Energy and natural resources make a strong comeback, but caution is merited

October 2021

By Anish De, Partner, Global Sector Head — Power and Utilities and National Head – Energy Natural Resources and Chemicals, KPMG in India

(6 min read)

Key takeaways:

- *Climate change is not just about clean energy but a clean ecosystem in its entirety*
- *In response to the catastrophic impact of climate change, one needs to consider urgency along with the right balance of caution and measured steps.*

Even as the end of the pandemic is not quite in sight with renewed risks posed by mutant variants of the COVID-19 virus, economies across the world are roaring back. Concomitant with that, energy demand is growing rapidly. In India, electricity demand crossed the landmark number of 200 GW in July 2021[1], and overall energy demand has been growing robustly. The Index of Industrial Production (IIP) electricity component has recovered smartly in the year-on-year comparisons.

Along with energy demand, prices have gone up substantially in domestic and global energy markets. In the past three months, the market Henry Hub gas prices have nearly doubled since April 2021[2]. In the day ahead in the Indian electricity markets, the price of electricity has witnessed similar sharp increases even over shorter one-month periods, with the market clearing prices rising to INR5.29 per kwh on 3 September 2021, as compared to INR3.19 per kwh a month ago. This increase is despite the recovery of the monsoons tempering agricultural demand and also improving hydropower supply. Overall, the economic buoyancy is palpable through the dynamics of the energy sector.

However, certain other dimensions of the energy economy have firmed up through this COVID-19-affected period. As extreme weather events have started occurring with increased frequency, climate concerns have arrived much more strongly at the doors of the energy sector. As an overpopulated human world (world population has increased from 1 billion in 1800 to 7.7 billion today[3]) seeks to meet its voracious energy needs, the planet has overheated. So, we turned from fossil fuels to 'green' energy. High carbon content resources have started taking a backseat, and in the case of coal-fired generation, new projects have become practically non-financeable. But, even as the old has come under threat, new resources in the renewable energy space have emerged at breakneck speed. India, for example, has touched 100,000 MW of renewable energy capacity[4], which marks a massive rise over a short decade. The clean energy space in India and elsewhere is evolving rapidly beyond plain-vanilla renewables. For example, there is much excitement around hydrogen, especially the green variety generated from

renewable energy. The promise is huge since hydrogen is super versatile and serves as fuel, feedstock and storage. Green hydrogen can help in climate change abatement greatly where it replaces fossil fuels.

The environmental footprint of renewable energy resources is certainly not as severe as conventional ones, but it does sometimes end up affecting long preserved ecosystems and at times leads to endangerment or extinction of species[5]. Choices will have to be made. It is not possible to turn the clock back in time, or even to change the momentum of the growth and consumption juggernaut substantially without significant effects. All of us, including those sensitive about ecology are equally responsible because chances are that our consumption footprint is high. In this world, we are entitled to our fair share along with other species, and we have to own up to that.

Green we must go, but with greater responsibility. There are issues related to the costs involved in the transition, the pace of change that can be managed without causing mass disruptions in energy delivery and also the social effects. If India's heavy reliance on indigenous coal is to be obviated by rapidly changing the supply portfolio in favour of renewables, it will involve very large investments in creating the new production and supply ecosystems. Simultaneously industries and communities reliant on coal will face transition challenges. Greater responsibility will in turn cost more money, opportunity and that may impair speed of change and the pain in its wake. However, we must start with one clear admission - that we are only borrowing from the planet, which like all debt, must be taken with care and be repaid with interest. The assumption of entitlement that we have operated on till now, must give way.
The strides in going green thus need to be long but measured. There is a risk of green-led inflation that this journey also carries[6]. If too much pressure is applied too quickly, the balloon will burst. As we stare down at the catastrophic impacts of climate change, urgency is warranted, but with the right balance of caution and measured steps.

As we end this note, there is a need to reiterate that climate change is not just about clean energy but a clean ecosystem in its entirety. In turning the tide on climate, we will have to access even more resources of the earth, including those under the sea. As we say in a recent KPMG report, you cannot go green without going blue![7] In a resource-constrained world, we will reach out to our oceans for critical minerals. However, in doing so, we need to pay much more attention to our marine ecosystems and extended maritime activities, including the effects of overfishing, ocean pollution, increasing maritime trade, deep sea mining and new age activities like ocean bed mining, offshore wind and tidal energy. Corporates and investors can take action to capture the value that can be found in a healthy, sustainable ocean economy, but like all actions in this climate affected world, it must be done with greater caution and responsibility.

---

[1] India's power demand surges to all-time high; crosses 200 GW mark, Business Standard, 8 July 2021
[2] Trading Economics, accessed on 21 September 2021
[3] World Population Growth, Our World in Data, accessed on 21 September 2021
[4] India's renewable energy capacity crosses 100 gigawatts, Hindustan Times, 13 August 2021
[5] Green energy projects threaten the last refuges of the endangered great Indian bustard, The Hindu, 10 July 2021
[6] Brown vs green trap: Shut down the dirty old economy too fast and building a cleaner one could be prohibitively expensive, The Times of India, 5 August 2021
[7] You can't go green without blue, KPMG report, accessed on 21 September 2021