



How has sustainability shaped communication and marketing in aviation industry?

A comparative case study

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<p>Abstract:</p> <p>This thesis investigates green marketing in aviation industry through comparative case study of four Airlines: Finnair, KLM, American Airlines and Qantas. The aim of this thesis is to understand green marketing, to research the sustainability marketing of the case companies, to see if there are similarities or differences between the case companies in sustainability marketing and to detect if over the time there has been a trend concerning sustainability marketing. Desktop research method was used for theory as well as to analyze and categorize sustainability marketing of the case companies. Case companies' YouTube channels as well as press releases were utilized as main marketing material source. The material was categorized into seven different topics which allowed for analyses of the differences and similarities between sustainability marketing of the case companies. Main findings were that the case companies focused mainly in two topics: fuels and carbon neutrality/emission reductions while certificates/sustainability indexes were discussed relatively often as well. KLM was publishing sustainability related articles and videos most actively while American Airlines the least actively. No clear trend was detected in posting activeness of case companies, except for year 2019 being perhaps a beginning of more active trend for Finnair and KLM. A difference between the focus topics in press releases and YouTube channels was detected. In press release side, the most common discussion topic was fuel related issues whilst on YouTube carbon neutrality and emission reduction were most frequent topics. Limitations are challenging categorization of topics and conclusions that can be derived from the findings.</p>	
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<p>Tiivistelmä:</p> <p>Tämä tutkielma tutkii ilmailualan vihreää markkinointia neljän lentoyhtiön (Finnair, KLM, American Airlines ja Qantas) vertailevalla tapaustutkimuksella. Tämän työn tarkoituksena on ymmärtää vihreää markkinointia, tutkia tapausyritysten kestävä kehityksen markkinointia, selvittää, onko yritysten välillä yhtäläisyyksiä tai eroja kestävä kehityksen markkinoinnissa, ja löytää mahdollinen trendi vihreässä markkinoinnissa. Case-yhtiöiden YouTube-kanavia sekä lehdistötiedotteita käytettiin pääasiallisena markkinointimateriaalin lähteenä. Aineisto luokiteltiin seitsemään eri aiheeseen, mikä mahdollisti analyysin tekemisen yritysten kestävä kehityksen markkinoinnin eroista ja samankaltaisuuksista. Tärkeimmät havainnot olivat, että tapausyritykset keskittyivät pääasiassa kahteen aiheeseen: polttoaineisiin ja hiilineutraaluuteen / päästövähennyksiin, kun taas sertifikaateista / kestävyysindekseistä keskusteltiin myös suhteellisen usein. KLM julkaisi kestävään kehitykseen liittyviä artikkeleita ja videoita aktiivisimmin, kun taas American Airlines vähiten. Tapausyritysten aktiivisuudessa ei havaittu selkeää trendiä, lukuun ottamatta sitä, että vuosi 2019 oli ehkä alku aktiivisemmalle trendille Finnairille ja KLM:lle. Ero lehdistötiedoiteiden ja YouTube-kanavien kohdeaiheiden välillä havaittiin. Lehdistötiedoiteiden puolella yleisimpiä keskusteluaiheita olivat polttoaineisiin liittyvät kysymykset, kun taas YouTubeessa hiilineutraalius ja päästöjen vähentäminen olivat yleisimpiä aiheita. Rajoitukset: haastava aiheiden luokittelu ja tutkielman havainnoista tehtävien johtopäätösten rajoitukset.</p>	
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1 INTRODUCTION

This thesis will investigate airlines' approach to sustainability and the use of sustainability in marketing and communications from the perspective of the case companies. Focus will be in environmental sustainability as environmental issues are one of the biggest issues that world and aviation faces in contemporary times and thus it is interesting to explore what kind of stances the aviation case companies have taken with environmental issues through their marketing and communication.

There are endless opportunities as businesses and societies as whole are doing work to become more sustainable. However, combining marketing and sustainability is not an easy task for a company. Consumers might see sustainability marketing as greenwashing instead (Baldasarre and Campo, 2016). For large companies, corporate social responsibility has become mandatory legal task in Finland (Ministry of Economic Affairs and Employment of Finland, 2019). This along with changing consumer preferences has led to companies seeking more ways of sustainable change so that it can be reported and used to convey a greener image of the corporation.

Sustainability comprises of three aspects: environmental, economic and social aspects which all affect one another. Other way to describe sustainability is that the actions are carried in a manner which do not endanger future generation's ability to prosper on earth (Grant et al., 2019). For this thesis research topic, the focus will be in environmental aspects.

1.1 Relevancy and motivation

Climate change brings about both challenges and opportunities to businesses. As Martin and Schouten (2014) wrote in their article, marketing can and should be utilized to drive a positive change in current challenges that societies face in relation to climate change. The climate change and sustainability issues are challenges not only societies but also companies have to face and solve.

1.2 Context description

Literature review suggests strongly that sustainability/green marketing is researched vastly (Leinonen, 2018; Martin & Schouten, 2014; O'Rourke, & Ringer, 2015; Sarkar, 2012).

In his article, Kotler looks at how increasing demand for sustainable actions will bring changes into how marketing is done. He discusses the dilemma of how to balance profitability and shareholders interest while taking sustainability into account. He also discusses how consumers tend to choose more sustainable solution always if the price is the same with less sustainable option. Interestingly significant number of consumers are also ready to pay a bit more for more sustainable option. He also writes that it is possible that marketing will increasingly shift into demarketing which means marketing in order to decrease demand instead of traditional job of marketing as demand increaser. (Kotler, 2011)

1.3 Problem statement

In contemporary times more than not, marketing increases unsustainable behaviour of people and organizations. After all, marketing is used to drive sales and consumption of products and services. Aviation market is growing continuously as global middle class grows in number (Du Xiaoying, 2019) and marketing, especially green marketing, of airlines does undoubtedly arise questions in regard to the relationship of aviation and sustainability and credibility of airlines' green marketing.

1.4 Demarcation

This thesis looks into sustainability marketing and communication of the case companies only from the perspective of environmental sustainability, thus leaving social and economic sustainability out of the scope of this thesis. The research will not consider nor research consumer's perspectives and opinions on the case companies sustainability communication. This thesis looks into case companies' marketing material which is published between years 2011 and 2019, any material outside this time-period is not considered.

1.5 Aim

The aim of this thesis is to research and prod the sustainability marketing and communication of the case companies to see what similarities and differences between the case companies are and to detect if over the time there has been a trend concerning sustainability marketing.

1.6 Research questions

This thesis aims to explore and answer following research questions.

- 1) In which ways do the case companies implement sustainability marketing?
- 2) What are the differences and similarities in sustainability marketing between the airlines, if any?
- 3) Has sustainability marketing and communication changed through the research time period of 2011-2019 in the case companies? If yes, how?

1.7 Previous research

Numerous comparative studies in regard to airline green marketing have been conducted previously.

