



MARKETING MODEL OF ROYAL DUTCH AIRLINES: TECHNICAL AND CONCEPTUAL SUSTAINABILITY

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ABSTRACT

Digital age makes everything is open source and easy to access through internet or application and that includes big company such as Royal Dutch Airlines. The influence of the internet helps to grow sustainability marketing developed by KLM airline. With the SWOT analysis, Author is able to discover that their key of both preserving environment and sustainability development itself is through technical and conceptual marketing development of low emission flight and biofuel flight. This analysis helps the audience to find that sustainability marketing development is a long practical journey instead of quick spread in numbers of campaigns and promotions.

Keywords: Sustainability development; Royal Dutch Airlines; SWOT Analysis; Biofuel Flight; Low Emission Flight

1. INTRODUCTION

The airplane industry has been under pressure to become more environmentally friendly in recent years, as concerns over climate change and carbon emissions have grown. As a result, many airlines and aircraft manufacturers have launched green campaigns to reduce their impact on the environment. Here, we will explore some of the ways in which the airplane industry is going green and the impact of these initiatives. One of the main ways in which the airplane industry is going green is through the use of more efficient engines. Aircraft manufacturers such as Boeing and Airbus are developing new engines that use less fuel and emit fewer pollutants (Mousavi & Bossink, 2020, 2017). For example, Boeing's 787 Dreamliner is equipped with engines that are up to 20% more fuel-efficient than previous models, while Airbus's A320neo uses 15% less fuel per passenger. These new engines not only reduce emissions but also save airlines money on fuel costs. Another way in which the airplane industry is going green is through the use of alternative fuels. Airlines such as KLM and United Airlines have experimented with biofuels made from sources such as algae and waste cooking oil. These fuels emit significantly fewer greenhouse gases than traditional fossil fuels and can be used in existing aircraft without modification. However, the availability of these fuels is limited, and they are currently more expensive than traditional jet fuel. Airlines are also implementing a range of measures to reduce their carbon footprint on the ground. For example, many airlines are switching to electric or hybrid ground vehicles at airports, while others are investing in renewable energy sources such as solar panels. Delta Air Lines, for instance, has installed solar panels at its Atlanta airport hub, which provide around 10% of the facility's energy needs.

In addition to these measures, airlines are also taking steps to reduce the amount of waste generated during flights. Many airlines are replacing single-use plastics with more sustainable alternatives such as bamboo cutlery and compostable food containers. Emirates, for example, has introduced a range of eco-friendly products on its flights, including blankets made from recycled plastic bottles (Govers & Govers, 2014; Hodgson, 2004). Another important aspect of the green campaign in the airplane industry is the development of modern technologies. For instance, a number of companies are working on electric or hybrid aircraft that could revolutionize air travel. While these planes are still in the development phase, they have the potential to significantly reduce emissions and noise pollution. The green campaign in the airplane industry has been driven by a range of factors, including regulatory pressure and consumer demand. In recent years, governments around the world have introduced measures to limit carbon emissions from the aviation sector. For example, the European Union has introduced the Emissions Trading System, which places a cap on

carbon emissions from airlines and allows them to trade emissions allowances. Similarly, the International Civil Aviation Organization has introduced a Carbon Offsetting and Reduction Scheme for International Aviation, which requires airlines to offset their emissions by purchasing carbon credits. Consumer demand has also played a significant role in driving the green campaign in the airplane industry. Surveys have shown that many passengers are willing to pay more for eco-friendly flights, and airlines have responded by introducing green initiatives such as carbon offsetting programs. These programs allow passengers to offset the carbon emissions from their flights by investing in renewable energy projects or other environmental initiatives.

The impact of the green campaign in the airplane industry has been significant, but there is still a long way to go. While airlines and aircraft manufacturers have made progress in reducing emissions, the growth of the aviation sector means that overall emissions are still rising. In addition, the excessive cost of alternative fuels and the limited availability of sustainable technologies means that it may be some time before the industry can fully transition to a low-carbon future. In conclusion, the green campaign in the airplane industry has seen noteworthy progress in recent years, with airlines and aircraft manufacturers implementing a range of measures to reduce their impact on the environment. In other words, the green campaign is needed as fundamental and responsibility of making a company; thus, they set sustainability marketing as significant rules. Sustainability marketing is a business strategy that focuses on promoting products and services that are environmentally friendly and socially responsible. This approach has become increasingly important in recent years, as consumers become more aware of the impact that their purchasing decisions have on the planet and society as a whole. In this topic, we will explore the benefits of sustainability marketing, both for businesses and for the planet. One of the primary benefits of sustainability marketing is that it can help businesses differentiate themselves in a crowded marketplace. In today's competitive business environment, it can be difficult for companies to stand out from their competitors. By promoting products and services that are environmentally friendly and socially responsible, businesses can distinguish themselves as leaders in their industry, and appeal to consumers who are looking for more sustainable options.

