

# AN ANALYTICAL STUDY OF GREEN BUSES OF NAGPUR CITY

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**Abstract:** Green Products and Services are today increasingly, being accepted by both companies and customers. Increasingly it is being realized that the decay in the cities and rural areas can be prevented only by maintaining an ecological balance and also by making green products and services an integral part of one's life. Not only that, even from the health point of view, the customers realize that by using products made from chemicals and those that emit harmful gases can lead to permanent disorder. Hence, increasingly, customers are turning to green air conditioners, refrigerators and even personal toiletries.

Ecological issues are, today, the concerns of all corporates, who are being called upon to maintain the ecological balance by ensuring that their products are bio- degradable or they do not involve indiscriminate use of scarce natural resources. Further, environmental activism has led to legislations and hence firms are now required to comply with the regulatory mechanism. Thus, ecological marketing, also called 'green Marketing', has today come of age and marketing needs to understand nuances. The Green Bus has launched with intention to protect the environment. People live in fresh air and free from carbon-dioxide and other toxic gases. This paper throws some light on the Green Marketing (Green Bus) is eco-friendly for the environment.

**Keywords:** Biodegradable, ethanol, hydro-drive technology, green fuel.

## INTRODUCTION:

With the mounting environmental pollution, it is essential for everyone in the society to make a contribution towards reducing it. The Green Bus would use biodegradable to protect the environment.

India is spending around seven lakh crores on petrol, diesel and oil imports. This massive expenditure can be substantially reduced if we start using eco-friendly fuels like ethanol, methanol, bio fuel, etc. Vehicles running with the help of ethanol and methanol and E-rickshaw will be the future means of transportation. This will help reduce air pollution in the country. Indian farmers will also be benefited from production of these types of fuel.

## Green Bus in Nagpur city:

The Green bus launched in Nagpur with intention to reduce pollution, prevent pollution and cut the prices of petrol and diesel. India's first ethanol-run green bus launched in Nagpur by the hands of Shri Nitin Gadkari, minister of Road Transport and Devendra Fadnavis Chief Minister of Maharashtra. Twenty five new buses will operate on six routes – Hingna to Sitabuldi and Pardi to Sitabuldi via Gandhibagh, Brahmani Fata Kalmeshwar to Sitabuldi, Butibori, Pipla fata, Defence to Sitabuldi, A passenger will have to shell out a minimum of Rs 14.

Green buses are equipped with rear engine, vehicle tracking system, CCTV cameras, automatic doors, fire extinguisher, automatic announcement systems for stoppages, automatic emergency window button, charger points, and led display with mike for announcements, etc.

Ethanol-run bus project is the first initiative in this direction. Today the nation imports petrol, diesel and gas worth over Rs 7 lakh crore every year. We can reduce imports by at least Rs 2.5 lakh crore by using alternative fuels. Four states Uttar Pradesh, Maharashtra, Karnataka and Tamil Nadu will be the major beneficiaries from the project as they produce ethanol in large quantities. Each bus cost more than Rs 1 crore without any added taxes.

Green Bus private operators could make more profit using ethanol-run buses. "The green fuel also conserves environment by reducing pollution. Such renewable fuels can boost our nation's economy and improve the farmers' condition who are committing suicide. Other such alternative sources like hybrid electric can boost automobile and other sectors. Indian companies are launching hybrid electric-run buses in other countries. Ashok Leyland has launched buses in London. Therefore, policy to exempt electric-run vehicles from tax.

Make wealth from urban waste agro and waste whether sewage or garbage could be treated and reused. Highlighting various technologies to Road transport and highways will maintain data. Ethanol and its role in making the nation eco-friendly.

### Importance of Green Bus:

- One Ten liters of diesel and petrol used, Twenty-five kg of Carbon-dioxide is pumped into the atmosphere.
- India patented Emulsification technology.
- Every year in world almost 30 billion tons of carbon-dioxide is released into the air.
- Forty per cent water can be used with Sixty per cent diesel for powering vehicles. It is a hydro-drive technology.



India's first green bus service in Nagpur

### 2. Statement of the Problem

Green Marketing has been widely attracted significant from various groups. Therefore it is the need of time to have the study Green marketing environment. The researcher has framed to study the Green Buses of Nagpur city.

### 3. Objectives of the Study:

1. To study about the Green marketing environment.
2. To study the strategies of Green Bus.
3. To evaluate the key decision areas in Green buses.

4. To Study the eco-friendly environment of Green buses.

#### 4. Need for the Study

There are many research projects regarding the Buses. A Study of Green marketing environment (Green Buses) in Nagpur is an untouched topic, hence the present study has been undertaken to fill up that gap.

#### 5. Research Methodology:

- Primary data: A structured questionnaire is used to collect the primary data.
- Secondary data: Secondary data is collected by referring related books, journals and web sites.

SAMPLE: The sample size of the study is 300.

#### 6. Tools and Techniques

Simple percentage

#### 7. Limitations

- The survey was restricted to Nagpur city.
- The number of respondents was limited to 300 only.

#### 8. Respondents' data

Question no.1

Gender of the respondents

Gender	No. of Respondent	Percentage
Male	176	58.67
Female	124	41.33
Total	300	100.00

(SOURCE: PRIMARY DATA)

The above table shows the gender of the respondents. Out of the total respondents taken for the study, 58.67 % are male and the remaining 41.33 % are female.