Mayer, Ryley and Gillingwater used secondary sources such as organizational documents and national newspaper articles to conduct a comparative study on green marketing of three UK based airlines: easyJet, Virgin Atlantics and Flybe. The research found that though there are some similarities in the case companies' green marketing, each of airlines has its own green marketing mix that is unique. They also suggest that the more airline communicates its green activities and is more active on green discussions the more it strengthens its eco-position in aviation sector. (Mayer, Ryley and Gillingwater 2014)

Mayer Robert has also researched previously in 2013 the topic of environmental marketing in the airline sector as his doctoral thesis. Utilizing quantitative interviews as a method and Resource-Advantage Theory, the thesis found five leisure air travel segments that perceive green marketing of the airlines differently. According to Mayer, "Green

communication is key for airlines, as actual environmental efficiency does not affect the eco-positioning of the airline.” (Mayer Robert, 2013, p. V).

Lynes and Dredge have conducted a case study of SAS on motivation for environmental commitment in airline industry (2010). They found that specifically in SAS the motivating aspects towards environmental commitment were internal leadership, eco-efficiencies and Scandinavian culture (Lynes and Dredge, 2010).

Hietajärvi researched climate change’s role in marketing and communications of companies and especially looked into specific ads of Valio, Finnair, Newil & Bau and Oatly to see how companies use sustainability aspects in their communication (Hietajärvi Siina, 2020). Hietajärvi found that companies bring sustainability aspects out in their ads differently, some companies use facts as basis of their sustainability ads, some make clear statements on sustainability while others rather try to address sustainability more softly (Hietajärvi Siina, 2020).

No comparative case studies have been done on Finnair, KLM, Qantas and American Airlines together with using YouTube and press releases as secondary source. This thesis also aims to find if there are any trends in sustainability marketing and communication activeness throughout the timeframe of research. This thesis also introduces carbon handprint and net positivity and widely looks into the topic of green marketing.

1.8 Case companies

Four airline companies are investigated, and their marketing efforts are analyzed in order to understand their stance on sustainability marketing. The case companies are following: Finnair, Qantas, KLM and American Airlines. All case companies operate globally. These companies were chosen in order to get as global view on the research question as possible.

Finland’s flag ship airline Finnair has history already from 1923. The Finnish airline’s focus lies on being a connector between Asia and Europe by utilizing Helsinki airport as its home hub. Finnair is part of One World alliance and it offers over 100 destinations

globally. In the recent years Finnair has focused on renewing its long-haul fleet to new Airbus A350 fleet. In 2019 Finnair flew 14,7 million passengers. (Finnair annual report, 2019)

European airline Royal Dutch Airlines KLM was founded in 1919. The Dutch KLM is part of SkyTeam Alliance. In 2019 KLM served 35 million passengers and offered 171 destinations globally. Amsterdam Airport Schiphol is KLM's home base. (Royal Dutch Airlines annual report, 2019)

The Australian airline and world's second oldest airline, Qantas, was founded in 1920. In 2019 Qantas Group served over 55 million passengers. Qantas Group consists of Qantas International, Jetstar and Qantas domestic. The airline mainly serves passengers in domestic and Asia routes. (Qantas Data Book, 2019)

The case companies were chosen by using convenience sampling. The chosen companies had enough material available online in either Finnish or English for the purpose of this thesis.

Having case companies from aviation industry is especially interesting as the said industry is facing a big challenge in becoming more sustainable and attracting consumers that are becoming increasingly more sustainably conscious. It is seen as controversial or even as greenwashing for an airline to promote itself in any green notion and this controversy makes the topic of green marketing in aviation an interesting topic to research and study.

1.9 Expected results

The thesis is expected to find increasing amount of sustainability marketing in the case companies during the researched timeframe of 2011-2019.

2 THEORY

The theoretical framework will be presented in this chapter. Marketing and its definitions as well as the change of marketing concepts through time will also be introduced. In addition, sustainability marketing and various topics related to it, such as carbon handprint, green marketing mix, greenwash and demarketing will be addressed.

2.1 Marketing

Marketing includes all actions that aim at facilitating or increasing sales of a product or service. As of 2017, American Marketing Association defines marketing as “Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.” (American Marketing Association, 2017). Marketing can also be defined as actions that build customer relationships and increase customer satisfaction (Armstrong, Kotler and Opresnik, 2017).

Marketing mix traditionally consists of 4 P’s which are Price, Promotion, Product and Place (Kotler and Keller, 2009). Further marketing can additionally include also People, Processes and Physical Evidence (Kotler and Keller, 2009).

Concepts of marketing have changed with time. At its beginning the focus of marketing was on producing products in masses in order to have as little costs as possible. It has since moved into concepts of product, selling, marketing and societal marketing. The focus and the purpose of marketing has shifted through time and Goyal, Kazmi, Kumar and Rahman (2012) suggest that now is the time for marketing to shift into 6th concept which is sustainability. This is argued by the fact that in today’s world sustainability is a must and not something that a company can choose to do or not to do anymore. (Goyal, Kazmi, Kumar and Rahman, 2012)

Marketing offers a wide and ever-growing selection of tools and ways to market products and services. One can utilize the traditional media outlets of TV, radio and print or choose a more contemporary tools such as mobile ads, social media influencers and augmented

reality for example. Marketing can touch almost all human senses through scent marketing as well as through utilizing branded sounds and colors in marketing material. Marketing can be direct and indirect, it can be covert, it can be brand image and recognition and so much more. (Kotler and Keller, 2015)

2.2 Sustainability

Sustainability is defined by UN as “...meets the needs of the present without compromising the ability of future generations to meet their own needs.” (UN, 1987, p.41). Sustainability is built around three cornerstones which are environment, societal and economic (Beattie, 2019). This thesis focuses entirely on environmental aspect of sustainability.

Sustainability is increasingly important to businesses, governments and other organizations globally. Businesses can play the key role in being part of solution in today's sustainability issues such as growing consumption, unsustainable usage of resources, plastic waste and increasing emissions. These sustainability problems offer new possibilities for new solutions, innovativeness, and discoveries to disrupt and change the current ways. This can already be seen from emergence of new models and products for current consumption lifestyle which are for example cradle to cradle designing (UNEP, 2015), products made from recycled materials (UNEP, 2015), increase in second-hand businesses (Armstrong and Park, 2020) and circular economy models (UNEP, 2015). The contemporary sustainability problems do provide challenges for businesses, but they also provide opportunities (Forest L. Reinhardt, 2007).

