



In the Dark:

How Much Do Power Sector Distortions Cost Pakistan?



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Pakistan has made important strides in expanding electricity access and increasing electricity supply over the past few decades. But despite the progress, electricity shortages measured by the gap between supply and latent demand remain severe.



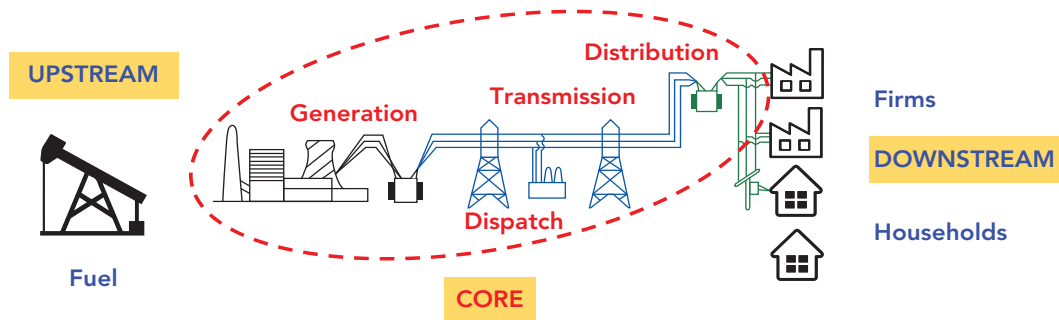
In fiscal year 2016, electricity shortages during peak hours equaled **24 percent of demand**. The 2018 *Global Competitiveness Report* ranks Pakistan **115th** among 137 economies in the reliability of electricity supply. Per capacity electricity consumption, after peaking in 2006, failed to grow for almost a decade. In 2014, it was only about **one-fifth** the average among middle-income countries.

While Pakistan's power sector needs urgent investments to boost sustainable energy supply, it also requires reforms to overcome **inefficiencies in every link of the electricity supply chain** that harms economic growth and efforts to end poverty.

Distortions in the power sector cost Pakistan's economy the equivalent of **\$17.7 billion** (6.5 percent of GDP) in fiscal year 2015. Addressing these distortions through power sector reforms could help Pakistan make the most use of existing facilities, avoid waste, and boost electricity supply in a cost-effective manner.

What Are the Distortions?

Upstream in the electricity supply chain, natural gas is Pakistan's most important indigenous fossil fuel. Multiple problems affect domestic gas supply:



Domestic gas has been consistently priced below the import parity price, contributing to gas shortages. In fiscal year 2016, international gas price was **2.2 times the weighted-average** domestic gas price. The low gas price reduces incentives of international oil companies to explore for and produce gas. Extremely low tariffs for the residential and fertilizer sectors led to excessive demand for low-value uses of gas from these two sectors.



Pakistan lost 14.3 percent of gas during transmission and distribution in fiscal year 2015, compared to a typical leakage rate (also called *unaccounted for gas*) of 1-2 percent in advanced economies. **Lack of effective regulation** of gas companies has contributed to a neglect of maintenance, leading to excessive pipeline leakage and gas theft.