Another benefit of sustainability marketing is that it can help businesses attract new customers. As consumers become more environmentally conscious, they are increasingly looking for products and services that align with their values. By promoting sustainability in their marketing, businesses can tap into this growing market and attract new customers who are looking for more sustainable options. Sustainability marketing can also help businesses build brand loyalty (Gualtieri et al., 2022; Wynes & Nicholas, 2017). When consumers see that a company is committed to sustainability, they are more likely to trust and remain loyal to that brand. This can lead to repeat purchases, positive word-of-mouth advertising, and a stronger brand reputation. Beyond the benefits to businesses, sustainability marketing also has significant benefits for the planet. By promoting products and services that are environmentally friendly, businesses can reduce their environmental impact and help protect the planet for future generations. This can include using sustainable materials in product design, reducing energy consumption in production, and minimizing waste throughout the supply chain. Sustainability marketing can also help raise awareness about environmental and social issues. By promoting sustainable practices and educating consumers about the impact of their purchasing decisions, businesses can help create a more informed and engaged consumer base (Dijkstra et al., 1994; Olson, 2016). This can lead to greater support for environmental and social causes and contribute to a more sustainable future for all.

In addition to the environmental and social benefits, sustainability marketing can also have financial benefits for businesses. By implementing sustainable practices and promoting sustainable products and services, businesses can reduce their operating costs, increase efficiency, and improve their bottom line. This can include reducing energy and resource consumption, minimizing waste, and improving supply chain management. Finally, sustainability marketing can also help businesses comply with regulations and meet the expectations of stakeholders. As governments and regulatory bodies increasingly focus on sustainability issues, businesses that demonstrate a commitment to sustainability are more likely to comply with regulations and avoid costly fines or legal action. Additionally, by meeting the expectations of stakeholders such as investors, employees, and customers, businesses can build trust and maintain a positive reputation (Ciliberti et al., 2022; Tarr et al., 2022). In conclusion, sustainability marketing has numerous benefits for businesses and the planet. By promoting products and services that are environmentally friendly and socially responsible, businesses can differentiate themselves in a crowded marketplace, attract new customers, build brand loyalty, reduce their environmental impact, raise awareness about environmental and social issues,



improve their bottom line, and comply with regulations and meet stakeholder expectations. As such, sustainability marketing should be a key component of any business strategy in today's environmentally conscious and socially responsible business environment. The purpose of this research is to contribute more research about how more efficient the sustainability marketing is. That the research will create heterogeneous data whether as comparison or new improved data. In practical sense, before coming into a decision, numerous data will help the decision maker to set better decision according to more data created by the researchers.

2. LITERATURE REVIEW

2.1 ROYAL DUTCH AIRLINES (KLM)'S HISTORY AND PROFILE

Royal Dutch Airlines, known today as KLM, is the national airline of the Netherlands and one of the oldest airlines in the world. The company was founded in 1919, making it over 100 years old, and it has played a significant role in shaping the aviation industry. The origins of KLM can be traced back to the Dutch government's desire to establish an airline that could connect the Netherlands with its overseas colonies (Dyson & Doel, 1984; Nurwansyah, 2022). This led to the creation of a company called Koninklijke Luchtvaart Maatschappij voor Nederland en Koloniën, which translates to "Royal Aviation Company for the Netherlands and Colonies." The name "KLM" was later adopted for simplicity. KLM's first flight took place on May 17, 1920, when a De Havilland DH-16 aircraft took off from London and landed in Amsterdam. The flight was piloted by a former Dutch Air Force pilot named Jerry Shaw. Initially, KLM only flew domestic routes within the Netherlands, but in 1924, it launched its first international service, linking Amsterdam with London. Throughout the 1920s, KLM continued to expand its network, adding new destinations across Europe and the Middle East. In 1929, it made history by launching the world's first transatlantic scheduled passenger service between Amsterdam and New York City. The flight took over 36 hours to complete and involved several stops along the way, but it marked a major milestone in aviation history.

