

International Conference on

Green Energy & Expo

September 21-23, 2015 Orlando, USA

Green energy development in Nigeria in the decade following the national renewable energy master plan of 2005

Richard Layi Fagbenle
University of Ibadan, Nigeria

The Renewable Energy Master Plan (REMP) for Nigeria was published a decade ago in 2005 following the Draft National Energy Policy (NEP) of 1993 as the only existing energy policy document at the time. The 1993 Draft NEP has since been reviewed and updated in 1996 and 2003 after which it got the approval of the Federal Government Executive Council. The NEP was again revised a decade later in 2013. A draft National Energy Master Plan (NEMP) was also developed in 2007 which captured renewable energy though as can be expected not in the great detail of the REMP of 2005. A commonality in all these documents is the absence of government white paper on any of them. Thus the clear intent and position of government in such an official publication is lacking. This paper examines Nigeria's green energy landscape in 2015 from the perspectives of the government actions and inactions (both at the Federal and State government levels) as a driver of the often stated intent to engage renewable energy. The Federal Government's inability to provide an enabling environment for the creation of a functional and virile renewable energy market in Nigeria in about two decades since the NEP came into existence (and a decade of existence of the REMP) will be examined and possible solution to the problem will also be discussed.

layifagbenle@gmail.com

Study of solar hydro complementarity potential for electric generation in Minas Gerais, Brazil

Livia Maria Leite da Silva, Wilson Pereira Barbosa Filho, Antonella Lombardi Costa, Alexandre Guimarães Reis and Abílio César Soares de Azevedo
Fundação Estadual do Meio Ambiente, Brazil

Nowadays in Brazil, lives up the challenge of meeting the increase consumption of electricity present in all sectors of society. For this purpose, it is required to use renewable energy sources as a promotional mechanism for sustainable development. However, the availability of these sources is often linked to natural factors such as rainfall which show variation throughout the year. Thus, it has become interesting the simultaneous use of more than a renewable source for generation purposes to ensure the seasonal stabilization of energy supply and the reduction of environmental impacts arising from the installation of new transmission and distribution systems. Therefore, a study was conducted by the Fundação Estadual do Meio Ambiente-FEAM to survey the potential complementarity of hydro and solar photovoltaic sources in the state of Minas Gerais, Brazil. In this state, the largest share of the electricity generated stems from hydro plants (about 85%), so that was analyzed the solar potential available in areas where there are already Hydroelectric Power Plants-HPP (>30 MW) and Pequenas Centrais Hidroelétricas-PCH (1 MW-30 MW) installed. This work aims at an increase in the reliability of the electrical generating system and its viability since there is the possibility of joint use of transmission systems already in operation. Previous analysis indicate a further strategic potential of the complementarity among solar generation and PCH, since this have a lower installed power, making them more compatible with the solar source which has smaller amounts of hours of annual availability.

livia.leite@meioambiente.mg.gov.br