

Renewables – a panacea to global warming concerns?

Emmanuel Omoniyi Falobi^{1*}, Olugbenga A. Falode² and Adenike A.O. Ogunsho³

¹Emmanuel Omoniyi Falobi, Center for Petroleum, Energy Economics & Law (CPEEL), University of Ibadan, Nigeria

²Deputy Director, Center for Petroleum, Energy Economics & Law CPEEL, University of Ibadan, Nigeria

³Center for Petroleum, Energy Economics & Law CPEEL, University of Ibadan, Nigeria

Attendant pollution associated with fossil fuel has elicited the need to seek for alternate cleaner fuels. Globally, there has been a paradigm shift towards the renewables, especially biofuels, which are fast drawing increasing attention as substitutes for petroleum-derived transportation fuels to help address issues of energy security, energy costs and global warming concerns. Pursuant to this, the UN Framework Convention on Climate Change (UNFCCC), at various fora – Lima COP20, Paris COP21 in 2015, and lately, Marrakesh COP22 in 2016, discussed extensively and agreed to mitigating climate change by limiting the global temperature rises to well below 2 degrees Celsius (2°C). According to a recent release of the BP Statistical Review of World Energy (2015), world biofuels production increased by 7.4% in 2014, whilst the global ethanol production increased by 6%. Also, biodiesel production was reported to have increased by 10.3% in 2014, despite a decline from North America. These compare favourably well with IEA Analysis report over the same period. This paper attempts to examine the impact of renewables, especially, biofuels, as a plausible solution to global warming concerns. An empirical study was conducted on the impact of biofuels mandates and subsidies across the Americas and the European Union (EU), since renewable policies are being driven by government policies through such interventions across the world. Results obtained showed clearly that the use of renewables, particularly, biofuels gave a clean, friendly environment and promises a sustainable, viable alternate source of clean energy that will reduce dependency on depleting and finite fossil fuels source.

Keywords: Biofuels, Climate Change, Global Warming, Renewables.