

Passenger Experience For A Green Air Journey

Fatma Selin Sak¹

Abstract

With the growing recognition of the importance of sustainability issues, efforts to minimize the inherently negative environmental impacts of airline operations have been steadily increasing. In addition to regulatory frameworks established by authorities in the sector, the pressure exerted by environmentally conscious passengers has intensified airlines' focus on sustainability and led to the emergence of related service offerings. Considering the increasing number of conscious consumers today, the adoption of green services and the evaluation of their outcomes have become crucial for airline companies. It is well known that passengers' preferences are shaped by the green services provided. From this perspective, the present study aims to define and exemplify a green journey to better understand the green experiences of airline passengers who embrace environmental values. To this end, the concepts of green airlines, green airports, green passengers, and green experiences are first explained. Then, the necessary steps for a green journey are illustrated from the perspective of a hypothetical passenger. The study draws upon previous literature and secondary data obtained from online sources. Content analysis was employed to extract the relevant data. The findings indicate that realizing a green journey with airline travel involves several stages, extending from the evaluation of alternative travel options to supporting sustainable practices at destinations, thus encompassing both pre- and post-flight phases.

1. Introduction

In the aviation industry, it is essential to implement changes through activities such as utilizing energy-saving technologies, improving fuel efficiency, introducing new regulatory frameworks, using environmentally friendly fuels, and enhancing waste management (Korba, Sekelová, Koščáková, & Behúnová, 2023). In this context, the establishment of green aviation requires various stakeholders, including regulatory international

1 Giresun Üniversitesi, selin.sak@giresun.edu.tr, <https://orcid.org/0000-0001-7105-7387>

authorities, airports, airlines, aircraft manufacturers, and suppliers, to engage in environmentally friendly initiatives. Before the broader implementation of new environmental practices, it is necessary to consider the opinions of passengers on these matters. This way, the impact of green practices on passenger experiences can be assessed.

Customer experience emerges as a guiding element in businesses' effective introduction of their services to the market. Particularly in service enterprises, the intangible nature of services inherently differentiates the experiences customers have with each service, making it challenging to perceive the quality of the service. Nowadays, customers seek to eliminate this uncertainty and minimize risks by participating in the service process and co-creating value with the business. Businesses, in turn, strive to use their resources efficiently to co-create value in collaboration with customers. In our era, the scarcity of resources has elevated the significance of green consumption, compelling businesses to adopt environmentally friendly practices. Airline companies, which have a considerable environmental impact, are also inclined to design services that minimize damage to nature. The present study aims to design and exemplify a green journey to understand the green experiences of passengers who travel by air and embrace green values. By presenting green air travel from the passengers' perspective, it is intended to guide researchers and practitioners engaged in this field.

This section will present an example of how a passenger experience would be on an international journey in light of green practices in airline companies. The example is created through an in-depth examination of secondary data sources. It focuses on the process from scanning airline websites before ticket purchase, to the ticket purchase itself, and the travel experience. Thus, it aims to provide a comprehensive understanding within the framework of the experience of an airline passenger who adopts green consumption. In the following sections, topics will be examined under the headings of green airline, green airport, green consumer, and green experience. The discussion will focus on the pathways that passengers take to achieve a sustainable journey within this context.

2. Literature Review and Conceptual Framework

When examining the literature, it is observed that most studies on green consumers in the airline industry are framed within the context of passengers' tendencies to use environmentally friendly airlines. However, it is noteworthy that these studies remain insufficient in both national and international contexts. The studies conducted in the literature from the past to the present are presented below (Table 1).

Table 1. Studies Conducted in Airlines within the Scope of Green Consumer

Author, Year	Sample	Research Topic	Results
(Hagmann, Semciijn, & Vcllenga, 2015)	394	Green image of airlines	Green image is differentiated from passengers' general attitude towards that airline, green image of airlines does influence airline choice during booking and willing to pay more for a greener flight
(Niu, Liu, Chang, & Ye, 2016)	442	Passenger perspectives	Passengers prefer to choose airlines that support environmental protection activities and different stages of economic development had varying preferences for airlines' environmental protection activities.
(Çabuk, Güreş, İnan, & Arslan, 2019)	346	Attitudes of passengers	Price, lack of information, gender, age, income, attitude
(Han, Chua, Ariza-Montes, & Untaru, 2020)	250	Effect of environmental corporate social responsibility on green attitude and norm activation process	Environmental CSR influence is airline customers' eco-friendly purchase behaviors.
(Hwang & Choi , Understanding environmentally friendly airline travelers' internal environmental locus of control and its consequences, 2021)	319	Airline travelers' internal environmental locus of control	Green consumers, environmental advocates, and recyclers have been found to be more likely to have a positive attitude toward an environmentally friendly airline
(Baumeister, Nyrhinen, Kemppainen , & Wilska, 2022)	1170	Customer satisfaction	Concrete actions (green flight attributes), yaş, brand image, value for money
(Keiser, Pupkes, & Freitag, 2023)	1081	Passenger Expectations	Importance of sustainability in the future, technical development and design decisions
(Crouse, Box , Winter, & Rice , 2024)	501	Support green initiatives	Future time perspective, perceived value, perception of climate change, and affect
(Secgebarth, Woisetschlager, Sohn, & Frenser, 2024)	1263	Consumers' intentions to reduce air travel	Benefits and sacrifices of air travel that are oriented either toward the self (e.g., perceived health risks) or others (e.g., perceived environmental concerns)

Source: Created by the author

As seen in Table 1, the expectations and attitudes of passengers towards a green airline, their tendencies to prefer green travel, and their levels of satisfaction with green air travel have been studied in the literature. It has been revealed that factors such as a lack of information among passengers and high prices are barriers to green air travel.

2.1. Green Airline

Despite the rapid growth of environmental issues in air transportation, particularly emissions and noise, aviation authorities and the industry have implemented strict environmental regulations and targets in the early 2000s to encourage airlines to become more environmentally friendly (Parsa, Nookabadi, Flapper, & Atan, 2019). In response, various airlines (e.g., Lufthansa, Swiss Airlines) have begun to address the issue of CO₂ emissions with solutions such as emission compensation (Hesse & Rünz, 2020).

As airline companies are among the service-producing enterprises, the products and processes they develop for green marketing are of significant importance. Indeed, some products are designed to reduce emissions and noise, while others are green practices that attract customer interest. For instance, the use of biofuels in aircraft is an environmentally friendly application that appeals to eco-conscious customers and thus provides a marketing advantage. Developments in product and process innovation in green marketing play a crucial role in the airline industry. In this regard, airlines need to examine and identify changes in products and processes that could provide them with a competitive edge (Mayer, Ryley, & Gillingwater, 2014).