In the 1930s, KLM introduced several new aircraft types, including the Douglas DC-2 and DC-3. These planes allowed the airline to offer faster and more comfortable journeys to its passengers, and they helped to cement KLM's reputation as a world-class airline. By the outbreak of World War II, KLM had become one of the largest airlines in Europe, operating a fleet of over 50 aircraft. During the war, KLM was forced to suspend its operations, as the Netherlands was occupied by Nazi Germany. However, after the war ended, the airline was able to resume its services, and it quickly returned to its pre-war level of operations. In the years that followed, KLM continued to expand its network, adding new destinations in Asia, Africa, and the Americas. In the 1950s and 1960s, KLM introduced several new aircraft types, including the Lockheed Constellation and the Boeing 747 "Jumbo Jet." These planes allowed the airline to offer even faster and more comfortable journeys, and they helped to make air travel accessible to a wider range of people. Throughout the 1970s and 1980s, KLM continued to innovate, introducing new services such as inflight entertainment and duty-free shopping. It also became one of the founding members of the SkyTeam airline alliance, which has since grown to include over 20 airlines around the world.

In the 1990s and 2000s, KLM faced increased competition from low-cost carriers and other airlines. However, it continued to adapt and innovate, launching new services such as online check-in and mobile boarding passes. It also merged with the French airline Air France in 2004, forming the Air France-KLM group, which is one of the largest airline groups in the world. Today, KLM operates a fleet of over 100 aircraft and serves over 100 destinations around the world. It is known for its prominent level of service and its commitment to sustainability, with a goal of reducing its carbon emissions by 50% by 2030. In conclusion, the history of Royal Dutch Airlines, or KLM, spans over 100 years and includes many significant milestones in the aviation industry. But before discussing further about KLM's corporate responsibility, we should elaborate how's the history of sustainability marketing itself. Sustainability marketing, also known as green marketing or eco-marketing, is the practice of promoting products, services, or organizations that are environmentally friendly or sustainable. The concept of sustainability marketing dates back several decades, and its evolution reflects changing attitudes towards environmentalism, social responsibility, and corporate sustainability.

In the early 1970s, the first Earth Day was held in the United States, and environmentalism began to gain momentum as a social and political issue. During this time, many companies started to recognize the importance of sustainability and began to incorporate environmental considerations into their business practices. However, this was a response to government regulations and public pressure, rather than a strategic marketing effort. In the 1980s, a number of companies began to adopt more proactive sustainability

strategies, including marketing their products as environmentally friendly. For example, the Body Shop, a UK-based cosmetics retailer, was one of the first companies to promote the use of natural ingredients and eco-friendly packaging. This approach resonated with consumers who were increasingly concerned about the environmental impact of their purchasing decisions.

By the 1990s, sustainability marketing had become more mainstream, and many companies were actively promoting their environmental initiatives. This was in part due to the rise of the internet, which made it easier for consumers to access information about companies and their practices. In 1993, Nike launched its "Reuse-A-Shoe" program, which collected and recycled old sneakers to create athletic surfaces. This was one of the first major sustainability initiatives from a global brand, and it helped to establish Nike as a leader in the sustainability space. During the 2000s, sustainability marketing continued to evolve, with many companies adopting a more holistic approach to sustainability. This involved addressing not just environmental concerns, but also social and economic issues. For example, companies such as Patagonia and Ben & Jerry's began to prioritize fair labour practices and supply chain transparency, in addition to their environmental initiatives.

In 2005, the United Nations launched the Principles for Responsible Investment (PRI), which encouraged companies to incorporate environmental, social, and governance (ESG) factors into their investment decisions. This helped to raise awareness of the importance of sustainability among investors, and many companies began to incorporate ESG considerations into their business strategies. In the years following the global monetary crisis of 2008, sustainability marketing became more important than ever. Consumers and investors were increasingly demanding that companies take responsibility for their social and environmental impact, and many companies began to recognize the business benefits of sustainability. For example, companies that were seen as leaders in sustainability, such as Tesla and Whole Foods Market, enjoyed a competitive advantage over their peers. Today, sustainability marketing is a mainstream practice, and many companies have made significant commitments to sustainability. For example, in 2020, Microsoft announced that it would be carbon negative by 2030, and that it would remove all the carbon it has emitted since its founding in 1975 by 2050 (Civil et al., 2013; Garrow & Lurkin, 2021). This type of ambitious sustainability commitment is becoming increasingly common among companies, as they recognize the importance of addressing climate change and other sustainability challenges.

