



# European and North American Airlines Green Marketing Initiatives

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## Overview

The purpose of this paper is to document and analyze the airline industry's green marketing initiatives. In this research we focused on the 15 largest European and North American airlines based on scheduled passenger carried in 2007. The largest EU and US airlines in order are:

1. Southwest Airlines (101,947,800 passengers)
2. American Airlines (98,143,374 passengers)
3. Air France-KLM (73,670,900 passengers)
4. Delta Air Lines (73,034,691 passengers)
5. United Airlines (67,430,677 passengers)
6. Lufthansa (54,150,800 passengers)
7. Northwest Airlines (51,854,072 passengers)
8. Ryanair (49,000,000 passengers)
9. Continental Airlines (48,975,698 passengers)
10. US Airways (42,198,717 passengers)
11. easyJet (38,200,000 passengers)
12. British Airways (33,470,400 passengers)
13. Air Canada (33,000,000 passengers)
14. Iberia (26,422,800 passengers)
15. Scandinavian Airlines (25,402,600 passengers)

This information was gathered from the US Bureau of Transportation Statistics, Association of European Airlines, European Low Fares Airline Association and Air Canada's 2007 financial statements.

## Research Methodology

Several different sources were reviewed and researched to collect data about the 15 largest European and North American airlines' green initiatives. To get a wide snapshot, wherever

Airline	Publisher 1	Publisher 2
Southwest Airlines	Credit Suisse North America	JPMorgan
American Airlines	Credit Suisse North America	JPMorgan
Air France-KLM	Oppenheim Research GmbH	Société Générale
Delta Air Lines	Credit Suisse North America	JPMorgan
United Airlines	Credit Suisse North America	JPMorgan
Lufthansa	Oppenheim Research GmbH	Société Générale
Northwest Airlines	Credit Suisse North America	JPMorgan
Ryanair	Credit Suisse North America	JPMorgan
Continental Airlines	Credit Suisse North America	JPMorgan
US Airways	Credit Suisse North America	JPMorgan
easyJet	Société Générale	JPMorgan
British Airways	Société Générale	JPMorgan
Air Canada	RBC Capital Markets	TD New Crest
Iberia	ABN Amro Bank	Société Générale
Scandinavian Airlines	ABN Amro Bank	JPMorgan

Table 1 - Financial Analysis Publishers

possible our search extended from the years 2002 to 2008 (financial analyst reports were limited to the years 2006 to 2008). Each airline's annual reports were searched for the words "environment" and "sustainable" being used in an ecological context. Our research also included each airline's investors' communication and marketing materials. This included environment and sustainability reports, official blogs or websites dedicated to environmental topics, and investors' addendums whenever available. Business news sources and publications were searched using Factiva, an online search engine specialized in searching authoritative business news sources, for the following subjects: Environmental News, Environmental Protection Agency (USA), Climate Change, Sustainable Development, Environment Department, and Corporate Social Responsibility. Financial analyst reports for each airline were also searched for the words "environment" and "sustainable" being used in an ecological context. Our financial analysis report search was limited to only two publishers per airline. For a list of the publishers that were reviewed for each airline please refer to "Table 1 - Financial Analysis Publishers".



## Findings

Over 300 different green initiatives were found for the 15 largest European and North American airlines. These initiatives were categorized in 13 different categories. While an initiative might have fallen under several categories in this research only the most reasonable category was chosen for classification. The categories are:

1. Environmental Standards: Pollution Reduction
2. Extended Initiative
3. Hazardous Waste Management
4. Information Disclosure
5. Operating Assets Upgrade: Costs
6. Operating Assets Upgrade: Environment
7. Reduce, Reuse, Recycle
8. Streamlining Operations: Costs
9. Streamlining Operations: Environment
10. Support Environmental Organizations
11. Support Environmental Research
12. Training
13. Other

## Environmental Standards: Pollution Reduction

Initiatives classified as “Environmental Standards: Pollution Reduction” can be described as pledges, standards, goals, membership in bodies, and management systems that are aimed at reducing pollution. Examples of this category include:

- Lufthansa CityLine EMAS II and ISO 14001 certification (Lufthansa, 2004)
- Air France-KLM signing the Environmental Summit Convention (Air France KLM, 2008)
- Iberia being part of Dow Jones Sustainability Index (Iberia)