Engaging in environmentally conscious activities is believed to benefit airline companies by creating customer satisfaction, which is a fundamental precursor to brand image and value for money, as well as customer loyalty (Baumeister, Nyrhinen, Kemppainen, & Wilska, 2022). Passengers who choose to fly with an airline perceive it as more environmentally friendly compared to non-users. This perception is particularly prevalent among low-cost carriers, while full-service airlines maintain a positive green image even among non-users. Consequently, it is crucial for low-cost airlines to engage more in and demonstrate their environmental activities (Mayer, Ryley, & Gillingwater, 2012).

In their study, Baumeister et al. (2022) indicate that it is insufficient for airlines to merely appear environmentally friendly to satisfy green consumers; rather, tangible actions (green flight features) are necessary for customer satisfaction to be achieved (Baumeister, Nyrhinen, Kemppainen

, & Wilska, 2022). Many airlines that claim to be green have been accused of greenwashing. Greenwashing is defined as “the act of disseminating false information to consumers regarding a company’s environmental practices or the environmental benefits of a product or service” (Baum, 2012). Although the aviation industry has a good image and impact regarding economic and social sustainability, it has a negative perception concerning environmental sustainability. Consequently, while airline companies continue to grow, they have preferred to act as if they are environmentally friendly. Thus, greenwashing has emerged as an invaluable opportunity for them, allowing them to create a misleading green image perception among their customers (Gürçam, 2022). In his 2023 study, Tokola categorizes greenwashing into three groups (Table 2). Accordingly, airline companies can engage in greenwashing through green claims, green innovation, and shifting the blame.

Table 2. Sub-Themes of Greenwashing

Green claims	Green innovation	Shifting the Blame
<ul style="list-style-type: none">• Virtue signalling• Baseless or vague claims• Contradictory claims• Executional greenwashing• Animal welfare and conservation	<ul style="list-style-type: none">• Characterized by overt tech optimism. Messaging about commitments to future goals with a focus on green innovation fixing the problems.	<ul style="list-style-type: none">• Shifting the blame from companies to the actions of individual customers, for example, carbon offsets or vegan and vegetarian options as a sustainable selling point.

Source: (Tokola , 2023)

It has been suggested that one of the activities identified as greenwashing may be voluntary carbon offsetting programs (Polonsky, Grau, & Ganna, 2010). Voluntary carbon offsetting, aimed at preventing environmental damage, shifts the responsibility of reducing the carbon footprint of travel onto passengers by airline companies (Babakhani, Ritchie, & Dolnicar, 2016). To mitigate the harmful effects of air transportation on the environment, carbon offsets purchased directly from the airline or through external websites such as atmosfair.de provide passengers wishing to undertake a green journey with the opportunity to financially compensate for their share of emissions caused by their flights. The revenue generated from carbon offsetting programs is subsequently invested in research on renewable energy, environmental education, or more energy-efficient

technologies. This aims to achieve a net zero impact on the climate from the flights taken by passengers. However, considering the limited success of these measures, the implementation of integrated carbon offsetting (ICOs), where offsets are automatically included in ticket prices, would be a more effective solution (Bösehans, Bolderdijk, & Wan, 2020). Indeed, passengers tend to support voluntary carbon offsetting only when they feel a sense of responsibility and when low fees are charged (Cordes, Baumeister, & Käyrä, 2024; Berger, Kilchenmann, Lenz, & Schlöder, 2022).

2.2. Green Airport

Air transportation plays a significant role in modern socio-economies by facilitating trade through connectivity and accessibility. Airports are viewed as critical nodes in the air transportation system and in connecting their regions to the outside world (Ferrulli, 2016). Beyond serving as functional areas for aircraft takeoffs and landings, airports have become places that meet the cognitive and emotional needs of passengers and visitors (Han, Quan, Lho, & Yu, 2020). Additionally, they symbolize environmental pollution as a significant stakeholder in aviation while contributing to socio-economic development.

As part of the effort to achieve a carbon-neutral sector by 2050 in aviation, airports are increasingly striving to adopt green practices. Through Airport Carbon Accreditation membership, airports can obtain green certification (Korba, Koscakova, Fozo, & Sekelova, 2022). Carbon Accreditation, developed by the Airports Council International (ACI) Europe in 2009, serves as the single global carbon management standard for airports. Its aim is to reduce carbon emissions and achieve carbon neutrality by implementing best practices (Gómez Comendador, Arnaldo Valdés, & Lisker, 2019).

Airports have significant potential for adapting their facilities and reducing energy consumption. Given the severity of global warming, there has been an increased interest in optimizing energy performance in buildings. This indicates a growing demand for green buildings and clean energy (Boca Santa et al., 2020). In this context, several factors promote the implementation of environmental management and certification systems in airports. These include the enhancement of airport operations (passenger traffic volume), improvement of the airport's financial status, increased access to information and knowledge, and a more environmentally friendly orientation of the airport authority. Additionally, other important motivating factors include measures taken as a result of local and international (EU) policies, lower implementation costs, and pressure from stakeholders (Mankowska, Tłoczynski, Wach-Kłoskowska, & Bulczak, 2023).

The concept of a green airport is simply defined as “reducing greenhouse gas and noise emissions and operation-specific waste volumes, while enhancing the energy efficiency and surface accessibility of airports through innovative concepts in public transport” (Nam, 2019). In the creation of a green airport, activities such as noise reduction, emission reduction, air quality improvement, energy management, successful implementation of water and waste management, optimal land use, measures to protect biodiversity, enhancement of indoor air quality, transportation control, and the enhancement of social and cultural indicators should be considered (Thummala & Hiremath, 2022). Bird control has become an environmental concern at airports. Various methods have been developed to prevent birds from posing a threat to aircraft, including the use of sonic devices, predator sounds, or noise-making devices to disturb them; employing lasers to scare them away; flying trained hawks; and training dogs (Şen, 2022).

One important aspect of green airports is water management. Water is an indispensable resource for the drinking needs of passengers, guests, and airport personnel, as well as for vehicle cleaning, restrooms, hygiene practices (such as handwashing and bathing facilities), maintenance activities, the care of green plants and lawns, cooking, and beverage sales points. The demand for water is expected to increase with the rise in passenger traffic and construction activities. Within the scope of water management, it is believed that water waste can be reduced through measures such as the separation of potable and non-potable water, the installation of water-saving fixtures, timely repairs, leak management, and raising awareness about water conservation. Accordingly, airport operators should ensure the use of non-potable water sources for cleaning and irrigation purposes. For instance, condensate water from air handling units (AHUs) in air conditioning systems can be utilized for irrigating the grass and plants in airports (Sreenath, Sudhakar, & Yusop, 2021).