In conclusion, the history of sustainability marketing reflects a changing landscape of environmentalism, social responsibility, and corporate sustainability. While the concept of sustainability marketing has been around for several decades, it has evolved significantly over time, as companies have recognized the importance of sustainability as a strategic business issue. Today, sustainability marketing is a critical component of many companies' business strategies, and it will continue to evolve as sustainability challenges become more urgent and complex. Corporate responsibility and sustainability marketing are two essential concepts that go hand in hand. They are the cornerstone of modern business practices, where companies strive to balance economic, social, and environmental objectives. Corporate responsibility is the commitment of a company to act ethically and responsibly towards its stakeholders and society. On the other hand, sustainability marketing is the use of sustainable practices to promote products and services that have a minimal impact on the environment (Dominković et al., 2018; Zhang & Filippone, 2022).

The success of any business today is highly dependent on how well it embraces corporate responsibility and sustainability marketing. A responsible company must consider the impact of its operations on the environment, society, and economy. Such a company has a long-term vision and a commitment to sustainable practices that ensure the preservation of resources and the well-being of its stakeholders (Daniel Susilo & Carlo Magno T. Mendoza, 2023). The connection between corporate responsibility and sustainability marketing is strong. It is through corporate responsibility that a company can identify areas where it can contribute to sustainability. For instance, a company can undertake initiatives such as using eco-friendly packaging, reducing carbon emissions, supporting local communities, and minimizing waste. Such initiatives will not only improve the company's reputation but also contribute to the sustainability of the environment.

Sustainability marketing is a tool that a responsible company can use to communicate its sustainable practices to the market. Consumers today are more conscious of the environment and are willing to buy products from companies that practice sustainability. Sustainable marketing involves communicating a company's sustainable practices, values, and benefits to the consumer. It is a way of creating a sustainable brand that resonates with the consumer's values and aspirations. One of the most significant benefits of sustainability marketing is the creation of a competitive advantage. A company that practices sustainability and communicates its practices to the market has a competitive edge over its rivals. Consumers are more



likely to choose a product or service from a sustainable brand than a non-sustainable one. Sustainable brands also attract more investors who are looking for companies that align with their sustainability goals.

Corporate responsibility and sustainability marketing also have a positive impact on a company's financial performance. A responsible company attracts more customers, retains them for longer, and has a better reputation. These factors translate into increased revenue and profits for the company. Sustainability practices such as reducing waste and energy consumption also lead to cost savings for the company. In conclusion, corporate responsibility and sustainability marketing are two sides of the same coin. A responsible company identifies areas where it can contribute to sustainability and undertakes initiatives that align with its vision. Sustainable marketing is a tool that the company can use to communicate its sustainable practices to the market, creating a sustainable brand that resonates with the consumer's values. The benefits of corporate responsibility and sustainability marketing include a competitive advantage, increased revenue, and cost savings. It is, therefore, essential for companies to embrace these concepts to succeed in the modern business environment.

3. RESEARCH METHODS

The length of KLM Achievement and also the nature of their marketing will suit the analysis that elaborate their structure is SWOT analysis. SWOT analysis is a strategic planning tool used to assess an organization's strengths, weaknesses, opportunities, and threats. It was first introduced in the 1960s by Albert Humphrey, who was a management consultant at Stanford Research Institute. Since then, SWOT analysis has become a popular tool used by businesses, governments, and non-profit organizations around the world. The theory behind SWOT analysis is based on the premise that an organization can only succeed if it is aware of its internal and external factors. The internal factors refer to the strengths and weaknesses of the organization, while the external factors refer to the opportunities and threats in the external environment (Wang & Wang, 2020). Strengths: The strengths of an organization are the characteristics that give it a competitive advantage over others. These could be its unique selling points, its intellectual property, its expertise, or its location. It is important to identify these strengths as they can be leveraged to improve the organization's performance and market position.

