

AUSTRIAN AIRLINES

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BUSINESS CASE CHALLENGE 2024

Austrian 

PROJECT SUMMARY

Case Study	Austrian Airlines
Website	https://www.austrian.com
Industry	Passenger Airlines
Employees	6121

Austrian Airlines is Austria's largest airline, with 130 destinations worldwide and 11.1 million passengers

Austrian Airlines commitment to sustainability goals:

- 50% reduction in net CO2 emissions by 2030;
- net-zero CO2 emissions by 2050

The customers of Austrian Airlines are the primary drivers of change. However, before customers can fully embrace the sustainability efforts, it is imperative that **we effectively educate them about the importance of sustainable practices**

RATIONALE AND CONCEPT

Information about sustainability measures evolves rapidly, BUT many airline industry clients are unaware of initiatives like **sustainable aviation fuel (SAF)** and other emissions reduction policies.

Recognizing this gap, we introduce the “Greenhub” smartphone app in collaboration with Austrian Airlines, designed to empower passengers with real-time information on sustainable flying practices.

- We use gamification strategy to entertain and educate
- From brand loyalty to sustainability cultivation

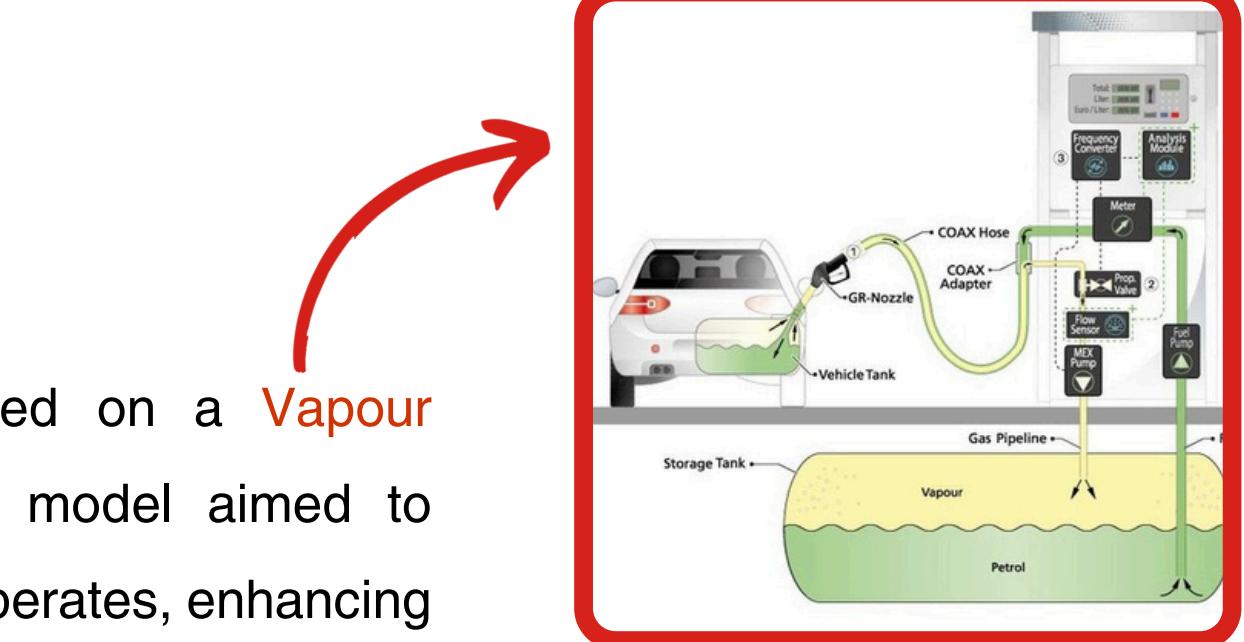
The Final Results

- NPV - 99 658€ (base scenario)
- Break-even year - 2026
- Emission reduction - 31% compared to 2019 year
- 6.8% increase in sustainable clients by 2030 compared to 2024, equivalent to approximately 1 million new customers who offset carbon emissions or opt for SAF

OUR LAST YEAR



Last year, we developed a project focused on a **Vapour Recovery System** for OMV. Our business model aimed to mitigate evaporation at airports where OMV operates, enhancing revenue and reducing environmental impact



This year, we were fortunate to receive another opportunity to develop a case in the aviation industry. This time, we are transitioning from airport operations to collaborating with Austria's largest airline



BUSINESS CASE CHALLENGE 2024

Austrian 

COMPANY ANALYSIS: INTRODUCTION

Website:
<https://www.austrian.com>

Industry:
Passenger Airlines

Employee Count:
6121

Fleet Size:
67

Austrian Airlines is Austria's largest airline, with 130 destinations worldwide and 11.1 million passengers

Alliance:
Star Alliance

Parent Company:
Deutsche Lufthansa AG

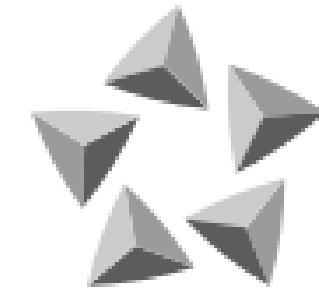
CHALLENGE TO SOLVE:

The overwhelming majority of air travelers state that sustainability is important to them, but currently, only about 3.5% are willing to pay for a flight with less CO₂.

