

# Preliminary outline and draft

[Linguistics](#), [English](#)



Preliminary Outline and Draft Part Preliminary Outline Introduction: Use of Biodiesel as Fuel A. Current status and level of biodiesel use in running vehicles

i. Research based trends of biodiesel use

ii. Forecast of biodiesel use for the foreseeable future

B. Reasons for the current status of biodiesel consumption

i. Research based evidence on potential benefits of biodiesel

ii. Actual environmental concerns motivating use of biodiesel

2. Background of the Study

A. Significance of the research exercise

i. Increasing pollution attributed to use of fossil fuels

ii. Subsequent pollution by the fuels cause global warming

iii. Effects of global warming translate into serious impacts

B. Benefits of Biodiesel as a fuel

i. Mitigate pollution effects of hydrocarbon fuels

ii. Reduce emission of green house gases like carbon dioxide

iii. General reduction of air pollution

3. Research hypotheses

A. Alternate hypothesis

i. Dependent variable – improved air pollution

ii. Independent variable – increased use of biodiesel fuel

B. Null Hypothesis

i. Biodiesel cannot decrease air pollution

ii. Pollution from industrial processes and volcanic eruptions

C. Counter argument

- i. Change in use of farmland for food crops
- ii. Rise in food prices

## Part 2: Preliminary Draft

Biodiesel is made from vegetable oils. Unlike hydrocarbon-based fuels, biodiesel is fully biodegradable. In addition, biodiesel is a renewable source of energy since vegetable oil is sourced from plants. Currently, 7% of commercial trucks in the US run on biodiesel blends. In order to improve power output and lubricating properties, pure biodiesel is blended with proportional volumes of gasoline. Federal institutions of public health are increasing campaigns advocating for biodiesel consumption in US roads. Research findings show that those campaigns are bearing fruits. In 10 years to come, approximately 25% of American vehicles will be running on biodiesel.

Public health institutions attribute increase in cancer and respiratory complications to pollution from fossil fuels. Undeniably, any alternative fuel that causes less or no pollution would be adopted as a solution to the health impacts of fossil fuels. Recent increase in biodiesel campaigns and consumption is attributed to potential benefits of the fuel. Unlike gasoline, biodiesel is non toxic. Gasoline releases unpleasant fumes upon combustion. On the contrary, biodiesel emit fumes with a pleasant smell, no greenhouse gases and absolute absence of carcinogenic hydrocarbon compounds. Occasionally, air pollutants like carbon dioxide are directly associated with gasoline and other fossil fuels. Carbon dioxide, together with other greenhouse gases causes global warming. Scientific research indicates that global warming will lead to increased desertification, climate change,

increased acidity of fresh water and rise in sea levels. Among the identified mitigating factors of global warming include use of less polluting and renewable energy sources like biodiesel. Since biodiesel burns cleanly, it releases negligible amounts of greenhouse gases compared to gasoline. Therefore, biodiesel features as a viable solution to the global warming monster together with other complications related to air pollution.

A scientific research exercise will be appropriate in substantiating claims relating to the benefits of biodiesel in addressing issues of air pollution. The research hypothesis asserts that increased use of biodiesel reduces emission of carbon dioxide and air pollution. This hypothesis contains both the dependent and independent variables. A null hypothesis, which contradicts the earlier statement, will be introduced to test the validity and reliability of the alternative hypothesis. Undeniably, biodiesel reduces pollution. However, other sources of pollutants like industrial manufacturing and ore processing emit considerable amounts of greenhouse gases (Smith 48).

Despite the fuel's benefits, increased production and consumption of biodiesel compromises on other aspects of human life, especially on food production. Use of farmlands for biodiesel oil production undermines production of food; hence leading to inflation of food prices. This counter argument can be evidenced by current increase in food prices within biodiesel producing areas in the US. In this regard, biodiesel can significantly solve pollution problems but invariably create other economic food crisis. Therefore, biodiesel is not an optimal solution to the problems of global warming and carbon dioxide emission.

Work Cited

<https://assignbuster.com/preliminary-outline-and-draft/>

Smith, Andrews. *Biofuel: Sustainable Energy in the 21st Century*. Harrisburg: Cengage Learning Publishing, 2010. Print.