Weaknesses: The weaknesses of an organization are the areas where it lags behind its competitors. These could be its lack of resources, outdated technology, or low brand recognition. Identifying weaknesses is essential to developing strategies to overcome them and improve overall performance. Opportunities: The opportunities for an organization are the potential areas for growth and development. These could be new markets, new products, or changes in consumer behaviour. Identifying opportunities is important as they can help the organization to stay ahead of the competition and improve profitability. Threats: The threats to an organization are the external factors that could harm its performance. These could be new competitors, changes in regulations, or economic downturns. Identifying threats is important as it allows the organization to develop strategies to mitigate them and minimize their impact.

There are several theories associated with SWOT analysis. One of the most popular is the resource-based view (RBV) theory. RBV suggests that an organization's resources are the key to its success. The theory argues that if an organization has unique and valuable resources, it will have a sustainable competitive advantage over its competitors. SWOT analysis can help identify these resources and leverage them to improve the organization's performance. Another theory associated with SWOT analysis is the contingency theory. This theory suggests that there is no one-size-fits-all approach to management. Instead, management practices must be tailored to the specific situation. SWOT analysis can help identify the unique characteristics of an organization and its environment, which can then be used to develop appropriate management strategies (Trojanowski, 2021). Finally, the stakeholder theory is another theory associated with SWOT analysis. This theory suggests that an organization's success is not just measured in financial terms. Instead, it must also consider the interests of its stakeholders, including employees, customers, suppliers, and the community. SWOT analysis can help identify the interests of these stakeholders and develop strategies that meet their needs. In conclusion, SWOT analysis is a powerful tool that can help organizations assess their strengths, weaknesses, opportunities, and threats. By identifying these factors, organizations can develop strategies that leverage their strengths, overcome their weaknesses, take advantage of opportunities, and mitigate threats. Theories such as the resource-based view, contingency theory, and stakeholder theory can help organizations use SWOT analysis to develop effective management strategies that improve overall performance and sustainability (Shohimov Jonibek, 2021).

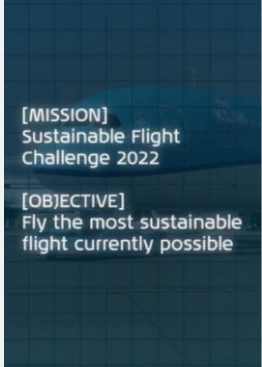


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➤ Analysis Technique

The technique will be taking both of Royal Dutch Airlines (KLM)'s both Instagram Account (@klm) and also their own company website. Both are the data instrument that is important for the analysis; thus, what's written in their company is what they promised and what posted in their Instagram account is more practical elaboration. After gathering data inside a table, the Author will be able to analyse their SWOT elements in marketing.

4. RESEARCH RESULT

CONTENT	CAPTION	DESCRIPTION
	<p>🎯 Our target: Fly the most sustainable flight currently possible. Result: a special flight with 8% less CO2-emissions (excl. SAF)! 🤔👀 Curious how we did it? Watch our recap of the Sustainable Flight Challenge 2022! 👁️</p> <p>#KLM #SkyTeam #SustainableFlightChallenge #Edmonton</p>	<p>The KLM Instagram account posted a content about less emission for their sustainable flight on their official Instagram.</p>
	<p>Today our first Trans-Atlantic flight on biofuel took off to Rio! #klm #biofuel #rio</p>	<p>The KLM Instagram account posted a content about biofuel on as part of their sustainable flight program.</p>
	<p>Sustainability We know flying is not the most sustainable way to travel. Therefore, being an airline comes with a big responsibility. We're committed to creating a more sustainable future for aviation. Check how we do this and how you can help.</p>	<p>The KLM Official Website contained their statement to devote their company to corporate responsibility with Sustainability. Their website also contained chronology of their sustainable commitment.</p>

Based on the data above, there are two content samples from their Instagram account and also one is from their official website information. The content of their statement according to klm.nl website is:
We are committed to minimize the impact of our activities, by reducing our environmental footprint and protecting the environment beyond regulatory compliance.
We strive to minimize the environmental risks that arise as a result of our operations, by using KLM's Risk Control Strategy, with source control as the preferred measure.



