Determinants of renewable energy production: do intellectual property rights matter?

ABSTRACT

Climate change and finite energy supply issues have received substantial public attention in recent times. It has been argued that a sustainable energy supply associated with the promotion of clean energy is an important engine of growth, which calls for sound protection to reinforce investments in the renewable energy market. This paper examined the effect of intellectual property rights (IPRs) on renewable energy production using the dynamic panel generalised method of moments (GMM) technique on data from 59 sample countries. The empirical results provided strong evidence that IPRs significantly drive renewable energy production. Greater protection rights motivate renewable energy firms to increase energy production from renewable resources. Our findings further revealed that stronger protection propagates the deployment of renewable energy technologies that ultimately promote renewable energy production.

Keyword: Intellectual property right; Renewable energy; Dynamic panel analysis