2.2.1 Carbon handprint, carbon neutrality and net positivity

Handprint, or especially carbon handprint in the context of this thesis, can be seen as the opposite of well-known footprint concept. Carbon footprint is used to communicate how much of a harm our existence is producing to the environment in terms of carbon emissions. On other hand carbon handprint showcases the good we do to the environment. Carbon handprint includes both the reductions made to carbon footprint and other actions that increase sustainability. In terms of aviation industry which has come to use and offer

carbon offsetting options for air travelers, carbon offsetting is one component of carbon handprint as well. (Norris, 2015b)

Handprint concept by Norris (2015b) also includes such concepts as carbon neutrality and net positivity. Carbon neutrality means that the operations of the company produce zero carbon emissions and thus the company is neutral when it comes to carbon emissions or on other hand it can also mean that emissions are offset at the same time as they are produced meaning the net emissions amount to zero. Net positivity then goes a step further with the aim of not only being carbon neutral but also producing more “good”. These both concepts are usually achieved by utilizing carbon compensation tools. If company is carbon neutral it means that the carbon footprint and handprint are the same size while in net positivity, the company’s handprint is bigger than footprint. (Norris, 2015b)

In their study on carbon offsets Barreto, Gonzalez, Mate and Zuk (2018, p.4) define carbon offsetting followingly “A carbon offset represents a metric ton of verified carbon emissions that are avoided or reduced as a result of a discrete, external project.”. The study introduces some critique that carbon offset schemes face such as moral risk, reputational risk and effectiveness of carbon offsetting in realizing carbon reductions. The study explains moral risk as a risk of carbon offsetting schemes basically working as platform that allows its users to continue producing carbon emissions but with the help of the offsetting the emissions are essentially wiped under the carpet. Reputational risk has to do with the use of carbon offsetting in sense that it can be seen as developed countries simply “buying the right to pollute” (Barreto, Gonzalez, Mate and Zuk, 2018, p.8) from undeveloped countries. However, the study also discusses how as with any other tool the matter of whether carbon offsetting is useful and effective is dependent on how the tool is used. (Barreto, Gonzalez, Mate and Zuk, 2018)

A study published by EU reveals that “CDM has still fundamental flaws in terms of environmental integrity. It is likely that the large majority of the projects registered and CER issued under the CDM are not providing real, measurable and additional emission reductions.” (Cames et al. 2016 p.14). However, the study mentions that the carbon offsetting schemes do also bring benefits in form of financing projects in underdeveloped countries, increasing knowledge and awareness of climate change and helping with the spread of

technology. The system needs improvements so that the offsetting projects deliver and realize emission reductions. (Cames et al. 2016).

CDM stands for Clean Development Mechanism which is market for carbon offsets deployed by UN. In CDM you can buy emission reduction credits which would decrease your emissions while financing sustainability projects mainly in less developed countries. (CDM definition, n.d.)

2.3 Sustainability/green marketing

There is no set definition of sustainability marketing. There are also other terms that seem to be overlapping in the literature. These terms are sustainability marketing, green marketing, ecological marketing and sustainable marketing. Green marketing is defined as “...development and marketing of products that are presumed to be environmentally safe (i.e., designed to minimize negative effects on the physical environment or to improve its quality)” (American Marketing Association, 2017). Sustainable marketing is defined as “...concept which focuses on achieving the ‘triple bottom line’ through creating, producing and delivering sustainable solutions with higher net sustainable value whilst continuously satisfying customers and other stakeholders.” (Charter, Peattie, Ottman and Polonsky, 2002, p.12).

Sustainability marketing is defined by Belsz and Peattie (2009) as “building and maintaining sustainable relationships with customers, the social environment and the natural environment”. (Goyal, Kazmi, Kumar and Rahman, 2012, p.486)

For the purpose of this thesis sustainability marketing is used and its it defined as marketing or communication of sustainability actions to the stakeholders and public and as such it can be seen as a term that includes all above mentioned marketing definitions.

Baldassarre and Campo divide companies in relation to sustainability marketing according to the level of commitment to sustainability and level of communication. The four emerging categories are dark, opaque, translucent and transparent companies (Baldassarre and Campo, 2016). Dark companies do not put effort into sustainability nor see

value in sustainability for the business or profitability. Opaque companies communicate loudly about sustainability but their actual commitment to sustainability actions is low meaning that they focus on appearing to be sustainable rather being truly sustainability. Opaque companies can be seen as greenwashing. Translucent companies on other hand are very committed to sustainability but do not communicate much about their green actions. These companies might see sustainability as moral task that should not be used in marketing or another reason for their low-profile communication can be the fear of being labelled as a greenwasher if they would communicate their sustainable actions more. Transparent category is where companies should try to move towards as in this category what is communicated equals what is done. Thus, the companies in transparent categories have high commitment to sustainability but they also communicate their sustainability actions to stakeholders and the public and see sustainability not only as a moral task but also as a competitive advantage. (Baldassarre and Campo, 2016)

It is not an easy task for a company to know how it should approach green marketing and whether it should implement green marketing as part of its marketing efforts at all. Ginsberg and Bloom explore the topic of how to choose a right green marketing strategy in their MIT Sloan Review article (2004). First off, a company needs to ponder over a set of questions, most importantly it should consider benefits and risks of green marketing and being seen as a green company as well as consider how much importance can or should place in green marketing as a tool to differentiate itself from other players in the market (Ginsberg and Bloom, 2004). Competitors' stance in green marketing, company's own resources as well as commitment to green values need to be considered in choosing the right strategy (Ginsberg and Bloom, 2004). A company can also be involved in many green activities and have green values as an integral part of in its business, but it is not necessarily always beneficial to communicate or promote these actions externally (Ginsberg and Bloom, 2004).

Ginsberg and Bloom introduce four different green marketing strategies that differ in the commitment of green values as well as promotions of the green activities (2004). The different strategies vary depending on how deeply the green marketing is implemented and how much value, as in profit to be made, benchmarking or having a competitive edge, the company sees in implementing green marketing (Ginsberg and Bloom, 2004).

Ginsberg and Bloom's four green marketing strategies are lean, defensive, shaded and extreme green (2004). Lean green companies can be seen as least committed to green values. Lean greens want to abide by regulations, tend to seek lower costs and improved efficiency from their green actions, are hesitant to promote much of their green activities and don't view green market as an opportunity to make a lot of profit. Defensive greens do see an opportunity for making money in green market but don't communicate much of their green actions except from time to time though their actions can stem from true green values. The defensive greens, as name suggests, focus on lessening possible future damage and improving their brand image. "Defensive Greens usually use green marketing as a precautionary measure, a response to a crisis or a response to a competitor's actions." (Ginsberg and Bloom, 2004, p.81). Shaded greens see that green market presents an opportunity to innovate and gain competitive advantage and thus invest a lot in green activities. Shaded greens could utilize green to differentiate themselves if they wanted to, however, they tend to instead focus on their product's other benefits with green attributes of the product promoted as secondary benefits. Extreme greens, which tend to focus on niche markets, have true green values as a core and driving force of their green actions. For extreme greens, the green values are integral part of business and tied to all actions in the company. (Ginsberg and Bloom, 2004)

In their opinion paper Jones, Clarke-Hill, Hillier and Comfort (2008) open dialogue on whether sustainability and marketing can be put together in the first place or are these two concepts so absolutely opposites that it is not logical to build association or a relationship between the two. The paper starts off by offering two opposing definitions of marketing; one which sees marketing as aiming to sell stuff to people that they actually don't need and the other sees marketing as way to increase customer satisfaction and a way to exchange value meaningfully. The first definition is hard to connect in any way to sustainability, but the second definition could be connected to sustainability by utilizing sustainability as an aspect that increases customer satisfaction. One take out from the paper (Jones, Clarke-Hill, Hillier and Comfort, 2008) is that some claim that as marketing is something that is used to change consumer perceptions and behaviors, it should thus be possible to also use marketing as a tool to shift the consumer perceptions and behaviors into more sustainable ones. However, the paper also discusses the debate between how some see that there is possibility for more sustainable consumptions through "smarter and

and much more efficient” (Jones, Clarke-Hill, Hillier and Comfort, 2008, p.128) consumption while others see this as an impossibility that would not be able to be reached as long as there is capitalistic system and consumerism is the norm.