The noise generated by aircraft during takeoff and landing at airports falls under the scope of noise management. Noise can lead to both physical (discomfort, ear and hearing problems, etc.) and psychological (fatigue, irritability, headaches, etc.) health issues (Gómez Comendador, Arnaldo Valdés, & Lisker, 2019). To minimize the disturbance caused to the local community by noise, the takeoff and landing times of aircraft can be restricted between 10:00 PM and 8:00 AM. Additionally, noise reduction measures such as double-glazed windows, sound-absorbing surfaces, and tree barriers can be implemented. Residents in the area may have negative attitudes and misconceptions regarding this noise. Consequently, they may exert pressure for operational restrictions that could hinder the airport's growth. Public

communication is crucial in this context (Sreenath, Sudhakar, & Yusop , 2021).

To gain green support from visitors at airports, it is essential to first design and prepare green spaces in rest/waiting areas, followed by placing live flowers, trees, and plants in certain sections, designing interior decor to align with green aesthetics, and improving air quality (such as providing clean air, comfortable temperatures, natural scents, and dust-free environments). Increasing the visibility of natural light and the natural environment through glass walls/windows is also necessary (Han et. al, 2020). Furthermore, to reduce cooling costs, the use of natural light everywhere and the protection of windows from sunlight are recommended (Korba, Sekelová, Koščáková, & Behúnová, 2023).

The presence and accessibility of green spaces, green relaxation areas, and green decor, along with the improvement of environmental conditions such as air quality and natural light both inside and outside the airport, have positive effects on passengers and visitors. These include feeling rejuvenated, reducing mental stress, feeling mentally healthy, and psychologically well. Airport managers should prioritize designing and developing a green physical environment in airports using various financial and non-financial resources. As a result of these efforts, significant steps may be taken to enhance visitors' psychological resilience, positive attitudes, favorable evaluations of their airport experiences, and loyalty intentions towards the airport (Han, Lho , & Kim, 2019). Additionally, by implementing green practices, an environmentally friendly airport image can be projected to end customers, thereby encouraging them to purchase the services offered at a higher price (Korba, Koscakova, Fozo, & Sekelova, 2022).

2.3. Green Experience

Green experience is defined as “the positive or negative responses that arise during the search, purchase, and consumption when consumers interact with environmentally friendly brands, products, services, store atmospheres, and environments, which combine with consumers' views and feelings” (Danar, Rohman, & Sunaryo , 2023). Using a green product leads consumers to perceive that they are valued as individuals by society, enhancing the enjoyment derived from the accompanying consumption experience (Tezer & Bodur, 2020). Yeşil deneyim memnuniyeti, işletmelerin yeşil hizmet taleplerini, çevresel düzenlemeleri ve toplumun sürdürülebilir kalkınma beklentisini ne ölçüde karşıladıkları ile müşterilerin buna göre deneyimledikleri tüketimin sonucu olarak ortaya çıkmaktadır (Chang & Fong, 2010).

When airline passengers have a positive experience regarding an airline's environmentally friendly activities, their likelihood of recommending that airline to acquaintances increases. Additionally, when passengers perceive a high level of green value, they may overlook negative green service experiences. In other words, even if passengers encounter negative green experiences during their airline travels, they can still feel a positive perception of green experiential satisfaction, provided they have a high perception of green value (Wu, Cheng, & Ai, 2018). This situation can be partially explained by the study of Hagmann, Semeijn, & Vellenga (2015). Their research indicates that when passengers experience a flight with an airline or are in direct communication with it, the communication of environmental image becomes easier. For instance, passengers are exposed to in-flight magazines during their flight experience and can spend their leisure time reading these magazines. These magazines, which also include promotions from airlines, are likely to discuss their environmental commitments (Hagmann, Semeijn, & Vellenga, 2015). When airlines implement measures such as reducing aircraft weight related to cabin services and equipment or using eco-friendly products, these can be perceived or experienced by passengers as beneficial for the ecology of the world and personal health. Therefore, by supporting these elements, passengers may be more willing to choose these airlines (Niu, Liu, Chang, & Ye, 2016). Designing green-appropriate physical environments to trigger positive emotional perceptions of green experiences can enhance customers' environmental awareness and differentiate from competing businesses (Lee & Peng, 2021). Accordingly, utilizing green design in the online-offline interactions that airline businesses have with their customers can provide an advantage. For example, in addition to in-flight green activities, ensuring that the design also supports these applications can be one of the effective ways to persuade customers.

Before consumers are ready to adopt an environmental innovation, they evaluate this new alternative service by comparing it with their previous experiences. This evaluation process requires cognitive effort and can vary according to individuals' levels of knowledge, thus becoming a mental burden that consumers prefer to avoid based on their habits. However, it is known that airline passengers continue to fly even if they experience flight shame (Chiambaretto et al., 2024). Research by Wong, Sia, & Ling (2020) has shown that airline passengers are unwilling to compromise on comfort, conveniences, and effort when adopting green practices. Chan et al. (2022) have demonstrated that green service can lead to passenger satisfaction with a green flight experience. However, perceptions of green service fairness do not influence passengers' decisions to switch to another airline.

The knowledge and skills of employees regarding green practices, as well as their understanding of how to communicate effectively with customers during green experiences, are considered important factors affecting customer satisfaction (Arici, Arici, & Altinay, 2022). Green organizational behaviors can be achieved through collaboration with employees. It is essential to motivate employees in this regard through rewards or recognition. Indeed, the qualifications of employees or barriers arising from the organizational structure can complicate the implementation of green activities (Karanfil & Karakuş, 2024).

2.4. Green Consumer

Green consumption is defined as “Consumers’ consumption with an awareness of sustainability and social responsibility, and the avoidance of any product or service that harms nature in all stages from the raw materials used in its production to its consumption.” In its simplest form, a green consumer is “A customer who purchases eco-friendly products and acts accordingly” (Baykal & Alaoglu, 2023).

As consumers become more conscious of the environmental impacts of consumption, they also tend to be more concerned about the potential environmental damage that consumption can cause (Mayer, Ryley, & Gillingwater, 2014). Consumers who perceive personal risk related to environmental issues and act to mitigate this feeling are more likely to purchase green products. In this regard, consumers need more information about environmental problems and how these problems can be mitigated (Darnall, Ponting, & Vazquez-Brust, 2012).

When passengers feel that by choosing a green airline they are contributing to the protection of nature, they are more likely to perceive that airline as having a positive image (Hwang & Choi, 2018). This suggests that they are also more likely to use a green airline when traveling (Hwang & Lyu, 2020). For instance, some studies have supported the notion that female passengers are likely to travel again with the same airline (Hwang & Choi, 2018; Westwood, Pritchard, & Morgan, 2000). Additionally, differences have been observed among individuals from countries at various stages of economic development regarding their support for airlines’ environmental protection activities (Niu, Liu, Chang, & Ye, 2016).