BUSINESS CASE STEPS:

- Description and evaluation** of approaches by other Airlines focusing on voluntary contributions to sustainable products
- Develop strategic recommendations** for Austrian Airlines to encourage customers to reduce CO₂
- Develop business model** for Austrian Airlines to achieve CO₂ reduction goals through Sustainable Aviation Fuels (SAF)

STAR ALLIANCE & DEUTSCHE LUFTHANSA AG



STAR ALLIANCE



Star Alliance is the world's largest airline alliance, holding a 17.4% market share. Lufthansa and Austrian Airlines joined the alliance in 1997 and 2000, respectively.



Austrian Airlines is a subsidiary of Deutsche Lufthansa AG, which operates a comprehensive network of airlines across Europe. Austrian Airlines joined Lufthansa after acquisition in 2009



MILES & MORE



Miles & More is a loyalty program offered by several European airlines, primarily led by Lufthansa Group. It's one of the largest frequent flyer programs in Europe, boasting a wide range of partners across various industries including Austrian Airlines

Earn miles and points with over 35 airlines, as well as for hotel and rental car bookings.



Flight reward, upgrade reward, one-way flight reward, children's flight reward, early bird flight reward

The **Mindfulflyer page** in the Miles & More app allows passengers to calculate and offset their CO₂ footprint using award miles, supporting climate-related sustainability projects

Contributes to the additional costs and research of Sustainable Aviation Fuel (SAF)

Cash&Miles rewards with partners

Select projects from "myclimate" to promote measurable climate protection initiatives

Starting 500M for the first time log in

Earn a digital badge for offsetting a flight for the first time and a "Mindfulflyer" badge for offsetting all your flights throughout the entire year

Instant access to the service card and client number for purchasing with partners

BUSINESS CASE CHALLENGE 2024

Austrian

KEY PARTNERS	KEY ACTIVITIES	VALUE PROPOSITIONS	CUSTOMER RELATIONSHIPS	CUSTOMER SEGMENTS
<ul style="list-style-type: none"> Shareholders: Austrian Airlines is a subsidiary of the Lufthansa Group, which holds 100% of its shares. Industry Partners: As part of the Lufthansa Group, Austrian Airlines collaborates closely with Lufthansa, Swiss International Air Lines, Brussels Airlines, and Eurowings. Equipment Manufacturers: Key suppliers include aircraft manufacturers like Airbus and Boeing, engine manufacturers like Rolls-Royce and Pratt & Whitney. Land Owners: Partnerships with airport authorities and service providers, particularly at their hub in Vienna International Airport. 	<ul style="list-style-type: none"> Flight Operations: Operating scheduled passenger and cargo flights across Europe and international destinations. Fleet Management: Maintenance, repair, and overhaul activities Customer Service: Providing booking, check-in, in-flight, and post-flight services. Marketing and Sales: Promoting flights and services through various channels to attract and retain customers. Safety and Compliance: Ensuring all operations adhere to aviation regulations and safety standards. 	<ul style="list-style-type: none"> Reliable and Extensive Network: A broad range of destinations within Europe and international flights. Quality Service: High standards of in-flight service and customer care. Part of Lufthansa Group: Benefits from the extensive network and resources of the Lufthansa Group. Austrian Hospitality: Emphasis on showcasing Austrian culture and hospitality on their flights. 	<ul style="list-style-type: none"> Personalized Service: Tailored services for different customer segments, including business and leisure travelers. Loyalty Programs: Frequent flyer programs like Miles & More. Customer Support: Multichannel support including online, phone, and in-person at airports 	<ul style="list-style-type: none"> Business Travelers: Individuals traveling for business purposes who require flexibility and premium services Leisure Travelers: Individuals and families traveling for holidays and personal reasons Cargo Customers: Businesses needing to transport goods quickly and efficiently
				<h2 data-bbox="2419 1879 3724 1987">COMPANY ANALYSIS</h2>

COMPANY ANALYSIS: SUSTAINABILITY GOALS



Lufthansa Group aims to reduce CO2 intensity **by 30.6% from 2019 to 2030**

Austrian Airlines has set a target to cut net CO2 emissions **by 50% by 2030**, compared to 2019 levels

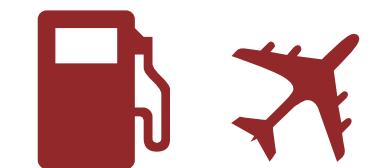
Austrian Airlines is committed to achieving **carbon-neutral operations by 2050**



Austrian Airlines collaborates with OMV on the initiative **ReOil®**. Flight attendants collect used plastic cups and other single-use plastic items from passengers. The OMV ReOil® pilot plant at the Schwechat refinery utilizes a globally patented 'Made in Austria' technology. This technology employs a thermolysis process to convert plastics extracted from crude oil into pyrolysis oil