Question on. 2

Category of the Respondent:

Category	No. of Respondent	Percentage
Student	020	06.67
Job	142	47.33
Other	138	46.00
Total	300	100

(SOURCE: PRIMARY DATA)

The above table shows the respondents Category.

Out of the total respondents taken for the study, 6.67% of the people are students, 47.33% of the people are in Job and remaining 46% from other. Majority of the people from Job.

Question no. 3

Green Bus is Eco- friendly

Eco-Friendly	No. of Respondent	Percentage
Yes	289	96.33
No	011	03.67
Total	300	100

(SOURCE: PRIMARY DATA)

The above table shows Green bus is Eco-friendly. Out of the total respondents taken for the study, 96.33 % opinion Green bus is eco-friendly while 3.67% are not agree. Majority of the people agree Green bus is eco-friendly.

Question no.4

Green Bus Fare is affordable

Fare Affordable	No. of respondents	Percentage
Yes	148	49.33
No	152	50.67
Total	300	100

(SOURCE: PRIMARY DATA)

The above table shows Bus Fare.

Out of the total respondents taken for the study, 49.33% opinion that Bus fare is affordable while 50.67% opinion that Bus fare is not affordable. Majority of People opinion that bus fare is not affordable.

Question no. 5

Journey is safe

Safe Journey	No. of respondents	Percentage
Yes	247	82.33
No	053	17.67
Total	300	100

(SOURCE: PRIMARY DATA)

The above table shows people opinion that Journey is safe.

Out of the total respondents taken for the study, 82.33 % opinion that journey is safe and 17.67% opinion that journey is not safe. Majority of the people opinion that Journey is Safe.

Question no. 6

Passengers feels Satisfaction

Satisfaction	No. of respondents	Percentage
Yes	221	73.67
No	079	26.33
Total	300	100

(SOURCE: PRIMARY DATA)

The above table shows Passengers feel satisfaction.

Out of the total respondents taken for the study, 73.67 % opinion that Passengers feel satisfaction and 26.33% opinion that Passengers not feel satisfaction. Majority of the people opinion that Passengers feel satisfaction.

Question no. 7

Better option as compare to Diesel or Petrol Bus

Better Option	No. of respondents	Percentage
Yes	239	79.67
No	061	20.33
Total	300	100

(SOURCE: PRIMARY DATA)

The above table shows people opinion that Green Bus is better option as compare to diesel or petrol bus.

Out of the total respondents taken for the study, 79.67 % opinion that Green Bus is better option as compare to diesel or petrol bus and 20.33% Green Bus is better option as compare to diesel or petrol bus.

Majority of the people opinion Green Bus is better option as compare to diesel or petrol bus.

Question no. 8

Costing of Bus is high

Costing is high	No. of respondents	Percentage
Yes	251	83.67
No	049	16.33
Total	300	100

(SOURCE: PRIMARY DATA)

The above table shows people opinion that Costing of bus is high.

Out of the total respondents taken for the study, 83.67 % opinion that Costing of bus is high. and 16.33% opinion that Costing of bus is not high. Majority of the people opinion that Costing of bus is high.

Question no. 9

Green bus reduces import of oil & Gases

Reduces import of oil	No. of respondents	Percentage
Yes	274	98.67
No	026	01.33
Total	300	100

The above table shows Green bus reduces import of oil & Gases.

Out of the total respondents taken for the study 98.67% people opinion that Green bus reduces import of oil & Gases while 1.33% people opinion that Green bus not reduces import of oil & Gases. Majority of the opinion that Green bus reduces import of oil & Gases.

Question no. 10

Green bus protect environment.

Protect Environment	No. of respondents	Percentage
Yes	282	94.00
No	018	06.00
Total	300	100

(SOURCE: PRIMARY DATA)

The above table shows people opinion that Green bus protect environment.

Out of the total respondents taken for the study, 94.00 % opinion Green bus protect environment and 23.67% opinion Green bus not protect environment.

Majority of the opinion that Green bus reduces import of oil & Gases.

#### Results and Discussion:

- Majority of the People are Male.
- Majority of the people are doing Job.
- Majority of the people agree Green bus is eco-friendly.
- Majority of the People opinion that bus fare is not affordable.
- Majority of the people opinion that Journey is Safe.
- Majority of the people opinion that Passengers feel satisfaction.
- Majority of the people opinion Green Bus is better option as compare to diesel or petrol bus.
- Majority of the people opinion that Costing of bus is high.
- Majority of the opinion that Green bus reduces import of oil & Gases.

#### Conclusion & Recommendation:

Green marketing is a developing concept, and as a part of any economy has untapped potential; marketers have realized the opportunity recently. Decrease in the costing of the buses and reduce the fare of the bus and spread the project in other city. Any macro-level strategy for these markets should focus on availability, accessibility and affordability. More focus on the Costing of bus. Green bus concept is eco- friendly. The Go Green Bus with a view to spreading awareness about environmental pollution. With the mounting environmental pollution. It reduces money on petrol, diesel and oil imports. This massive expenditure can be substantially reduced if we start using eco-friendly. This will help reduce air pollution in the country.

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