## Extended Initiative

Initiatives classified as “Extended Initiative” can be described as initiatives that go beyond the researched airline and typically include one or several external organizations. Examples of this category include:

- KLM and the Netherlands Rail operator, NS, agreement to give KLM employees a discount for their daily journeys to Schiphol in order to reduce road transport (AirFrance KLM, 2005).
- Iberia in cooperation with the Fundación Biodiversidad and the Spanish Ministry of Environment, a number of graphic designs for a Sustainable Tourism campaign were developed, placing these designs on all Iberia’s aircraft (Iberia).
- British Airways partnering with Forum for the Future, ABTA, and the transport and tourism industry in a project to develop a high level vision and strategy for a sustainable outbound tourism industry (British Airways, 2008).

## Hazardous Waste Management

Initiatives classified as “Hazardous Waste Management” can be described as initiatives that facilitate the expulsion, management or reduction of hazardous waste produce by the airline, passengers or employees. Examples of this category include:

- Air Canada working closely with airports and de-icing operators to ensure run-off glycol is collected and disposed of in the most environmentally friendly way possible (Air Canada).
- Air France-KLM developing chromate-free paint (Air France-KLM, 2008).

## Information Disclosure

Initiatives classified as “Information Disclosure” can be described as initiatives where the airline manages, communicates or discloses to travelers, regulatory agencies, and governments information about the environment, airlines environmental initiatives, and their environmental footprint. This communication could be periodic or not. Examples of this category include:

- Corporate Responsibility Reports
- Emissions calculators
- Lufthansa showing "Living Planet - Fascinating Nature" on its long haul flights (Lufthansa, 2004)

## Operating Assets Upgrade: Costs

Initiatives classified as “Operating Assets Upgrade: Costs” can be described as initiatives where the airline periodically or non-periodically upgrades its operating assets with the primary intention of cutting costs. Examples of this category include:

- Fleet renewal
- Southwest airlines ground support equipment electrification (Southwest Airlines, 2008).

## Operating Assets Upgrade: Environment

Initiatives classified as “Operating Assets Upgrade: Environment” can be described as initiatives where the airline periodically or non-periodically upgrades its operating assets with the primary intention of helping the environment. Examples of this category include:

- Lufthansa Dish Wash 21: the development of new washing equipment to reduce use of water when washing (Lufthansa, 2006).

- Adding winglets to reduce noise and fuel
- easyJet outlining the environmental requirements that must be met by the next generation of short-haul super-clean aircraft; and unveiled its design of what such an aircraft could look like for operation by 2015 (easyJet).

## Reduce, Reuse, Recycle

Initiatives classified as “Reduce, Reuse, Recycle” can be described as initiatives which focus on reducing, reusing and/or recycling airplanes, airplane components or items used onboard an airplane or when servicing an airplane.

Examples of this category include:

- In-flight recycling programs
- American Airlines recycling retired aircraft by leasing or selling them to independent airlines, training schools and corporations (AMR Corporation, 2007).
- Air France-KLM frequent flyer program is gradually replacing plastic cards with cards based on natural starch from plants (Air France KLM, 2008).

## Streamlining Operations: Costs

Initiatives classified as “Streamlining Operations: Costs” can be described as initiatives where an airlines operations are improved or streamlined with the intention of cutting costs. Examples of this category include:

- Continental plan to have more than 800 at-home reservations agents, further reducing the number of employees who commute to work (Continental Airlines, 2007).
- Delta Airlines paperless mobile check-in (Delta Air Lines, 2008).



- United Airlines optimized approach to the transport of on-board potable water (United Airlines).

### Streamlining Operations: Environment

Initiatives classified as “Streamlining Operations: Environment” can be described as initiatives where an airline’s operations are improved or streamlined with the intention of helping the environment. Examples of this category include:

- United Airlines examining flight paths in search of the most fuel-efficient routes (United Airlines).
- easyJet avoiding congested hubs (easyJet).

### Support Environmental Organizations

Initiatives classified as “Support Environmental Organizations” can be described as initiatives where an airline partners or supports an environmental organization either through financial or non financial means. Examples of this category include:

- Lufthansa support for Frankfurt Zoological Society and International Crane Foundation (Lufthansa, 2008).
- Northwest Airlines Carbon Offset Program with Donations to the Nature Conservancy (Reuters, 2008).

