

Current Affairs

Energy crisis in Pakistan

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1) Introduction:

The world is facing a shortage of energy and that has sent shock waves from Europe to Asia - and Pakistan is no exception - the energy industry in Pakistan is in crisis due to the lack of energy output, to overcome the countries rising demand now Pakistan is reliant on imported hydrocarbons, like, oil, gas and coal - According to the **Asian development Bank**, the report published in 2019 claiming that Pakistan is an energy insecure country

2) **Hydrocarbon Imports.**

Pakistan Produces **20%** energy from oil, and **23%** from gas, basic Production of Pakistan is about **36%** which is Producing by the local reservoirs - the rest of hydrocarbon Pakistan imports for instance, oil from **UAE** and Saudi Arabia, gas from **Qatar** and coal from **South Africa**. In **2020** Pakistan imported **32** Barrel total hydrocarbon that was **588** thousand, Barrel Per day.

3) **Electricity Production.**

In Pakistan the basic **28%** electricity is Produced by Wapda and **27%** by **IPPs** independent Power Producer and the rest of **10%** Produced by the civil Nuclear.

4) **Administrative Institution.**

a) The executive unit related to electricity is **(Pso)** Pakistan State Oil, whoever imported oil like **shall, attock** etc will be led to Pso because it issues the licence too. mostly the imported oil comes in the raw form which also known as crude oil - Pso send it to bank for refinement of that oil and distributes to the further - where it needed like Petrol Pumps, Industries etc -

b) **OGRA**, oil and gas regulatory Authority - it decided the Prices of oil and gas

c) **Sui Southern and Northern:**

In Balochistan and Sindh, **Sui Southern** distributed the gas and in Punjab and

kpk, **Sui Northern** distributes the gas.

d) **NEPRA.**

on National Level NEPRA decides the prices and Problems affiliated with the electricity etc.

e) **(NTDC)** National Transmission Dispatch company - it distributes electricity in national Level.

5) **Role of Banks.**

Banks Provide Loans in energy sector.

for example, if any administrative unit need debt like, **IPPs, WAPDA,**

NTDC etc. so role of the banks in energy sector is not neglectable.

6) **Circular Debt.**

The Loan from the **IPPs, importers** and the **Banks** over the government of Pakistan in context of electricity is called the circular debt.

7) **Irani hydrocarbon.**

In Pakistan more than **60%** hydrocarbon based electricity produced by hydrocarbons and **6000 MW** hydrocarbon produced by oil. then the Question arise that why Pakistan do not buy Irani hydrocarbon? the answer would be that due to its impurities.

Irani hydrocarbon is impure more than the hydrocarbon of whole Caspian region.

8) **US sanction.**

Iran has been under **US** sanctions due to the increase in enrichment level of

Uranium So, in this case Pakistan deals with Iran for hydrocarbon then **US** Policies would be harder upon Pakistan. as Pakistan's economy is dependent upon **IMF**. Furthermore US sanctions on Iran is like a barrier for Pakistan to borrow cheap hydrocarbon on the cheapest price.

9) Devaluation of PKR

oil, gas and coal are the most expensive source of hydrocarbon. As internationally import and export carried out in the form of Dollar. In **July** per barrel oil price was **127-2020** - and none other than in **January 2022** - 1\$ increased from **178PKR** to **223** till 2023. So Rupee has devalued in international market. that sent shock waves resultfully Pakistan faced inflation and also made expensive agreements with **(IPPS)** during the year of 1986, 1991, 2002 and 2014.

10) Factor affecting Energy crisis

- 1) Capacity Payment 33% of the unit of product which means that after a expensive agreement you have to pay 33% of the product, either the consumer is using that product or not.
- 2) The consumer would pay the 70% overall capacity in the form of dollars after agreement
- 3) Lack of negotiation after the agreement.
- 4) Problem with distribution sector.
- 5) Line loss which is **17%** in Pakistan and if we compare it with neighboring countries, India **9%**, Afghanistan **10%**, China **3%**.

- 6) Electricity theft
 7) Tampering of meter or bypass of the meter specially in rural areas and economic zones.
 8) **Collusion** between the consumer and WAPDA

11) Cheapest Production

During the 5 months electricity cost has been increased that is

Domestic electricity **16 PKR** to **38 PKR**
 Commercial unit **34 PKR** to **63 PKR**

In this case government has two options to pay the circular debt to shift on the consumer or do not shift the debt on consumer - government should produce cheaper electricity and give subsidy to consumer.

12) Hydroelectrical Projects

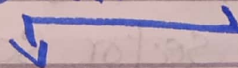
Karot **730 MW**, Sukki Kinqri **883 MW**
 Tarbela Phase **V**, Muhammad Dam **800 MW**
 Dasu **4300 MW**, Diamer Bhasha **45**

and these projects will be completed till **2029**

13) Civil Nuclear Projects.

K₂ and K₃ **1100 MW** for each

Thar Coal **320 MW** - 4 Projects



14 PKR Per unit.

14) Wind Projects

Installation of wind projects on coastal belts

4500 MW Project in Dalbandin, Balochistan

Sollar **900 MW**

15)

Way forward

- 1) To reduce the circular debt government should shift the debt to consumer which has also been done in the recent years
- 2) reduce the expensive agreements and install projects which produce cheaper electricity like wind projects, solar projects and hydroelectric.
- 3) Pakistan has world's 5th largest coal reserves which are untapped so should work on the local production to produce cheaper source of hydrocarbon.

16)

Conclusion.

In a nutshell state should play the role of regulator to overcome the energy crisis, by providing subsidy to the consumer, as well as, produce cheaper electricity. State should renegotiate with IPPs, no matter how expensive the product is, and also the production cost would not be paid in the dollar. Make sure the revamp of the transmission lines in the form of coated wires and underground wires so that may help to save the line loss. Should privatize the electricity sector so, by applying the all these techniques energy crisis can be reduced.