



ENERGY AND CLIMATE
PANORAMA

POLITICO-ECONOMIC ANALYSIS OF PAKISTAN'S GAS SECTOR

U.S.-PAKISTAN CENTER FOR ADVANCED
STUDIES IN ENERGY

ABOUT US

Who we are

We are a dedicated team of researchers and experts who recognize the urgent need for action in addressing climate resilience and energy transition in Pakistan. Our mission is to develop and implement effective policies for cleaner, renewable energy sources like solar and wind, aligning with Pakistan's 2030 goal of 30% renewable energy in its electricity mix. As a multidisciplinary team, we leverage expertise in three key disciplines of study—Energy Systems Engineering, Thermal Energy Engineering, and Electrical Power Engineering—to drive our mission forward. We are united by a shared vision of creating a sustainable and resilient future for Pakistan, where cleaner energy sources play a pivotal role in reducing the nation's vulnerability to climate-related challenges.

What we do

We conduct in-depth, evidence-based research to analyze and improve energy policies in Pakistan. Our focus is on advancing renewable energy solutions and engaging stakeholders to ensure effective policy implementation. Our methodology involves a critical examination of current energy policies to pinpoint areas of improvement and formulate strategies for the widespread adoption of renewable energy sources across various levels.

In line with our commitment to fostering sustainable practices, we have established a fellowship program as part of our broader initiatives that aims to facilitate evidence-based research for promoting energy transition in Pakistan. Through research studies, surveys, and forecasting, we plan to assess various aspects of energy transition, including the adoption of renewable energy technologies and their impact on climate change. Our approach involves active engagement with stakeholders to address their concerns and facilitate the effective implementation of policies, fostering the growth of renewable energy manufacturing and marketing facilities.

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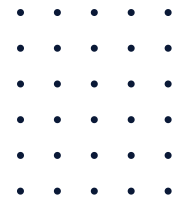
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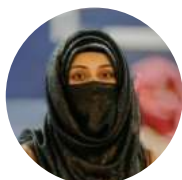
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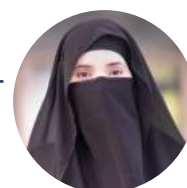
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Executive Summary

This study extensively examines Pakistan's gas and LNG market, emphasising important factors such as energy availability, consumption patterns, and concerns over financial stability.

The background section highlights the crucial significance of energy in contemporary civilisation, propelled by technological progress and growing demand. This highlights the worldwide movement towards sustainable development and the need to control energy usage to reduce the impact of climate change, including the increase in global temperatures and sea levels. Pakistan's energy sector encounters substantial obstacles, such as a growing dependence on imported liquefied natural gas (LNG) as a result of diminishing domestic gas supplies. The report provides a comprehensive analysis of the financial instability resulting from this reliance, specifically highlighting the issue of circular debt in the gas sector. The increase of this debt is attributed to factors such as significant unaccounted-for gas losses, delayed adjustments to tariffs, and insufficient subsidy mechanisms. Furthermore, it highlights the difficulties encountered in establishing a tariff system that accurately reflects costs. It specifically mentions the opposition faced by gas-producing states, such as Sindh, who are reluctant to adopt standardised petrol rates.

The examination of LNG supply problems uncovers a dire scenario in which scarcities have resulted in blackouts and economic disturbances, particularly in vital sectors such as fertilisers. The report emphasises the necessity of implementing strategic planning and enacting policy reforms to tackle these difficulties.

This supports the promotion of energy efficiency, the allocation of funds towards energy (RE), and the revision of the petrol pricing structure to better align with the true costs involved. It also presents policy proposals to decrease reliance on LNG imports, strengthen energy security, and encourage sustainable practices in the energy sector. Implementing these measures is crucial for stabilising the energy market and guaranteeing long-term economic and environmental sustainability for Pakistan.