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The Resilience of the Israel's Energy Sector During Security Emergencies

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Abstract

Israel's energy sector faces significant vulnerabilities during security emergencies, including potential electricity supply disruptions driven by military demands and economic constraints. Although the country has shifted from imported oil to domestic natural gas and is gradually expanding its use of renewables, systemic weaknesses, such as limited storage capacity, centralized grid design, and inadequate integration of intermittent sources persist. This study employs a mixed-methods approach to evaluate the sector's structural resilience. Quantitative analysis draws on official data to assess trends in electricity production, fuel diversification, and consumption. The qualitative component involves a structured content analysis of policy documents, regulatory decisions, and institutional reports. The findings highlight growing gaps between electricity demand and emergency preparedness, particularly in light of Israel's heavy reliance on natural gas and the absence of a strategic reserve. The study concludes with policy recommendations aimed at enhancing the resilience of Israel's energy system under conditions of armed conflict.

Key words: Energy Sector; Israel; Natural Gas Resources; Electricity; Security Crisis