According to the renewal programme older aircraft are being replaced by quieter aircraft. An Airbus A320neo is **50% quieter** on take-off and Boeing 787-9 **uses 20% less fuel**. The existing fleet is also being optimised to reduce noise, such as the installation of vortex generators on all Airbus 320 and 321 aircraft



Since 2022, passengers can choose to **offset the CO2 emissions** of their individual flight by purchasing sustainable fuel (SAF), supporting climate projects or a mix of both options (offset program)



Since 2020, the Lufthansa Group in Austria has exclusively purchased **green electricity**

BUSINESS ENVIRONMENT LATEST TRENDS

SUSTAINABILITY AND ENVIRONMENT

- Constantly increasing adoption and investment in SAF (Sustainable Aviation Fuel) to reduce carbon emissions. Airlines are partnering with fuel producers to reduce the costs of production
- Carbon offset programs are implemented to allow passengers to compensate for their travel emissions
- Initiatives to reduce waste and improve recycling alongside with enhancing energy efficiency in ground operations and facilities

PASSENGER EXPERIENCE

- Personalization of the services on board, customized travel offers and meal preferences
- Increasing in-flight connectivity with expansion of high-speed in-flight Wi-Fi and entertainment system

OPERATIONAL EFFICIENCY

Modernization of the fleet with more fuel-efficient aircraft

BUSINESS ENVIRONMENT

STRENGTHS

- Being a subsidiary of Lufthansa it is associated with a strong brand name
- Deutsche Lufthansa AG owns shares in many companies and hence has a steady financial inflow
- With a fleet size of nearly 70 Austrian Airlines provides services to around 130 destinations all over the world
- Strong brand presence across Europe

WEAKNESSES

- Financial or operational problems faced by the airline after the latest economic disturbances
- Since its a subsidiary of Lufthansa, all strategic and administrative decisions cannot be taken by Austrian Airlines fully independently
- Restricting the company may result in increase in fares

OPPORTUNITIES

- Leverage association with Brand Lufthansa as financial support has been approved by Lufthansa for restructuring
- Expand services to South American and Australian markets
- More brand awareness through advertising and increasing destinations

THREATS

- Strong competition in the saturated European market
- Increasing cost of aviation fuel
- Government regulations and taxes may affect financials to a large extent

BUSINESS ENVIRONMENT

Political	Economic	Social
<ul style="list-style-type: none"> Geopolitical Instability: closed Russian sky for European airlines - longer routes to Asian destinations Additional policies on emissions and sustainability (target of at least 55% net reduction in greenhouse gas emissions by 2030). 	<ul style="list-style-type: none"> Fuel Prices (Constantly increasing oil prices) Exchange rates (Consumer demand in the developing countries, especially Turkey) 	<ul style="list-style-type: none"> Travel Trends (Increasing demand for responsible travelling together with protests against mass tourism) Cultural Factors (Shifting from European destinations to Asian)
Technological	Environmental	Legal
<ul style="list-style-type: none"> Automation and AI: Implementing automated tools and artificial intelligence to enhance customer interactions and develop more efficient systems Innovation in Aircraft: difficulties in Boeing's operations, improvements in engine fuel efficiency 	<ul style="list-style-type: none"> Climate Change: Increasing pressure to reduce carbon emissions and adapt to changing weather patterns, which impact daily operations Noise Pollution: Adhering to regulations on noise pollution in residential areas near airports 	<ul style="list-style-type: none"> Aviation Laws: Compliance with international and national regulations governing air travel Environmental Regulations: Adherence to laws aimed at reducing environmental impact, including emissions and noise pollution Data Protection: Ensuring compliance with GDPR in the EU to safeguard customer information. Labor Laws: Observing employment regulations related to pilots and crew working hours.

APPROACHES OF OTHER AIRLINES



- **Conscious Choices Program:** Rewards passengers with Etihad Guest Tier miles for making sustainable choices
- **Carbon Emissions Offsetting:** Partnering with CarbonClick to support climate-related projects and offset carbon emissions
- **Etihad Greenliner Program:** Launched in 2019 to collaborate with corporations on developing sustainable products for all operational steps, including bottle recycling with DGrade and an MOU with WorldEnergy

- **EasyJet Holidays Sustainable Tourism Program:** Aims to make sustainable travel to tourist destinations more affordable
- **Engaging the Next Generation:** Conducting public lectures at schools and universities to educate about sustainability in the aviation industry

- **Carbon Offsetting Program:** Partnering with "Choose," a global climate technology company, to offset carbon emissions
- **"Leave Less" Program:** Designed for corporate customers, allowing them to customize their use of Sustainable Aviation Fuel (SAF), carbon offsets, or a combination of both

- **Flight100:** The world's first transatlantic flight by a commercial airline powered entirely by Sustainable Aviation Fuel (SAF). This milestone is part of a marketing campaign to promote sustainable flying practices.
- **Single-Use Plastic Reduction:** Achieving a 90% reduction in single-use plastics for inflight items.

