

# The Impact of COVID-19 on the Power Sector



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Power is essential for driving economic growth, especially in emerging markets. Achieving Sustainable Development Goal (SDG) 7—*Ensure access to affordable, reliable, sustainable and modern energy for all*—is a necessary precondition for progress on many other SDGs, including those concerning health, education, industry, sustainable cities, and more.

Emerging markets are especially vulnerable to these developments. Despite greater access to power in developing countries, 789 million people across the globe remain in the dark.

COVID-19 has had an impact on the sector, particularly by leading to a reduction of demand, financial stress, and disruptions to the power supply chain.

## SECTOR BACKGROUND

The power sector is the engine of the global economy, supplying electricity to all other sectors. Goods and services depend on it. In times of crisis, such as the pandemic we have been experiencing in 2020, reliable electricity supply has become critical for sustained medical services and working remotely under lockdown conditions, among other aspects of our new, daily lives.

The power sector consists of generation, transmission, and distribution. Traditionally, power was generated by burning hydrocarbons and harnessing hydropower. However, in recent years, the share of power generated from renewables such as wind and solar has grown, thanks to declining costs and concerns about global warming. Generated electricity moves through transmission lines that are as extensive as highways—power crosses international borders and is traded on

global markets. Once the transmission lines reach users in industrial, commercial, or residential areas, the distribution network takes over and delivers electricity to the end consumers.

Until the 1990s, a handful of companies (or national agencies) owned power stations and networks. However, many countries across the globe have unbundled their electricity utilities—separating generation, transmission, and distribution, which has encouraged private sector participation in the sector, increased competition, and lowered electricity prices. Added to the mix is work on the regulatory environment, which has become critical for building investor confidence, ensuring fair pricing, and promoting renewable energy, conservation, and efficiency.

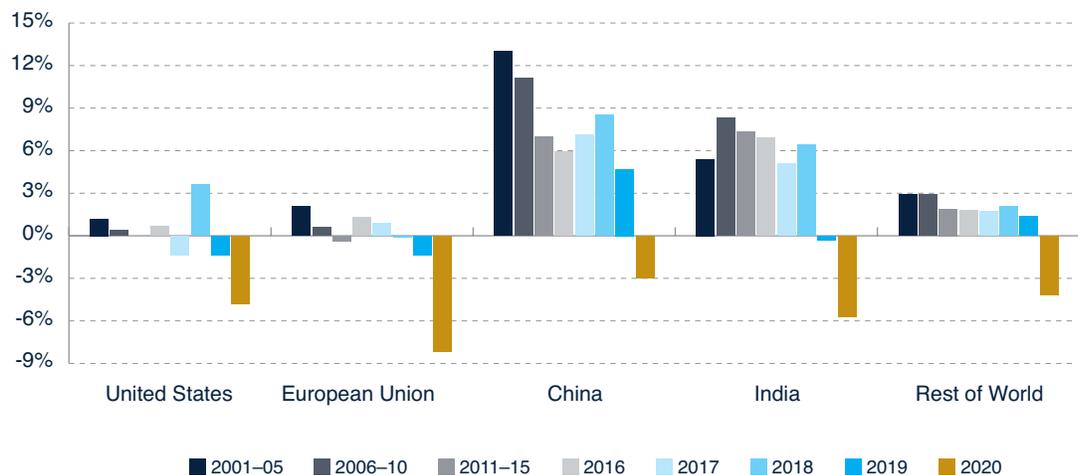
## COVID-19'S IMPACT ON THE POWER SECTOR

Over the past few months, lockdown measures have significantly reduced electricity demand in the commercial and industrial sectors. The [International Energy Agency \(IEA\)](#) estimates that global electricity demand decreased by 2.5 percent in Q1 2020, and forecasts a 5 percent contraction by the end of the year. In March and April 2020, IFC observed a 15 percent drop in demand, on average, in many countries where it does business.

Slower demand growth resulting from falling economic activity prompted by COVID-19 will probably keep oil prices down. However, volatility should be expected. Low oil prices will help oil-importing countries, including those where the price of natural gas is indexed to oil. Natural gas prices were already at record lows before COVID-19 due to the economic slowdown in China and record shale gas production in the United States.

Spot prices in countries with a large share of renewables have reached levels close to zero marginal cost (for example, in Brazil, Mexico, Peru, and Turkey at certain hours).

### ANNUAL AVERAGE GROWTH RATES OF ELECTRICITY DEMAND IN SELECTED REGIONS, 2001–20



Source: IEA 2020. All rights reserved.