Price is a very important factor influencing airline passengers’ attitudes towards green airlines. In this context, airlines can shape their environmental activities by considering the price sensitivity of passengers (Çabuk, Güreş, İnan, & Arslan, 2019). Hagmann et al. (2015) found that some passengers

are willing to pay up to ‘a’ more for a ticket. This indicates that the “green” options offered by airlines can be utilized profitably. However, not all airlines currently offer options such as voluntary carbon offsets on their websites (Hagmann, Semeijn, & Vellenga, 2015).

On the other hand, some passengers exhibit intentions to reduce air travel. It has been observed that this group primarily consists of passengers with greater environmental concerns (Seegebarth, Woisetschlager, Sohn, & Frenser, 2024). The Swedish term “flygskam” entered social media in July 2016 and was translated into English as “flight shame” in August 2018 (Becken, Friedl, Stantic, Connolly, & Chen, 2020). This term has evolved into a movement that increasingly resonates with participants, reflecting a growing sense of obligation to reduce carbon footprints or to adopt more environmentally friendly modes of transportation (Gössling, Humpe, & Bausch, 2020; Korba, Sekelová, Koščáková, & Behúnová, 2023). Accordingly, when examining the environmentally conscious behaviors of air travelers, it is evident that they tend to avoid air travel, prefer alternative transportation modes, opt for low-emission flights, or purchase carbon offsets (Gössling & Dolnicar, 2023). Among alternative transportation modes, efforts are made to minimize CO₂ emissions related to travel, with a preference for train travel over air travel. Indeed, traveling by train results in 90% less CO₂ emissions (Dällenbach, 2020).

Conversely, it has also been revealed that, in some cases, passengers are unable to practice green consumption. Five barriers to green consumerism have been identified (Bonini & Oppenheim, 2008):

- **Lack of Awareness:** This refers to the lack of knowledge about environmental issues, such as most consumers being unaware of green product labels when purchasing products.
- **Negative Perceptions:** Even if consumers can correctly identify environmentally friendly products, they may still believe that these products perform worse than traditional products.
- **Distrust:** Consumers not only have negative perceptions regarding the quality of green products but also doubt their environmental friendliness.
- **High Prices:** Consumers perceive the benefits of using green products as minor and long-term, which leads them to view the typically higher costs of these products as a significant barrier to purchase.
- **Low Availability:** Even if consumers decide to buy eco-friendly products, they may face difficulties in procuring them. The lack of

stock of these products by businesses poses a major obstacle to their purchase.

3. Method

In order to achieve a green journey in travel, actions that can be taken before, during, and after the journey have been examined from the passenger's perspective. In this context, secondary data sources have been utilized for data collection. Secondary data sources are those that have been collected by other researchers or institutions prior to this study. They provide researchers with the opportunity to obtain data of richness and quality that cannot be gathered independently (Gürbüz & Şahin, 2017). Secondary data sources are generally preferred due to their advantages in terms of speed of obtaining results, time, and cost (Çakıcı & Yılmaz, 2021). To access secondary sources via the internet, national and international search services can be utilized. Among these, the most well-known and preferred is Google's search service (Özdamar, 2013). In this study, data obtained from various aviation websites searched through the Google search engine have been used to design a green journey. Accordingly, our representative passenger, "Deniz," plans to undertake a flight from Istanbul to London on June 11, 2025. As an environmentally conscious individual, what steps should Deniz follow to make a green journey? What paths should be taken at each stage of the journey? The following section of the study will seek answers to these questions.

4. Results

Our representative traveler, "Deniz," is embarking on a green journey for the planned Istanbul-London flight on June 11, 2025. To achieve this goal, he has followed the steps outlined below.

4.1. Evaluation of Alternative Travel Options

On March 24, 2021, the European Environment Agency (EEA) published the report "Transport and Environment 2020." According to this report, train travel is considered the most environmentally friendly mode of transportation compared to other transport options. However, when evaluated specifically in terms of solo travel, traveling by gasoline or diesel-powered car can be more harmful to the environment than flying (European Environment Agency, 2021). Maritime transport, on the other hand, is seen as advantageous compared to air transport. It is known that maritime transport produces approximately 15 to 25 times less CO₂ emissions per kilogram-kilometer than air transport. This situation makes air transport

less environmentally friendly compared to maritime transport (sufu, 2024). Considering alternative transportation options such as trains or buses for shorter distances demonstrates an environmentally conscious approach.

In light of this information, when the passenger evaluates alternative travel options by Deniz, he learn that direct point-to-point travel is not possible by train or maritime transport. He anticipate that traveling by car on the road would be significantly longer and more harmful to the environment. Therefore, he find himselfes compelled to choose air travel. Indeed, he believe that the environmental damage of a direct flight lasting approximately four hours (partially long-haul) will also be reduced. Furthermore, according to the EEA, for longer distances, air travel incurs less environmental cost due to the fact that the environmental costs of takeoffs and landings do not vary with distance in direct flights (European Environment Agency, 2021).

4.2. The Pursuit of Environmentally Conscious Airlines

Some airline companies engage in more environmentally friendly practices compared to their competitors. examples of these practices include the use of efficient aircraft, the implementation of carbon offset programs, and investments in sustainable aviation fuels.

Deniz, who wishes to travel with an environmentally friendly airline, initially conducted a flight search on the Skyscanner website. This site allows users to view and compare the carbon emission rates of various airlines for their flights. Subsequently, Deniz accessed the flight search section of Google, entering the destination of İstanbul-London and the date of June 11, 2025, to access the flight options window. Accordingly, he was able to see the estimated carbon emission amounts for different airlines. Deniz selected the airlines with the lowest carbon emission rates. He then narrowed down the list of airlines that offered the option to purchase carbon offsets during ticket sales.

Carbon offsetting refers to a mechanism that allows for the compensation or reduction of the carbon footprint resulting from activities such as air transportation by addressing it elsewhere. In other words, it is a program through which passengers can balance their flight-related carbon footprint by purchasing carbon credits from globally certified climate change mitigation and social development projects. Purchasing a carbon offset credit ensures a reduction of one ton of carbon dioxide emissions (Turkish Airlines, 2024). For instance, when calculating the carbon footprint for Turkish Airlines, the passenger is prompted to enter the departure and arrival destinations along with the date of the flight. After entering the necessary information, a fee

of 5.87 USD is displayed. This fee corresponds to the calculation of the passenger's carbon footprint for the specified route as 220 kg. The passenger, Deniz, is willing to pay this additional fee to offset the carbon footprint he will cause during his journey.

4.3. The Preference For Direct Flights

It is well-known that airplanes consume the most fuel during takeoff and landing maneuvers. Therefore, minimizing indirect flights and the number of takeoffs and landings at intermediate points through direct flights can contribute to reducing the carbon footprint.