APPROACHES OF OTHER AIRLINES

AIR CANADA YTO → YOW | Juli 01 - Juli 08 | 18 | Ändern

Überprüfen Passagiere Sitzplätze 4. Zahlung

Guest information

Extras
Make your flight even better with extras like seats, baggage and more.

- Choose your seat
- Add extra baggage Up to 65% off
- Add Priority Access
- Add Lounge Access
- Give back before you take off

Back Continue without extras

Air Canada and Etihad do not have any information about environmental actions during the tickets purchasing

Ryanair provides a bald description about CO2-emissions on the last step of tickets purchasing

Austrian Airlines provides possible options on the last step of tickets purchasing with an non-flexible system

Jeder Fluggast auf diesem Flug setzt durchschnittlich 66 g CO₂-Emissionen pro km frei. Kompensieren Sie Ihre CO₂-Emissionen mit einem unserer Umweltpartner. Weitere Informationen

Ihre geschätzten CO₂-Emissionen pro Fluggast für diesen Flug betragen **286 kg CO₂**

Kompensieren Sie Ihren geschätzten Anteil an CO₂-Emissionen für diesen Flug **Hinzufügen €6,87 pro person**

Kompensieren Sie teilweise Ihren geschätzten Anteil an CO₂-Emissionen für diesen Flug **Hinzufügen €2,00 pro person**

Fly more sustainably

Learn more about sustainable flying

The CO₂ emissions of 1 person come to 682.782 kg for the entire flight.

Climate Projects package EUR 11.20 for all passengers	Combined package EUR 55.96 for all passengers
<ul style="list-style-type: none"> ✓ 100 % offset of your flight CO₂ emissions through contributions to climate protection projects <p><input type="checkbox"/> More about climate protection projects</p> <p>SELECT PACKAGE</p>	<p>Our recommendation</p> <ul style="list-style-type: none"> ✓ 90 % offset of your flight CO₂ emissions through contributions to climate protection projects ✓ 10 % CO₂ emissions reduction by the use of Sustainable Aviation Fuel (SAF) <p><input type="checkbox"/> More about the mix</p> <p>SELECT PACKAGE</p>

WHAT DO OTHER INDUSTRIES OFFER

Oil & Gas industry



BP Target Neutral - The program educates customers on reducing their carbon footprint by utilizing cleaner fuels. Users can calculate emissions, receive advice on energy efficiency, adopt cleaner technologies, and explore strategies to minimize carbon footprints. After calculating and reducing emissions, participants can offset their remaining carbon footprint by purchasing carbon credits through BP Target Neutral. These credits support projects aimed at reducing or capturing an equivalent amount of greenhouse gas emissions.



Shell provides a mobile application featuring the Shell Go+ loyalty program, offering discounts and bonus rewards for purchases at Shell stations. Clients can enjoy discounts and bonuses of up to 10% on fuel purchases, including sustainable options like Shell V-Power.



Since 1991, **Sweden** has provided tax exemptions of up to 20% for pure and high-blend biofuels. Fuels such as E85, ED95, biodiesel, and renewable diesel (HVO) are eligible for tax exemption in Sweden until 2026.

BUSINESS CASE CHALLENGE 2024

Construction industry



Energie Investeringsaftrek (EIA) - The Netherlands government has initiated a program to bolster sustainable construction efforts. Through this tax relief program, businesses can deduct 40% of the investment costs for energy-saving equipment and sustainable energy from their taxable profits.



Zero-Interest Eco-Loan (Eco-PTZ) - Homeowners have the opportunity to borrow up to €30,000 for energy renovation work at zero interest. This loan can be repaid over a maximum period of 15 years, tailored to the scope of the renovation project.



KfW Energy-Efficient Construction: It offers low-interest loans of up to €120,000 per unit for eligible new buildings that meet stringent energy efficiency standards.

Austrian

KEY TAKEAWAYS FROM OTHER SUSTAINABILITY PROGRAMS

Passengers' Sustainability Involvement Policies

STRENGTHS

- **Education Initiatives:** Companies such as BP, through its "Target Neutral" program, and EasyJet, with its outreach through public lectures in schools, utilize education programs including online calculators and information about energy efficiency
- **Loyalty Incentives:** Programs like "Shell Go+" and Etihad's "Conscious Choices Program" offer enticing bonuses and rewards, up to 10% of purchases, for patrons who make sustainable choices
- **Financial Support for Sustainability:** Governments in countries such as Sweden and Germany offer tax reductions and low-interest loans to support sustainability-related projects, particularly in industries like oil and construction
- **Carbon Offsetting Opportunities:** Carbon offsetting programs, exemplified by initiatives from AirCanada and EasyJet, provide individuals with a tangible means to mitigate their carbon emissions

