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FEASIBILITY OF BIO ETHANOL AS AN ALTERNATIVE FUEL IN SRI LANKAN MOTOR VEHICLES

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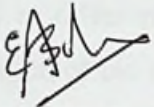
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DECLARATION

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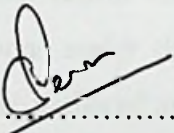
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ABSTRACT

This research is aimed at probing and studying the feasibility of bio ethanol blended gasoline in Sri Lankan motor vehicles and the whole report includes a comprehensive literature survey, feasibility check and calculations related to this topic.

In the first chapter, the case is well introduced with the background of the problem and why this entire exercise is being done. Then the project objectives are well described with the definition of the project scope. It is also included the significance of this study and the research methodology; that how the project work is being done.

The second chapter is mainly consisting of all the studies under the literature survey. It includes the studies of the world petroleum oil market, oil price fluctuations and the different types of biofuels that used around the world. Also this includes the history of bio ethanol, how it has been used in different countries, what are the ways of bio ethanol usage around the world and the situation of bio ethanol in Sri Lanka.

The next chapter, the shortest in this dissertation describes the research methodology that going to be used in this comprehensive research project. This chapter presents the details of the methods to be used in this study including what type of data, how they to be collected and the analysis techniques.

Under the fourth chapter, the main body of the report is done with the analysis and the calculations under the feasibility checks. In this chapter the petroleum data pertaining to Sri Lanka are gathered and analyzed. Then the capabilities and the opportunities of using bio ethanol in the transportation sector are analyzed. Mainly three feed-stocks are selected in order to produce bio ethanol and then the percentage that can be blended with gasoline is identified with the current capability of the country.

In the next two chapters are mainly on the analysis of the survey feedback specially carried out using a questionnaire and the conclusions made using this study.

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LIST OF ABBREVIATIONS

MBA	-	Master of business administration
USA	-	United states of America
CO2	-	Carbon dioxide
E85	-	15% ethanol blended gasoline
LPG	-	Liquefied petroleum gas
API	-	American petroleum institute
OPEC	-	Organization of petroleum exporting countries
EIA	-	Energy information administration
NYMEX	-	New York mercantile oil exchange
SVO	-	Straight vegetable oil
M85	-	15% methanol blended gasoline
B20	-	20% blended bio-diesel
MTBE	-	Methyl tert-butyl ether
R&D	-	Research and development
ETBE	-	Ethyl tert-butyl ether
EPA	-	Energy policy act
BRP	-	Bombardier Recreational Products
EU	-	European Union
SEK	-	Swedish krona
KOTIS	-	Korea Trade Information Services
JVAP	-	Joint Venture Agro-forestry Program