

Colombian Biofuels Perspectives

Bendeck, J.1; Kafarov, V.2; González A.D.2

1-Colombian Biofuels Federation, Colombia; 2-Industrial University of Santander, Colombia

Introduction

The high sun radiation levels and rich water resources in Colombia are important factors for the competitive production of biofuels based on crops such as sugarcane, sugar beets, cassava, African palm and other natural feedstocks. These crops can be harvested for all year, thanks to country's climatic conditions. Colombia is the 5-th producer of palm oil, 7-th producer of sugarcane and 12-th producer of ethanol in the world. Currently, Colombia produces bioethanol from sugarcane and biodiesel from palm oil. Sugar mills and palm oil producers have the most organized and developed producer associations and scientific research centers. Fuel ethanol production started in late 2005 and palm oil biodiesel production in late 2007. Colombia's blending requirements are for 8 percent ethanol for gasoline and 8.5 percent biodiesel for diesel.

Results and Conclusions

Country has a high potential to increase the biofuels production, taking advantage of its natural resources and its capacity to extend the existent crops for biomass production without any deforestation. The perspective of biofuels in Colombia is promissory thanks to the government intervention creating the appropriate legislation to promote its production.

Nevertheless, if the biofuels production goals would be accomplished, Colombia will become in a bioethanol exporter and one of the Latin-American countries leader in the development of systems to produce energy from clean and environmentally friendly sources. An analysis of biofuels modern trends and future needs, with basis in the existent legislation and including some aspects such as the sustainable development, energy balances, environmental impacts, use of renewable resources and social impact, was made in this work.

Author publications

Gonzalez A.D. and Kafarov V. (2010) Design of a Multifunctional Reactor for Third Generation Biofuels Production. Chemical Engineering Transactions, Volume 21, 1297-1302

This document was created with Win2PDF available at <http://www.win2pdf.com>.
The unregistered version of Win2PDF is for evaluation or non-commercial use only.
This page will not be added after purchasing Win2PDF.