As is known, low-cost carriers often adopt a point-to-point strategy, which emphasizes direct flights. However, there are instances where they also offer connecting flights. On the other hand, full-cost carriers provide their passengers with both direct and indirect flight options. Consequently, Deniz can choose to fly with airlines that adopt two different strategies for direct flights. Other variables, such as the availability of carbon offset programs or the use of sustainable aviation fuel, will influence the airline he decides to select.

4.4. Traveling in Economy Class

In the context of air travel, it is often considered more environmentally friendly to travel in economy class due to the higher number of seats available compared to business or first class. Indeed, the ability to accommodate more passengers in economy class allows for the distribution of the carbon footprint across a larger number of individuals.

To reduce the carbon footprint, it is particularly beneficial to travel with a low-cost airline. As is well known, one of the strategies employed by these airlines is to increase the number of seats on the aircraft, thereby reducing costs. Conversely, full-service airlines typically offer different classes (first, business, economy, etc.) with varying seat configurations. Even when it is necessary to fly with these airlines, choosing to fly in economy class can contribute to minimizing environmental impact. The seats in first or business class, which can convert into beds, are heavier compared to those in economy class. This added weight results in increased fuel consumption by the aircraft, leading to a higher carbon footprint. Passenger Deniz has purchased a ticket in economy class with the aim of reducing his carbon footprint.

4.5. The Use of Electronic Tickets And Check-in

To prevent the further cutting down of trees, it is important to reduce paper waste by opting for digital boarding passes and tickets. Nowadays, each airline operates mobile applications to facilitate environmentally friendly check-in processes and to provide services quickly and easily.

To benefit from mobile boarding passes, passengers need to download the application of the airline they are flying with onto their tablet, phone, or integrated smart watch. Accordingly, Deniz first downloaded the mobile application of his preferred airline onto his cell phone. He then completed his passenger information in the online check-in section and created his mobile boarding pass. Upon arriving at the gate for his flight at the airport, he scanned the QR code at the boarding system and was able to board the plane without generating paper waste.

4.6. Training of Passengers and Personnel

Awareness of the environmental impacts of air travel and the sharing of this information among passengers are crucial for fostering environmental consciousness. When individuals are informed, they are more likely to opt for sustainable flight options. It is particularly important for airline personnel to be trained on this subject, as it benefits both the organization and the customers' awareness.

Generally, airline companies publish sustainability reports on their official websites. They also share their activities, including green initiatives, through their pages or social media platforms. Passengers can monitor the activities of airlines through these reports and news updates. For instance, Turkish Airlines has communicated through its website how it disseminates its sustainability activities and practices to stakeholders, including passengers and personnel. It can be observed that they share sustainability reports with their staff and organize training sessions (Turkish Airlines, 2024). However, upon reviewing some airline companies' websites, it has been found that they either do not share sustainability reports regularly or do not share them at all (Sak & Karakuş, 2024). Passenger Deniz has examined the sustainability reports of the airline company from which he purchased a ticket on an annual basis. He prefer to fly with an airline that transparently shares its sustainability reports and focuses on continuously improving the activities outlined in these reports, and he will make their decision based on these evaluations.

4.7. The Lightness of the Luggage Carried by Passengers

Passengers contribute to waste reduction by bringing their own headphones, blankets, and reusable travel kits. Environmentally conscious actions can be taken by avoiding single-use plastics through practices such as carrying a refillable water bottle, using a non-plastic bamboo toothbrush, or opting for personal headphones.

It is known that each kilogram carried during a flight leads to increased fuel consumption. Therefore, lighter luggage not only offers economic savings but also reduces carbon emissions. Passenger Deniz will act in a manner to bring only the necessary items. By carrying hand luggage, he will lighten his load.

4.8. The Preference for Vegan or Vegetarian Meals on Airplanes

Since industrial meat production harms the environment, the preference for meat-free in-flight meals demonstrates a more environmentally friendly characteristic. In addition, the ingredients of local foods are sourced from areas close to the region. In contrast, imported ingredients involve long transportation processes, resulting in a higher carbon footprint.

It has been observed that healthy and environmentally sustainable in-flight meals are preferred more often than branded food items. When comparing occasional and frequent flyers, there are significant differences in their in-flight meal preferences. While both groups tend to prefer low-calorie and tasty meals made with local ingredients, frequent flyers have been found to choose branded meals prepared with organically grown ingredients. On the other hand, occasional flyers tend to opt for generic branded meals made with conventionally grown ingredients (Hwang, Kim, Baloglu, & Raab, 2024). Deniz is not a frequent flyer unless necessary. Therefore, he will prefer vegan, vegetarian, and regionally inspired flavors among the in-flight meal offerings.

4.9. Lowering the Window Shades and Opening the Ventilation Outlets While Flying

During the in-flight service process, most airlines encourage passengers to follow the 3R rule -Reduce, Reuse, Recycle- and assess other environmentally friendly practices to enhance sustainability onboard. For instance, cabin crew request passengers to lower the window shades before disembarking during the summer months in order to reduce cabin temperature, alleviate the heavy use of the aircraft's ventilation system, and decrease the operating costs of the Auxiliary Power Unit (APU) (Vongtharawat, Jeambua, &

Pooripakdee, 2019). Deniz will follow the instructions of the cabin crew and adopt behaviors that contribute to reducing his carbon footprint during the flight.

4.10. Supporting Sustainable Practices At Destinations

It is important for passengers to choose hotels and local businesses that demonstrate sustainable performance at their destinations. Local economies can be supported by selecting eco-certified hotels and purchasing local products. Acting with an environmentally conscious mindset, Deniz has researched eco-certified hotels at his destination and made a reservation at an accommodation that prioritizes renewable energy sources, water conservation, and waste reduction.

5. Conclusion

With the decline in commercial profit and the growing importance of environmental protection, airlines are increasingly engaging in efforts to preserve nature and enhance their commercial revenues (Niu, Liu, Chang, & Ye, 2016). In order to support their green activities, airlines must ensure that passengers adopt positive attitudes toward these developments. Firstly, passengers need to be convinced that green consumption benefits themselves or future generations. This message can be conveyed through various tools such as advertisements, public relations activities, and in-flight equipment. Secondly, passengers must possess a positive social norm; in other words, the environment surrounding the individual must be supportive of green initiatives. The final stage involves the passenger managing their internal conflict in a way that directs them toward green consumption. It is difficult for individuals to act or behave in a way that deviates from their accustomed habits. Changing consumption behaviors takes time. Ultimately, it is anticipated that with the successful completion of these three stages, passengers may achieve the desired environmental behaviors (Korba, Sekelová, Koščáková, & Behúnová, 2023).

