

# Remittances and renewable energy: an empirical analysis

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energy

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## Abstract

**Purpose** – The purpose of this paper is to examine the potential role of remittances on renewable energy consumption in the top recipient developing countries from 1990 to 2016.

**Design/methodology/approach** – The paper uses autoregressive distributed lag (ARDL) technique to fulfil the purpose.

**Findings** – The empirical findings divulge that remittances positively affect renewable energy consumption. This finding implies that remittances can potentially increase the level of renewable energy consumption by increasing affordability if proper incentives and encouragement are offered.

**Practical implications** – Given the enormous potential that renewable energy can bring to an economy, the government should offer indirect incentives to encourage recipients to allocate a portion of their remittances to renewable energy projects, either as minor investors or users.

**Originality/value** – To the best of the authors' knowledge, this paper is novel for two reasons. First, this study adds to the existing literature by empirically examining the link between remittances and renewable energy consumption in the top five remittance recipients, which have never been studied before. Second, the findings of this study will have policy implications not only for the top remittance recipients but also for other remittance recipients, particularly for developing countries.

**Keywords** Remittances, Renewable energy, ARDL

**Paper type** Research paper

## 1. Introduction

Renewable energy is being produced and used to deal with energy security, reduce greenhouse emissions and strengthen rural development. Among the examples of renewable energy are solar, hydro, wind and geothermal, which can ensure price stability, unlimited energy supply and lower carbon emissions (Chen, 2005). Renewable energy consumption will gradually increase the quality of the environment by reducing carbon dioxide emissions. Despite the potential benefits, several obstacles continue to stymie the development of renewable energy consumption. Several barriers have been identified in the

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