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BIOELAION- Biofuel-Based Business Model Plan

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Abstract:
Global Warming has been a worrying problem for decades, with the majority of contributions coming from industrial and commercial energy generation sources. Using fossil fuels has resulted in the rapid loss of natural resources, increased pollution, and a threat to deplete the Earth's natural reserve. Biofuels were selected as the best alternative to fossil fuels in terms of byproduct creation, environmental friendliness, competition for natural resources, and rate of generation. Bioethanol is the most prevalent biofuel being studied. It is the most adaptable biofuel that can be produced from any generation of feedstock, especially those with a high carbohydrate content, low lignin levels, and the ability to be easily converted to fermentable sugar. This analysis focuses on a unique bioethanol-driven business model strategy that includes production tactics, potential funding and capital resources, and targeted advertising for the use of alternative environmentally friendly fuels. It can be commercialized through a variety of business tactics, and its increased reach can help with environmental effects and fuel supply for autos, making it an ideal social enterprise.

Keywords: Global warming, fossil fuels, biofuel, business model, production, funding, capital resource, social enterprise.

I. Introduction:

India is one of the largest consumers of petroleum-derived products in the world. India imports 82% of its crude oil from nations such as Iraq, the United States, Saudi Arabia, and the United Arab Emirates. India bought 185 million metric tons of petroleum valued at $55 billion in 2020–21(Ofori-Boateng & Lee, 2013). India must import more crude oil each year due to insufficient indigenous petroleum supplies to meet the country's rising domestic demand. By 2024, the government intends to have blended 20% ethanol with gasoline(Bompolakis, 2019). Because ethanol is less expensive than gasoline, the government could potentially save $4 billion year on petroleum imports. Moreover, because ethanol is less toxic than gasoline, swapping it for petroleum also reduces environmental pollution. (Raheem et al., 2018)

With the availability of food grains and sugar cane and the government's plan to gradually replace all gasoline with ethanol, ethanol can be produced, the Indian government encourages a large number of businesses to research the potential of ethanol production and to establish manufacturing units. (Ajala et al., 2021). Sugarcane breeding has resulted in the generation of cultivars with excellent yields. (de Souza et al., 2014) This is one of the key reasons why Brazil is the second-largest producer of first-generation (1G) bioethanol, which is produced from sugarcane culms containing sucrose(Dey et al., 2020) (Mączyńska et al., 2019). Recent advances in the science of second-generation (2G) bioethanol have enabled at least two Brazilian initiatives for the commercial production of 2G bioethanol, GranBio, and Raizen/Costa Pinto (Glensor& María Rosa Muñoz, 2019). Presently, the former uses sugarcane leaves as the principal raw material for the synthesis of 2G bioethanol, whereas the latter combines 1G and 2G es using sugarcane bagasse (Aditiya et al., 2016).

With advancements in Biotechnology, it has become quite easy to produce bioethanol-biofuel (Rasool &Hemalatha, 2016). Bioethanol-based project is a very new and well-advanced business to protect the environment helping as a social cause and in turn, benefitting to earn money.

Bioethanol is entirely comprised of biological products, and hence the combustion of

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bioethanol results in cleaner emissions (carbon dioxide, steam, and heat) (Fulton et al., 2015)(Shote, 200 C.E.). Carbon dioxide is absorbed by plants and processed via photosynthesis to help the plant grow. This cycle of creation and energy combustion means bioethanol could potentially be a carbon-neutral fuel source (Darda et al., 2019)(Rasool &Hemalatha, 2016).

These are the various reasons that helped us come up with this idea for **BIOELAION** a platform of business to help solve this social problem of increased petrol hike, damage to the environment, and pollution and come up with a solid solution with actionable insights via our business.

Objectives and Goals:

Our goal is to provide a platform for producing and selling bioethanol using second-generation technologies (using plants such as sugarcane and corn) as well as microorganisms, microalgae, and macroalgae. We intend to sell our fuel at a lower price than conventional fossil fuels (petrol and diesel) while causing no harm to the environment and with the help of the environment to help the environment and return by investing very little in this project and helping to deal with the devastating social problems of the petrol price hike that has caused strikes throughout the country and led to citizens revolting and protesting against the government, as well as providing and promoting clean green energy.

Mission:

Our primary objective is to educate the public about the new generation of biofuel - bioethanol - its functions, its necessity, and how it is a highly advantageous alternative to conventional fossil fuels - gasoline and diesel. In addition, we want to lessen the environmental impact by withdrawing tones of resources and replacing them with ones that do not affect the environment and are inexpensive and simple to create. We wish to collaborate with larger oil companies such as ONGC, IOCL, and HPCL.

II. Company Summary:

Mission Statement: Encourage the production of cheap new generation biofuel -bioethanol as an alternative to primitive expensive fossil fuels.

Production strategy:

Figure 1: Production plant strategy for Biofuel production(Rathore D, Sevda et al., 2022)

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The production strategy for a bioethanol business can be broken down into several key steps:

2.0.1. Feedstock selection: The first step in producing bioethanol is selecting the right feedstock. Common feedstocks for bioethanol production include corn, sugarcane, switchgrass, and other high-starch, high-sugar or high-cellulose crops. The selection of feedstock should be based on factors such as availability, cost, and energy efficiency (Kucharska et al., 2020).

2.1.2 Pre-treatment: Once the feedstock is selected, it needs to be pre-treated to break down its cell walls and release the sugars for fermentation(Kumar et al., 2017). Pre-treatment can involve mechanical, thermal, or chemical methods depending on the feedstock used.

2.1.3 Fermentation: After pre-treatment, the feedstock is mixed with enzymes and yeast to convert the sugars into ethanol. The fermentation process typically takes several days and produces a mixture of ethanol and water called beery(Lopes et al., 2018).

2.1.4. Distillation: The beer is then distilled to separate the ethanol from the water. Distillation involves heating the beer to vaporize the ethanol, which is then condensed back into a liquid form. This process is typically repeated several times to produce high-purity ethanol(*Ghana Goes Biofuel, despite Global Food Crisis - Ghana Business News*, n.d.).

2.1.5. Dehydration: The final step in producing bioethanol is dehydration. This involves removing any remaining water from the ethanol to increase its purity and energycontent. Dehydration can be accomplished through several methods, including molecular sieves, azeotropic distillation, or pressure-swing distillation(Zhao et al., 2022).

In addition to these production steps, a successful bioethanol business also requires careful consideration of factors such as feedstock sourcing, energy efficiency, and waste management(Lee & Ofori-Boateng, 2013). By implementing a well-designed production strategy, a bioethanol business can produce high-quality ethanol efficiently and cost- effectively (Moreno Fernández & Aguilar, 2017).

2.1. Services:

We will install bioethanol-producing facilities in several cities and lay down pipelines to transport bioethanol to various pumping stations. We will use garbage collection procedures and utilize people and trucks to transport agricultural waste such as cane molasses, maize cobs, and sugarcane to our substrate collection center for collection(Lee & Ofori-Boateng, 2013). The biofuel will be distributed on a regular basis to adjacent gas stations from storage facilities provided by nearby oil companies(Dey et al., 2020). Environmental awareness commercials will aid in the promotion of the biofuel-based petroleum strategy(Chen et al., 2013). It can be initiated with gas stations that have a high number of users to raise the initial danger. Bioethanol Service-oriented gas stations can only be established in the future if customers respond positively to associated petroleum firms.

III. Publication and advertising strategies:

1. Setting up and taking a membership in the industry associated with this sustainable idea Indian Biogas Association which is a unique platform of; nationwide operators, manufacturers, and planners of biogas plants, and other environmental enthusiasts(Aditiya et al., 2016).
2. Promoting the ideas and our product on social media platforms and industry-related magazines and publications
3. Reach a Larger Audience Through Environmentalist Marketing-Another highly effective way to promote our product and gain more customers is influencer marketing(Boddey et al., n.d.). Influencer marketing is the process of increasing brand awareness and revenue through the use of influential personalities who have engaged audiences.
4. Presenting our ideas at international conferences to promote environmental sustainability.

Pricing strategies:

The current biofuel in the form of biodiesel is sold at 67-77 Rs/liter through all cities in India. Our target Bioethanol pricing strategy will be 60-65 Rs/litre in comparison to 90 Rs/liter of diesel and 96 Rs/litre of petroleum across India during December to January 2022-23. The lower initial pricing strategy will both be an economic option for users and can be increased exponentially across the years after customer feedback and survey(Glensor& María Rosa Muñoz, 2019).

IV. Sources of funding:

4.1.1. Angel Investment Angel investors are individuals with a lot of cash. They may also work in groups to collectively screen the proposals before investing. They can also offer mentoring or advice alongside capital(Sharma et al., 2017).

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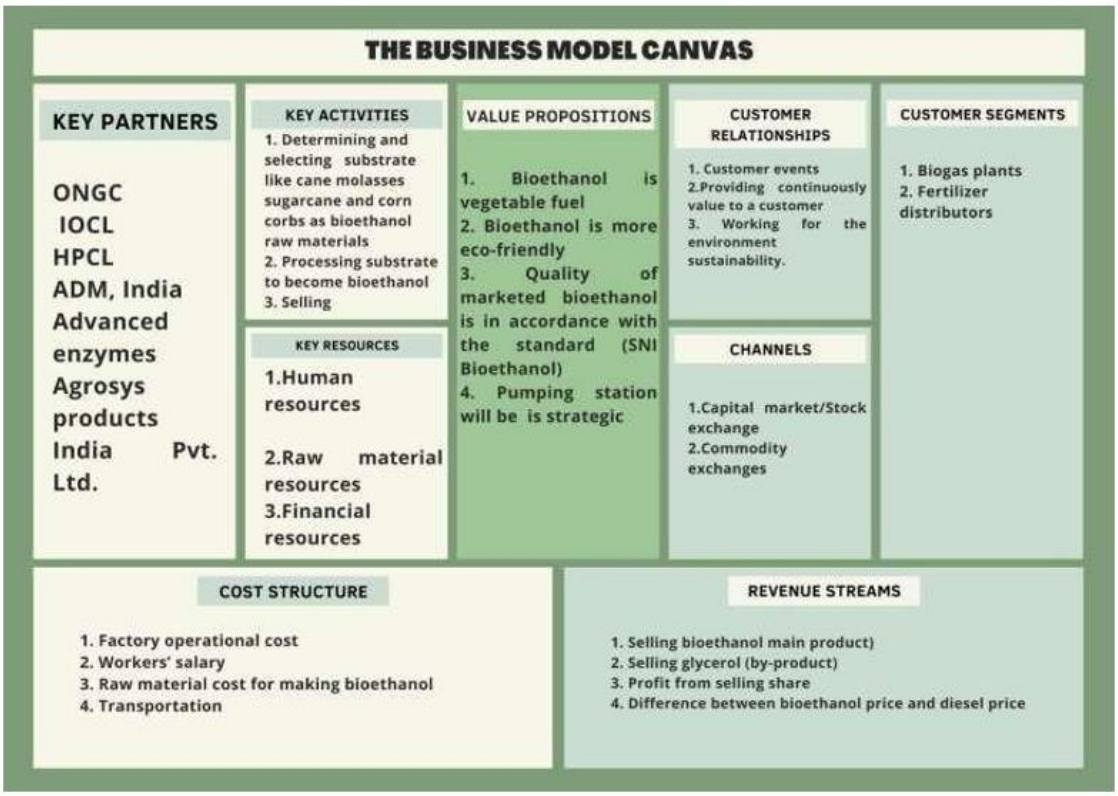
4.1.2. Money Through Bank Loans: After registering as a Pvt. Ltd. companies can apply for loans from banks which can be approved easily. There can be two types of financing - one is a working capital loan, and the other is funding(Moreno Fernández & Aguilar, 2017).

4.1.3. Crowdfunding Modern technology has made it easier for people to share their problems on an interactive social platform(Raheem et al., 2018) Crowdfunding platforms are basically set up for individuals to pitch their business ideas or challenges to a community of investors or people willing to support their ideas or cause(Haji Esmaeili et al., 2020).

4.1.4. Venture Capital for Startup: Venture capital funds are managed by professionals that have a keen eye for seeking out companies with great prospects(Stichnothe&Azapagic, 2009). Once there is an IPO or acquisition of the business they are partnered with, they then pull out and seek other investments.

4.1.5. Equity Financing: Equity financing is the method of raising capital by selling company stock to investors. In return for the investment, the shareholders receive ownership interests in the company(Ryms et al., n.d.).

V. Business canvas model:



VI. Business Model

We have used the PAY-PER-USE business model With pay-per-use billing, the consumer makes a single purchase at a defined fee and may or may not do business with your firm in the future. It offers a simple income model, and clients appreciate the dependability of a one-time fee. Pay-per-use and other usage-based pricing strategies have their place. Many clients value the price and flexibility that pay-per-use offers, especially when they may pay as needed and utilize the service (Flodén& Williamson, 2016).

6.1 Benefits of using PAY- PER –USE business model-

6.1.1 Product evolution-The pay-per-use approach makes it much simpler for businesses to track consumption, providing them with a clearer picture of how customers interact with their product or service(Glithero, Ramsden, et al., 2013). Knowing what customers like and dislike makes it easier for businesses to improve, generate

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personalized options, and even develop entirely new products. A big transition from using fossil fuels such as gasoline and diesel to directly using bioethanol as a biofuel might be a significant adjustment, and customer feedback is essential(Razeghifard, 2013).

6.1.2 Expanded market share- Pay-per-use reduces the barrier to entry for numerous client categories by minimizing entry fees. Having to pay a premium for fuel and diesel. The "pay as you go" pay-per-use approach, on the other hand, can persuade people to begin using a specific product or service since it is inexpensive and environmentally beneficial(Yadi et al., 2021).

6.1.3 Customer commitment- The user's relationship with the corporation shifts from a one-time purchase to a service-oriented relationship. This reduces the likelihood that users will migrate to competitors. In addition, the product's value increases if it is inexpensive, environmentally friendly, and less harmful(Ma & Hanna, n.d.).

6.1.4 Fewer obligations- As part of its offering, the pay-per-use business model shifts the risks of ownership and duty for product maintenance to the corporation(Glithero, Wilson, et al., 2013).

6.1.5 Less expensive and more transparent- Customers' access to and understanding of the cost of products and services are facilitated by the absence of a substantial initial payment requirement for simple access. Instead, it is adaptable, simple to monitor, and environmentally friendly(Li et al., 2015).

VII. Legal structure:

For our startup, we have chosen a partnership in which each of us will serve as a general partner. We believe that this form of ownership is the most suitable for our business, as we will all shareresponsibility for the daily operations while retaining individual liability.

VIII. SWOT Analysis:

In general, SWOT matrix involves the strategic evaluation of a business's Strengths, Weaknesses, Opportunities, and Threats. Here, we do a SWOT analysis of biofuel production and its impact on India's socioeconomic situation(Lee & Ofori-Boateng, 2013).

	POSTITVE	NEGATIVE
INTERNAL	**STRENGTHS**	**WEAKNESS**
	Environment friendly Creating a sustainable environment Reduces Global Warming Cost-effective Reducing the dependency on the natural resources	Installation of Plant cost is high Mass acceptance of biofuel will take more time Cost of labor Huge Biomass Requirement Huge space for storage
EXTERNAL	**OPPORTUNITIES**	**THREATS**
	Creates a job opportunity for the people Improving the quality of the air Increasing in economic growth by selling in lower price Less reliance on petroleum import opportunities	Due to a lack of available area for feedback production, biofuel production is constrained Energy intensive pretreatment The market for biofuels is a relatively recent market

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IX. Market competition and production suppliers:

Recent emphasis on ethanol as a petrol additive has provided a sweet twist for ethanol-producing enterprises in India(Isa et al., 2013). The high price of crude oil has accelerated the ethanol addition plan, which is currently around 8% per liter of gasoline. However, the government is actively pursuing an increase to 12 percent in the near future and 20 percent in the long run (to a liter). India's ethanol makers will soon be able to increase production with the aid of the necessary policy backing. Moreover, this action will instantly address the issues posed by the industry's excess sugar output. The major competitors in the field of Bioethanol production are listed below

9.0.1. Bajaj Hindusthan Ltd

Bajaj Hindusthan Sugar Ltd (BHSL), situated in Mumbai, is India's largest sugar and ethanol producer. Founded in 1931, the company is a pioneer in the Indian sugar industry. The first facility in Uttar Pradesh's Lakhimpur district, Golagokarnnath, had a crushing capacity of 400 TCD (Tonnes of cane per day). The same plant can now crush 13,000 Mt of sugarcane every day. In 1944, the firm began manufacturing ethanol as a byproduct of the Golagokarnanath mill. Today, BHSL has a cane crushing capacity of 136,000 TCD and a distillation capacity of 800,000 liters of ethanol per day. BHSL's fourteen integrated sugar production operations in Uttar Pradesh manufacture ethanol (Zhang et al., 2020). During the 21st fiscal year, the company produced 90,900 kL of ethanol, an increase of over 50 percent over the previous year. BHSL is on a path of constant expansion. With the present government policy emphasizing blended gasoline, BHSL intends to become one of the most prominent global players in the ethanol industry. The company revenue for fiscal year 21 was Rs.6688 billion.

9.0.2. Balarampur Chinni Mills Ltd:

In 1975, Balarampur Chini was founded. The corporation situated in Kolkata is among the leading producers of sugar and ethanol. The company's capacity for ethanol distillation is 520 KLPD, while its capacity for cane crushing is 76,500 TCD. The locations of the distilleries are Balarampur, Manakapur, and Gularia (all in Uttar Pradesh). A new distillery with an installed capacity of 320 KLPD is planned for Maizapur. The company's revenue for fiscal year 21 was Rs.4812 Crores. The corporation intends to enhance ethanol production from sugar-free molasses and sugar cane syrup in order to increase the proportion of ethanol in gasoline blends. In addition, the company's active environment management program aims to reduce the distillery's impact and neutralize its carbon footprint(Ordóñez De Pablos, 2004).

9.0.3. Dalmia Bharat Sugar and Industries Ltd:

The company started its first sugar and ethanol plant in Ramgarh, Uttar Pradesh, in 1994. Subsequently, the business increased its ethanol production capacity by constructing Greenfield plants in Jawaharpur, Nigohi, and Kolhapur, all in Uttar Pradesh, as well as in Maharashtra (Chintagunta et al., 2016; Jacob et al., 2016). Consequently, the company's total ethanol distillation capacity is 305 KLPD (kilolitres per day). By distilling molasses, Dalmia Bharat Sugar manufactures a variety of ethanol products. The spectrum of products includes Rectified Spirit (RS), Extra neutral alcohol (ENA), and drinkable triple-distilled alcohol utilized in the cosmetics and fragrances industries. In addition, fuel-grade anhydrous ethanol for blending with gasoline and Denatured spirit, a chemical industry solvent, are produced. The company's overall crushing capacity of 35,000 TCD places it in the top tier of the sugar business. The business has a well-defined plan for conservation and green efforts. Specific emphasis on water conservation and emission reduction has generated economic benefits. The company's revenue in FY 21 was approximately Rs. 2700 crores.

9.0.4. Shree Renuka Sugars Ltd:

Shree Renuka Sugars is a multinational agribusiness and bioenergy enterprise. The corporation is one of the nation's leading sugar and ethanol producers. Five of the company's seven integrated sugar millsare located in Karnataka: Munoli, Athani, Havalga, Gokak, and Ratbag. Two are located in Maharashtra: Ratnaprabha and Panchaganga. Shree Renuka is one of the leading ethanol manufacturers in India, with a total sugarcane crushing capacity of 35,000 TCD and a distillation capacity of 930 KLPD(Amore et al., 2016; Chandel et al., 2020). The corporation primarily produces and sells fuel-grade ethanol to oil companies. The company's expected revenue for fiscal year 21 was Rs. 5,100 crores.

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9.0.5. Triveni Engineering and Sugar Industrie

Triveni (formed in 1932 as the Ganga Sugar Company Ltd) is one of the country's major integrated sugar makers, having seven sugar mills in Uttar Pradesh (UP). In addition, the company's two distilleries in Muzaffarnagar and Sabitgarh (both in Uttar Pradesh) have a total Ethanol production capacity of 320 KLPD. The company is increasing its ethanol production capacity to 660 KLPD, which should be operational within a year. In addition, two new distilleries are in the works. The corporation is a major supplier of ethanol to Indian oil companies for blending with gasoline. In fiscal year 21 the company's revenue was Rs 4,664 crores.

X. Industry Analysis

The global bioethanol market was valued at USD 33.61 billion in 2021 and is projected to expand at a CAGR of 14.1% during the forecast period. Bioethanol can be produced from sugar cane molasses, starch crops, crop leftovers, and other waste crops. Miscanthus, switch grass, and sugarcane bagasse are examples of agricultural and forest byproducts and energy crops that manufacturers are focusing on for production(Neupane, 2019).

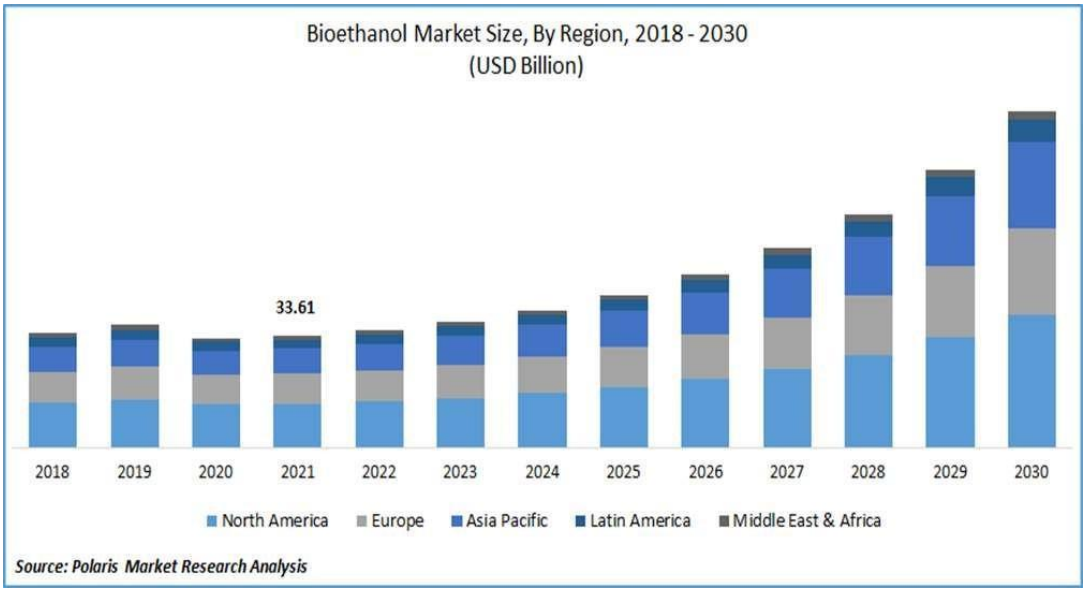

Figure.2: Bioethanol Market Size around the World

In addition, Sustainable Development Goals (SDG) are one of the primary objectives of the United Nations, with the objective of minimizing global warming and reducing climate change. In this context, biofuels play a significant role. In addition, diminishing energy supplies and an increasing emphasis on renewable energy sources are expected to boost market growth(Mahmud et al., 2020; Pachauri et al., 2014). It is projected that technological advances and expanding R&D to produce ethanol from algae will increase market demand due to its high production rate and natural occurrence in the ocean, hence decreasing production costs. In addition, lower prices relative to diesel and gasoline will promote use.

Government regulatory bodies' encouragement of bioethanol production is the primary factor driving the global bioethanol industry. Government efforts to produce and use cleaner fuels, such as bio-ethanol, are intensifying, thereby fostering market growth. The enactment of stringent regulations has motivated corporations to work on generating more efficient, less expensive, and cleaner energy. The market's technological advances have resulted in the development of second and third-generation bioethanol, which is expected to remain a viable choice on the global market(Vrublova, 2020).

Growing environmental concerns, which motivate enterprises to produce bioethanol, EPA (Environmental Protection Agency) blending restrictions, and abundant raw material availability are the drivers driving the global bioethanol market.

Countries are focusing on energy security as a result of economic development, population growth, an increase in consumer income, and the

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discovery of new energy applications. Some nations continue to import vast volumes of crude oil and might utilize it as an alternative, thereby reducing their dependence(Hochberg et al., 2007).

XI. Survey analysis from potential

customers for startup idea:

A survey was performed on Bioelaion as how much the customers have a knowledge about biofuel and if they are willing to change the conventional fuel to a sustainable fuel source.

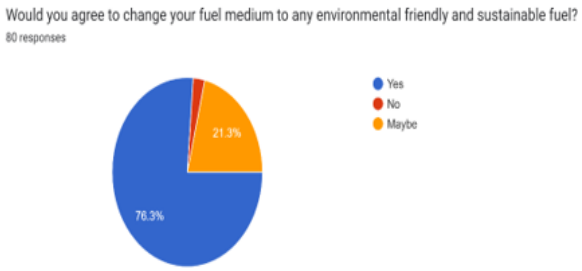

Figure 3 – 76% are agreeing to change fuel medium to any environmental friendly and sustainable fuel.

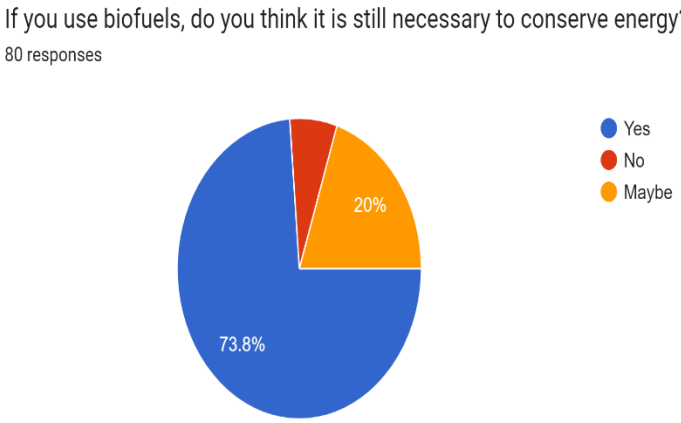

Figure 4 – 73.8% think even after biofuel, they still have to conserve energy.

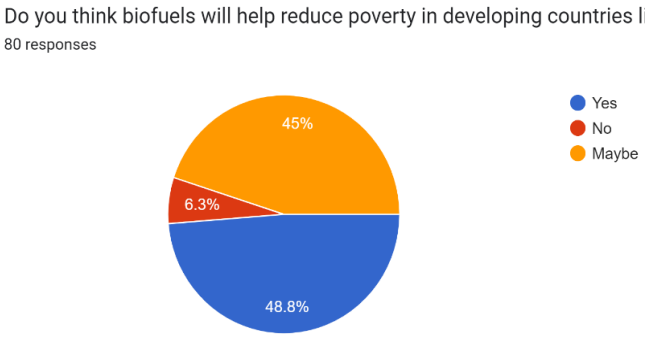

Figure 5 –48% think biofuel will reduce poverty in our country and 45% think it might alleviate poverty.

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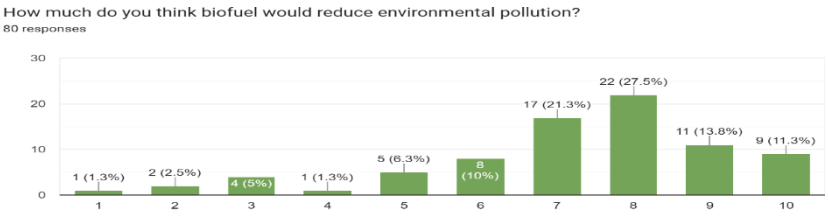

Figure 6– 27.5% think it would reduce 8/10 environmental pollution, 21.3% think about 7/10 reduction, 13.8% believe in 9/10 and 11.3% in 10/10 environmental pollution reduction.

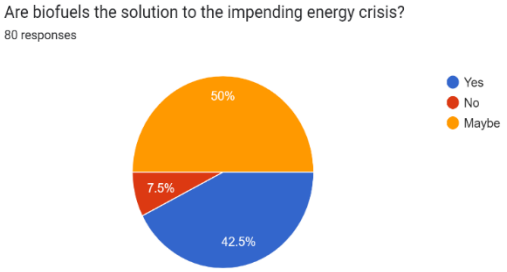

Figure 7 – 50% of the customers think it might be the solution and 42.5% think biofuels the solution to the impending energy crisis.

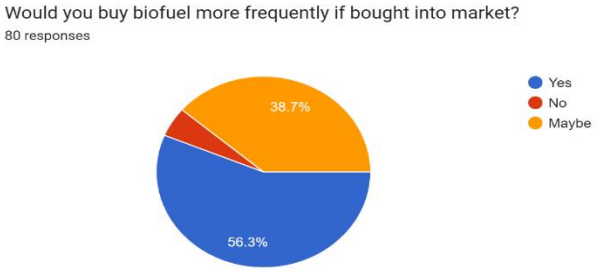

Figure 8 - 56% of the customers will buy biofuel frequently and 38.7% might buy biofuel more frequently if bought into market.

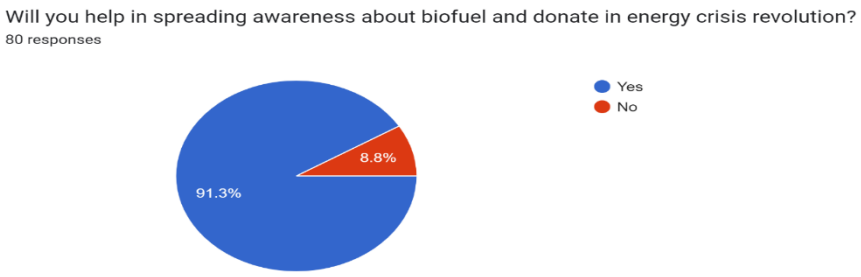

Figure 9 – An overwhelming 91.3% of the customers are ready to spread awareness about biofuel and donate in energy crisis revolution.

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XII. Long-Term Company Goals

To produce a bioethanol-biofuel for the replacement of the transport fuel like petrol and diesel which are developed from fossil fuels and to supply biofuel to every part of the country so that everyone can easily access it, to provide employment to the people, especially those belonging to the rural and women who are not well educated and also to increase the total income of our company by 10% over the next two years.

XIII. Sustainability and exponential customer usage

The rise of bioethanol usage in the transportation industry has frequently been hampered by sustainability concerns relating to environmental difficulties associated with their production and use. To overcome this obstacle, significant efforts have been made to build sophisticated techniques for measuring the energy and carbon balances for the production and use of biofuels, as well as their environmental impact. In addition, it is essential to quantify the social advantages of biofuels, as they represent a chance for rural area development and job creation (Dias et al., 2011; Fulton et al., 2015; Zhao et al., 2022). The influence of increasing demand for biofuel feedstocks on the economy and commodity markets must also be examined (Sharma et al., 2017). Thus, an overall sustainability analysis of the entire biofuel chain must consider environmental, economic, and social implications and provide quantitative assessments that could be used to facilitate policy decisions regarding the implementation and acceleration of the commercialization and adoption of conventional and advanced biofuels. On this topic, all considerations regarding the sustainability of biofuels can be viewed as having a direct impact on bioethanol, as it is one of the most widely utilized biofuels in the world.

XIV. Management and Organization

The management and organization team of a bioethanol-based business would typically consist of the following roles:

14.0 Chief Executive Officer (CEO): The CEO is responsible for the overall management and strategic decision-making of the business(Ajala et al., 2021). They set the company's goals and objectives, develop and implement business strategies, and oversee all operations.

14.1 Chief Operating Officer (COO): The COO is responsible for the day-to-day operations of the business. They manage the production process, ensure quality control, and oversee supply chain management(Kestell, 2008).

14.2 Chief Financial Officer (CFO): The CFO is responsible for the financial management of the business. They oversee budgeting, accounting, financial reporting, and risk management

14.3 Chief Marketing Officer (CMO): The CMO is responsible for developing and implementing marketing strategies to promote the company's products and services(Dalena et al., 2022). They conduct market research, analyze consumer trends, and develop marketing campaigns.

14.4 Chief Technology Officer (CTO): The CTO is responsible for the research and development of new technologies to improve the production process and increase efficiency(Isa et al., 2013). They also oversee the maintenance of existing technology infrastructure.

14.5 Human Resources (HR) Manager: The HR manager is responsible for managing the company's workforce. They oversee recruitment, training, performance management, and employee relations(García et al., 2011).

14.6 Production Manager: The production manager is responsible for managing the production process. They oversee the production schedule, ensure compliance with quality control standards, and manage inventory(Moodley &Gueguim Kana, 2019).

14.7 Research and Development (R&D) Manager: The R&D manager is responsible for researching and developing new bioethanol production technologies. They also work to improve existing production methods and oversee the implementation of new technologies(Shote, 200 C.E.).

14.8 Environmental and Regulatory Compliance Manager: The environmental and regulatory compliance manager is responsible for ensuring the company meets all environmental regulations and guidelines(Afrane, 2012). They also oversee the company's sustainability efforts.

14.10. **Supply Chain Manager:** The supply chain manager is responsible for managing the flow of goods and services from suppliers to customers. They oversee logistics, inventory management, and distribution(Pippo et al., 2011).

In addition to these roles, the organization may also have support staff such as administrative assistants, IT specialists, and customer service representatives.

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XV. Recognition and services as a social enterprise

Bioelaion will be recognized and operated as a social enterprise, which means that it is a business that has a social or environmental mission at its core and seeks to make a positive impact in the world while also generating profit.

In the case of a bioethanol business, the social mission would be to contribute to the development of sustainable energy solutions and reduce the carbon footprint of the transportation industry. Bioethanol is a renewable fuel made from plant-based materials such as corn, sugarcane, or wheat, which can be used as a substitute for gasoline in vehicles.

To operate as a social enterprise, a bioethanol business will have a clear social or environmental mission statement, and incorporate that mission into its business strategy and operations. This could include investing in research and development of more sustainable and efficient production methods, sourcing raw materials from local farmers or cooperatives, and collaborating with other stakeholders in the industry to promote the adoption of bioethanol as a viable alternative to traditional fuels.

In addition to its social mission, a bioethanol business will also focus on providing excellent customer service and building strong relationships with its stakeholders. This will include offering competitive prices, ensuring the quality and consistency of the product, and communicating clearly with customers and partners about the benefits of bioethanol as a sustainable energy source.

By prioritizing both its social mission and customer service, a bioethanol business can differentiate itself from competitors and build a loyal customer base that supports its efforts to create a more sustainable and environmentally friendly transportation industry.

XVI. Discussion:

a. Problems with conventional automobile fuels: 83% of customers do not accept the current high rate of diesel and petrol, 41% of the customers have experienced issues with conventional fuel in their vehicles, 90% of them are aware of the pollution it causes and 71% of the customers have scaled the environmental impact to be 4/5 and 5/5. 76.3% of the customers are now ready to shift to environmentally friendly and sustainable fuel.

b. Concept of biofuel to customers: 57% of the customers know about biofuel and 72.5% think biofuel is environment friendly. 66.3% of the customers believe biofuel has the innovation and potential to change automobile fuel energy to renewable and environmental sources which is a major boost to our startup and they think biofuel would reduce environmental pollution by 8/10 (27.5% of customers).

c. Valuation, marketing, and customer feedback: 51% of them think the proper valuation of biofuel should be 65-70 Rs/l. 88% of the customers want the biofuel pumps to be merged with their local petrol pumps which would increase our network. 50% of them would use biofuel for their vehicle after listening to reviews so customer feedback will be very important.

d. Social and environmental responsibility of our startup company Bioelaion: 92% of customers think Bioelaion might be a solution to the impending energy crisis but along with that 73.8% also think it is still necessary to conserve energy. 93.7% of the customers think Bioelaion will help reduce poverty in developing countries like India and this response gives us a major drive to make the start-up a success. 70% of them think Bioelaion will break the power of the conventional oil companies, utilities, and automotive industry.

e. Environmental & fuel revolution and future prospects: 48% of customers think biofuel will take over conventional fuel energy by 2030 and 30% of them predict around 2045. 56.3% of them have agreed to by biofuel more frequently to market. 91.3% of the customers will help spreading awareness about biofuel and donate in energy crisis revolution through Bioelaion which gives our start up a major scope of success.

XVII. Conclusion

The use of conventional fuel is one of the major contributors of pollution throughout the last decade. It has a devastating impact to atmosphere and pollution and needs to be replaced. Bioelaion, a biofuel-based startup idea aims at not only to create a more environment friendly and sustainable fuel energy but also to break the conventional petroleum companies and decrease poverty. Bioelaion can be a promising social enterprise helping in both environmental and social cause and this ideology would surpass the only aim for stabilizing the business and sole aim for profit. With green technology starting from the production of raw materials to delivery of environment-friendly fuel,

Bioelaion can have a massive potential of pollution reduction throughout the world. After deep market analysis and the recent survey conducted as a startup idea, we can conclude customers are well aware of the pollution caused by conventional fuel and are ready to switch to biofuels and help in revolutionize the fuel energy source to sustainable and eco-friendly fuel and Bioelaion can be a big innovation in the process.

Conflict of interest

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

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