In this context, developing practices that encourage consumers may increase support for environmental activities. Discounts and loyalty programs can provide incentives for the selection of green practices. For example, bonus reward miles can be offered when a passenger chooses a flight with relatively lower carbon emissions or pays an additional fee to offset their emissions (Crouse, Box, Winter, & Rice, 2024). Additionally, governments may implement certain regulations to encourage airlines. For instance, governments can impose taxes on airlines that use non-environmentally friendly fuels and inform consumers through various channels to prefer

fuel-efficient flights. Airlines may begin to renew their fleets and use this as a competitive advantage over other carriers (Gössling & Dolnicar, 2023). This study aims to design and exemplify a green journey to understand the green experiences of passengers who travel by air and embrace green values. The hypothetical sampling was constructed based on the review of secondary data sources. The steps that a passenger can follow to make a green journey before, during, and after the flight were designed. According to information obtained from various sources, it is considered appropriate for passengers who wish to have a green air travel experience to complete ten fundamental steps, ranging from evaluating alternative travel options to supporting sustainable practices at destinations (Evoke, 2024; Alternative Airlines, 2024). The basic steps to be followed by customers trying to make a green airline journey are given in Table 3.

Table 3. Steps to A Green Air Travel

1.Evaluation of alternative travel options
1.The pursuit of environmentally conscious airlines
1.The preference for direct flights
1.Traveling in economy class
1.The use of electronic tickets and check-in
1.Training of passengers and personnel
1.The lightness of the luggage
1.Vegan or vegetarian meals on airplanes
1.Window shades and the ventilation outlets
1.Supporting sustainable practices at destinations

Source: Created by the author

Each green step presented in Table 3 is important. However, completing an entirely green air journey from start to finish, including research and implementation, requires considerable effort. Airlines differ in their green practices. Some implement more environmentally friendly policies than

others. Passengers persistently demanding an environmentally responsible journey may encourage airlines to offer greater support for these practices. In turn, this may reduce the number of airlines engaging in greenwashing.

This study aims to serve as a foundation for future research in this field. Indeed, considering the flight experience from the perspective of environmentally conscious passengers who aim to undertake a green journey plays a vital role in enabling practitioners to sustain green activities. In studies conducted from this perspective, including other stakeholders (such as employees, managers, etc.) and adopting different methodologies may broaden the scope of the existing topic. In this way, future green practices may also be encouraged.

References

- Çabuk, S., Güreş, N., İnan, H., & Arslan, S. (2019). Attitudes of passengers towards green airlines. *Journal of Yasar University*, 14(55), 237-250. <https://doi.org/10.19168/jyasar.452297>.
- Çakıcı, E., & Yılmaz, K. (2021). Uluslararası pazarlarda hedef pazar seçimi üzerine bir araştırma. *Sosyal, Beşerî ve İdari Bilimler Dergisi*, 4(9), 833-849. <https://doi.org/10.26677/TR1010.2021.801>.
- Özdamar, K. (2013). *Modern Bilimsel Araştırma Yöntemleri*. Ankara (Second Edition): Nisan Kitabevi.
- Alternative Airlines. (2024, September 19). *Buy Flights with Eco-Friendly Airlines*. <https://www.alternativeairlines.com/eco-friendly-airlines> adresinden alındı
- Arıcı, H., Arıcı, N., & Altınay, L. (2022). The use of big data analytics to discover customers' perceptions of and satisfaction with green hotel service quality. *Current Issues in Tourism*, 26(2), 270-288. <https://doi.org/10.1080/13683500.2022.2029832>.
- Böschans, G., Bolderdijk, J., & Wan, J. (2020). Pay more, fly more? Examining the potential guilt-reducing and flight-encouraging effect of an integrated carbon offset. *Journal of Environmental Psychology*, 71, <https://doi.org/10.1016/j.jenvp.2020.101469>.
- Babakhani, N., Ritchie, B., & Dolnicar, S. (2016). Improving carbon offsetting appeals in online airplane ticket purchasing: testing new messages, and using new test methods. *Journal of Sustainable Tourism*, 25(7), 955-969. <http://dx.doi.org/10.1080/09669582.2016.1257013>.
- Baum, L. (2012). It's not easy being green ... or is it? A content analysis of environmental claims in magazine advertisements from the United States and United Kingdom. *Environmental Communication: A Journal of Nature and Culture*, 6(4), 423-440. <http://dx.doi.org/10.1080/17524032.2012.724022>.
- Baumeister, S., Nyrhinen, J., Kemppainen, T., & Wilska, T.-A. (2022). Does airlines' eco-friendliness matter? Customer satisfaction towards an environmentally responsible airline. *Transport Policy*, 128, 89-97. <https://doi.org/10.1016/j.tranpol.2022.09.016>.
- Baykal, B., & Alaoglu, H. (2023). Green marketing and green consumer perceptions . *International IZMIR Congress on Humanities and Social Sciences*, (s. 47-55).
- Becken, S., Friedl, H., Stantic, B., Connolly, R., & Chen, J. (2020). Climate crisis and flying: social media analysis traces the rise of "flightshame". *Journal of Sustainable Tourism*, 29(9), 1450-1469. <https://doi.org/10.1080/09669582.2020.1851699>.

- Berger, S., Kilchenmann, A., Lenz, O., & Schlöder, F. (2022). Willingness-to-pay for carbon dioxide offsets: Field evidence on revealed preferences in the aviation industry. *Global Environmental Change*, 73(102470), <https://doi.org/10.1016/j.gloenvcha.2022.102470>.
- Boca Santa, S., Pereira Ribeiro, J., Mazon, G., Schneider, J., Barcelos, R., & Osório de Andrade Guerr, J. (2020). A Green Airport model: Proposition based on social and environmental management systems. *Sustainable Cities and Society*, 59(102160), <https://doi.org/10.1016/j.scs.2020.102160>.
- Bonini, S., & Oppenheim, J. (2008). *Cultivating the Green Consumer*. California, USA: Leland Stanford Jr. University.
- Chan, S., Zhang, X., Wang, Y., & Li, Z. (2022). Effects of psychological benefits of greenness on airlines' customer experiential satisfaction, service fairness, alternative attractiveness, and switching intention. *Frontiers in Psychology*, 13, <https://doi.org/10.3389/fpsyg.2022.834351>.
- Chang, N.-J., & Fong, C.-M. (2010). Green product quality, green corporate image, green customer satisfaction, and green customer loyalty. *African Journal of Business Management*, 4(13), 2836-2844.
- Chiambaretto, P., Laurent, S., Schmalz, U., Fu, M., Rouyre, A., Bildstein, C., & Fernandez, A.-S. (2024). Are consumers willing to pay more for green innovations? Insights from the air transport industry. *Technovation*, 137(103079), <https://doi.org/10.1016/j.technovation.2024.103079>.
- Cordes, H., Baumeister, S., & Käyrä, M. (2024). Factors influencing the willingness to pay for aviation voluntary carbon offsets: A literature review. *European Journal of Tourism Research*, 36(3602), <https://doi.org/10.54055/cjtr.v36i.2741>.
- Crouse, S., Box, S., Winter, S., & Rice, S. (2024). Support for green initiatives in aviation: A case study across American aviation consumers. *Journal of the Air Transport Research Society*, 2, <https://doi.org/10.1016/j.jatrs.2024.100020>.
- Dällenbach, N. (2020). Low-carbon travel mode choices: The role of time perceptions and familiarity. *Transportation Research Part D*, 86, <https://doi.org/10.1016/j.trd.2020.102378>.
- Daniar, K., Rohman, F., & Sunaryo. (2023). The green experience effects on gen z customer loyalty mediated by perceived value and satisfaction. *Research in Business & Social Science*, 12(5), 429-436. <https://doi.org/10.20525/ijrbs.v12i5.2688>.
- Darnall, N., Ponting, C., & Vazquez-Brust, A. (2012). Why Consumers Buy Green. D. Vazquez-Brust, & J. Sarkis içinde, *Green Growth: Managing the Transition to a Sustainable Economy* (s. 287-308. DOI: 10.10087/978-94-007-4417-2_15). Dordrecht: Springer Science+Business Media.

