## **Chapter 6**

## URBANIZATION, RENEWABLE ENERGY AND ECONOMIC GROWTH: SELECTED IN 10 COUNTRIES

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## **INTRODUCTION**

Renewable energy is energy derived from natural sources that can be reached continuously and repeatedly. It is also referred to as the types of energy that is derived from natural sources and is renewable. These are sources of energy such as hydraulics, wind power, solar power, geothermic, biomass, biogas, wave power and tidal power, which are not fossil based, do not run out and will continue renewing themselves at all times. It is well known that today's traditional technologies of energy production and consumption have negative effects on people, environment and natural sources at local, regional and global scales. Therefore, it gained significance for energy to be produced and consumed with minimal impact on the environment. Many countries place emphasis on introducing renewable energy sources, especially those with zero emission, into the economy through free market mechanisms in a reliable and affordable way without pushing the limits (www.epdk.gov.tr, 2016).

Energy is crucial for the progression of a society. Modern life is fully dependent on energy as the production of electricity is dependent on coal, transportation on petroleum products and heating is on natural gas. However, as much as beneficial it is, the production, distribution and consumption of energy has considerable negative effects on especially public health and the environment. Mining and drilling of fossil fuels such as coal and petroleum has significant impact on the environment. Additionally, coal mining is thought to be the leading source of greenhouse gas emissions. Most renewable energy sources including wind power and solar power do not entail traditional mining/drilling activities (Çoban & Kılınç, 2016).

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was concluded that all series have a cross sectional dependency. Presence of unit root in series was analyzed using CADF Unit Root Test and it was concluded that series were stationary in the first difference. Furthermore, presence of co-integration was analyzed using LM Bootstrap test developed by Westerlund-Edgerton (2007) and co-integration between series was concluded.

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