestic energy needs, we have continued to invest significant capital on a year on year basis while forging meaningful technology partnerships with both local and international players to unlock new areas or to realize greater value from existing assets. As a group we are balanced, present across the value-chain and well-hedged against cyclical volatility of markets – the acquisition of HPCL further consolidates our portfolio. Technology induction has also been stepped up in all facets of the organization – from remote monitoring of wells and dynamic gas blending or managed pressure drilling to paperless office and eliminating use of plastic at workplaces. As part of our strategic roadmap, ONGC has also targeted a renewable capacity of 10 GW by 2040.

6. ONGC has always ensured that it protects and cares for the environment. What more eco-friendly and cost-effective measures are you planning to make our Nation proud?

- A lot is going on actually on that front - we currently have 15 CDM (Clean Development Mechanism) projects which are UNFCCC certified that amasses in excess of 2 million CERs. Among these our Power Plant in Tripura (OTPC) is the largest CDM project in the country. Our solar-power capacity stands at 31 MW at the end of FY'21. As part of the Global Methane Initiative, ONGC has prevented the leakage of more than 20 MMSCM of methane gas since 2007 with an environmental benefit of approximately 300,000 CO2 ton equivalent. We also have implemented company-wide LED lighting in the company. In operations, we have gone ahead with installation of micro-turbines and dynamic gas blending technologies, affording us both cost savings and improved operational outcomes. On energy front, we have not been spoilt for choices as such ONGC implemented many technologies and work practices to gain more

from each molecule of energy. It is because of this reason that when in most oil and gas producing regions resorted to flaring of gas, ONGC in India had implemented world class gas flaring reduction project.

We also are on the way to implementing the country's first CO2 based EOR project at Gandhar in collaboration with IOC's Koyali Refinery. The Company is committed to leveraging technology and digital tools in order to stay ahead of the Industry. Building up further from the benefits of our paperless office ecosystem, ONGC is working on an ambitious organization wide transformative initiative which will create a 'Future Ready Organization' – with location agnostic shared service model for both support and field services thereby bringing more efficiencies and productivity.

7. Which reforms and regulations in emerging business environment do you think the government should take up on priority basis to achieve its 2022 clean energy target?

- From within the oil and gas business perspective, I think the Government should incentivize the production and consumption of gas. It is a cleaner fuel and one in which we have significant room for growth. From the merging trends it is clear that all sources of energy will coexist and flourish in India, gas is going to play a vital role in overall global transition from fossil fuels based energy to renewables. The Government already has announced a slew of measures focused on gas development in the country such as premium prices for gas developed in difficult areas, marketing freedom for new gas fields and incentives for higher recovery among others. But there is a need to urgently address the current unviable pricing regime for domestic gas (particularly from nomination fields, which still contribute the bulk of the country's gas supplies). This is must for a country trying to increase the contribution of gas in its energy basket from 6% to 15%. Production of natural gas in this country can be increased only if the producers are assured of remunerative prices. Good intentions and milestones need to be backed by enabling pricing reforms to help realise the intended objectives.

Also, we can set a mechanism of incentives for technologies like CCUS, the only clean technology capable of decarbonising major industrial sectors such as steel, cement, pulp and paper, refining and petrochemicals. ONGC, like I mentioned, is executing the country's first CO2 based EOR project at Gandhar.

8. Please share with us ONGC's role behind maintaining India's energy dominance in the coming decades?

- India, on account of its economic heft and a young population among other reasons, will assume centrestage in the global energy arena in the coming years. As per most projections, it will most likely be the hub of global energy demand growth in the next 2 decades with its oil demand doubling and gas consumption tripling. At a time when energy demand is either plateauing or tapering off in the erstwhile 'big' energy consuming economies, India's positive demand outlook is certainly cause for cheer in global energy investment circles. However, this growth in its stature must not come at the expense of India's own energy security concerns. That would entail higher domestic energy production as well as overall energy efficiency measures, in order to mitigate country's rising energy import bill. This is where ONGC plays a crucial role as the country's energy anchor. While the ongoing Energy transition is one of the key drivers of this strategic rethink, ONGC's Energy Strategy 2040 roadmap is also a clear acknowledgement of the company's capacities and appetite for overall growth in alignment with the country's energy priorities. Some of the key strategic goals of ONGC for the next 20 years are :

- ⊙ Increase group upstream volumes from 65 MMTOE to 110 MMTOE
- ⊙ Triple refining capacity from 35 MMTPA to 100 MMTPA and Petchem to 9.5 MMT from 3.8 MMT
- ⊙ Install Renewable Capacity of 10 GW
- ⊙ Venture fund corpus of ~\$1 billion in select frontier themes such as Clean energy, AI or Reservoir/field services technology etc.; a hedge against disruptions

9. Which innovative projects are there in your pipeline for the next 2 to 3 years to uphold excellence and retain the position of the biggest wealth creator concern of India?

