Louvain School of Management

Corporate Social Responsibility in the airline sector: a business model comparison

Is Corporate Social Responsibility integrated into the business model of legacy carrier and low-cost airline? Two case studies

Author: Corentin Meurens
Supervisor: Christophe Lejeune
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Corentin Meurens

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List of abbreviations and acronyms

- APEC: Asia-Pacific Economic Cooperation
- ASK: Available Seat Kilometers
- BM: Business Model
- BMI: Business Model innovation
- BOP: Base of Pyramid
- BSR: Business for Social Responsibility
- CAB: Civil Aeronautics Board
- CORSIA: Carbon Offsetting and Reduction Scheme for International Aviation
- CSER: Corporate Social and Environmental Responsibility
- CSP: Corporate Social Performance
- CSR: Corporate Social Responsibility
- CSR1: Corporate Social Responsibility
- CSR2: Corporate Social Responsiveness
- DJSI: Dow Jones Sustainability Index
- E-BM: E-business model
- EU: European Union
- EU-ETS: European Union Emission Trading Scheme
- FSC: Full service carrier
- FSNC: Full service network carrier
- GHG: Greenhouse gas emissions
- ICAO: International Civil Aviation Organization
- ICT: Information and communications technology
- LCC: Low-cost carrier
- LFA: Low-fares airline
- MCDM: Multi-criteria decision making
- PAX: Number of passengers carried by an airline
- PLC: Public Limited Company
- RPK: Revenue passenger kilometer
- SAF: Sustainable Aviation Fuel

Introduction

Being able to fly has long been the dream of men. In the era that we live in, moving from one side of the world to the other has become a banality. Moreover, certain flight fares enable people to travel at a lower cost than any other means of transportation, and in a very fast way. It has become normal to travel by plane several times a year for leisure or business purposes. The farthest country is only a day's flight away, which creates the impression that the other side of the world is much closer than it once seemed.

The airline industry contributes tremendously to today's global economy, it enables to connect people, countries and organizations throughout the world giving the impression that it has become a mere village. The development of commercial airline activities helps in fostering relationships between the citizens and nations of the world. Nevertheless, its prominence has not always been the same as today. Before the Airline Deregulation Act of 1978 in the United States (1992 in Europe), the aviation activities were more limited by governments. The introduction of this act allowed traditional airlines to develop and compete in a free market environment with less regulations and restrictions, which also led other types of low-cost airlines to provide relatively different services from those previously offered.

Although, the airline industry contributes positively to global economic growth, international mobility and tourism development, it also has a detrimental impact on the environment and multiple stakeholders e.g. carbon footprint, air quality, biodiversity. Nowadays, a growing number of firms are aware of the environmental imperatives, and progressively sustainable strategy and initiatives are implemented in companies' business model. Hence, the notion of social responsibility and the idea of going beyond the mere pursuit of profits have evolved significantly over the past decades. Corporations measuring their environmental and social impact are becoming more and more common and expected by stakeholders and the whole society. Guidelines and calls for actions such as the Sustainable Development Goals introduced by the United Nations are also developed by international organizations to foster sustainable development.

The research subject originates first from my personal interest in aviation in general. Indeed, the appeal of aviation has always been present and the requirement to write a thesis was therefore a great opportunity to write about a personal interest. Moreover, after reading a few articles on the topic, two distinct airline models emerged from the readings, which has led to the desire to explore the different business models more thoroughly. After consulting scientific articles on the airline industry and the business model concept, another more current theme has emerged: the Corporate Social Responsibility. Indeed, by reading and examining the negative impacts that the airline industry generates at the environmental and society level, it seemed interesting to investigate the social and environmental responsibilities of airlines. This has led to examining in more depth the questions about the practices, initiatives and forms of Corporate Social Responsibility reporting in the airline industry.

The subject was therefore established by combining an interest in aviation and the concept of business model, while considering the notion of Corporate Social Responsibility. Moreover, the clear distinction between legacy carrier and low-cost airline stimulated the interest to analyze and explore two distinct airlines within this context, which led to the following subject: *Corporate Social Responsibility in the airline sector: a business model comparison*.