### Support Environmental Research

Initiatives classified as “Support Environmental Research” can be described as initiatives where an airline partners with or supports environmental research organization either through financial or non financial means. Examples of this category include:

- Lufthansa support for environmental projects including CARIBIC and TBCplus (Lufthansa, 2008).
- Lufthansa joint research project LAnAB to reduce aircraft noise (Lufthansa, 2008).
- Air Canada support for the WheelTug research and development program by lending a B767 aircraft to conduct test trials (Air Canada).

### Training

Initiatives classified as “Training” can be described as initiatives where an airline provides its employees with training on the environment or environmental issues. Examples of this category include:

- Iberia training on environmental issues during 2005 included courses in the Airports and Maintenance & Engineering Departments on the new standard ISO 14001/2004, with a total of 348 hours (Iberia, 2005).
- Iberia 30 internal auditors of the company received a total of 60 hours environmental training, examining the main new legislation and any environmental aspect that required greater attention during these checks (Iberia).

### Other

Any environmental initiative that did not fall under any other category was classified as other. Only 8 initiatives were assigned to this category.



## The initiatives

In this section of the paper we will slice and dice the initiatives and look at them in different ways and as a whole to understand which airlines are doing the most and what the industry as a whole is focusing on.

Rank	Airline	#Initiatives	%Initiatives
1	Air France-KLM	51	16.72%
2	British Airways	49	16.07%
3	Lufthansa	42	13.77%
4	Iberia	31	10.16%
5	American Airlines	18	5.90%
6	Scandinavian Airlines	18	5.90%
7	United Airlines	17	5.57%
8	Southwest Airlines	14	4.59%
9	Northwest Airlines	14	4.59%
10	easyJet	14	4.59%
11	Continental Airlines	13	4.26%
12	Air Canada	11	3.61%
13	Delta Air Lines	9	2.95%
14	Ryanair	4	1.31%
15	US Airways	0	0.00%
		<b>100.00%</b>	

Table 2 - Green Initiatives Ranking

## Airlines with the Most Green Initiatives

The top four airlines with the most green initiatives are: Air France-KLM, British Airways, Lufthansa and Iberia. For the full ranking please refer to “Table 2 - Green Initiatives Ranking”. The top four airlines represent 57% of all the researched initiatives.

## Each Airlines’ Focus

When looking at each airline separately and seeing initiatives they implement, we see that some airlines specialize in certain categories over others. Air France-KLM focuses primarily on “Environmental Standards: Pollution Reduction” as 35% of its initiatives fall under this category. Lufthansa on the other hand focuses more on supporting environmental organizations and research with close to 50% of

	Environmental Standards: Pollution Reduction	Extended Initiative	Hazardous Waste Management	Information Disclosure	Operating Assets Upgrade: Costs	Operating Assets Upgrade: Environment	Reduce, Reuse, Recycle	Streamlining Operations: Costs	Streamlining Operations: Environment	Support Environmental Organizations	Support Environmental Research	Training	Other	Total
Southwest Airlines	2			2	2	1	2	1	1	3				14
American Airlines				1	1	5	6	2	2	1				18
Air France-KLM	18	3	1	3		6	5	2	4	4	4		1	51
Delta Air Lines	1					3	1			4				9
United Airlines	3			1				7	3	3				17
Lufthansa	8			3	3	4		2	1	13	7		1	42
Northwest Airlines				2	2	1	5			4				14
Ryanair						2		1					1	4
Continental Airlines	2			1	1		1	1	7					13
US Airways														0
easyJet	1			1		3		4	2	1			2	14
British Airways	3	2	1	2		4	18		6	6	7			49
Air Canada			1	1	1	3			1	1	2			11
Iberia	7	2	2	2		2	1		5		3	4	3	31
Scandinavian Airlines	4			3		2	3	1	2		3			18
<b>Total</b>	<b>49</b>	<b>8</b>	<b>5</b>	<b>21</b>	<b>10</b>	<b>31</b>	<b>47</b>	<b>22</b>	<b>34</b>	<b>40</b>	<b>26</b>	<b>4</b>	<b>8</b>	<b>305</b>

