

# PRACTICAL

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Imbalance of energy mix in Pakistan  
and its consequences

Outline

1- Introduction

**Thesis statements:** Traditionally, imbalance of energy mix in Pakistan has become a common problem which has several consequences. Several factors, including imported hydrocarbons, outdated transmission system, energy theft etc result consequences such as, tremendous circular debt, unprecedented loadshedding, expensive energy and so on. However, with proactive strategies its consequences can be mitigated.

2- A bird's eyeriew of energy mix in Pakistan



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### 3- Factors behind imbalance of energy mix in Pakistan

- a) Dependency syndrome on imported hydrocarbons leads to energy mix
- b) Out-dated transmission system causes massive energy loss
- c) Surge in energy theft has become a common trend
- d) Rampant corruption in WAPDA paves a way for energy imbalance
- e) Tamper with meter reading throughout Pakistan
- f) Skyrocketing energy prices at global level
- g) Expensive energy agreements with IPP

### 4- Consequences of imbalance energy mix in Pakistan

- a) Pakistan has been caught in a vicious cycle of circular debt
- b) Long-prevailing loadshedding throughout the country
- c) Expensive energy has weakened Pakistan
- d) Tremendous economic meltdown due to the imported hydrocarbons
- e) Decline in industrial growth of Pakistan



f) The nation-wide public protest against energy prices

## 5- Proactive strategies to contain energy imbalance in Pakistan

- a) Renewable energy generation from local resources
- b) Replacement of out-dated transmission system with a new one
- c) Renegotiating energy agreements with IPP
- d) Ensuring digital meter-reading system

## 6- Conclusion



## Essay:

"Pakistan has been facing imbalance energy mix since 2007" (Pakistan Bureau of Statistics, 2022). No doubt, Pakistan faces massive energy imbalance, but how long it is prevailing throughout the country? In fact, several factors are behind this imbalance energy mix and chief among them is dependency syndrome on imported hydrocarbons for energy production. Not only this, but out-dated transmission system is also a root cause of it. Other factors, including surge in energy theft, rampant corruption in WAPDA department, tamper with meter reading etc have also added oxygen to imbalance energy in Pakistan. In consequence, Pakistan faces multiple issues such as, tremendous circular debt, long-prevailing loadshedding throughout the country, expensive energy. All these have contributed to economic downturn and industrial decline. Resultantly, the nation led to nation-wide protest against prices of energy. However, certain proactive policies will help



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in containing energy imbalance in Pakistan. Renewable energy generation from local sources, adaptation of a new transmission system, renegotiating energy agreements with IPP etc are strong measures. Traditionally, imbalance of energy mix in Pakistan has become a common problem which has several consequences. Imported hydrocarbons, out-dated transmission system, tremendous circular debt are few debated arguments. Therefore, it is beyond any doubt that proactive strategies will help in reducing its consequences.

Imbalance energy mix in Pakistan has become a common problem. In fact, imbalance of energy has been prevailing for a long time. As a result, Pakistan faces unprecedented consequences of energy imbalance.

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As per the report of Pakistan Bureau of Statistics, "Pakistan has faced peak of loadshedding in the year 2022." (Pakistan Bureau of Statistics, 2022). Hence, it is beyond any doubt that Pakistan has face massive imbalance of energy.

Several factors are chief drivers of energy imbalance in Pakistan, among them chief factor is dependency syndrome on imported hydrocarbons for energy production. Pakistan, unfortunately, has become used to imported hydrocarbons to generate its energy. Consequently, a huge source of energy production comes from imported hydrocarbon. "About 60 pc of energy of Pakistan comes from imported hydrocarbons." (Pakistan Bureau of Statistics, 2022). This shows Pakistan's dependency syndrome on imported hydrocarbon for energy generation which leads to imbalance energy.