- European Environment Agency. (2021). *Motorlu taşımacılık: tren, uçak, karayolu veya gemi- hangisi en yeşil?* [https://www.cea.europa.eu/tr/highlights/motorlu-tasimacilik-tren-ucak-karayolu#:~:text=Avrupa%20%C3%87cvre%20Ajans%C4%B1%20\(A%C3%87A\)%20taraf%C4%B1ndan,dostu%20yol%20olmaya%20devam%20etmektedir. adresinden alındı](https://www.cea.europa.eu/tr/highlights/motorlu-tasimacilik-tren-ucak-karayolu#:~:text=Avrupa%20%C3%87cvre%20Ajans%C4%B1%20(A%C3%87A)%20taraf%C4%B1ndan,dostu%20yol%20olmaya%20devam%20etmektedir. adresinden alındı)
- Evoke. (2024, September 20). *Sustainability - Fly Green and Clean: Top 10 Tips for Sustainable Air Travel*. <https://www.evoke.limo/post/fly-green-and-clean-top-10-tips-for-sustainable-air-travel> adresinden alındı
- Ferrulli , P. (2016). Green Airport Design Evaluation (GrADE) – methods and tools improving infrastructure planning. *Transportation Research Procedia*, 14, 3781–3790. doi: 10.1016/j.trpro.2016.05.463.
- Gössling, S., & Dolnicar, S. (2023). A review of air travel behavior and climate change. *Wiley Interdisciplinary Reviews: Climate Change*, 14(1), <https://doi.org/10.1002/wcc.802>.
- Gössling, S., Humpe, A., & Bausch, T. (2020). Does ‘flight shame’ affect social norms? Changing perspectives on the desirability of air travel in Germany. *Journal of Cleaner Production*, 266, 1-10. <https://doi.org/10.1016/j.jclepro.2020.122015>.
- Gürçam, S. (2022). The neoliberal initiative of the aviation industry to fight the climate crisis: Greenwashing. *International Journal of Environment and Geoinformatics (IJEGEO)*, 9(3), 178-186. <https://doi.org/10.30897/ijegeo.1083921>.
- Gürbüz, S., & Şahin, F. (2017). *Sosyal Bilimlerde Araştırma Yöntemleri: Felsefe-Yöntem-Analiz*. Ankara (Third Edition): Seçkin.
- Gómez Comendador , V., Arnaldo Valdés, R., & Lisker , B. (2019). A holistic approach to the environmental certification of green airports. *Sustainability*, 11(15), 1-38. <https://doi.org/10.3390/sul1154043>.
- Hagmann, C., Semeijn, J., & Vellenga, D. (2015). Exploring the green image of airlines: Passenger perceptions and airline choice. *Journal of Air Transport Management*, 43, 37-45. <http://dx.doi.org/10.1016/j.jairtraman.2015.01.003>.
- Han, H., Chua, B.-L., Ariza-Montes, A., & Untaru, E.-N. (2020). Effect of environmental corporate social responsibility on green attitude and norm activation process for sustainable consumption: Airline versus restaurant. *Corporate Social Responsibility and Environmental Management* , 27(4), 1851-1864. <https://doi.org/10.1002/csr.1931>.
- Han, H., Lho , L., & Kim, H.-C. (2019). Airport green environment and its influence on visitors’ psychological health and behaviors. *Sustainability*, 11(24), 1-15. <https://doi.org/10.3390/sul1247018>.
- Han, H., Olya, H., Untaru, E.-N., Ispas, A., Kim, J., & Kim, W. (2020). Impact of airport green atmospherics on mental health value,image, and lo-

- yalty among visitors and workers. *Business Strategy and the Environment*, 29(3), 1186-1198. https://doi.org/10.1002/bse.2425open_in_new.
- Han, H., Quan, W., Lho, L., & Yu, J. (2020). Eco-design of airport buildings and customer responses and behaviors: uncovering the role of biospheric value, reputation, and subjective well-Being. *Sustainability*, 12(23), <https://doi.org/10.3390/su122310059>.
- Hesse, A., & Rünz, S. (2020). 'Fly Responsibly': a case study on consumer perceptions of a green demarketing campaign. *Journal of Marketing Communications*, 28(3), 232-252. <https://doi.org/10.1080/13527266.2020.1842483>.
- Hwang, E., Kim, Y.-S., Baloglu, S., & Raab, C. (2024). Do healthy and environmentally sustainable inflight foods matter to international flight passengers? Frequent vs. occasional flyers. *Journal of Air Transport Management*, 121(102687), <https://doi.org/10.1016/j.jairtraman.2024.102687>.
- Hwang, J., & Choi, J. (2018). An investigation of passengers' psychological benefits from green brands in an environmentally friendly airline context: The moderating role of gender. *Sustainability*, 10(80), <https://doi.org/10.3390/su10010080>.
- Hwang, J., & Choi, J. (2021). Understanding environmentally friendly airline travelers' internal environmental locus of control and its consequences. *Research in Transportation Business & Management*, 41, 1-9. <https://doi.org/10.1016/j.rtbm.2020.100612>.
- Hwang, J., & Lyu, S. (2020). Relationships among green image, consumer attitudes, desire, and customer citizenship behavior in the airline industry. *International Journal of Sustainable Transportation*, 14(6), 437-447. <https://doi.org/10.1080/15568318.2019.1573280>.
- Karanfil, S., & Karakuş, B. (2024). An examination of airlines employees' perceptions of sustainability, green business behaviors and employees' views on corporate reputation. *International Journal of Aviation, Aeronautics, and Aerospace*, 11(3), <https://doi.org/10.58940/2374-6793.1908>.
- Keiser, D., Pupkes, B., & Freitag, M. (2023). Passenger Expectations towards a Sustainable Aviation Industry . *12th International Conference on Air Transport – INAIR 2023, The Future of Aviation – is the Sky the Limit?* (s. 189-197). Tartu, Estonia: Transportation Research Procedia.
- Korba, P., Koscakova, M., Fozo, L., & Sekelova, I. (2022). Current state and possible challenges in the development of green airports. *IEEE Xplore*, 191-197.
- Korba, P., Sekelová, I., Koščáková, M., & Behúnová, A. (2023). Passengers' knowledge and attitudes toward green initiatives in aviation. *Sustainability*, 15(7), 1-25. <https://doi.org/10.3390/su15076187>.