As mentioned in paper opinion of Jones, Clarke-Hill, Hillier and Comfort (2008), some believe that marketing can be used to change consumer perceptions and behaviors into more sustainable ones. This makes sense as marketing is indeed used to shape consumer behavior through informing consumers of offerings of different companies, through setting new trends, through making certain products more desired than others (such as in luxury or branded products), through enabling differentiation between competitors, through bringing innovations and new products to consumers’ knowledge, through creating new consumer wants, through communicating product benefits and through creating new consumption habits. In essence marketing is the tool for a company to for example inform consumers about how their business is run by wind power while competitor is still fueled by coal. Thus, marketing could be seen as a vital tool for sustainability change the world is needing. Of course, this works other way as well if marketing is used to increase consumption of unsustainable products or if it is used to simply increase consumption of all products with no regards to whether the products are sustainable or not. The idea is that marketing is vessel, a tool, and based on the message it carries it can either benefit or harm sustainability efforts.

2.3.1 Green marketing mix

Halim, Osman and Solaiman introduce green marketing mix in their article on green marketing (2015). The traditional marketing mix of price, product, place and promotion is turned into green product, green pricing, green place and green promotion. According to Halim, Osman and Solaiman (2015), pricing of green products tends to be higher than traditional products as the process of developing a green product including designing life-cycle of the product may incur more costs. A product is seen as green when it has been designed to be environmentally friendly through reduction of harmful impacts it leaves on environment and reduction of resources needed in consumption throughout product’s whole life (Halim, Osman and Solaiman, 2015). Green place part of marketing mix focuses above all on reducing transportation emissions through logistics management as

well as achieving smaller carbon footprints and lower shipping costs (Halim, Osman and Solaiman, 2015). Risky green promotion communicates green aspects of the product to consumers. Green promotion is not easy to achieve for companies as consumers might interpret promotions as greenwash which then can result in a backlash from external stakeholders (Halim, Osman and Solaiman, 2015). “The problem facing companies attempting green marketing is that consumers do increasingly not believe environmental claims.” (Halim, Osman and Solaiman, 2015, p. 93)

2.3.2 Greenwashing

Greenwashing happens when a company puts a lot of effort into appearing to be sustainable in its operations yet what is communicated as green actions is not reflected in the true nature of the actions (Kenton, 2021). Overpromising and making unattainable goals for sustainability can be seen as greenwashing as well (Kenton, 2021). Greenwashing has become a trap that no company wants to step on, especially as today’s social media and fast networks offer a way for scandals on sustainability to become viral and for companies to quickly lose or tarnish brand image, stock value and consumer’s loyalty and perceptions.

Existence of greenwashing underlines the importance of both accomplishing what is promised as well as communicating or marketing only that what is actually done (Jong, Huluba and Beldad, 2019). A company should not sell itself as greener than it is in reality (Jong, Huluba and Beldad, 2019).

2.3.3 Demarketing

Kotler discusses demarketing and its applications and its implication on traditional 4p’s (Kotler Philip, 2017). Demarketing is essence is marketing or effort to reduce demand or consumption of a product or service (Kotler Philip, 2017). Kotler lists four different situations in which demarketing can be useful tool: minimizing harm to nature or unique resources, avoiding potential shortages, minimizing harm to individuals and managing existing shortage (Kotler Philip, 2017). An example from aviation would be to encourage passengers to take alternative modes of transport instead of flying.

Ramirez, Tajdini and David conducted two studies on how proenvironmental demarketing affects consumers' perceptions of the company and whether there are positive impacts on consumer behaviors (Ramirez, Tajdini and David, 2017). The study found that proenvironmental demarketing affects consumer attitudes positively and has other positive outcomes for companies, such as consumers perceiving company as more trustworthy, and that company is environmentally sensitive as well as positive changes in consumer behavior (Ramirez, Tajdini and David, 2017). Adding a message to energy bills of treatment group detailing tips on how the consumer can decrease their energy consumption, led to a lower energy consumption growth than in control group with no proenvironmental demarketing (Ramirez, Tajdini and David, 2017).

2.4 Drivers of sustainability and sustainability marketing

What are the reasons for companies to move toward sustainability marketing? What are the drivers of sustainability and communicating the actions that the companies take? The drivers for sustainability come from legislations, market trends, increased transparency and increased awareness of sustainability in consumers (Devine, nd). Sustainability actions can make or break a deal as more increasingly business partners such as suppliers look into other partners sustainability plans before accepting partnerships (Devine, nd). Sustainability marketing can be driven by the need to attract sustainable conscious consumers and to achieve competitive advantage (Devine, nd).

It cannot be denied that sustainability is a must for companies both from legal obligations side as well as keeping appropriate brand image and keeping up with competitors sustainability efforts.

According to International Air Transport Association (IATA, 2019), the aviation has taken steps to become more sustainable. IATA (2019) lists raise in anti-aviation opinions, NGO activities and the demand for aviation services which are expected to double by 2040 as main reasons for aviation industry to change its operations into more sustainable. The 2019 Annual review underlines operational, technical and infrastructural changes and carbon offsetting schemes as tools for achieving industry's sustainability goals. In the

review carbon reductions, waste and noise management is mentioned as aims for sustainability efforts. IATA (2019) also discusses the developments made in fuels used in 2018. For example, IATA (2019) mentions the use of renewable or recycled feedstock fuels, alcohol derived fuel and use of municipal waste as fuel. The main priorities for whole aviation industry are annual improvements in fuel efficiency, carbon neutral growth and reduction in carbon emissions. (IATA, 2019)

The issue with the untraditional ways of producing jet fuel mentioned above is that there is still a long way to go before the new fuel types are at price points that consumers are willing to pay (Bonini et al, 2021) and in addition at level in which these new fuel types are a norm in fuelling and not one time experiments by airlines.