- The future is a canvas of possibilities in the domain of energy. On the near term, focus is on maintaining sufficient supplies of oil and gas from its existing projects as the nation, and its economy, navigates its way through a debilitating crisis of resources and confidence in the wake of the pandemic, the Company also has a rich project pipeline geared to fuel the country's growth for years to come. As on date we have a project slate comprising 15 projects worth over Rs 60K Cr with envisaged lifetime energy supplies of 113 MMTOE. More recently, in view of the long-term prospects of gas in the energy infrastructure, a new wholly owned subsidiary Company for Gas & LNG business value chain is planned, subject to necessary approvals. The Company is

being formed with the focus on sourcing, marketing and trading of natural gas, LNG, Hydrogen enriched CNG(HCNG), Gas to Power business, bio-energy/bio-gas/bio methane/other bio fuels business. Also, the fortunes of our international business arm and our 100 percent subsidiary, ONGC Videsh Ltd, continues to grow in key energy hotspots across the globe such as Mozambique, Russia and Israel. Beyond E&P, our downstream investments in refining and Petchem (and Power) - HPCL, MRPL, OMPL, OPaL - further bolster our energy returns, ensuring maximum value extraction at each stage of the value-chain.

10. What emerging roadblocks (if any) are you facing in upstream activities? How do you deal with the same?

- Upstream companies of today face a trifecta of challenges – low price (or pronounced volatility), potential perils of energy transition and heightened safety (and sustainability) requirements. There is no short answer to this or probably even a long one that can be taken as a 'silver bullet' prescription. But upstream will have to reinvent strategies and business models in order to stay relevant for the longer haul because although the 'responsible and conscious energy consumer' reality is pretty much the preserve (and privilege) of the developed bloc of countries, climate change is universally real and we ideally should not second guess here. The way out – Technology and its judicious deployment. While oil and gas has always been a technology-forward sector in its operational aspect, aggressive adoption of technology across all facets of the business is likely to become a norm sooner than later with potentially remarkable results in productivity, safety and costs. Technology can be leveraged effectively to remarkably improve risk return trade off of this business as such induction of relevant technology to improve understanding of sub soil reservoirs is likely to be a targeted area of technology adoption. Costs and productivity become vitally important in a low-price era where companies struggle to protect their balance sheets. While findings costs for ONGC have come down noticeably in recent years, the same does not hold for our production costs because of a mature portfolio with legacy contracts. Cost control becomes critical while implementing complex and capital-heavy projects such as KG-DWN-98/2 deepwater project. Operationally, I believe we must lean towards leaner projects with quicker turnarounds and cashflow generation as big finds (reserves) may not always translate a projects within defined timelines as major projects also encounter major surprises requiring mid-course corrections, as even with most advanced technology you can

only reduce uncertainty but not eliminate it. Also along with lowering carbon emissions and costs, oil and gas companies will also have to aggressively pursue lowering of technical risk with better reservoir models, better visualization and more. The future undoubtedly has a place for oil and gas – but the dynamics of that narrative may be drastically different to the one we are used to.

11. What one piece of advice would you give to the young CMA professionals?

- I think the times we are in now calls ever more for an integrated approach based on a holistic view of things or information at our disposal – so the young professionals should never lose sight of the 'big picture' – 'why' we do what we do. As CMA professionals every insight or calculation on costs must eventually aid management decision making in a way that eventually helps the organization or business to create value and thus serve its stakeholders. While it may not always be practicable in every aspect of your job, keeping an eye on the larger picture does lend a sense of purpose and ambition to what we do.

12. It is praiseworthy how ONGC has been on the forefront of combating the pandemic since its inception in 2020. What are the various ways our Institute can integrate with your organization to support this noble cause?

- Thank you –given scale of the pandemic, there is no other way but to pitch in and do all that we can to support the fellow Indians and the government in this grave and trying period. Most of our efforts during the pandemic has been steered by our CSR team and local administration units – ranging from providing food and medical kits to providing cold-chain logistical support among others. We have been given responsibility of partnering for setting up oxygen plants and also procuring oxygen concentrators on behalf of GoI. I am happy the Institute is keen on partnering, – the more we collaborate and team up the more we can reach and impact on the ground. On areas where and how we can possibly team up, you are always welcome to discuss this with my team at ONGC. ONGC deems itself lucky to have been associated with efforts to improve supply of oxygen supply within country through number of PSA plants in various parts of country through its group entities. ONGC has also been chosen to source one lac oxygen concentrators on behalf of PM Cares Fund through an approach which not only improves our capacity to fight future waves effectively but also helps build domestic business capacity.