- Lee, T.-C., & Peng, M.-P. (2021). Green experiential marketing, experiential value, relationship quality, and customer loyalty in environmental leisure farm. *Frontiers in Environmental Science*, 9, 1-15. <https://doi.org/10.3389/fenvs.2021.657523>.
- Mankowska, M., Tłoczyński, D., Wach-Kłoskowska, M., & Bulczak, G. (2023). Factors determining the implementation of green practices in airport management. The case study of Polish airports. *Journal of Air Transport Management*, 111(102438), <https://doi.org/10.1016/j.jairtraman.2023.102438>.
- Mayer, R., Ryley, T., & Gillingwater, D. (2012). Passenger perceptions of the green image associated with airlines. *Journal of Transport Geography*, 22, 179-186. <https://doi.org/10.1016/j.jtrangeo.2012.01.007>.
- Mayer, R., Ryley, T., & Gillingwater, D. (2014). The role of green marketing: Insights from three airline case studies. *The Journal of Sustainability*, 1(2), 46-72.
- Nam, V. (2019). Green sustainable airports: The deployment of renewable energy at vietnam airports. Is that feasible? *Journal of Mechanical Engineering Research and Developments (JMERC)*, 42(5), 61-65. <http://doi.org/10.26480/jmercd.05.2019.61.65>.
- Niu, S.-Y., Liu, C.-L., Chang, C.-C., & Ye, K.-D. (2016). What are passenger perspectives regarding airlines' environmental protection? An empirical investigation in Taiwan. *Journal of Air Transport Management*, 55, 84-91. <https://doi.org/10.1016/j.jairtraman.2016.04.012>.
- Parsa, M., Nookabadi, A., Flapper, S., & Atan, Z. (2019). Green hub-and-spoke network design for aviation industry. *Journal of Cleaner Production*, 229, 1377-1396. <https://doi.org/10.1016/j.jclepro.2019.04.188>.
- Polonsky, M., Grau, S., & Ganna, R. (2010). The new greenwash? potential marketing problems with carbon offsets. *International Journal of Business Studies: A Publication of the Faculty of Business Administration, Edith Cowan University*, 18(1), 49-54.
- Sak, F., & Karakuş, G. (2024). Airline Companies in Green Transformation: A Comparison Through Websites. J.-V. Andrei, M. Vasic, L. Chivu, & B. Kuzman içinde, *Marketing and Resource Management for Green Transitions in Economies* (s. 236-265). Hershey: IGI Global.
- Seegebarth, B., Woisetschlager, D., Sohn, S., & Frenser, V. (2024). Determinants of consumers' intentions to reduce air travel. *Journal of Travel Research*, 63(2), 335-356. <https://doi.org/10.1177/00472875231159044>.
- Sreenath, S., Sudhakar, K., & Yusop, A. (2021). Sustainability at airports: Technologies and best practices from ASEAN countries. *Journal of Environmental Management*, 299(113639), <https://doi.org/10.1016/j.jenvman.2021.113639>.

- sufu. (2024). *Sea vs Air: Comparing the Environmental Impacts of Slow and Fast Freight Transportation*. <https://www.sufu.dk/insights/sea-vs-air-freight-transportation> adresinden alındı
- Şen, G. (2022). Can a green business strategy be an alternative to the success of the airport environmental management system? *Journal of Aviation*, 6(2), 241-250. <https://doi.org/10.30518/jav.1128353>.
- Tezer, A., & Bodur, O. H. (2020). The green consumption effect: how using green products improves consumption experience. *Journal of Consumer Research*, 47(1), 25-39. <https://doi.org/10.1093/jcr/ucz045>.
- Thummala, V., & Hiremath, R. (2022). Green aviation in India: Airline's implementation for achieving sustainability. *Cleaner and Responsible Consumption*, 7, 1-11. <https://doi.org/10.1016/j.clrc.2022.100082>.
- Tokola, A. (2023). Bachelor Thesis. *Greenwashing in Airline Marketing*. Haaga-Helia University of Applied Sciences. <https://urn.fi/URN:NBN:fi:amk-2023053116757>.
- Turkish Airlines. (2024). *Engaging with stakeholders*. Sustainability Management: chrome-extension://efaidnbmnnnnibpcajpcgclclefindmkaj/<https://cdn.turkishairlines.com/m/15c497af073c446b/original/Paydas-Tablosu.pdf> adresinden alındı
- Turkish Airlines. (2024). *What are carbon offsetting and carbon credits?* Do you want to offset your flight's carbon emissions?: <https://www.turkishairlines.com/tr-int/co2mission/> adresinden alındı
- Vongtharawat, M., Jeambua, K., & Pooripakdee, S. (2019). Willingness to Use and Pro-Environmental Attitudes for Airlines' Environment Friendly Services: The Perspective of Thai Passengers. *International Journal of Humanities, Arts and Social Sciences*, 5(4), 145-156. <https://dx.doi.org/10.20469/ijhss.5.20003-4>.
- Westwood, S., Pritchard, A., & Morgan, N. (2000). Gender-blind marketing: businesswomen's perceptions of airline services. *Tourism Management*, 21, 353-362. [https://doi.org/10.1016/S0261-5177\(99\)00069-2](https://doi.org/10.1016/S0261-5177(99)00069-2).
- Wong, L., Sia, J., & Ling, T. (2020). Airline passengers' perceived sacrifice and green practices adoption behaviours. *Asian Journal of Business Research*, 10(3), 85-110.
- Wu, H.-C., Cheng, C.-C., & Ai, C.-H. (2018). An empirical analysis of green switching intentions in the airline industry. *Journal of Environmental Planning and Management*, 61(8), 1438-1468. <https://doi.org/10.1080/09640568.2017.1352495>.