The subject being defined, a more precise question was formulated in order to conduct an exploratory research: *"Is Corporate Social Responsibility integrated into the business model of legacy carrier and low-cost airline? Two case studies."*

As a result of my research, curiosity led me to explore the notion of Corporate Social Responsibility in more detail and in the context of two very distinct business cases. On the one hand, the Air France-KLM Group, a traditional airline and one of the world's first airlines, and on the other hand, Ryanair, the leading low-cost airline in Europe. This thesis aims to answer the main research question by adopting a qualitative exploratory approach. In addition, a case-study research methodology will be applied to investigate the notions of Corporate Social Responsibility within the two airline cases. This will permit to compare them and to understand in an extensive way whether Corporate Social Responsibility is integrated within the two business models of Air

France-KLM and Ryanair. More precisely, the initiatives reported by the two airlines will be explored and compared throughout this paper.
In order to conduct this exploratory research approach, the reader will be guided through the different sections of this paper.

First of all, the reader will be introduced to pre-existing knowledge and research on the subject through the literature review. This section will be divided into three main points: the business model, Corporate Social Responsibility, and the business model and Corporate Social Responsibility in the airline industry. The conclusion of the literature will ensure as well that the reader understands the main points discussed in the literature review.

Then, the methodology section will strive to expose the methods adopted throughout the paper in order to conduct a qualitative exploratory analysis using a case-study research approach. It will also attempt to outline the research sub-questions, research objectives and the rationale for selecting the two case studies.

Subsequently, the case study analysis section will be divided into two main parts: the company overview and the company's concerns and initiatives towards Corporate Social Responsibility. The latter is composed of five angles in order to assess each airline's concerns and initiatives towards Corporate Social Responsibility.

Afterwards, the findings obtained during the analysis will be illustrated in the discussion section. This one will allow to understand the implications of the results obtained while contextualizing them with the scientific literature on the subject. This discussion will also provide some perspective on the results obtained.

Later, the main limits of this research paper will be exposed in the limitations and future research section. These will permit to present a personal critique of the analysis conducted and on the paper as a whole. Moreover, this exploration will provide insightful leads that emerged during the research for future research on the subject.

At last, a general conclusion will synthesize the whole research paper, while including the most important aspects of each section reminding the reader of the essential points raised throughout this research.

The next section reviews the scientific knowledge and research that has been conducted on the subject. These are gathered in the literature review. It will enable the reader to familiarize himself with the concepts that will be discussed in the continuation of this paper.

Part 1: Literature review

Introduction

In this first part, the reader will be acquainted with relevant concepts related to the purpose of this research. Then, it will be easier to relate different concepts in a more practical and applied way. As a reminder, the subject of the research paper is *Corporate Social Responsibility in the airline sector: a business model comparison*. More precisely, the research question aims at comprehending whether Corporate Social Responsibility is integrated into the business model of the legacy carrier and the low cost airline. The details concerning the method adopted to conduct the analysis will be discussed in part two methodology.

The literature section is composed of three parts which will be addressed in the following respect: the Business model; Corporate Social Responsibility; Business model and Corporate Social Responsibility in the airline industry. It is important to remember that this literature review is only an overview of what is available in terms of scientific literature. It aims to summarize the main ideas and discoveries of researchers as well as to trace the evolution of certain paradigms. This is therefore not exhaustive in its content.

As the analysis will be conducted on two practical cases, it is relevant to use an approach that focuses on global concepts, in order to go into greater detail later on. Therefore, the first core concept focusing on business model will be addressed, then the core concept of CSR. At last, the concept of business model and CSR will be applied in the context of the airline industry.

The first core concept of business model will enable the reader to become acquainted with this notion and its multiple interpretations.

1.1 The business model

1.1.1 Terminology and conceptualization

The term *business model* is a widely used concept which is often referred to as *architecture, blueprint, construct, description, design, device, framework, method, rationale, representation, set, tool, etc*. This non-exhaustive list constitutes part of the terminologies available in the scientific literature as several scholars have different interpretations on the subject. A few researchers only use one terminology to illustrate the concept, while others employ multiple terminologies within the same paper (see Table 1). Moreover, two usage of the term can be applied: a *static approach* (blueprint for the coherence between core model components) and a *transformational approach* (concept as a tool to address change and innovation in the organization, or in the model itself) (Demil & Lecocq, 2010).