SHORTCOMINGS

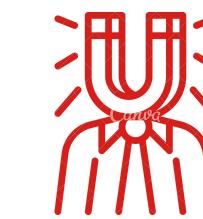
- **Insufficient Pre-Purchase Information:** Traditionally, companies like BP or Etihad tend to focus their sustainability efforts on existing customers post-purchase, rather than providing ample information beforehand
- **Challenges in Accessing Sustainability Information:** Consumers often encounter difficulties accessing relevant sustainability reports or navigating sustainability pages on company websites. This lack of transparency hampers informed decision-making and undermines efforts to promote sustainable practices. Information about offsetting prices is usually located on the last purchasing steps or is not presented at all. Many customers do not reach information about sustainability policies.
- **Limited Loyalty Incentives for Sustainable Products:** There is a notable absence of loyalty incentives tied to sustainability products. Only a few sustainability offerings are integrated into loyalty systems, which fails to incentivize customers to adopt more sustainable choices

OUR PROPOSAL

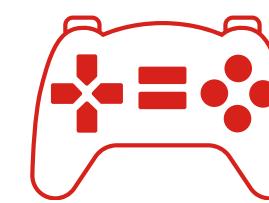
Sustainable game application with cashback motivation



Customers need to be educated properly about sustainable traveling



People learn better through interactive games and when they have tangible incentives. By combining gamification with a financial incentive system, we can effectively educate and attract more people to sustainable flights. This approach not only makes learning enjoyable but also motivates participants to engage with and commit to sustainable practices.



Gamification to attract customers' attention in combination with financial incentives may solve the tasks to promote sustainable traveling



Motivating Customers to Gain Knowledge and Engage in Sustainability Efforts



Passengers often have considerable downtime while waiting for departure and during flights, which they typically spend playing games, watching films, or sleeping. We can utilize part of this time to educate them through engaging, game-based learning

GREEN HUB AIRPORT

The concept of sustainable airport of the future.

Main aim: to educate users about sustainable traveling and to convince more people to participate in emission reduction programs through gamification.

We offer a **game**, which is styled as sustainable future with carbon neutral airport

During the play, gamers will get general information about sustainable traveling and advises regarding their own impact in our green future.



Play mini-games to spend time, gain knowledge about sustainability and get bonus points

Moreover, users will be motivated to participate in sustainable projects by additional cashback for their purchases

Miles accumulated



User level of Sustainability

Latest sustainability news that the user can browse and the list of in-game tasks



Mini-game associated with sustainable flying practices



Useful interface links including settings, user profile, rating system, etc.

WHAT IS INSIDE



The player opens an application to construct a sustainable airport, progressing through various levels of challenges and objectives.

To progress to the next level, players will engage in casual mini-games including:

- A match-three game themed around airport sustainability.
- A game simulating the role of a flight attendant, where players must quickly match passengers with their food within a limited timeframe, reminiscent of the gameplay in Piano Tiles.

Throughout the games, players will encounter sustainability tips aimed at educating them about Sustainable Aviation Fuel (SAF), carbon offsetting, and green initiatives.

Example for the Objectives of a sustainable traveller:

- Purchase your first SAF ticket
- Arrive for your flight with luggage weighing no more than 50% of the permitted limit.
- Arrive at the airport using environmentally friendly modes of transportation

Users can be categorized into groups based on their contributions to sustainable projects and earn achievements for actively participating in carbon reduction efforts.

As users progress through game levels, they can earn bonuses (additional miles) that can be redeemed to lower the cost of Sustainable Aviation Fuel (SAF) flights.

Moreover, registered players will have the opportunity to receive a cashback of 1%, 1.5% or 2% on orders that offset emissions or utilize Sustainable Aviation Fuel (SAF) depending on the client group.



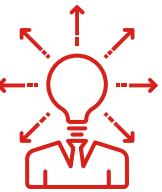
WHY IT IS BETTER? //



Sustainability initiatives should be presented interactively since many individuals may not encounter sustainability issues directly and thus may not initially be interested in green projects or understand how they can contribute.



Gamifying education is effective in capturing people's attention and maintaining their focus on the material.



Games will raise awareness about sustainable travel among people, while the cashback system will incentivize customers to utilize more sustainable services.



The application can significantly boost brand recognition. Users who enjoy the games and acquire new knowledge are likely to recommend the app to their friends. Consequently, this will attract new customers to try out Austrian Airlines' services.

Business aims of the application:

1. Promote awareness of sustainable flying practices
2. Illustrate the importance of sustainability
3. Demonstrate how individuals can contribute positively
4. Encourage responsible flight behavior

Customer has two motivations to get back to application:

1. Long-term: Reach the highest level and engage in friendly competition with other community members.
2. Short-term: Unwind by playing mini-games and earn bonuses along the way.