Table 3 - Breakdown of Initiatives per Airline Heat Map

Rank	Category	#Initiatives	%Initiatives
1	Environmental Standards: Pollution Reduction	49	16.07%
2	Reduce, Reuse, Recycle	46	15.08%
3	Support Environmental Organizations	40	13.11%
4	Streamlining Operations: Environment	34	11.15%
5	Operating Assets Upgrade: Environment	31	10.16%
6	Support Environmental Research	26	8.52%
7	Streamlining Operations: Costs	22	7.21%
8	Information Disclosure	21	6.89%
9	Operating Assets Upgrade: Costs	11	3.61%
10	Extended Initiative	8	2.62%
11	Other	8	2.62%
12	Hazardous Waste Management	5	1.64%
13	Training	4	1.31%
		<b>100.00%</b>	

Table 4 - Breakdown of the top 15 EU and US Airlines Initiatives



its initiatives falling under these two categories. British Airways environmental initiatives primarily fall under “Reduce, Reuse, Recycle” with 37% of its green initiatives falling under this category. Iberia is the only covered airline with initiatives that fall under “Training”. Our research did not reveal any green initiatives by US Airways. Overall the rest of the airlines’ initiatives seem to be almost evenly spread over three to eight categories.

### Industry’s Focus

We ranked the different categories based on the total number of initiatives that fall under that specific category. The top three categories are “Environmental Standards: Pollution Reduction”, “Reduce, Reuse, Recycle” and “Support Environmental Organizations”. These three categories represent 44% of the researched initiatives. “Hazardous Waste Management” and “Training” are the categories with the least amount of initiatives.

### European Airlines Vs North American Airlines

Our research included eight North American airlines and seven European airlines. The European airlines are ahead of the pack with the most number of environmental initiatives. Overall the European airlines are responsible for 69% of all the researched initiatives while North American airlines were responsible for only 31% of all the researched initiatives.

North American airlines had on average 12 green programs with none as a minimum and 18 as a maximum number of programs. On the other hand, European airlines had on average

around 30 programs with four as a minimum and 51 as a maximum number of programs.

European airlines green initiatives focus differs in some cases from that of their North American counterpart. European airlines main focus is “Environmental Standards: Pollution Reduction”, while North American airlines main focus is “Reduce, Reuse, Recycle”. North American airlines also have significantly more initiatives that fall under “Streamlining Operations: Costs” as a percentage of their overall initiatives than that of their European counterpart. Another interesting observation is that European airlines have significantly more initiatives that fall under “Support Environmental Research” as a percentage of their overall initiatives than their North American counterpart. The rest of the categories are more or less the same across both groups of airlines.

	Environmental Standards: Pollution Reduction	Extended Initiative	Hazardous Waste Management	Information Disclosure	Operating Assets Upgrade: Costs	Operating Assets Upgrade: Environment	Reduce, Reuse, Recycle	Streamlining Operations: Costs	Streamlining Operations: Environment	Support Environmental Organizations	Support Environmental Research	Training	Other
North American	8%	1%	1%	7%	7%	8%	21%	13%	15%	17%	2%	0%	0%
European	20%	3%	2%	7%	1%	11%	13%	5%	10%	11%	11%	2%	4%

Table 5 - Breakdown of EU and US Airlines Green Initiatives per Continent

### Research Limitations

Our research had the following limitations. Only English resources were researched, this might



have been a big limitation for European airlines that do not have all their communication translated into English including: Air France-KLM, Lufthansa, Iberia and Scandinavian Airlines. Our research did not validate the impact of the reported initiatives and instead assumed that each reported green initiative's impact is equivalent.

paper. More research is required to expand on these points.

## Conclusion

After looking at our data from different angles, we found some very interesting observations. The top 3 researched airlines with the most number of green initiatives: Air France-KLM, British Airways and Lufthansa have different approaches when it comes to green initiatives. Air France-KLM focuses on "Environmental Standards: Pollution Reduction", British Airways focuses on "Reduce, Reuse, Recycle", and Lufthansa focuses on "Support Environmental Organizations and Research".

Furthermore, we found that European airlines are ahead of their American counterpart when it comes to the number of green initiatives. Moreover European airlines are more focused on "Environmental Standards: Pollution Reduction" initiatives. Possible reasons might include:

1. Tighter air quality limits in Europe when compared to the United States (AEA Technology Environment, 2004)
2. European citizens being more concerned over environmental problems than United States citizens (The Pew Global Attitudes Project , 2007)

The reasons behind the top 3 airlines focus, and differences between the focus of European and US airlines are out of scope for this research



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