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Sustainability of Palm Biodiesel in Transportation: a Review on Biofuel Standard, Policy and International Collaboration Between Malaysia and Colombia

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Abstract

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Biodiesel is gaining prominence as a superior alternative source of energy to replace petroleum-based fuel in transportation. As of today, the biodiesel market continuous to rise up as the biofuel has been introduced to more than 60 countries worldwide. The aim of the present review is to highlight on the scenario of the biofuel implementation in transportation sector towards sustainable development in Colombia and Malaysia. Colombia serves as an ideal comparative case for Malaysia in terms of biodiesel development since the country is the main palm oil producer in Latin America region and the pioneer in bioethanol industry. The first section shows an overview on the biodiesel as an alternative fuel in transportation. The next section will focus on a comparative study between Malaysia and Colombia biodiesel sector in terms of energy supply, resource, production and consumption, standards, techno-economic cost and their biodiesel policies. A comprehensive review was studied to discuss on the sustainability of palm cultivation and biodiesel, impact of palm industry and biodiesel policy in transportation sector and potential international collaboration between Malaysia and Colombia to improve their existing policies, strategies and blueprints related to the palm biodiesel industry, thus overcoming the challenges when dealing with global energy issue. © 2020, Springer Science+Business Media, LLC, part of Springer Nature.

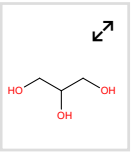
SciVal Topic Prominence

Topic: Transesterification | Cooking Fats and Oils | Rubber Seed Oil

Prominence percentile: 99.868

Chemistry database information

Substances



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