We endeavour to reduce our environmental footprint by implementing the following policies:

- *adopt the best available technologies;*
- *strive to operate environmental efficient procedures;*
- *promote creativity and support innovation among all our employees, suppliers and subcontractors;*
- *promote environmental awareness among our employees and customers;*
- *request our suppliers and subcontractors to implement measures aimed at reducing the environmental impact of their activities.*

By using the plan-do-check-act methodology and challenging ourselves, we ensure continuous improvement.

We expect our employees, suppliers and subcontractors to endorse the above commitments together with us, in order to implement this policy and pursue it companywide in all our day-to-day activities.

Amsterdam, March 2018

Thus, KLM has committed to program their business and industry into sustainability design. According to their letter, the element involves tech adoption, efficient procedure operation, promote creativity and innovation, promote environmental awareness, and also reducing environmental impact with their procedure. These element involves both human resources and natural resources but specifically the main idea revolves around technology and innovation with it. It means that KLM promised to create tech and innovation to preserve environment. And then in the Instagram posted content, KLM posted and mentioned about biofuel and less emission flight.

What is Biofuel and how does it connect to the KLM service?

4.1 DISCUSSION

Strength: KLM makes bright promises with future based development and KLM also fulfilled it in today's digital age. The KLM also developed in proper manner makes it more than good enough for Indonesian Market who needs the adult phase of Sustainability Marketing and adapted to it.

Weakness: The weakness is that as bright as their consistency is, the KLM barely mentions more about their sustainability program aside from the two data. This makes KLM or Royal Dutch Airlines to be just average due to lack enthusiasm for the tech and innovation from KLM.

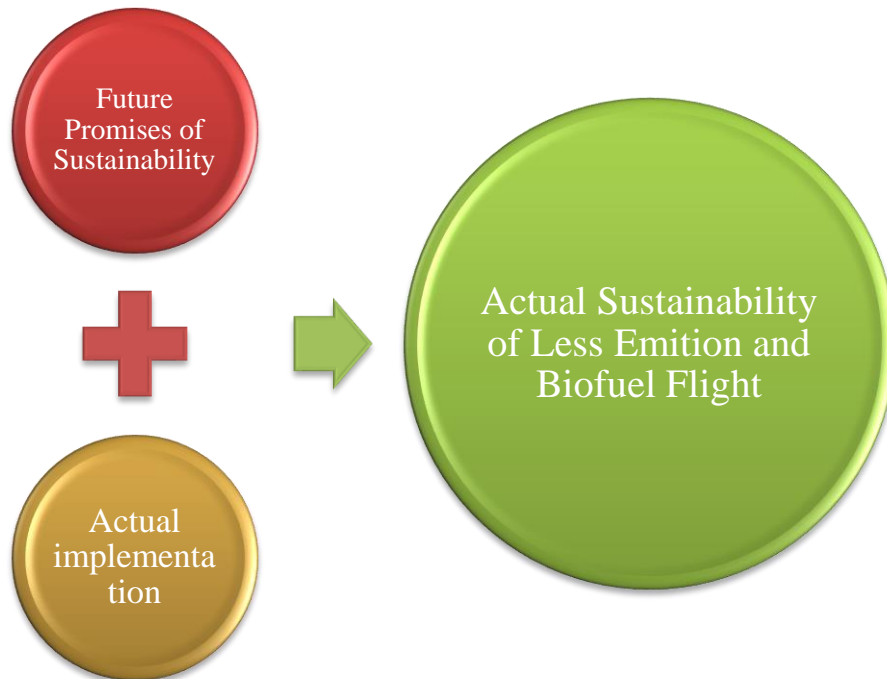
Opportunities:

Their opportunity had a simple premise. Not only that KLM is close to the Netherland's official and keyperson in their country, their mission joining Sustainability program allows them to gain numerous loyal customers to follow them and also great profit from Sustainability circle.

Threat:

For now, there's no threat detected in their industry.

Out of all SWOT parts, only threat that doesn't occur around the data nor the phenomenon itself. Their strength syncs with each other with their weakness and opportunity. From the result alone, their promise and actual practice of what they say makes them trigger no threat withing the company's current condition (Meuer et al., 2020; Pranugrahaning et al., 2021).