MODEL ASSUMPTIONS //

	Base case	Positive case	Negative case
Yearly passenger growth rate	6%	7%	3%
Yearly growth rate of revenue per passenger	1%	2%	0,5%
Yearly EBIT per passenger growth rate	3%	3%	3%
Hours to develop app	1600	1600	1600
Hourly costs for development	50	40	70
App development costs	120 000	104 000	152 000
Percentage of last year sustainable passengers, who decided to join app this year	20%	25%	15%
Technological improvement of emissions reduction	8%	10%	5%

- Passenger growth rate is determined based on **data from Statista**.
- From annual and sustainability reports, we derived the average distance traveled by one passenger (*1540 kilometers per year*) and the carbon emissions per thousand passenger kilometers (*0.106 tons of CO2 per year*).
- We anticipate a yearly decrease in CO2 emissions per passenger, driven by **advancements in technology**
- **App development costs** and related expenses were derived from multiple sources providing information on app development.
- We anticipate moderate growth in both the company and airline industry. We have adopted **conservative assumptions regarding revenue and EBIT** development.
- We project a duration of **five years** for the project. Beyond this period, the application and its technologies are likely to become outdated.
- **After three years**, the efficiency of the app is expected to decline.

MODEL RESULTS //

- The model considers three groups of app users: those who **offset emissions**, those who **pay for Sustainable Aviation Fuel (SAF)**, and those who **exclusively use in-app bonuses**. Each group receives respective cashbacks of **1%, 1.5%, and 2%**.
- The assumptions regarding project duration and efficiency suggest **changes in retention rates** and the number of new users attracted.
- The average revenue per passenger and average EBIT** for the future forecast were computed using the annual reports of Austrian Airlines from 2018, excluding the years affected by COVID-19.
- The primary profit generator** of the project is the attraction of new customers to Austrian Airlines.
- Since the main objective of the project is to **increase the number of sustainable passengers** and achieve the **sustainability goals**, we have also projected the share of the sustainability passengers (who perform offsetting or SAF-related operations) and CO2 emissions in each scenario.

	Base scenario									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Total Passengers per year	11 142 000	13 857 000	14 734 000	15 618 040	16 555 122	17 548 430	18 601 336	19 717 416	20 900 461	
Sustainable passengers			515 690	679 679	853 508	1 037 767	1 228 430	1 331 947	1 420 774	
Sustainable passengers %			3,5%	4,4%	5,2%	5,9%	6,6%	6,8%	6,8%	
Average revenue per passenger EUR	€ 167,05	€ 168,78	€ 170,46	€ 172,17	€ 173,89	€ 175,63	€ 177,39	€ 179,16	€ 180,95	
Average EBIT per passenger EUR	€ 0,27	€ 0,34	€ 0,48	€ 0,49	€ 0,51	€ 0,52	€ 0,54	€ 0,56	€ 0,57	
New users from existing customers, who offset emissions	-		82 510	135 936	170 702	166 043	157 239	149 178		
New users from existing customers, who pay for SAF	-		20 628	33 984	42 675	41 511	39 310	37 295		
New users, who only use bonuses from games	-		7 809	8 278	8 774	4 650	4 929	5 225		
Retention rate	-		30%	30%	30%	30%	20%	20%		
New users %			1,00%	1,00%	1,00%	1,00%	0,50%	0,40%		
New external users	-		163 989	173 829	184 259	190 664	103 516	88 827		
Total Users of app	-		267 127	423 887	524 802	555 658	411 197	357 539		
Application design	€ 15 000	€ -	€ -	€ -	€ -	€ -	€ -	€ -	€ -	
Application development and testing	€ 80 000	€ -	€ -	€ -	€ -	€ -	€ -	€ -	€ -	
Cybersecurity	€ 25 000	€ -	€ -	€ -	€ -	€ -	€ -	€ -	€ -	
Initial investment in app development	€ 120 000	€ -	€ -	€ -	€ -	€ -	€ -	€ -	€ -	
Cashback costs for New users from existing customers, who offset emissions	€ -	€ 142 058	€ 236 380	€ 299 803	€ 294 537	€ 281 710	€ 269 940			
Cashback costs for New users from existing customers, who pay for SAF	€ -	€ 53 272	€ 88 643	€ 112 426	€ 110 451	€ 105 641	€ 101 228			
Cashback costs for New users, who only use bonuses from games	€ -	€ 26 889	€ 28 788	€ 30 820	€ 16 498	€ 17 663	€ 18 910			
Cashback for new external customers	€ -	€ 310 574	€ 332 500	€ 355 975	€ 372 032	€ 204 006	€ 176 807			
Maintenance costs	€ -	€ 60 000	€ 24 000	€ 24 000	€ 24 000	€ 24 000	€ 40 000			
Marketing costs	€ 50 000	€ 40 000	€ 40 000	€ 40 000	€ 30 000	€ 20 000	€ 10 000			
Total App costs	-€ 170 000	€ 632 792	€ 750 311	€ 863 024	€ 847 519	€ 653 020	€ 616 885			
Added value to EBIT	€ -	€ 810 764	€ 885 192	€ 966 452	€ 1 030 050	€ 576 019	€ 509 107			
Unexpected expenses	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000			
Inflation	8%	7,7%	3,6%	2,8%	2,6%	2,4%	2,2%	2,0%	2,0%	
Total	-€ 190 000	€ 153 669	€ 108 920	€ 77 245	€ 147 246	-€ 86 156	-€ 111 266			
Emissions	1 841 522	2 279 854	2 424 144	2 281 721	2 193 599	2 090 457	1 971 142	1 841 243	1 690 879	