2.5 Consumer behavior and decision making

According to Nielsen's study of 2014 conducted globally via internet, over half of the respondents were willing to pay more for sustainable products. The study had over 30000 consumers respond from 60 countries. Especially millennials stood out in the research as a generation which had most positive views on sustainability and considered companies' values in their purchasing decisions. According to the study, respondents' valuing the companies that work on sustainability and social issues do translate to also concrete purchases from these companies. The study reveals that companies that have sustainability claims on their products or do sustainability marketing achieve 1 to 4 percentile more sales increase than companies which do not communicate sustainability efforts. (Nielsen, 2014)

Harvard Business Review article discussing green consumer and how marketing can change consumer behaviour underlines the usefulness of social influence. People are more likely to change their behaviours to more sustainable when the action is publicly communicated or visible from actions of others. "Telling online shoppers that other people were buying eco-friendly products led to a 65% increase in making at least one sustainable purchase." (White, Hardisty and Habib, 2019)

2.6 “Green aviation or green airlines”

What constructs a green airline or green aviation industry? Whether there can be green aviation, or a green airline can be disputed. Some aspects can though make an airline greener in relation to its competitors. According to ICAO’s environmental report from 2019 there are many ways aviation emissions and other pollution can be reduced (Environmental Report, 2019). This includes use of sustainable fuel alternatives, or SAF, such as biofuels instead of traditional kerosine fuel and operational actions to minimize fuel waste during landing, taxing and take-off (Environmental Report, 2019). Technology advances also contribute to less pollution through decreasing for example noise pollution and fuel needs per flight (Environmental reports, 2019).

One airline that clearly wants to position itself as greener than other airlines is European Ryanair. In Ryanair’s monthly CO₂ report page, Ryanair claims to be Europe’s greenest major airline based on lower rates of CO₂ emissions per passenger/km (Ryanair nd.).

Baumeister and Onkila researched feasibility of an eco-label for airline industry as tool of changing consumer behavior to more sustainable one through interviewing industry experts on the topic of eco-labels (Baumeister and Onkila 2017). According to their findings, there is a need for such eco-label and a universal eco-label would make it easier for consumers to choose flights depending on the environmental parameters (Baumeister and Onkila, 2017). In addition, eco-label could drive more competition on which airline becomes the greenest as environmental aspects of each flight are brought to knowledge of passengers (Baumeister and Onkila, 2017).

Green taxes or environmental taxes could be seen as one tool to reduce flying. According to Airlines for Europe association’s Janzen’s article European airlines are paying 5 billion euros in environmental taxes in 2019 (Janzen, 2019). The article states that the money would have been used to decarbonize aviation industry if not for the taxes (Janzen, 2019). According to Brandler’s Business Traveller article, France is proposing eco tax on aviation which, if implemented, would mean 4,2 billion euros of taxes collected from airlines annually (Brandler, 2021). International Air Travel Association (IATA) clearly opposes any possible green taxes to aviation (IATA, nd). IATA lists negative impacts to

passengers, tourism sector, governments and airlines as reasons why green tax would not be beneficial (IATA, nd). According to IATA's statement against green taxes: "Passengers – may choose not to travel as a result of the price increase, may substitute other means of travel for air travel (i.e., train, automobile, etc. ...)" (IATA,nd, p.1).

2.7 Critical opinions

According to BBC's news article (2020), number of passengers flying through Sweden's airports has shown a decrease in 2018 which is rather unusual for a European country and rather a divergent trend in regard to whole aviation industry and its trend of passenger number development. According to the BBC's article (2020), flight shame is the reason for decrease in passenger numbers. People are becoming more aware of climate and emission issues and many have even pledged to be flight free for year 2020 (BBC, 2020).

Biofuels are one of the many ways aviation industry is aiming to reach its emission reduction goals. However, there are possible downsides to biofuels and negative impacts from biofuels (Popp, Lakner, Harangi-Rakos and Fari, 2014). One such downside is the possible negative impact biofuels could have on food crops production and global food security through using food crops as biofuels and through using available land is used to produce biofuel crops instead of food (Popp, Lakner, Harangi-Rakos and Fari, 2014). According to their research paper, "Increasing biomass energy production beyond a certain level would have significant effects on land use and conventional agricultural markets" (Popp, Lakner, Harangi-Rakos and Fari, 2014, p.575).

In its report discussing environmental issues, International Civil Aviation Organization (ICAO) states that many of ICAO's environmental goals will not be necessarily met by 2020 or 2050 (Environmental Report, 2019). According to the report carbon neutral growth from 2020 onwards and 2 % fuel efficiency per year by 2050 "are unlikely to be met" and also the potential of using sustainable alternative fuels in long term is questioned (Environmental report, 2019, p.23).

Ryanair's green marketing campaign in 2019 sailing with claim of having "Europe's lowest fares, lowest emissions airline" was met with greenwashing accusations after ad

campaign was banned by UK's The Advertising Standards Authority (Sweeney Mark, 2020). The campaign had significant environmental claims which were not substantiated well enough and thus The Advertising Standards Authority found the campaign misleading (Sweeney Mark, 2020).

2.8 Summary

Sustainability and marketing traditionally do not necessary seem to be able to coexist nor co-operate, but the historical development of marketing concepts shows that marketing can evolve and change to also address new issues. Marketing is utilized to change consumer perceptions and behavior and thus this could mean that marketing can also be used to change consumption to more sustainable.

Sustainability marketing literature is filled with various terms such as green marketing, sustainable marketing and ecological marketing. When it comes to marketing, companies should pay attention to steering far from greenwashing as this is proven way of destroying company value and brand image.

Carbon handprint goes hand in hand with concepts of carbon footprint, carbon offsetting, carbon neutrality and net-positive operations. As of now, carbon offsetting schemes still arise questions of their effectiveness, yet companies use these schemes to promote sustainability of their business operations.

3 METHODOLOGY

In this chapter, the methodological frame of the thesis is introduced and explained. The chapter will touch on qualitative research, research methods and data analysis method used for the thesis. The chapter also gives an overview on how the collection and analysis of case companies' marketing material was carried out.

3.1 Qualitative desktop research

Qualitative research offers a possibility to have a deeper understanding and learning experience on a topic (Bryman & Bell, 2007). According to Kumar P. (2016): over 25 years, 19 percent of all research articles on green marketing used qualitative research method. Over half of these qualitative articles utilized interviews and secondary data and others used case study method as their main research method.

The aim of this thesis was to study case airlines' sustainability marketing and get a detailed insight into the phenomenon of sustainability marketing in aviation. The comparative case study method was chosen for this thesis as case study method offers ability to investigate phenomena of sustainability marketing in various airlines closely. The method used to collect and study the theory was desktop research as there are plenty of valuable secondary data online in forms of for example green marketing research articles. Desktop research or secondary research is fast and cheap method in which already existing data, such as for example online publications and articles, is used (QuestionPro, nd).

In addition to theory building, desktop research method was used to study case companies' actions by analyzing their online marketing and communication materials such as news articles and social media posts related to environmental sustainability. This entails press releases on environmental sustainability published by the companies on their online newsrooms as well as videos that were posted on their official YouTube channel during the research timeframe of 2011-2019. As of 2021, KLM had over 200k followers, Qantas had over 100k followers, American Airlines over 75k and Finnair over 30k follower on their official YouTube channels. Therefore, case companies' YouTube channels are important part of their social media channel portfolio and worth investigating to get insight on the companies' sustainability marketing and communication.