The illustration above is the result of their marketing model. The way KLM designs their marketing isn't like obvious promotion that spreads through numbers; but rather technical and conceptual. The conceptual part is that they already prepared to join Sustainability development since ages ago before internet exists. This makes them a different caliber in becoming the role of Corporate Sustainability development. As we know there are a lot of companies which are joining the program in order to connect alone instead of making actual sustainability impact (Daniel Susilo et al., 2023). The way they design organic or natural implementation is through energy or fuel conception is also an important part that energy is quickest medium to preserve sustainability. Biofuel for airplanes, also known as aviation biofuel, is a type of fuel made from organic matter such as plant-based materials, animal fats, and agricultural waste. It is a renewable alternative to traditional fossil fuels and can help to reduce greenhouse gas emissions and improve sustainability in the aviation industry. Biofuels are produced using a variety of processes, including fermentation, hydrolysis, and pyrolysis. The resulting fuel can be blended with traditional jet fuel to create a "drop-in" replacement that can be used in existing airplane engines without requiring modifications or additional infrastructure (Alherbawi et al., 2023; Asnadi et al., 2020).

Biofuels have several benefits over traditional fossil fuels. They can help to reduce greenhouse gas emissions, as they produce less carbon dioxide and other harmful pollutants when burned. Biofuels also have the potential to increase energy security by reducing dependence on foreign oil and promoting domestic agriculture (Pazienza et al., 2022; Saunila et al., 2019). There are several challenges to the widespread adoption of biofuels in aviation, including the cost of production, the availability of feedstocks, and the need for regulatory approval. However, many airlines and governments around the world are working to promote the use of biofuels in aviation as part of their efforts to reduce carbon emissions and combat climate change (Daggett et al., 2007; Demirbas, 2011). Overall, biofuels represent a promising alternative to traditional fossil fuels in aviation and have the potential to play a key role in creating a more sustainable and environmentally friendly aviation industry. The airline industry like KLM confirmed to use biofuel in the 2nd data. According to the chronological development from their official website, they started the biofuel flight project in 2009 then successfully uses biofuel flight for Trans-Atlantic. This means that KLM had one of their responsibilities fulfilled as company. While the 1st data shows about less emission flight from KLM Airplane. A "low emission" or "less emission" airplane refers to an aircraft that has been designed to produce fewer greenhouse gas emissions during its operation. There are several ways that an airplane can achieve this:

1. Fuel efficiency: One of the most effective ways to reduce emissions from an airplane is to improve its fuel efficiency. This can be accomplished through a variety of means, such as using lighter



- materials in the aircraft's construction, optimizing its aerodynamics, and using more efficient engines.
2. Alternative fuels: Another way to reduce emissions is to use alternative fuels, such as biofuels, which emit fewer greenhouse gases than traditional jet fuel. These fuels are often made from renewable sources, such as plant matter or waste products, and can be blended with traditional jet fuel to reduce emissions.
 3. Improved air traffic management: By optimizing flight paths and reducing the amount of time planes spend waiting on the tarmac, air traffic management systems can help reduce emissions from airplanes.
 4. Electric and hybrid-electric airplanes: A newer technology that is currently being developed are electric and hybrid-electric airplanes. These planes use electric motors, which produce zero emissions, and are powered by batteries that can be recharged either in-flight or on the ground.

Overall, there are several ways that airplanes can reduce their emissions, and many manufacturers are investing in research and development to create more environmentally friendly planes. With this, KLM shows and prove themselves that their promise to make their company tech and innovation to preserve the earth has been fulfilled. What they write down in statement is fulfilled with great achievement.

5. CONCLUSIONS AND RECOMMENDATIONS

The conclusion of this analysis is that sustainability development is a long journey of capital and industry. Some countries that are limited by their own economic strength still have a short period of time to grow. Despite many sectors need farming or cultivating, KLM's tech creation and innovation becomes on of influential sustainability development despite belonged to the sector of machine and science like airplane industry (Oncioiu et al., 2020). This also means good news that science isn't limited to natural business and industry but is also a development that can be manifested with any sector as long as their goal is to preserve the earth, because the environment is part of the natural phenomenon itself. The recommendation for this topic is to find more about long sustainability development in order for other companies to learn fast and grow good seeds in the future. There are some companies that are still young to grow the field themselves; therefore, this kind of research provides more data to see marketing dynamic in airplane industry.

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