

# Biodiesel Renewable Energy and Transportation Consumption

Suppanunta Romprasert <sup>1\*</sup>, Korakot Kataboonyaruk <sup>2</sup>, Natthacha Tangnititham <sup>3</sup>,  
Tanyaluk Suwanthaijaroen <sup>4</sup>, Maytavee Soonthornwattanachai <sup>5</sup>, Danai Tanamee <sup>6</sup>

1Srinakharinwirot University, Nirvana Wongwang Rama9, 10250, Bangkok, Thailand

2Srinakharinwirot University, 114 M.L. Malakul Building, 10110, Bangkok, Thailand

3Srinakharinwirot University, The Faculty of Economics, Bangkok, Thailand

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## ABSTRACT

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Paper focuses on the renewable energy in Thailand. Objective is to compare risk on renewable energy and transportation consumption on biodiesel. It is using SWOT analysis and sustainable development theory as the tools. Besides, collecting data via questionnaire to investigate behaviors of people in having the ideas relating to biodiesel. The 52 responses from survey launching have returned. According to the results, the current consumption of biodiesel is still low because insufficient is on awareness of the consumers' trusts about biodiesel. Moreover, government's policy is not in good quality control. Biodiesel price has not been confirmed or set up in a clear standard that shows confidence in biodiesel to consumers. Remains adherence to diesel as it has been used for a longer period of time. Therefore, the risk of renewable energy in biodiesel is a relatively high risk. At the same time, in terms of environmental sustainability development, research results show that the use of biodiesel can help reducing air pollution at either PM 2.5 or global warming. Also, it would distribute an income to palm farmers. The results can be implemented for making improvements and suggesting recommendations to the government. A strengthening policy on renewable energy security and implement strategies is for solving various energy problems. With the concept of supporting research and development, it can create a wide range of knowledges, and the production of biodiesel as renewable energy. There should control the price structure, and the well quality practices to be fairly suitable in the nearly future.

**Keywords:** Biodiesel, Consumption, Renewable Energy, Risk, Transportation,