

Expensive electricity and persistent load shedding are major hurdles in the economic growth of the country. Critically evaluate the statement and give recommendations.

## Introduction

An acute ongoing energy crisis has plagued Pakistan's already flagging economy. The country's energy difficulties are deep and complicated, stemming from a lack of governance and political will rather than a lack of supplies. This stems from the lack of a comprehensive and integrated energy strategy, which has resulted in interagency turf wars and a lack of coordination; insufficient revenue to support energy generation and infrastructure, which is due to low liquidity in Pakistan's struggling economy and high rates of tax defaults; and the leadership's unwillingness to make politically unpopular changes to address the situation.

## Energy Woes are Not New - A Historical Glimpse

Islamabad is convulsed in energy crisis but this situation is not new. It is persistent and recurring. Pakistan energy crisis may be traced all the way back to the 1970s. In the 1970s, a serious crisis was averted when the government built the gigantic Mangla and Tarbela dams, resulting in a brief period of reliable hydro-carbon driven energy supply that met demand. However, following a period of great economic expansion in 1980s, energy demand skyrocketed, outstripping supply and infrastructure. The government attempted

I  
 to increase production but was unable to meet demand. The problem has worsened as Pakistan's population growth, and as urbanization has resulted in the growth of new companies and other corporate energy users.

### Exacerbated Energy Shortfall Today - A Gensis:

The electricity shortfall in Pakistan has been recorded at 7868 megawatt (MW), according to National Electric Power Regulatory Authority (NEPRA).

It has resulted in 10-12 hours of load-shedding.

4. The country is lagging behind in demand as it is producing 15,500 MW against 21,500 MW demand.

About 25% of the population is not electrified, while those who have electricity are paying heavy bills. The installed capacity of producing electricity is way more than that of the demand; however, due to numerous reasons electricity cannot be produced. Under CPEC a number of energy projects are completed and some of these are in the pipeline. Theoretically speaking, these projects are enough to not only fulfil the local energy demand but also enough to make it exporting product.

### Reasons of Energy Crisis:

Electrical shortages are likely caused by multiple factors including faulty power policies, heavy lines losses, mismanagement of indigenous resources, and continuous use of obsolete thermal

power plants that burn costly imported fossil fuel. The electricity shortage have cut GDP growth by 4% causing shutdowns in hundreds of manufacturing plants, and a decline in agricultural productivity, compromising the economic security of the country through fluctuations in GDP devaluations of the currency, and increases in the unemployment rate. A few reasons explaining the failure of production of energy are as follows:

### Mounting Circular Debt:

The current burden of circular debt on the feeble economy of Pakistan is unprecedented. The rental power projects and independent power projects producers (IPPs) have cut down their production because of the pending money to be paid by government of Pakistan. Currently, IPPs are producing only 9526 MW only. In addition, a few plants were shut down due to unavailability of oil or technical glitches. They lack money to buy oil to keep the plants functional. Similarly Chinese coal companies in Bhit gas project pulled out because of outstanding payments.

### International Price Hike of Hydrocarbons:

Pakistan energy sector is highly dependent on import of hydrocarbons. The international price hike has brought the buying to a grinding halt. Despite global price hike, Pakistan froze petrol and electricity prices. It is critical for an efficient economic

Date \_\_\_\_\_

system that prices are directly related to costs. When fundamental costs grow, as they do when international commodity prices rise, the government cannot protect the public from increased domestic prices without increasing future generations' debt load. The core of economy's problems is insufficient tax collection from large swaths of the economy and a lack of productivity in comparison to other countries. Gargantuan circular debt coupled with a international hike has led to reduction in hydrocarbons imports, which has shut down numerous power plants. Hence, the huge electricity shortfall.

### Decadent Transmission Lines:

The aggregate Technical and Commercial (AT&C) losses of Pakistan's power sector soared to 29%, the highest in the region while other countries fared much better, according to the K-Electric Investor Presentation. A state that is already faced with huge energy crisis coupled with a flunking economy cannot afford line losses and electricity theft. The already short supplied commodity is lost on the way and the general public suffers immensely. Energy lost in the equipment used for electricity transmissions often a result of long transmission lines and outdated/inefficient equipment and imbalanced load that produce voltage drops. Non-technical losses / commercial losses include loss outside the

power generating systems, consists of electricity theft, meter tampering and unpaid bills.

Resolving Pakistan's energy crisis will thus require

## Salvage From Grim Energy Crisis - Recommendations

Resolving Pakistan's energy crisis will thus require political will, additional funding, and new power generation sources.

As the country lacks significant internal sources of revenue, opportunities exist for international donors to finance its energy recovery.

In addition, indigenous energy solutions and alternative energy resources should be brought to optimum use.

### 1. Paying Off IPPs to Reduce Circular Debt:

A short-term fix that could bring immediate relief is to request a new loan from the International Monetary Fund (IMF) or other bilateral donors. However, because the IMF and other donors would probably impose politically delicate conditions, it can be a very tricky situation. Once the payment is made, the IPPs, energy sector might catch a breathe.

## 2. Import of Hydrocarbon must be resumed and increased:

The import of hydrocarbon has to be resumed and increased, that too on international prices. It is because IMF would not give loan if the government keeps the prices frozen.

## 3. Tax Reform:

~~The~~ Tax Reform is imperative and should be designed to provide Islamabad with more revenue to address the energy crisis.

## 4. The long-term Solutions:

Pakistan can initially better diversify its energy mix by importing clean coals, which is often cheaper than imported oil and gas. For this purpose, clean energy projects and nuclear energy production holds the most significance. Additionally, Renewable Energy Generation (REG) and Green, Clean and Sustainable (GCS) electricity generation must be prioritized scenarios. Among these scenarios, the GCS scenario will enable Pakistan's power system to generate 50% of its electricity using sustainable, clean and green energy technologies thus ensuring power and economic sustainability in Pakistan.