Along with imported hydrocarbon, out-dated transmission system



causes massive energy loss in Pakistan. No doubt, Pakistan has been relying on out-dated transmission system since its inception. This results a huge energy loss due to out-dated, vulnerable transmission system. "Pakistan, unfortunately, has a major energy loss due to out-dated transmission system in Asia with the percent of 17 as compared to 12pc in Afghanistan" (Pakistan Bureau of Statistics, 2022). Thus, out-dated transmission system also causes imbalance energy due to massive energy loss.

Further, surge in energy theft has become a common trend in Pakistan. Unfortunately, energy theft is not a new trend, but it has been prevailing for a long time. As a result, Pakistan has become fragile to imbalance energy. "Kundi" system in Sindh and Balochistan leads to surge in energy theft in Pakistan." (Economic Survey of Pakistan, 2017-18). This is an evidence that surge in energy theft



has made Pakistan vulnerable to unprecedented energy imbalance mix.

Furthermore, rampant corruption in WAPDA paves a way for energy imbalance in Pakistan. Traditionally, Pakistan faces abuse of power in its every department, especially in WAPDA in the context of energy. This corruption system and mistrust in the WAPDA department leads to energy imbalance. As favoritism and nepotism is long-prevailing among WAPDA members. Thus it shows how corruption in WAPDA paves a way for energy imbalance in Pakistan.

Moreover, tamper with meter-reading throughout Pakistan has also become a culture. People are more prone to tamper with meter reading in order to escape from payment of bill. No doubt, Pakistani people are in search of short-cut to keep themselves escape, and country in troubles. This makes Pakistan fragile to energy



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imbalance in its all parts. Hence, tamper with meter reading has become a common culture of Pakistan.

Additionally, skyrocketing energy prices at global level has also enhanced imbalance of energy in Pakistan. In fact, global prices hike has caught Pakistan in a severe problem as it depends on imported fuel. Global energy prices at peak has put the country at the state of energy requirements. "In first year 2023, price of fuel reached at PKR 270 against \$ per litre" (The State Bank of Pakistan, 2023). Therefore, skyrocketing energy prices at global level has also enhanced imbalance of energy in Pakistan.

Besides all above, expensive

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energy agreements with IPP is also a main cause of energy imbalance in Pakistan. As Pakistan has done several agreements with IPP for energy balance, but it has put Pakistan in the cycle of energy imbalance. This shows that Pakistan's energy imbalance is also due to expensive agreements with IPP. "Agreements with IPP has pressurized Pakistan to pay 35pc of amount every year to IPP." (Pakistan Bureau of Statistics, 2022). Hence, it is a clear evidence that expensive agreements with IPP also paves a way for energy imbalance in Pakistan.

As a result, Pakistan faces several consequences of energy imbalance as Pakistan is caught in a tremendous circular debt. No doubt, imbalance of energy mix has threatened Pakistan that is clear from its debt cycle. Unfortunately, Pakistan has a huge burden of ~~the~~ circular debt on its shoulders. According to Pakistan Bureau of Statistics,



"About \$2.3trillions of circular debt has weakened Pakistan." (Pakistan Bureau of Statistics, 2022). This shows the massive negative consequence in Pakistan which is a witness that Pakistan has caught in a tremendous circular debt.

Not only this, but long-prevailing loadshedding throughout the country has also become a threat to Pakistan. Pakistan, unfortunately, is unable to meet energy need of its people. In consequence, people face unprecedented loadshedding in both rural and urban areas.

"In the first year 2022, rural areas remained under loadshedding of 16 to 18 hours, while urban areas faced the loadshedding of 8 to 10 hours." (Pakistan Bureau of Statistics, 2022). Hence, long-prevailing loadshedding throughout the country has become a major issue due to imbalance of energy in Pakistan.

Besides this, expensive energy has also weakened Pakistan. As



global prices of energy at peak and expensive agreements with IPP has already created consequences for Pakistan. This can be seen from peak prices prevailing in Pakistan as well. Prices of electricity, no doubt, is a solid argument to accept reality. Therefore, expensive energy due to imbalance energy mix has also weakened Pakistan.

