

Reducing Carbon Emissions through Household Energy Efficiency Measures in Nigeria

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Abstract

The Paris agreement has a goal of reducing global warming to below 20C, preferably to 1.50C. To achieve this, emissions need to be reduced quickly. The energy sector is one of the key sectors that contributes to carbon emission, it is therefore imperative to find ways of reducing emissions through energy efficiency measures. In Nigeria, energy is used in the industrial, residential, transport, services and informal sectors. However, the residential sector accounts for the largest consumption. Emissions from household fossil fuels and electricity use produces about 1000g CO₂/kwh. The economic evaluation of improved efficiency of appliances in the household sector will help to put a cost to reducing CO₂ emissions. Therefore, the objective of this study is to analyse the economic implication of CO₂ emission reduction potentials in Households.

In this study, the Long-Range Energy Alternatives Planning System (LEAP), a modelling tool will be adopted. The model stimulates energy scenarios with several modules and its user friendly and transparent.

The economic value of reduced carbon emissions will facilitate advocacy in the change to a more clean and efficient energy demand.