	Positive scenario									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Total App costs	-€ 154 000	€ 814 234	€ 1 012 560	€ 1 206 813	€ 1 296 832	€ 1 229 592	€ 1 215 204			
Added value to EBIT	€ -	€ 1 062 171	€ 1 170 619	€ 1 290 139	€ 1 421 862	€ 1 276 843	€ 1 407 209			
Unexpected expenses	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000			
Inflation	8%	7,7%	3,6%	2,8%	2,6%	2,4%	2,2%	2,0%	2,0%	
Total	-€ 174 000	€ 221 729	€ 130 895	€ 58 633	€ 95 154	€ 24 204	€ 149 778			
Emissions	1 841 522	2 279 854	2 447 013	2 269 359	2 139 627	1 986 789	1 808 081	1 603 896	1 366 288	

	Negative scenario									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Total App costs	-€ 202 000	€ 272 495	€ 243 973	€ 268 367	€ 293 709	€ 277 856	€ 245 859			
Added value to EBIT	€ -	€ 390 193	€ 413 955	€ 439 165	€ 465 910	€ 258 911	€ 274 679			
Unexpected expenses	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000			
Inflation	8%	7,7%	3,6%	3,4%	3,2%	3,0%	2,8%	2,6%	2,4%	
Total	-€ 222 000	€ 95 037	€ 142 200	€ 139 622	€ 137 888	-€ 34 591	€ 7 680			
Emissions	1 841 522	2 279 854	2 401 275	2 275 905	2 213 270	2 145 905	2 073 569	2 000 187	1 920 884	

KEY TAKEAWAYS FROM THE MODEL

	Base case	Positive case	Negative case
NPV	99 658	506 394	265 837
Break-even year	2026	2025	2026
Emissions reduced compared to 2019	-31.3%	-44.5%	-21.9%

- While profitability is not our primary focus, the project **proves to be profitable through the attraction of new customers** to Austrian Airlines with the help of the app, aligning with our overarching goal of achieving sustainability.
- The project will contribute significantly to achieving sustainability goals by educating and motivating customers to embrace sustainable travel practices. In the base scenario, Austrian Airlines **reduces CO2 emissions by 30% by 2030**.
- By 2030, the project aims to increase the participation of passengers in sustainable travel to **6.8%**, nearly double the current levels.

SUSTAINABILITY KPIs

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



Environmental

Sustainable consumption and production (SDG Target 12): significant reduction in fossil fuel consumption, replaced by Sustainable Aviation Fuel (SAF), thereby contributing to the reduction of CO2 emissions by approximately 30% from the base scenario

Social

Promoting a shift in social preferences towards carbon offsetting, Sustainable Aviation Fuel (SAF) utilization, and flights with lower CO2 emissions

Governance

Enhancing the aviation loyalty program industry by incentivizing sustainable travel through the inclusion of bonus loyalty miles. Achieving emission reduction targets for 2030 and net-zero emissions by 2050 through customer-driven demand shifts.

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**Thank you for the
attention!**

BUSINESS CASE CHALLENGE 2024

Austrian 

APPENDIX

Positive scenario

	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Passengers per year	11 142 000	13 857 000	14 873 000	15 914 110	17 028 098	18 220 065	19 495 469	20 860 152	22 320 363
Sustainable passengers %		3,5%		4,6%		5,7%		6,6%	
Sustainable passengers		520 555		735 395		965 275		1 211 246	
Average revenue per passenger EUR	€ 167,05	€ 168,78	€ 172,15	€ 175,60	€ 179,11	€ 182,69	€ 186,34	€ 190,07	€ 193,87
Average EBIT per passenger EUR	€ 0,27	€ 9,14	€ 4,80	€ 4,94	€ 5,09	€ 5,25	€ 5,40	€ 5,56	€ 5,73
Offset group users		-	104 111	176 495	231 666	242 249	235 910	204 468	
SAF group users		-	26 028	44 124	57 916	60 562	58 977	51 117	
Bonus group users		-	15 914	17 028	18 220	19 495	20 860	22 320	
Retention rate		-	30%	30%	30%	30%	20%	20%	
New users %		1,25%		1,25%		1,25%		1,00%	
New users		-	214 840	229 879	245 971	263 189	229 462	245 524	
Total Users of app		-	344 979	553 992	701 751	776 526	679 654	637 039	
Application design	€ 15 000,00		-	-	-	-	-	-	
Application development and testing	€ 64 000,00		-	-	-	-	-	-	
Cybersecurity	€ 25 000,00		-	-	-	-	-	-	
Initial investment in app development	€ 104 000,00		-	-	-	-	-	-	
Cashback costs for group 1	€ -	€ 182 814,30	€ 316 115,60	€ 423 229,67	€ 451 415,33	€ 448 393,91	€ 396 404,69		
Cashback costs for group 2	€ -	€ 68 555,36	€ 118 543,35	€ 158 711,13	€ 169 280,75	€ 168 147,72	€ 148 651,76		
Cashback costs for group 3	€ -	€ 55 888,94	€ 60 997,19	€ 66 572,34	€ 72 657,05	€ 79 297,90	€ 86 545,73		
Cashback for new users	€ -	€ 414 975,41	€ 452 904,16	€ 494 299,60	€ 539 478,58	€ 479 752,31	€ 523 601,67		
Maintenance costs	€ -	€ 52 000,00	€ 24 000,00	€ 24 000,00	€ 24 000,00	€ 24 000,00	€ 40 000,00		
Marketing costs	€ 50 000,00	€ 40 000,00	€ 40 000,00	€ 40 000,00	€ 40 000,00	€ 30 000,00	€ 20 000,00		
Total App costs	-€ 154 000	€ 814 234	€ 1 012 560	€ 1 206 813	€ 1 296 832	€ 1 229 592	€ 1 215 204		
Added value to EBIT	€ -	€ 1 062 171	€ 1 170 619	€ 1 290 139	€ 1 421 862	€ 1 276 843	€ 1 407 209		
Unexpected expenses	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000		
Inflation	8%	7,7%	3,6%	2,8%	2,6%	2,4%	2,2%	2,0%	2,0%
Total	-€ 174 000	€ 221 729	€ 130 895	€ 58 633	€ 95 154	€ 24 204	€ 149 778		
Emissions	1 841 522	2 279 854	2 447 013	2 269 359	2 139 627	1 986 789	1 808 081	1 603 896	1 366 288