The research and information gathering were done by utilizing both Finnish and English. Multiple searches were utilised with varied key words on Google, Google Scholar and scientific databases such as Sage, Emerald, EBSCO and Elsevier. Keywords for searches were, among others, sustainable marketing in aviation, green/sustainability/sustainable marketing, marketing, carbon handprint, carbon footprint, handprint in marketing, carbon

offsetting, green airlines, ecological handprint, demarketing, green marketing in aviation/airlines, green marketing campaigns of airlines and greenwashing.

3.2 Data analysis

Qualitative research data can be analysed in various ways depending on the research method, resources available and the scope of the research.

Qualitative data is often coded and grouped according to reoccurring themes in order to simplify the data (Bryman & Bell, 2007). For desktop research of case companies' marketing material, thematic analysis was used to analyse the data. The focus was then on the content and understanding main themes that arise from researched content.

Thematic analysis method is used to analyze the researched content for recurring themes (Caulfield Jack, 2019). Thematic analysis allows to group the content into different themes (Caulfield Jack, 2019). This was crucial for this research in order to answer the research questions. The content categorization did reveal recurring themes in the marketing and communication of the companies as well as reveal differences and similarities between the case companies in terms of what themes or topics were being focused on by the case companies. The analysis did also provide insights into any developments or shifts in focused themes across the time windows of the research.

Secondary data raises questions on whether the data is authentic, credible, representative and meaningful (Bryman & Bell, 2007). Who has published the data, with what purpose is it published, and does it have additional goal? These are example of questions that can be asked when retrieving secondary data and wanting to utilise it in valuable way. Is the data objective or subjective?

Majority of the data utilised for this thesis was research articles which can be seen already as fulfilling the characteristics of useful and relevant data. However, this thesis did analyse data produced by companies to sell the company's point of view and in this case, and it may be that the data might be biased and presented in most suitable way in accordance to the company's goals. In this thesis, only relevant data was utilised, and the data origin

is always mentioned. The four criteria from Bryman and Bell (2007) mentioned above will be utilised when the data in question is other than research articles (see Table 1).

Table 1 Critical checklist in empirical research

Authenticity	The publisher and the writer of the articles or researches can be found on references. The data is derived from credible websites.
Credibility	Mainly researches and articles published in well-known journals are used.
Representativeness	Appropriate key words are used to collect needed resources.
Meaningfulness	The data used is meaningful to the aims of the research. This is accomplished by utilising only useful and contributing data.

3.3 Summary of research blueprint and methods

The research on sustainability marketing of the case companies was carried out through collection and thematic analysis of press releases and YouTube videos connected to environmental sustainability topics published by the case companies between years 2011-2019.

The news articles published by the case companies were categorized to seven arising themes which are the following: reporting, fuels, carbon neutrality and reductions of emissions, plastic waste and recycling, renewable energies, certificates/indexes/rewards as well as common goals of the field of aviation. The articles' headlines were analyzed, and environmental sustainability related articles were categorized into one of the seven themes. This categorization allowed further analysis on companies' communication as well as comparison between the case companies.

In addition, case companies' YouTube channels were used as one research tool. The case companies' YouTube videos on environmental sustainability from year 2011 to 2019 were analyzed and categorized according to the seven environmental sustainability themes above.

4 RESULTS

Results from the research on case companies' environmental sustainability related marketing material will be presented in this chapter. Each case companies' activeness in posting environmental sustainability related press releases and YouTube-videos as well as the focus topics discussed in these posts will be presented. In addition, case companies' green marketing campaigns will be introduced.

4.1 Airlines' marketing material: the focus through the years

This chapter will present results from Finnair's, KLM's, American Airline's, and Qantas' environmental sustainability related marketing through the research period of 2011-2019. The chapter will give a closer look on case companies' activeness in press release and YouTube-video postings and the topics that the case companies focus on in these posts.

4.1.1 Finnair

Table 2 Finnair's environmental sustainability related PR posts

Finnair										
Themes	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Reporting	3	1	1							5
Fuels	2	2		1					4	9
Carbon neutrality/emission reduction								2	2	4
Plastic waste									1	1
Renewable energies							1			1
Certificates/indexes/rewards	1	1	2	1	2	1				8
Common goals of aviation industry						1				1
Total	6	4	3	2	2	2	1	2	7	29

Through the years 2011-2019 Finnair has published 29 sustainability related press releases (see Table 2). Majority of the press releases, nine releases, discuss fuel topics. Second most recurring topic, certificates and indexes, is discussed in eight press releases. Other topics that are covered more than once are carbon neutrality and reduction of

emissions as well as reporting. Some one off article topics were plastic waste, renewable energies and common goals in field of aviation.

In year 2011 Finnair published six press releases on sustainability issues, in year 2012 four releases and then again ramping up to publishing seven releases in 2019. In other years only three or less press releases were published. The change from 2018 to 2019 is significant as in 2018 only two press releases were published while 2019 had seven press releases on sustainability issues.

The focus topics of the press releases has shifted through the years. In year 2011 the focus was more on reporting and secondly on fuel topics whilst in 2012 the focus shifted to fuels with also touching on topics of reporting and certificates/indexes. Through years 2013 to 2016, Finnair's press releases mainly discussed topics regarding certificates/indexes. In 2017 the only press release published in regards of sustainability was on the topic of renewable energies. In 2018 main general topic was reduction of emissions and carbon neutrality. In 2019 Finnair started to focus again more on fuels and emission reduction topics.

Table 3 Finnair's environmental sustainability related YouTube posts

Finnair YouTube										
Themes	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Reporting										
Fuels	1								2	3
Carbon neutrality/emission reduction			1							1
Plastic waste										
Renewable energies										
Certificates/indexes/rewards										
Common goals of aviation industry										
Total	1		1						2	4

Finnair uploaded overall four videos related to environmental sustainability between years 2011 and 2019 (see Table 3). Majority of the videos, three out of four, were about fuels while one video was on the topic of carbon neutrality/emission reduction. In 2011 and 2013 Finnair had one video in each year and two in 2019 regarding environmental sustainability.

4.1.2 KLM

Table 4 KLM's environmental sustainability related PR posts

KLM										
Themes	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Reporting					1			1		2
Fuels	2	2	1	2		3	2	2	4	18
Carbon neutrality/emission reduction	1	1	2					1	8	13
Plastic waste						1		1	2	4
Renewable energies										
Certificates/indexes/rewards		1	1	1	1	1	1	1	1	8
Common goals of aviation industry						1			1	2
Total	3	4	4	3	2	6	3	6	16	47

KLM published 47 environmental sustainability related press releases from 2011 to 2019 (see Table 4). Throughout the timeframe KLM has published sustainability press releases with constant and stable flow except for publishing high number of six press releases in 2016 and 2018 and especially for 2019 when it published 16 articles. KLM has focused on the topics of fuels, carbon neutrality/reduction of emissions as well as certificates/indexes. It has also discussed issues related to plastic waste/recycling, reporting and common goals in the field of aviation.

