Science and Innovation

Volume 7, Issue 1, pp. 19-34

Published 2025/03/15

DOI: 10.12345/si.2025.1.002

Renewable Energy Transition in the South Caucasus: Policy and Infrastructure Challenges

Authors: Lasha Tsiklauri, Maka Dolidze

Abstract

This study examines the structural barriers and policy frameworks governing the transition to renewable energy sources in South Caucasus nations, with particular focus on Georgia, Armenia, and Azerbaijan. Drawing on qualitative interviews with 34 policymakers and quantitative energy data from 2010?2024, we identify three primary obstacle clusters: grid modernization deficits, regulatory fragmentation, and limited access to green finance. We propose a regional coordination framework to accelerate the adoption of solar and wind technologies.

Keywords: renewable energy, South Caucasus, energy policy, grid modernization, green finance

References

IRENA (2023). World Energy Transitions Outlook 2023. International Renewable Energy Agency, Abu Dhabi.

Muradov, N. (2020). Low-carbon energy transitions in the South Caucasus. Energy Policy, 139, 111344.

IEA (2024). Georgia: Energy Policy Review. International Energy Agency, Paris.

Stern, N. (2015). Why Are We Waiting? The Logic, Urgency, and Promise of Tackling Climate Change. MIT Press.