

# Topic: Imbalance of Energy mix in Pakistan and its consequences.

## OUTLINE:

### 1) Introduction

**Thesis Statement:** Energy balance is essential because the imbalance of energy mix is a potential threat to our economic well-being. Exploration of the more indigenous and renewable resources is key to have energy security.

### 2) Overview of imbalance in energy mix in Pakistan and importance of energy.

### 3) How energy mix in Pakistan is imbalanced

- a) Limited percentage of oil to meet overall demand
- b) Natural gas reserves of the country are quickly depleting
- c) Less utilization of hydropower for electricity generation
- d) Energy generation is highly relying on the imported coal
- e) Low utilization of wind for electricity generation
- f) Lack of knowledge for proper utilization of energy

### 4) Consequences of imbalance in energy mix.

- a) Electricity shortages left business in the dark
- b) Imbalance in energy affects the major cities of the country
- c) Import of coal will burden the economy
- d) Imbalance of energy mix increases inflation
- e) Oil imports are becoming costlier, burdening the balance of payment.

- 5) Ways to balance the energy mix in Pakistan
- a) That coal based lucky Electric Power project
  - b) Development through CPEC
  - c) PPIB Amendment bill 2022
  - d) Short Term Targets to meet energy demands.
  - e) Renewable Sector
  - f) Distributed Generation and Net Metering Regulations.

## 6) Conclusion

Balanced diet is necessary to meet the nutritional demands of the body and to prevent malnutrition. Food containing balance amount of vitamins, minerals and nutrients will enhance ~~our~~ our health and prevent us from life threatening diseases. Similarly the balance of energy mix is necessary to ensure the smooth supply of energy to the general public and to boost economic growth. Low utilization of hydropower and wind are causing imbalance in energy. Natural gas reserves of the country are quickly depleting and energy generation is highly dependent on the imported coal is also causing imbalance in energy mix. Electricity shortages and imbalance in energy left business and cities in the dark, while import of coal will burden the economy by increasing inflation in the country. The that coal based lucky power projects

and development through China Pakistan economic corridor will help us to balance the energy mix in Pakistan. The renewable energy sector and development of Short Term Targets will also contribute in the generation of balance in the energy production and supply. Energy balance is essential because the imbalance of energy mix is a potential threat to our economic well-being. Exploration of the more indigenous and renewable resources is a key to have energy security.

Energy sector plays a vital role in the economic development of a country. The recent decades witnessed a manifold increase in the demand for energy. According to the International Energy Agency (IEA), the economic recovery from the COVID-19 pandemic, combined with unusual weather conditions led to a sudden jump in electricity demand by more than 6 percent in 2022. Pakistan's dependence on liquefied natural gas (LNG) has increased in recent years due to depleting indigenous natural gas deposits. The ~~the~~ in appropriate responses of the government created problems in the import of LNG by the private sector which led to gas crises in the country, especially in winters. Pakistan is producing very limited percentage of oil to meet the

overall demand of the country. The indigenous oil production is constrained by technological, technical and financial constraints. The import of oil increased by 95.9 percent to US \$ 17.03 billion during July-April FY 2022.

Natural gas reserves of the country are quickly depleting due to substantial increase in the demand for gas, putting huge pressure on the limited gas reserves of the country. In the FY 2021, around 373 million MMBTU of LNG gas worth around US \$ 3.4 billion was imported (Ministry of Finance, 2023)

Pakistan is very rich in hydro power and has the enormous potential to generate electricity from water. The estimated total hydropower potential of Pakistan is around 60,000 MW. The country is not fully utilizing full potential and using nearly 16 percent of the total hydropower potential.