The origin of this concept is not a new phenomenon, research publications containing the term 'business model' have been present in the literature for more than fifty years (Wirtz et al., 2016). The first academic article mentioning the term 'business model' was published in 1957 and concerned the subject of multi-stage, multi-person business game for executive training (Bellman et al., 1957). However, the surge of scientific discussion related to the topic can only be traced back to the years 2000's (Foss & Saebi, 2017; Osterwalder et al., 2005) (see Appendix 1). Interestingly enough, several scholars expose the relationship between the prominence of scientific publications and the NASDAQ evolution (see Appendix 2). The increase in academic papers publications closely follow this trend, as well as the prominence of the internet in the business sector. Hence, this theme occurs to be closely related to technology (DaSilva & Trkman, 2014; Osterwalder et al., 2005).

Table 1 - Business model role and terminology review

Role	Associated terms	Authors
(1) Explaining the business	Blend	(Mahadevan, 2000)
	Content	(Amit & Zott, 2001)
	Description	(Weill & Vitale, 2001)(Osterwalder et al., 2005)
	Rationale	(Osterwalder & Pigneur, 2010)
	Representation	(Shafer et al., 2005)(Arend, 2013)(Morris et al., 2005)
	Statement	(Stewart & Zhao, 2000)
	Story	(Magretta, 2002)
(2) Running the business	Architecture	(Teece, 2010) (Rosenbloom & Chesbrough, 2002) (Dubosson-Torbay et al., 2002)(Timmers, 1998)(Osterwalder et al., 2005)(Foss & Saebi, 2017)
	Blueprint	(Demil & Lecocq, 2010)(Osterwalder et al., 2005)
	Construct	(Rosenbloom & Chesbrough, 2002)
	Device	(Rosenbloom & Chesbrough, 2002)
	Framework	(Rosenbloom & Chesbrough, 2002)(Afuah, 2004)
	Method	(Afuah & Tucci, 2003)
	Structure	(Amit & Zott, 2001)
	System	(Zott & Amit, 2010)

	Template	(Zott & Amit, 2008) (Zott & Amit, 2010)
(3) Developing the business	Design	(Teece, 2010) (Amit & Zott, 2001)
	Logic	(Rosenbloom & Chesbrough, 2002)
	Pattern	(Brousseau & Penard, 2007)
	Set	(Casadesus-Masanell & Ricart, 2010)(Seelos & Mair, 2007)(Afuah, 2004)
	Tool	(George & Bock, 2011)(Osterwalder et al., 2005)

Source : Based and adapted from (Spieth et al., 2014)

1.1.2 Definition and classification review

Having a great deal of interest among scholars, practitioners and within companies, the business model theme unfolds in various definitions. Not all authors include the same components within it or do not refer to general business model but to distinct ones, making it more difficult to reach a certain consensus within the scientific community. Among all available definitions, one can be provided by Teece (2010) *"a business model describes the design or architecture of the value creation, delivery and capture mechanisms employed"*. Others authors define it as *"the rationale of how an organization creates, delivers, and captures value"* (Osterwalder & Pigneur, 2010). As a matter of fact, definitions on the object are numerous (see Table 2). Thus far, there is no generally approved definition that encompasses the terminology of *business model*.

In reviewing the literature, the research object is approached in three ways. The first is that the subject matter is approached in a comprehensive manner by some authors (Magretta, 2002; Morris et al., 2005; Rosenbloom & Chesbrough, 2002; Teece, 2010). Certain scholars also approach the term *business model* whilst placing particular attention on *e-business model* (Amit & Zott, 2001; Dubosson-Torbay et al., 2002; Weill & Vitale, 2001). Other authors place more emphasis on *business model innovation*, a recent progress building up on the business model literature (Foss & Saebi, 2017) (see Table 2).

Although available definitions embodied distinct elements, several components appear repeatedly. Morris et al., (2005) identified elements in their framework on which scholars agree: *value creation*, *value capture*, *internal capabilities*, *competitive strategy factors*. Anyhow, this diversity complicates researches on the subject, as the nature and the components delimitations are quite fuzzy (Morris et al., 2005). One way to classify descriptions is on the basis of their scope: network and enterprise (Lambert & Davidson,

2013) (see Appendix 3). While Morris et al., (2005) have categorized them based on three other aspects: economic, operational and strategic. Additionally, dominant themes emerge from empirical studies: the business model as the basis for enterprise classification; business models an enterprise performance; business model innovation (Lambert & Davidson, 2013)(see Appendix 4).