[S&P Global reports](#) that the slowdown in demand has led to cleaner air with estimated carbon emissions dropping by 17 percent in April compared to a year earlier. Falling industrial production, fewer cars on the road, and less power generation contributed to this. In addition, global power

generation from renewables increased by 3 percent, largely driven by new solar and wind projects coming online during the past year. The resiliency of renewable power under current circumstances provides strong optimism for increased demand and investments in renewables going forward.

As economies recover from COVID-19, increased energy demand may also be met by ramping up thermal power plant generation, which will increase carbon emissions. If fossil fuel prices remain low, renewables could potentially be crowded out in the medium term, especially in countries with large hydrocarbon endowments. On the other hand, low gas prices are now helping make gas-fired power generation relatively more attractive in comparison to carbon-intensive, coal-fired power generation.

Increasing unemployment due to the pandemic may prevent many people from paying their electricity bills. The payment delays and delinquency of utility bills by end-consumers (residential, commercial, and industrial) is beginning to have a detrimental effect along the energy supply chain. In many countries, governments have intervened by maintaining electricity services to the population during the lockdown while also reducing the negative financial impact on the sector.

Lower power demand and end-consumer payment stresses are constraining the ability of distribution companies to pay power producers under long-term, take-or-pay power purchase agreements (PPAs). Many power distribution companies are in need of significant and immediate liquidity support. This is a major concern for investors who rely on PPAs to recover their investments and make a return. In more liberalized markets, the drop-in demand has resulted in the collapse of electricity market prices, hurting power generation companies.

Many companies across different sectors globally have ceased or decreased capital expenditures, where possible, and the power sector is no exception. Non-critical investments have been suspended throughout the sector—from generation to transmission to distribution.

Supply chains for the power sector are also impacted. Manufacturing of most power sector equipment is going into a sharp slowdown. On the positive side, the COVID-19 situation in China, where the majority of solar supply comes from, is normalizing, and factories are starting to re-open. Supply disruptions from other countries are affecting the wind industry (which relies on international supply linkages) more heavily than solar. Moreover, local and international travel restrictions, quarantine requirements, and lockdowns have resulted in project delays and have added to project construction costs.

## RESPONSE TO THE CRISIS

IFC currently has a \$6.9 billion electric power portfolio in 48 countries. In most of its markets, the COVID-19 outbreak has triggered government measures to secure power supply to users during the crisis period. Some of the more common measures taken are:

- Social considerations have driven some governments to announce a moratorium or deferral of consumer bill payments for a few months (for example, Bangladesh, Brazil, Chile, Cote d'Ivoire, Ghana, Philippines, and Senegal).
- Several distribution companies have declared *force majeure*—a clause that allows contracts to be declared null and void due to acts of God or other unexpected circumstances—to power generation companies, which impacts payments to power producers.

In this time of crisis, IFC will continue to work closely with the private sector, national authorities and international partners to support the power sector on many fronts to ensure a resilient and sustainable sector. IFC will continue to extend support to all stakeholders, balancing the need to address short-term liquidity needs while ensuring that power sector viability and long-term goals are not jeopardized. As such, the crisis can be an opportunity to help governments embark on reforms that strengthen the power sector and mobilize public and private financing to meet the significant investment needs of the sector.

IFC is supporting private sector players in the power sector with multiple financing solutions, including working capital facilities to support temporary liquidity needs, refinancing existing debt to enhance resiliency, and long-term financing to support project development and construction in an environment where financing is not as easily available.

In close cooperation with international partners, IFC will continue to promote energy efficiency, conservation, and carbon reduction so that the promising trends established prior to the crisis do not lose momentum and continue to be significant drivers of the power sector.

## GOING FORWARD

The COVID-19 pandemic has caused many dislocations to the power sector. However, as the pandemic eases and mobility increases, economic activity is likely to pick up. That will increase commercial and industrial demand for electricity, which will ease many of the problems faced during the crisis. It is important that IFC and international partners help the sector safely pass through the crisis period.

As governments, among other pressing priorities, attend to the large financing needs arising from COVID-19, the private sector can play a vital role in delivering the large investments and expertise required for the power sector in developing countries. IFC, with its long track record in financing power projects globally, mobilizing financing from partners, and strong engagement with governments and local stakeholders, will continue to contribute significantly to the development of the sector.

Going forward, IFC's objective in the power sector is to support its client countries in creating cost-competitive power markets that promote sector resilience, inclusiveness, and encompass the ever-increasing role of renewables.

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