Positive scenario results

APPENDIX

Negative scenario

	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Passengers per year	11 142 000	13 857 000	14 595 000	15 032 850	15 483 836	15 948 351	16 426 801	16 919 605	17 427 193
Sustainable passengers %		3,5%		3,9%		4,3%		4,7%	
Sustainable passengers		510 825		589 747		671 038		754 766	
Average revenue per passenger EUR	€ 167,05	€ 168,78	€ 169,62	€ 170,47	€ 171,32	€ 172,18	€ 173,04	€ 173,90	€ 174,77
Average EBIT per passenger EUR	€ 0,27	€ 9,14	€ 4,80	€ 4,94	€ 5,09	€ 5,25	€ 5,40	€ 5,56	€ 5,73
Offset group users		-	61 299	70 770	80 525	90 572	87 465	71 003	
SAF group users		-	15 325	17 692	20 131	22 643	21 866	17 751	
Bonus group users		-	3 758	3 871	3 987	4 107	4 230	4 357	
Retention rate		-	20%	20%	20%	20%	15%	15%	
New users %		0,50%	0,50%	0,50%	0,50%	0,50%	0,25%	0,25%	
New users		-	78 922	81 290	83 729	86 241	46 529	47 925	
Total Users of app		-	155 546	200 861	224 557	244 367	192 515	165 556	
Application design	€ 15 000,00		-	-	-	-	-	-	
Application development and testing	€ 112 000,00		-	-	-	-	-	-	
Cybersecurity	€ 25 000,00		-	-	-	-	-	-	
Initial investment in app development	€ 152 000,00		-	-	-	-	-	-	
Cashback costs for group 1	€ -	€ 104 495,77	€ 121 243,57	€ 138 645,43	€ 156 724,66	€ 152 104,69	€ 124 094,24		
Cashback costs for group 2	€ -	€ 39 185,91	€ 45 466,34	€ 51 992,04	€ 58 771,75	€ 57 039,26	€ 46 535,34		
Cashback costs for group 3	€ -	€ 12 813,17	€ 13 263,56	€ 13 729,77	€ 14 212,37	€ 14 711,94	€ 15 229,06		
Cashback for new users	€ -	€ 147 992,14	€ 153 194,06	€ 158 578,83	€ 164 152,88	€ 89 007,21	€ 92 135,81		
Maintenance costs	€ -	€ 76 000,00	€ 24 000,00	€ 24 000,00	€ 24 000,00	€ 24 000,00	€ 40 000,00	€ 40 000,00	
Marketing costs	€ 50 000,00	€ 40 000,00	€ 40 000,00	€ 40 000,00	€ 40 000,00	€ 30 000,00	€ 20 000,00		
Total App costs	-€ 202 000	€ 272 495	€ 243 973	€ 268 367	€ 293 709	€ 277 856	€ 245 859		
Added value to EBIT	€ -	€ 390 193	€ 413 955	€ 439 165	€ 465 910	€ 258 911	€ 274 679		
Unexpected expenses	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	€ 20 000	
Inflation	8%	7,7%	3,6%	3,4%	3,2%	3,0%	2,8%	2,6%	2,4%
Total	-€ 222 000	€ 95 037	€ 142 200	€ 139 622	€ 137 888	-€ 34 591	€ 7 680		
Emissions	1 841 522	2 279 854	2 401 275	2 275 905	2 213 270	2 145 905	2 073 569	2 000 187	1 920 884

Negative scenario results