Through majority of years KLM focused on fuel topics while in years 2013 and 2019 the focus shifted towards carbon neutrality and emission reductions. Throughout the years, except for 2011, KLM published constantly one certificate/sustainability index related press release per year.

Table 5 KLM's environmental sustainability related YouTube posts

KLM YouTube										
Themes	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Reporting						1	1			2
Fuels		2			1			1	3	7
Carbon neutrality/emission reduction	1	1	1				1	3	5	12
Plastic waste									1	1
Renewable energies										
Certificates/indexes/rewards										
Common goals of aviation industry										
Total	1	3	1		1	1	2	4	9	22

Through the research time frame, KLM published 22 videos that were related to environmental sustainability topics (see Table 5). Majority of the videos discussed carbon neutrality/emission reduction (12 videos) and fuels (seven videos). Other topics that were touched on were reporting and plastic waste/recycling. Most frequently videos were

published in 2019 (nine videos). In 2012, 2017 and 2018 videos were uploaded relatively often, with two to four videos published in a year.

4.1.3 American Airlines

Table 6 American Airline's environmental sustainability related PR posts

American Airlines										
Themes	2011	2012	2013	2014	2015	2016	2017	2018	2019	Totals
Reporting	1	1	1					1	1	5
Fuels			1		1	1				3
Carbon neutrality/emission reduction	1	2								3
Plastic waste								1		1
Renewable energies										
Certificates/indexes/rewards	1	1							1	3
Common goals of aviation industry										
Total	3	4	2		1	1		2	2	15

American airlines published 15 press releases from 2011 to 2019 (see Table 6). Most of the press releases discuss reporting, fuels, carbon neutrality/emission reductions as well as certificates/ sustainability indexes with one-off article on plastic waste/recycling.

American Airlines published most frequently in 2011 and 2012, three and four press releases, respectively. In other years, American Airlines published one or two press release per year. In the years 2014 and 2017 the airline did not publish a single press release related to environmental sustainability. In 2012 the focus was on carbon neutrality/emission reduction topic and in years 2015 and 2016 the focus was on fuels. In other years there was no specific topic that was more frequent than other topics.

In regard to American Airline's YouTube channel, no videos on environmental sustainability were uploaded during the timeframe of 2011-2019.

4.1.4 Qantas

Table 7 Qantas's environmental sustainability related PR posts

Qantas										
Themes	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Reporting										
Fuels	1	2	1				2	1		7
Carbon neutrality/emission reduction					1		1		2	4
Plastic waste							1		2	3
Renewable energies			1							1
Certificates/indexes/rewards	1	1	1							3
Common goals of aviation industry		1								1
Total	2	4	3		1		4	1	4	19

All in all, Qantas published 19 press releases that were related to sustainability topics between years 2011 and 2019 (see Table 7). Most of the press releases discussed fuels, second common topic was carbon neutrality/emission reductions and thirdly plastic waste/recycling and certificates/indexes. Qantas also touched on the topics of renewable energies and common goals of the field of aviation once.

Qantas published at most four sustainability press release in a year. Qantas published most frequently in years 2012, 2017 and 2019. Years 2011 and 2013 had relatively many press releases published, two and three press releases, respectively. In 2015 and 2018 Qantas published one environmental sustainability related press release in each year while in years 2014 and 2016 it published none.

In years 2012, 2017 and 2018 the most frequent topic was biofuels while in 2015 the only press release published was on topic of carbon neutrality/reduction of emissions. In other years the topics were equally divided between two or more topics thus not having one topic raising above others in frequency.

Table 8 Qantas's environmental sustainability related YouTube post

Qantas YouTube										
Themes	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Reporting										
Fuels		2								2
Carbon neutrality/emission reduction	1	1			2	3		1	5	13
Plastic waste									1	1
Renewable energies										
Certificates/indexes/rewards										
Common goals of aviation industry										
Total	1	3			2	3		1	6	16

Qantas had 16 videos on environmental sustainability through the researched time period (see Table 8). Clear majority of the videos, 13 videos, were on carbon neutrality and emission reduction while Qantas touched also on fuels and plastic waste/recycling. It uploaded most frequently in 2019, uploading six videos during the year. There was relatively frequent publishing of videos also in years 2012, 2015 and 2016 with two or three videos in a year uploaded.

4.2 Green marketing campaigns

In 2019, KLM published "Fly Responsibly" campaign as a call to action to its passengers. Surprisingly and somewhat unexpectedly, the campaign urges to not fly unless necessary. The campaign also encouraged to choose alternative modes of transport such as trains whenever possible, especially as an alternative for short hauls flight. The campaign also informs that KLM offers possibility for passengers to carbon offset their flights. The campaign has its own website (KLM campaign page, 2019) as well as video (KLM campaign video, 2019) with over half a million views on KLM's YouTube channel.

According to edie website's article (Edie newsroom, 2020) The Dutch Advertising Code Committee has ruled KLM's biofuel campaigns in Netherlands as greenwashing. KLM overstated its use of biofuels by stating in the advertisement that it has been flying daily with biofuels and it uses maximum of 50% of traditional kerosine with biofuels (Edie newsroom, 2020). The reality as started in the article was that "biofuel only accounted for 0.18% of its total fuel consumption in 2019" though it did indeed fly at least one biofuel flight in a day (Edie newsroom, 2020).

In 2019 Finnair published a green marketing campaign called Push For Change. The campaign introduces Finnair's Push For Change service: an opportunity for passengers to purchase biofuel and CO2 offsets with a push of a button (Finnair, 2019). However, in 2020 Finnair decided to stop the service as according to Police, the collection of payments from customers for purchasing biofuel and offsets could be seen as an action subject for permission from Police (Yle, 2020). Another news article from Yle discusses Finnair having misleading messages on Push For Change campaign page (Yle, 20219).

According to the article (Yle, 2019) Finnair conveys a message of having much more ambitious emission reduction targets than it in reality is even aiming for.

When it comes to Qantas and American Airlines, no green marketing campaign was found online.

5 DISCUSSION

In this chapter, role of sustainability marketing as well as similarities and differences found in case companies' environmental sustainability related marketing and communication actions will be discussed. Additionally, limitations of the thesis research and future recommendations arising from this research will be presented.

5.1 Role of sustainability in marketing and communication

Environmental sustainability is without a doubt a topic that is part of all case companies' communication and marketing efforts. The companies are perhaps not only catering toward more sustainability conscious consumer groups but also discussing an issue that poses a challenge for whole aviation industry. As Mayer Robert has concluded in previous research, green communication is important for airlines (Mayer Robert, 2013). All case companies have dedicated online sites for sustainability, and all publish sustainability or corporate social responsibility reports.

