

Green energy spikes up

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The ongoing pandemic has spared none, including the power sector. According to the International Energy Agency (IEA), following the pandemic, the global energy demand has reduced by around 6%. This, along with the increase in the percentage share of renewable energy sources, indicates that carbon emissions this year will decrease by around 8%.

In India, power demand has reduced by a staggering 25–30%. This demand reduction, coupled with reduced tariff collection and slow recovery, has adversely impacted the already stressed distribution companies (DISCOMs) by creating a significant cash crunch. Moreover, the pandemic is likely to affect India's energy transition, either creating uncertainty or inducing a radical shift in favour of renewable energy. One thing is certain though—the status quo cannot remain.

The central government and many state governments have implemented several proactive policies and fiscal measures to mitigate the pandemic's adverse effects on the power sector. The Karnataka Electricity Regulatory Commission issued an order in April 2020 to continue with the existing tariff on solar rooftop PV (SRTPV) and grid-connected solar plants. The order mandated that the deadline be extended till 31 March 2021 despite the module cost, and thereby the solar plant costs, coming down drastically. This step was aimed at promoting and encouraging more investment in SRTPV uptake.

Globally, the current pandemic situation has led to an increase in the share of renewable energy in the total power mix. In India, the renewable energy share increased from around 19% in early March (pre-lockdown) to over 30% by the end of June. This significant increase can be attributed to the combination of reduced electricity demand and the 'must-run' status of renewable power plants. Moreover, solar power plants have witnessed a capacity increase because of the drastic reduction in air pollution levels during the lockdown. As cleaner air leads to more sunlight reaching the solar panels, energy production has increased.

The total power generated from renewable energy sources in 2020 remained almost equal to that in 2019. However, thermal power in 2020 reduced significantly (19.75%) compared to the generation in 2019. This decrease is attributed to a reduced energy demand, which ultimately increased the share of renewables.

The share of electricity generated from coal and natural gas is expected to increase again as India slowly eases the strict lockdown measures. According to IEA, the global natural gas demand could decrease by 5% by the end of 2020. Nevertheless, unless the Government of India enacts substantial policy changes to promote renewables, the share of fossil fuels in the energy mix could increase and that of renewables could return to levels before Covid-19.

The recently proposed draft of Electricity Act (Amendment) Bill 2020 is a step in the right direction as it has the potential to usher in some much-sought reforms in the renewable sector. These include simplification of tariff structure, cost-reflective tariff, and reduction of cross-subsidies, among others.

The central government's initiative 'Atmanirbhar Bharat' (self-reliant India) will help to further boost the renewable industry. It will encourage indigenous manufacturing over heavy reliance on imports of solar PV panels, wind turbines, and other raw materials from China, which currently accounts for 79% of India's solar module supplies. These policy changes are expected to significantly reduce imports from China.

A reduction in the country's energy demand due to the Covid-19 pandemic and the subsequent increase in the renewable share (because of the must-run status of renewable plants) have highlighted the robustness of India's power sector in handling unforeseen circumstances. By pursuing favourable policies, the government can generate further confidence in renewable energy developers, encouraging them to invest more in green energy.

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