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Energy trends in Palestinian territories of West Bank and Gaza Strip: Possibilities for reducing the reliance on external energy sources

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ABSTRACT

The Palestinian territories (PT) is dependent on external sources to meet their energy demands. Around 80% of their energy sources come from neighboring countries. This dependency renders the price of different fuel types, despite the fact that the per capita consumption is among the lowest. The goal of this work is to reduce the energy dependency on external energy sources, with the express hope that a more stable and reliable energy security can be realized. This paper will attempt to detail the current energy demands in the PT, and evaluate the different possibilities in reducing the reliance on external energy sources. Adopting clear and transparent energy policies that result in strategies and action plans directed to encourage the exploitation of renewable energy is the first step in achieving this goal. Investments in renewable energy is one of these measures where PT have good potentials of solar radiation, huge amounts of biomass, good wind speeds at certain sites and success in utilizing geothermal energy for domestic applications. The analysis of a number of pilot projects being installed or are running in the PT for different renewable energy fields are indicative of their viability and potential in the context of the PT. The development of a clear energy conservation policy is also an important tool that can be used to reduce the energy consumption in the PT, which will in turn reduce the dependency of the PT on external energy sources.

Contents

Abbreviations: GS, Gaza Strip; IEC, Israeli Electrical Company; LPG, liquefied petroleum gas; NGOs, non-government organizations; PIF, Palestine Investment Fund; PT, Palestinian territories; PV, photovoltaic; TJ, tera Joule; WB, West Bank

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