Moreover, tremendous economic meltdown due to the imported hydrocarbons can not be ignored as a major consequence. Pakistan, unfortunately, has been revolving in a vicious cycle of economic downturn that has become an unending dilemma. A major portion of economic loss is due to dependency syndrome on imported hydrocarbons for energy generation. According to the report of Pakistan Bureau of Statistics, "About 25% of trade deficit of Pakistan is due to imported hydrocarbons" (Pakistan Bureau of Statistics, 2022). This shows that economic downturn of Pakistan



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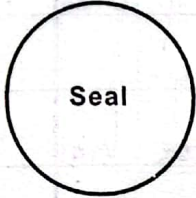


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is due to imbalance of energy mix.

Further, decline in industrial growth of Pakistan is another consequence of energy imbalance. Unfortunately, Pakistan has the most weakened industrial development. Inadequate energy supply paved a way for industrial decline in Pakistan.

"About 35pc of cotton is shifted to abroad and 80pc of domestic industries were closed due to massive loadshedding in 2022." (The Institute of Strategic Studies Islamabad, 2023). Thus, energy imbalance mix in Pakistan led to industrial decline in Pakistan.

Furthermore, the nationwide public protest against energy prices is also due to imbalance energy prevailing in Pakistan. The

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nation faces several consequences of energy imbalance that resulted widespread protest throughout the country. People in all provinces of Pakistan came out from houses and did protest at roads by burning energy bills. This shows how energy imbalance has posed several consequences in Pakistan which can be seen throughout protest of the nation.

To address all above consequences, Pakistan needs proactive strategies which include renewable energy generation from local sources. Pakistan, fortunately, has a great potential to produce its energy from local, untapped sources. This will reduce energy imbalance by generating a huge energy from local sources. "Pakistan has become ready to produce its 66% of energy from hydro generation by 2030." (Pakistan Bureau of Statistics, 2022). Thus, renewable energy generation from local sources will help in redu-



ing energy imbalance in Pakistan.

Meanwhile, replacement of out-dated transmission system with a new one will also reduce imbalance of energy in Pakistan. In fact, Pakistan should get pro-active in fixing a new transmission system in order to save energy from being loss. This will definitely save a major portion of energy in Pakistan. "About 3pc of energy loss has saved by a new transmission system from Lahore to Multan." (Economic Survey, 2022). This is a clear witness that replacement of out-dated system will save a major portion of energy in Pakistan.

Along with it, Pakistan should renegotiate energy agreements with IPP. Pakistan's imbalance of energy is also prevailing due to expensive agreements with IPP which should be renegotiated timely. Fortunately, this will help Pakistan to reduce energy imbalance. "Pakistan can save \$100 or \$150 PKR



by renegotiating agreements with IPPs (Pakistan Bureau of Statistics, 2022). Thus, renegotiating energy agreements with IPP is one of proactive solutions to reduce energy imbalance in Pakistan.

Last but not the least, ensuring digital meter reading system throughout the country will reduce imbalance of energy. Pakistan needs to be serious in decision-making process to ensure digitalization of meter reading. This, as a result, will decrease imbalance of energy mix in Pakistan. Governance role in regularizing digital meter-reading is a necessary tool. Therefore, ensuring digital meter reading system throughout the country will reduce imbalance of energy mix in Pakistan.

In conclusion, imbalance of energy mix in Pakistan has become a chief problem which has several consequences. No doubt, several factors are contributing in energy imbalance



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which include, dependency syndrome on imported hydrocarbons, outdated transmission system, surge in energy theft etc. All these, as a result, enhance several consequences such as, tremendous circular debt, long-prevailing loadshedding, expensive energy and many more. These consequences demand proactive strategies to reduce imbalance of energy. Renewable energy generation from local sources, replacement of out-dated transmission system, and renegotiating agreements with IPP are sound solutions against imbalance of energy. Traditionally, Pakistan has caught in a circle of energy imbalance mix which poses above consequences. However, with rational measures its shortcomings can be mitigated. "Pakistan has a tremendous potential to produce energy" (The World Bank, 2023).

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