Thus, all case companies communicate their stance on environmental sustainability issues through their channels. As Mayer, Ryley and Gillingwater, 2014, found in their comparative case study between three British airlines, also this thesis's case companies' extent at which marketing and communication is done varies from company to company. Sustainability marketing is not necessarily a first choice of action for airline companies, as the navigation between discussing company's goals and actions can be perceived at any time by consumers as greenwash (Baldassarre and Campo, 2016). Leaning on Mayer, Ryley and Gillingwater 2014 research, it could be assumed that as KLM's is most active

with environmental marketing and communications among this thesis' case companies, KLM also is trying most to strengthen its eco-position in aviation.

Sustainability has become an important topic for all companies across industries. For example, in Finland reporting on sustainability and corporate social responsibility effects of the company has become compulsory for larger companies (Ministry of Economic Affairs and Employment of Finland, 2019). The environmental sustainability related topics discussed vary from industry to industry. One important topic that is clearly part of environmental sustainability discussion in aviation is fuels, or more specifically biofuels and its possibilities and uses in airlines' operations and as a tool for emission reductions (Environmental Report, 2019).

5.2 Differences and similarities in case companies marketing and communications

Table 9 Case companies' environmental sustainability related PR posts

PR posts					
Themes	Finnair	Qantas	KLM	American Airlines	Total
Reporting	5		2	5	12
Fuels	9	7	18	3	37
Carbon neutrality/emission reduction	4	4	13	3	24
Plastic waste	1	3	4	1	9
Renewable energies	1	1			2
Certificates/indexes/rewards	8	3	8	3	22
Common goals of aviation industry	1	1	2		4
Total	29	19	47	15	110

There are differences in studied sustainability marketing and communication actions between the case companies (see Table 9). Most active in the topic of environmental sustainability is KLM with 47 press releases and 22 videos between the years 2011 and 2019. Least active to discuss environmental sustainability topics in its YouTube channel and through press releases is American Airlines with 15 press releases published and no videos posted on environmental sustainability.

The topic that was most frequently discussed in the press releases when looking at case companies as whole was fuel and secondarily came carbon neutrality/emission reduction and certificates/indexes topics. In three out of four case companies fuel was most frequent and carbon neutrality second most frequent topic whilst for American Airline reporting came first with fuels, carbon neutrality and certificates being second.

There was no clear trend on posting frequency through the years. Finnair and KLM had most press releases posted in 2019, which could possibly be beginning of upward trend. Qantas and American Airlines had some years with no environmental sustainability related posts.

Table 10 Case companies' environmental sustainability related YouTube posts

YouTube post				
Themes	Finnair	Qantas	KLM	Total
Reporting			2	2
Fuels	3	2	7	12
Carbon neutrality/emission reduction	1	13	12	26
Plastic waste		1	1	2
Renewable energies				
Certificates/indexes/rewards				
Common goals of aviation industry				
Total	4	16	22	42

In YouTube side, Qantas, Finnair and KLM were most actively posting environmental sustainability in 2019 (see Table 10). Further research of additional years is needed to determine whether this is possibly a start of upward trend in number of posts related to environmental sustainability or not. For Finnair, the most frequent topic was fuels and secondary topic carbon neutrality. For both Qantas and KLM this was vice versa, carbon neutrality was most frequent, and fuels came second. American Airlines had no videos on environmental sustainability. Unlike in press releases, renewable energies, certificates, and common goals of aviation industry were not topics any video posted by the case companies. Overall, most frequent topic in case companies' post was carbon neutrality and second most frequent topic was fuels.

KLM had also some green marketing campaigns in 2019, “Fly Responsibly” and a biofuel campaign run in Netherlands. Kotler discussed in his article how marketing may shift more toward reducing consumption, or in other words towards demarketing (Kotler, 2011). KLM’s Fly Responsibly seems to be an example of demarketing as the campaign seemingly tries to urge people to fly less. In 2019 Finnair had a green marketing campaign for Push For Change service which enabling purchases of biofuel and CO2 emission off-sets. Finnair decided later on to discontinue offering of Push For Change service. No online green marketing campaigns were found from Qantas or American Airlines.

5.3 Limitations

The categorization of press releases and YouTube videos was rather challenging as some posts had overlapping themes and covered many topics in one article. In these cases, the most relevant theme, often it being carbon neutrality and emissions reduction topic, was chosen as a basis of categorization. For example, vague topics such as eco-friendliness and general sustainability collaborations were regarded as carbon neutrality topics.

This thesis did not investigate and thus could not answer the question regarding reasons for differences or lack of differences in sustainability marketing between case companies. It also did not investigate the source for differences in case companies’ year to year changes in their own marketing.

The conclusions derived from findings of this thesis are limited. Though press releases and YouTube channel activity can give general idea on the stance of the case companies sustainability marketing, it does not tell the whole story. Case company might be more active on sustainability marketing through other channels and marketing tools than YouTube and its website. In addition, publishing most content on environmental sustainability does not necessarily mean that the case company is the most committed to green values in its day-to-day business actions.

5.4 Recommendations

More research is needed in order to learn why the case companies green marketing differs. One future research opportunity could also be to research the case companies' green communication and marketing through a longer time-period and to see whether there has been a change in communication during said longer time period.

5.5 Conclusions

To answer the first research question on which ways do case companies implement sustainability, the case companies implement sustainability marketing through various ways. The case companies publish corporate responsibility reports, maintain sustainability/CSR webpages, publish numerous press releases and YouTube videos regarding environmental sustainability and two of the case companies has also published green marketing campaigns. For the purpose of this thesis, main focus was on investigating press releases and YouTube content.

The desktop research on case companies' press releases and YouTube channel videos clearly indicates that the case companies focus mainly in two topics: fuels and carbon neutrality/emission reductions and in addition certificates/sustainability indexes were discussed often as well. These three topics are one similarity among the communication and marketing of the case companies. One key difference between the case companies was the activeness of the case companies in posting environmental sustainability related press releases and YouTube content with KLM being most active and American Airlines the least active. A difference between the focus topics in press releases and YouTube channels was detected. In press release side, the most common discussion topic was fuel related issues whilst on YouTube carbon neutrality and emission reduction were most frequent topics.

No clear trend was detected in posting activeness of case companies over the research time-period, except for year 2019 being perhaps a beginning of more active trend for Finnair and KLM. As to whether there have been changes in sustainability marketing over the research time-period, for press releases and YouTube marketing and communication

no clear change was detected in sustainability marketing and communication over the research time-period.

Environmental sustainability is clearly part of all case companies' communication and marketing. With the rise of flight-shaming and increasingly more sustainability conscious consumers, it can be doubted that the sustainability marketing communications would decrease with coming years. For any company, but especially for industry like aviation, there is always a risk of the marketing and communication to be perceived as greenwash and this poses a challenge in airlines' communication to balance discussing topics that are important on societal level and not being active at all in environmental sustainability discussions because of the fear of having communications and marketing labeled as greenwash.

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