

6th World Congress on

BIOFUELS AND BIOENERGY

September 05-06, 2017 | London, UK

Estimation of the production of electric and thermal energy for a controlled landfill (Morocco)

Naimi Youssef

University of Hassan II Casablanca, Morocco

The United Nations Framework Convention on Climate Change was signed in 1992 at the Rio Summit. The Conference of the Parties shall, as the supreme body, regularly review the implementation of the Convention and any other related legal instruments that it may adopt and take, within its mandate, Effective implementation of the Convention. The Conference of the Parties (COP) is the supreme body of the UNFCCC and meets annually to take stock of progress in combating climate change in order to negotiate and monitor the implementation of the Convention. It ratified the Kyoto Protocol on 16 February 2005. The twenty-second meeting will take place in Marrakech, Morocco, from 7 to 18 November 2016. The reduction and valorization of household waste is one of the main objectives of the COP22 in Marrakech. Waste recovery is conceivable through the construction of controlled landfills. The work presented in this article represents a study of modeling the operation of the controlled dump of Fez thanks to several calculation techniques. The controlled landfill in Fez is the first controlled landfill built at national level, and even in Africa, for modern solid waste management. It allows to control all the effluents, while preserving the environment of the city. This study presents an inventory of the production of electrical energy and heat energy by cogeneration. We will show that the quantity of electrical energy estimated by the mechanization of household waste from the Fes landfill is 65.5 GWh, and the amount of thermal energy estimated by the cogeneration of the electrical systems is 142.174 GWh, then these quantities are currently available at the Fes landfill. This alternative allows a reduction in the tonnage of accumulated waste. Thus, it avoids its negative impact on the environment.

Biography

Naimi Youssef has his expertise in the fields of renewable energies, and particularly in biomass, fuel cells, and environment. He is Full Professor at Sciences Faculty of Ben M'sik, the University of Hassan II of Casablanca. He is a Vice-President of association, The Moroccan Society for Advancement of Renewable Energy (SMADER), Coordinator of the course "Chemistry of the Environment" License Materials Science Chemistry (SMC), responsible for the Specialized Master "Renewable Energy and Material".

youssef.naimi@univh2c.ma
youssefnaimi@outlook.com

Notes: