

PROJECT REPORT

On

Vision Plan for Acobitan to go sustainable

Submitted by:

Chhavi Rathore	190005010
Harsh Agrawal	190005016
Manav Trivedi	190005022
Rama Edlabadkar	190005033

Submitted to:

Dr. Hemant Borkar
(Assistant Professor, MEMS)



**DISCIPLINE OF METALLURGY ENGINEERING AND MATERIALS
SCIENCE**

INDIAN INSTITUTE OF TECHNOLOGY, INDORE

April, 2023

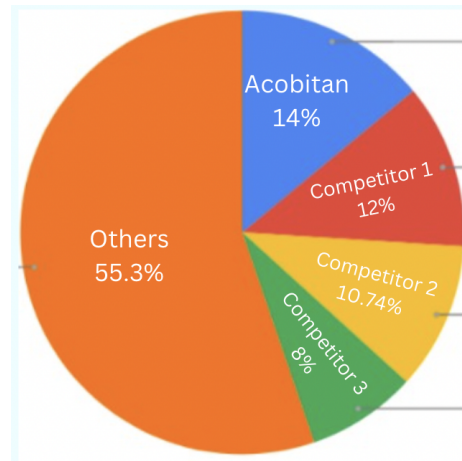
Table of Contents

1.	Company overview.....	4
1.1.	Strengths.....	4
1.2.	Weaknesses.....	5
2.	Sustainability and CSR in Business.....	5
3.	Priorities in CSR.....	5
4.	Future Risks and Opportunities.....	6
4.1.	Risks.....	6
4.2.	Opportunities.....	7
5.	Vision Plan to go sustainable.....	7
5.1.	Sustainable packaging of Goods (by 2024).....	8
5.1.1.	Benefits.....	8
5.1.2.	Action Plan.....	9
5.1.3.	Packaging options.....	9
5.1.3.1.	Selected option.....	10
5.1.3.2.	Startups working on the same approach.....	10
5.1.4.	Feasibility analysis.....	11
5.1.4.1.	Revenue Sources.....	11
5.1.4.2.	Expenditures.....	11
5.1.4.3.	Assumptions.....	11
5.1.4.4.	Guesstimate.....	11
5.2.	Sustainable transport of products (by 2025).....	12
5.2.1.	Benefits.....	12
5.2.2.	Action Plan.....	12
5.2.3.	Transportation Options	13
5.2.3.1.	Selected Option	13
5.2.3.2.	Startups working on the same approach	14
5.2.4.	Feasibility analysis.....	15
5.2.4.1.	Revenue Sources	15
5.2.4.2.	Expenditures.....	15
5.2.4.3.	Assumptions	15

5.2.4.4.	Guesstimate.....	15
5.3.	Sourcing 100% sustainable ingredients (By 2029).....	16
5.3.1.	Benefits	16
5.3.2.	Possible options.....	17
5.4.	Using 100% renewable resources (By 2030).....	17
5.4.1.	Benefits	17
5.4.2.	Possible options.....	18
6.	Benefits.....	18

1 Company overview

Acobitan is a traditional FMCG (Fast-Moving Consumer Goods) company, which means it's another contingent in a competitive market. We currently enjoy the largest market share in the industry because of our loyal customer bases. Below Market Share Pie Chart shows that Acobitan has the largest market share of 14%, but there are many competitors around the same mark, showing that it is a very cluttered market.



For Acobitan to consistently stay ahead of the competition we have to change our operations with the changing times. We have to take on sustainable practices And, for this to happen smoothly we need a vision plan. To work on that we need an idea about our strengths and weaknesses.

1.1 Strengths

- **Established brand:** Acobitan has been operating for several years and has built a reputation in the FMCG industry. This established brand can help the company to maintain customer loyalty and attract new customers.
- **Strong supply chain:** Acobitan likely has a well-established supply chain that allows for efficient and cost-effective production and distribution of its products.
- **Innovation:** Acobitan has shown a willingness to innovate by exploring sustainable packaging options and other environmentally-friendly initiatives. This demonstrates a commitment to sustainability and can help the company stay ahead of the competition.
- **Experienced leadership:** If Acobitan has experienced and capable leadership, this can provide stability and direction for the company, helping to ensure its long-term success.

- **Diversified product line:** If Acobitan has a diversified product line, this can help to mitigate risks associated with changes in consumer preferences or market conditions.

1.2 Weakness

- **Potential for higher prices:** If Acobitan does choose to invest in sustainable packaging or other initiatives, this could result in higher prices for consumers, which could impact sales and profitability.
- **Competition:** Acobitan operates in a highly competitive industry, and other companies may already be investing heavily in sustainability initiatives, giving them a competitive advantage.
- **Consumer preferences:** While there is growing consumer interest in sustainability, not all consumers may be willing to pay a premium for sustainably packaged products or may not prioritize sustainability when making purchasing decisions.

2 Sustainability and CSR in business

Our Main Goal in this is reaching Sustainable and follow CSR principles. Below are ways it applies to our business -

- **Sustainable sourcing:** Acobitan can ensure that the raw materials they use are sustainably sourced, such as using fair trade cocoa or palm oil from suppliers who are committed to protecting the environment and respecting human rights.
- **Packaging:** Acobitan can reduce its environmental impact by using eco-friendly packaging materials, such as biodegradable plastics, or by using packaging that is recyclable or reusable.
- **Energy efficiency:** Acobitan can reduce its carbon footprint by implementing energy-efficient practices in its operations, such as using renewable energy sources, optimizing production processes, and reducing waste.
- **Social responsibility:** Acobitan can also demonstrate its commitment to social responsibility by supporting local communities, promoting fair labor practices, and ensuring that its products are safe and healthy for consumers.

3 Priorities in CSR

In general, CSR priorities that are aligned with the company's core values and stakeholder expectations can benefit the company by improving its reputation, reducing risks, and attracting and retaining customers, investors, and employees.

- **Environmental sustainability:** Prioritizing environmental sustainability initiatives such as reducing carbon emissions, using renewable energy, and promoting sustainable sourcing of

ingredients can benefit the company by improving its brand reputation and reducing operational costs in the long run.

- **Ethical labor practices:** Prioritizing ethical labor practices, such as ensuring safe working conditions, fair wages, and preventing exploitation, can improve the company's reputation and help it attract and retain employees.
- **Community involvement:** Prioritizing community involvement initiatives such as volunteering and charitable donations can help the company build a positive image and foster goodwill in the communities where it operates.
- **Diversity and inclusion:** Prioritizing diversity and inclusion initiatives such as creating a diverse and inclusive workplace can help the company attract and retain talent, enhance its reputation, and better understand the needs of diverse customers.
- **Transparency and accountability:** Prioritizing transparency and accountability initiatives, such as disclosing environmental and social performance data, can help the company build trust with stakeholders and reduce the risk of negative publicity or legal action.

4 Future risks and opportunities

Acobitan faces both risks and opportunities, which are essential to understand the businesses operating.

4.1 Risks

We face various risks related to market position, quality control, environmental concerns, and climate change. We must be aware of these risks and take proactive measures to address them to maintain their competitiveness and ensure long-term sustainability.

- **Loss of market/customer position:** The FMCG industry is highly competitive, and companies must continually innovate and adapt to changing consumer preferences and trends. Failure to do so can result in losing market share to competitors, which can be detrimental to the company's financial performance.
- **Quality control risk:** Acobitan is known for producing products that are consumed by a large number of people on a daily basis. Therefore, ensuring the quality of these products is essential. Any quality control issues can lead to product recalls, lawsuits, and damage to the brand's reputation.
- **Environmental concerns:** Consumers are becoming increasingly aware of the environmental impact of their purchasing decisions. Acobitan is under pressure to reduce its carbon footprint, adopt sustainable practices, and use eco-friendly packaging. Failure to do so can result in a loss of customers and damage to the company's reputation.
- **Climate change:** Climate change is an issue that affects all industries, including FMCG. Changes in weather patterns can impact the production and distribution of products, resulting in supply chain disruptions and increased costs. Acobitan must also consider the long-term impact of climate change on their operations and take steps to mitigate these risks.

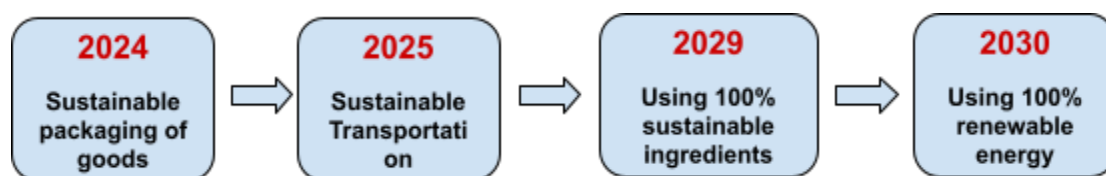
4.2 Opportunities

We have several opportunities to explore in terms of accessing new markets, innovation, brand reputation, sustainability and CSR, growing demand for organic snacks, and cost-saving measures. If we capitalize on these opportunities, we can gain a competitive advantage and achieve long-term success.

- **Accessing new markets:** Acobitan can explore new markets to expand their customer base and increase their revenue. Emerging markets, such as China, India, and Brazil, offer significant growth opportunities due to their growing middle class and increasing consumer purchasing power.
- **Innovation:** The FMCG industry is competitive, and we need to continually innovate to stay ahead of the competition. Innovation can come in the form of new product development, packaging, and marketing strategies, among others.
- **Brand reputation:** A strong brand reputation is critical for Acobitan to build trust and loyalty with customers. We can enhance their brand reputation by focusing on product quality, customer service, and social responsibility initiatives.
- **Sustainability and CSR:** Consumers are increasingly conscious of the environmental impact of their purchasing decisions. We can adopt sustainable practices, such as using eco-friendly packaging, reducing carbon emissions, and implementing responsible sourcing policies. CSR initiatives, such as supporting local communities, can also help to enhance the company's reputation and build customer loyalty.
- **Growing demand for organic snacks:** The demand for organic snacks is on the rise, as consumers become more health-conscious and seek healthier snacking options. Acobitan can tap into this growing trend by developing and marketing organic snack products.
- **Cost-saving measures:** Acobitan can adopt cost-saving measures, such as optimizing their supply chain, reducing waste, and implementing lean manufacturing processes. These measures can help to improve efficiency and reduce costs, which can be passed on to customers in the form of lower prices.

5 Vision Plan to go sustainable

Find our vision plan for Acobitan to go sustainable maintaining its competitiveness and profitability. Our vision plan is sustainable, holistic, realistic, affordable & profitable and will create real value for the firm.



Short Term Goals-

- By 2024, we plan to incorporate 100% sustainable packaging of our products
- By 2025, we plan to incorporate sustainable transportation of our products

Long Term Goals-

- By 2029, we plan to use 100% sustainable ingredients used for producing our product.
- By 2030, we plan to use 100% renewable energy throughout the production plant.

For each of the short term goals, we have discussed its benefits, action plan, best option amongst various alternatives and feasibility analysis. Long term goals are also discussed briefly.

5.1 Sustainable Packaging of Goods (by 2024)

Sustainable packaging is the use of materials and packaging design that has minimal impact on the environment, both in terms of the materials used and the way the packaging is disposed of after use. It aims to reduce the negative impact of packaging waste on the environment and to promote a more sustainable use of resources.

Sustainable packaging can take many forms, such as using recyclable or compostable materials, minimizing the amount of packaging used, using lightweight packaging to reduce transportation emissions, and using renewable resources in the production of packaging. The goal of sustainable packaging is to balance the needs of the product, consumer, and environment, while ensuring that the packaging is effective and efficient in protecting the product during transport and storage.

5.1.1 Benefits

- **Improved brand reputation:** FMCG (Fast Moving Consumer Goods) companies that use sustainable packaging demonstrate their commitment to social and environmental responsibility. This can enhance their brand reputation and improve customer loyalty, as consumers are becoming more conscious about the impact of their consumption on the environment.
- **Cost savings:** Sustainable packaging can lead to cost savings for FMCG companies, as it often involves the use of lightweight and recyclable materials, which can reduce the overall packaging cost. Additionally, sustainable packaging can also help to reduce waste disposal costs.
- **Compliance with regulations:** Many countries have regulations in place to reduce the environmental impact of packaging waste. By using sustainable packaging, FMCG companies can ensure compliance with these regulations and avoid penalties for non-compliance.
- **Increased sales:** Consumers are becoming more aware of the environmental impact of their purchases and are increasingly opting for products with sustainable packaging. FMCG companies that use sustainable packaging can attract these consumers and potentially increase their sales.
- **Reduced environmental impact:** Sustainable packaging reduces the amount of waste that ends up in landfills, reduces carbon emissions, and conserves natural resources. This can have a positive impact on the environment and contribute to a more sustainable future.

5.1.2 Action Plan

1. **Set sustainability goals:** Define specific, measurable, achievable, relevant, and time-bound (SMART) goals for sustainable packaging. For example, reduce packaging waste by 50% by 2025, switch to 100% recyclable or compostable packaging materials by 2030, etc.
2. **Conduct a sustainability assessment:** Evaluate the environmental impact of Ecobite's current packaging materials and processes, identify areas of improvement, and set priorities.
3. **Explore sustainable packaging alternatives:** Research and test sustainable packaging alternatives, such as biodegradable or compostable materials, recycled or recyclable materials, and reusable containers.
4. **Engage suppliers:** Collaborate with packaging material suppliers to find sustainable alternatives and encourage them to develop eco-friendly products.
5. **Optimize packaging design:** Redesign packaging to reduce waste, use fewer materials, and improve recyclability or compostability.
6. **Communicate sustainability to customers:** Inform customers about the company's sustainable packaging initiatives and encourage them to recycle or compost the packaging.
7. **Monitor and report progress:** Track and report progress towards the sustainability goals, identify areas of improvement, and adjust the action plan as needed.
8. **Invest in research and development:** Allocate resources to research and develop new sustainable packaging solutions, optimize production processes, and minimize waste.
9. **Collaborate with industry peers:** Join industry associations or initiatives to share best practices and collaborate on sustainability issues.
10. **Continuously improve:** Make sustainability a core part of Ecobite's business strategy and continuously improve packaging materials, processes, and practices to minimize environmental impact.

5.1.3 Packaging options

There are several sustainable packaging options that Ecobite could consider, depending on their specific needs and priorities. Some examples include:

- **Biodegradable packaging:** This type of packaging is designed to break down into natural materials when disposed of, reducing the amount of waste that ends up in landfills.
- **Compostable packaging:** Similar to biodegradable packaging, compostable packaging is designed to break down quickly and safely in a composting environment.
- **Recyclable packaging:** Packaging that can be easily recycled is another sustainable option. This can include materials such as paper, cardboard, aluminum, and certain types of plastic.
- **Reusable packaging:** Rather than using single-use packaging, Ecobite could consider implementing a reusable packaging system that allows customers to return packaging for cleaning and reuse.
- **Plant-based packaging:** Packaging made from plant-based materials, such as cornstarch or sugarcane, is a renewable and sustainable alternative to traditional packaging materials.

- **Minimal packaging:** In some cases, reducing the amount of packaging used altogether can be a sustainable option. This could involve using smaller packaging sizes or eliminating unnecessary packaging layers.

Overall, the most suitable sustainable packaging option for a company will depend on a variety of factors such as cost, availability, and compatibility with their existing supply chain and equipment.

5.1.3.1 Selected option

Plant based packing turns out to be best among all the options for the company because of the following reasons-

- **Renewable:** Plant-based materials are renewable, meaning they can be grown and harvested repeatedly. This is in contrast to materials like plastic or metal, which are non-renewable and can only be sourced from limited resources.
- **Biodegradable:** Many plant-based materials, such as cornstarch or sugarcane, are biodegradable, meaning they can break down naturally over time and do not accumulate in landfills or oceans.
- **Lower carbon footprint:** Plant-based materials generally have a lower carbon footprint than traditional materials. For example, producing plant-based plastics can result in up to 75% less greenhouse gas emissions than producing traditional plastic.
- **Customer appeal:** Many customers are increasingly seeking sustainable products, and plant-based packaging can be an attractive option for environmentally conscious consumers.

However, it's worth noting that plant-based packaging can have limitations, such as higher cost, limitations on packaging design, and potential supply chain challenges. Additionally, some plant-based materials may require significant resources, such as water or fertilizers, to grow and process, which can have their own environmental impacts. Therefore, the best packaging option for a business will depend on a variety of factors, including the specific product, customer preferences, environmental impact, and cost considerations.

5.1.3.1 Startups working on same approach

- **Biorgani (Startup From Guatemala)**
 - Biorgani is a startup in Guatemala that makes high-quality and affordable plant-based biopolymers.
 - Their resins range from bio-based grade up to compostable grade and are also compatible with conventional plastic machinery.
- **Jordisk (Norwegian Startup)**
 - It makes plant-based packaging from sugarcane. The startup extracts polylactic acid (PLA) from sugarcane to create packaging solutions.
 - They offer PLA bottles that are industrially compostable and are suitable for packaging a range of beverages like water, juice and dairy products.
- **Embelium L'emballage (French Startup)**
 - They offer cultivated packaging solutions.

- It grows Embellium, a combination of different plant fibers from hemp, corn cobs, and mycelium. As a result, Embellium-based packaging is impact-resistant, non-flammable, and sound-proof.

5.1.4 Feasibility analysis

5.1.4.1 Revenue Source

- **Increasing demand for sustainable packaging-** This can indeed be a source of revenue for companies, especially in the long term. As consumers become more aware of the environmental impact of their purchases, they are increasingly seeking out products with sustainable packaging. This shift in consumer behavior presents an opportunity for companies that prioritize sustainability to differentiate themselves from competitors and attract new customers. Furthermore, sustainable packaging can also lead to cost savings for companies, such as reducing waste disposal costs and optimizing transportation efficiency. This can result in improved operational efficiency and increased profitability in the long run.

5.1.4.2 Expenditure

- **Research Own Solutions-** R&D investments can lead to the development of new and improved sustainable packaging materials, designs, and production methods. This can result in packaging that is more environmentally friendly, cost-effective, and better able to meet the needs of both businesses and consumers.
- **Startup Investments-** Startups focused on sustainable packaging can bring fresh perspectives, technologies, and ideas to the market that may not be available from established companies. Investing in startups can help to accelerate the development of new sustainable packaging solutions and increase their availability in the market.

5.1.4.3 Assumptions

- Company produces 10 million units of snacks annually
- Each unit of snack has an average packaging weight of 10 grams
- The cost of switching to plant based packaging will be an additional \$0.10 per unit of snack.
- Company has a profit margin of 10% on each unit of snack sold
- The market demand for sustainable packaging is expected to increase by 10% annually

5.1.4.4 Guesstimate

- Current revenue 10 million units * \$1 per unit = \$10 million
- Current profit from selling snacks is \$1 million (10% of \$10 million)
- Additional cost of sustainable packaging per unit is \$0.10 so total additional cost of \$1 million (10 M units * \$0.10 per unit)
- An increase in Sustainability Demand will allow a 10% price rise.(\$1 million)

- Final Profits of \$1 M (10% of \$10 M) as profit with a 3-4% year on year increase because of new customers.
- Hence, the company will not face a hit in its first year and is set for further annual profit growth.

5.2 Sustainable transport of Products (By 2025)

Coming to our next vision plan, we want to make our mode of transportation more sustainable which is our short-term goal. Sustainable transportation refers to the use of transportation modes and infrastructure that have minimal negative impacts on the environment, economy, and society, while also meeting the transportation needs of people and goods. Sustainable transportation aims to reduce carbon emissions, air pollution, noise pollution, and other negative impacts associated with traditional transportation modes, such as cars, trucks, and airplanes, and to promote social equity, economic growth, and environmental sustainability.

Sustainable transportation is about creating a more sustainable, equitable, and efficient transportation system that meets the needs of people and goods while reducing negative impacts on the environment and society.

5.2.1 Benefits

We try to make a guesstimate analysis on how a new sustainable transportation plan could be profitable for Acobitan, we found out some benefits also:

- **Cost savings:** Implementing sustainable logistics practices can help reduce costs associated with transportation. This could include reducing fuel consumption, optimizing delivery routes, and using more efficient transportation modes.
- **Improved efficiency:** Sustainable logistics practices can help streamline operations and improve efficiency. This could include implementing new technologies or software to track shipments and manage inventory.
- **Brand reputation:** Implementing sustainable logistics practices can help improve the company's brand reputation and build customer loyalty. Consumers are increasingly aware of the impact of their purchasing decisions on the environment, and a company that demonstrates a commitment to sustainability is more likely to attract and retain customers.
- **Compliance:** Implementing sustainable logistics practices can help the company comply with environmental regulations and reduce the risk of fines or penalties for non-compliance.
- **Environment Impact:** Sustainable transportation can reduce negative environmental impacts by reducing greenhouse gas emissions, improving air quality, reducing noise pollution, conserving natural resources, and protecting biodiversity.

5.2.2 Action Plan

Here's an action plan for Acobitan to implement sustainable logistical/transport system.

1. **Conduct a sustainability assessment:** The first step is to conduct a comprehensive assessment of Acobitan's current logistics operations to identify areas of improvement. This assessment should consider factors such as transportation modes, delivery routes, fuel consumption, and emissions.
2. **Set sustainability goals:** Based on the sustainability assessment, Acobitan should set measurable goals for improving its logistics operations. These goals could include reducing fuel consumption, decreasing emissions, and increasing the use of sustainable transportation modes.
3. **Optimize delivery routes:** Acobitan should work to optimize delivery routes to reduce the distance traveled and minimize fuel consumption. This could involve using mapping software to identify the most efficient routes, or partnering with other companies to share transportation resources.
4. **Use sustainable transportation modes:** Acobitan should explore the use of more sustainable transportation modes such as electric or hybrid vehicles, bicycles, or public transportation. In addition, the company should consider the use of alternative fuel sources such as biodiesel or compressed natural gas.
5. **Improve inventory management:** Acobitan should implement new technologies or software to track shipments and manage inventory. This could include real-time tracking of shipments, inventory management software, or automated inventory replenishment systems.
6. **Monitor and report progress:** Acobitan should regularly monitor and report on its progress towards its sustainability goals. This will help the company to identify areas for further improvement and demonstrate its commitment to sustainability to stakeholders.
7. **Collaborate with suppliers and customers:** Acobitan should collaborate with its suppliers and customers to improve the sustainability of its logistics operations. This could involve working with suppliers to reduce packaging waste or partnering with customers to implement sustainable delivery options.

By implementing these practices, Acobitan can improve the sustainability of its logistics operations and reduce its environmental impact. In addition, the company can improve its brand reputation, attract customers who value sustainability, and potentially reduce costs associated with transportation.

5.2.3 Transportation options

- Rail
- Electric vehicles
- Hybrid vehicles
- Waterways
- Hybrid Transport
- Combination of any two

5.2.3.1 Selected Option

The combination of Railway and E-vehicle turns out to be the best option. We can use railways for majority of the transportation and use E-vehicles for the last mile distribution. Advantages of using a Combination of Rail & E-vehicle-

- Efficiency: Rail transportation is generally the most efficient mode for long-distance transportation of goods, especially for heavy or bulky products. It can transport a large volume of goods at once, which reduces transportation costs and improves supply chain efficiency.
- Cost-effective: Rail transportation is often less expensive than other modes of transportation, such as road or air transportation, for long-distance transportation of goods. Electric vehicles have lower operating costs than traditional combustion engine vehicles because they require less maintenance and use electricity, which is generally cheaper than gasoline or diesel fuel.
- Environmentally friendly: Rail transportation produces fewer emissions per ton of goods transported than road or air transportation, which makes it a more environmentally friendly mode of transportation. Electric vehicles produce zero emissions when in use, which makes them an environmentally friendly mode of transportation that can help reduce carbon footprint and air pollution.
- Improved brand reputation: Using electric vehicles for last-mile distribution can enhance a company's sustainability image, which can attract environmentally conscious customers and investors.
- Government incentives: Governments around the world are encouraging the adoption of electric vehicles by offering various incentives, such as tax credits, rebates, grants, and other financial incentives, to businesses that purchase and use electric vehicles.

In conclusion, using rail transportation for long-distance transportation and electric vehicles for last-mile distribution can provide various advantages to Acobitan, including cost savings, improved supply chain efficiency, and reduced environmental impact. We need to evaluate their transportation needs carefully and choose the modes that best suit their needs and objectives.

5.2.3.1 *Startup working on same approach*

Some names of good startups with which we can collaborate for achieving sustainable transportation.

- Spring Free EV (San Francisco)
 - It makes EV affordable and simple to acquire through fintech. As the creator of a first-of-its-kind pay-per-mile subscription model designed to benefit high-mileage drivers.
 - Spring Free EV enables fleet owners to lower fuel and maintenance costs with EVs.
- Lucid Motors (startup from Newark)
 - Involves designing vehicles tough enough to go off-road. It promises far more range per battery charge than existing electric cars.
 - Rivian EVs are designed for adventure, including off-road and all-weather situations. Rivian vehicles also look more traditional and come with unique storage features.
- Rivian Automotive (Irvine-based startup)
 - The newly launched car, Lucid Air, produces zero emissions, and the actual driving part isn't the only emission-free part.

- The car has been designed as a luxury vehicle, and that design goes beyond the materials lining the inside and outside of the car. Driving one may be fun, but passengers are in for a good time too.

5.2.4 Feasibility analysis

5.2.4.1 Revenue sources

- **Increasing demand for sustainable transportation:** This can increase revenue for our company by expanding their customer base, improving their brand reputation, and reducing transportation costs. By adopting sustainable transportation modes such as electric vehicles and public transportation, Acobitan can appeal to environmentally conscious consumers, improve our brand image, and potentially access new markets. Furthermore, by reducing transportation costs through sustainable transportation modes, we can increase profitability and invest in other areas of our business, leading to potential revenue growth.

5.2.4.3 Expenditure

- **Research Own Solutions-** Investing in research and development (R&D) can help us develop sustainable transportation solutions by identifying areas of improvement, developing new technologies, optimizing existing processes, enhancing sustainability, and improving cost-effectiveness. Through R&D, we can develop innovative solutions that are more efficient, cost-effective, and environmentally friendly.
- **Startup Investments-** Investing in startups can help Acobitan to access new technologies, benefit from specialized expertise, support innovation, foster partnerships, and gain a competitive advantage in the market. Startups are often at the forefront of innovation, and investing in them can provide FMCG firms with new sustainable transportation solutions that they may not have access to otherwise.

5.2.4.3 Assumptions

- Produces 10 million units of snacks annually.
- Long-distance transportation is 500 km/unit.
- Last-mile distribution is 10 km/unit.
- The cost of transporting each unit of snack by rail is \$0.02
- The cost of last-mile distribution is \$0.05
- Current cost is \$0.08 /unit
- Profit margin is 10% on each unit of snacks sold

5.2.4.4 Guesstimate

- Cost of Long-distance transportation annually: \$200,000

- Cost of last-mile distribution annually: \$500,000
- Cost of current transportation method annually: \$800,000
- Total cost savings from using both rail and electric vehicles: $\$800,000 - \$700,000 = \$100,000$
- Total revenue from selling snacks annually: 10 million units * \$1 per unit = \$10 million
- Total profit from selling snacks annually: $\$10 \text{ million} * 10\% = \1 million
- If FMCG company saves \$100,000 from using sustainable transportation, their profit would increase to \$1.1 million ($\$1 \text{ million} + \$100,000$).

Based on these factors, it is likely that a new sustainable logistics plan could be profitable for Acobitan. By implementing sustainable logistics practices, the company could reduce costs associated with transportation and improve efficiency, resulting in cost savings. The company's brand reputation could also be improved, which could lead to increased customer loyalty and sales.

For example, let's assume that Acobitan currently spends \$1 million annually on transportation costs, and that implementing sustainable logistics practices could reduce this cost by 10% (\$100,000). Additionally, let's assume that the company could increase sales by 5% (\$500,000) due to the improved brand reputation associated with sustainable logistics practices. Finally, let's assume that the company could avoid \$50,000 in fines and penalties by complying with environmental regulations.

In this scenario, the total financial impact of implementing sustainable logistics practices would be \$650,000 annually. While this is just a rough estimate based on several assumptions, it suggests that implementing sustainable logistics practices could be profitable for Acobitan. A more detailed analysis would be necessary to determine the exact financial impact of a specific sustainable logistics plan.

Summarizing our transport sustainability analysis, we have evaluated the feasibility of transitioning to electric vehicles for transportation, planned to establish partnerships with electric vehicle manufacturers and charging infrastructure providers establish policies to encourage the use of electric vehicles.

5.3 Sourcing 100% sustainable ingredients (By 2029)

Coming to the next part of our Vision Plan i.e. **Sourcing 100% sustainable ingredients**. It is one of our long-term objectives.

5.3.1 Benefits

Benefits that Acobitan will have by sourcing sustainable ingredients

1. **Environmental Benefit:** Sourcing 100% sustainable ingredients for Acobitan will have a significant environmental benefit. It will reduce the negative impact on the environment by minimizing the use of non-renewable resources and reducing greenhouse gas emissions, pollution and waste.

2. **Cost Saving:** While initially, the cost of sourcing sustainable ingredients may be higher, in the long run, it can result in cost savings. Sustainable practices can reduce waste, increase efficiency, and lead to better management of resources, all of which can save money in the long run.
3. **Improved Supply Chain Resilience:** Sourcing sustainable ingredients can improve supply chain resilience by reducing the risks associated with climate change and resource scarcity.
4. **Positive Brand Image:** Sourcing sustainable ingredients can help Ecobite build a positive brand image. Consumers are increasingly looking for eco-friendly products and are willing to pay a premium for sustainable products. By sourcing 100% sustainable ingredients, Ecobite can position itself as a socially responsible and environmentally conscious company, which can improve brand loyalty and attract new customers.
5. **Regulatory Compliance:** As governments around the world continue to increase their focus on environmental protection, sourcing sustainable ingredients can help Acobitan to comply with regulations and avoid potential fines and penalties. By demonstrating compliance with environmental regulations, the company can also improve its reputation and strengthen its relationships with stakeholders.

5.3.2 Possible options

Some possible Solutions for doing this-

1. Partnering with Sustainable Ingredient Suppliers
2. Implementing Sustainable Farming Practices
3. Using Alternative Ingredients.

5.4 Using 100% renewable resources (By 2030)

Moving to the Next part of our Vision Plan **Using 100% renewable Energy**. This also comes under our long-term goal.

5.4.1 Benefits

Benefits we will enjoy in the Process and after completion of this goal .

1. **Environmental Benefit:** By using 100% renewable energy, Ecobite can significantly reduce its carbon footprint and contribute to the fight against climate change. This would lead to a positive impact on the environment by reducing greenhouse gas emissions, air pollution, and dependence on fossil fuels.
2. **Cost Saving:** While the initial cost of transitioning to renewable energy sources may be high, in the long run, it could lead to significant cost savings for Ecobite. This is because renewable energy sources have a lower cost of production and are not subject to the volatility of traditional energy markets.

3. **Improved Brand Reputation:** Using renewable energy sources can improve Ecobite's brand reputation as a socially responsible and environmentally conscious company. This could lead to increased customer loyalty and brand recognition, as well as attracting environmentally conscious consumers.
4. **Energy Independence:** By relying solely on renewable energy sources, Ecobite can achieve energy independence, reducing its dependence on external energy providers and minimizing the risks associated with volatile energy markets.
5. **Compliance with Regulations:** Governments and regulatory bodies worldwide are increasingly imposing regulations and incentives for companies to use renewable energy sources. By using 100% renewable energy, Ecobite can comply with such regulations and benefit from any incentives offered by governments for the adoption of renewable energy.

5.4.2 Possible options

Some possible Solutions for doing this-

1. Solar Energy
2. Wind Energy
3. Geothermal Energy
4. Hybrid Energy
5. Biomass energy

6 Benefits

Going sustainable can bring several benefits Acobitan in terms of environmental friendliness, brand reputation, cost savings, attracting and retaining talent, and access to new markets and customers.

- **Environmental friendliness:** Adopting sustainable practices can help Acobitan reduce its environmental impact. For example, using eco-friendly packaging, reducing carbon emissions, and implementing responsible sourcing policies can help to reduce the company's carbon footprint and preserve natural resources.
- **Brand reputation:** Consumers are increasingly conscious of the environmental impact of their purchasing decisions. By adopting to sustainable practices, we can enhance our brand reputation and build trust and loyalty with customers.
- **Cost savings:** Sustainable practices can also help Acobitan save costs. For example, reducing waste and optimizing the supply chain can help to improve efficiency and reduce costs, which can be passed on to customers in the form of lower prices.
- **Attracting and retaining talent:** Employees are increasingly looking for companies that are committed to sustainability and social responsibility. By adopting to sustainable practices, Acobitan can attract and retain talent who share its values and are committed to making a positive impact.

- **Access to new markets and customers:** Consumers are increasingly looking for sustainable and eco-friendly products. By adopting to sustainable practices, we can tap into this growing trend and access new markets and customers who are looking for environmentally friendly products.