Table 2 - Business model description review

Authors	Description	BM, BMI & E-BM
(Dubosson-Torbay et al., 2002)	"A business model is nothing else than the architecture of a firm and its network of partners for creating, marketing and delivering value and relationship capital to one or several segments of customers in order to generate profitable and sustainable revenue streams." (p. 7)	E-BM
(Teece, 2010)	"A business model describes the design or architecture of the value creation, delivery and capture mechanisms employed."	BM
(Magretta, 2002)	"Business models, though, are anything but arcane. They are, at heart, stories-stories that explain how enterprise work."	BM
(Rosenbloom & Chesbrough, 2002)	"The business model is thus conceived as a focusing device that meditates between technology development and economic value creation."	BM
(Zott & Amit, 2008)	"The business model is a structural template of how a focal firm transacts with all its external constituents, whethere they are customers or other parties."	BM
(Stewart & Zhao, 2000)	"A business model is a statement of how a firm will make money and sustain its profit stream over time." (p. 5)	BM & E-BM
(Morris et al., 2005)	"A business model is a concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture, and economics are addressed to create sustainable competitive advantage in defined markets." (p. 727)	BM
(Shafer et al., 2005)	"Business model as a representation of a firm's underlying core logic and strategic choices for creating and capturing value within a value network."	BM
(Timmers, 1998)	"The business model is an architecture of the product, service and information flows, including a description of the various business actors and their roles; a description of the potential benefits for the various business actors; a description of the sources of revenues." (p. 2)	BM
(Osterwalder et al., 2005)	"A business model is a conceptual tool that contains a set of elements and their relationships and allows expressing the business logic of a specific firm. It is a description of the value a company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams." (p. 10)	BM

(Amit & Zott, 2001)	"A business model depicts the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities." (p. 511)	E-BM
(Brousseau & Penard, 2007)	"A business model as a pattern of organizing exchanges and allocating various costs and revenue streams so that the production and exchange of goods or services become viable, in the sense of being self-sustainable on the basis of the income it generates." (p. 82)	BM
(Seelos & Mair, 2007)	"The term business model as a set of capabilities that is configured to enable value creation consistent with either economic or social strategic objectives." (p. 53)	BM (BOP)
(Foss & Saebi, 2017)	We define BMI as "designed, novel, nontrivial changes to the key elements of a firm's business model and/or the architecture linking these elements". (p. 201)	BMI
(Zott & Amit, 2010)	"(…) A firm's business model as a system of interdependent activities that transcends the focal firm and spans its boundaries. The activity system enables the firm, in concert with its partners, to create value and also appropriate a share of that value." (p. 216)	BM
(Weill & Vitale, 2001)	"A description of the roles and relationships among a firm's consumers, customers, allies, and suppliers that identifies the major flows of product, information, and money, and the major benefits to participants." (p. 34)	E-BM
(Afuah, 2004)	"A business model is the set of which activities a firm performs, how it performs them, and when it performs them as its uses its resources to perform activities, given its industry, to create superior customer value (low-cost or differentiated products) and put itself in a position to appropriate value." (p. 9)	BM
(Osterwalder & Pigneur, 2010)	"A business model describes the rationale of how an organization creates, delivers, and captures value."	BM

Source: Based and adapted from (Zott et al., 2011) & (Foss & Saebi, 2017)

1.1.3 ICT and Internet

During the internet advent in the 21st century, an increasing amount of businesses were operating their activities or establishing on the internet. With its specific growth, dynamic and competitive aspects, it was a promising opportunity for wealth creation (Amit & Zott, 2001). On the contrary, some authors state that the conditions for the advent of the term during this period are not very well defined (DaSilva & Trkman, 2014). The business model terminology even became a buzzword while there was this misconception that a company only needed a good business model to generate mind-blowing profits (Magretta, 2002). Indeed, the term gained momentum in the research and professional community with the evolution of internet companies and the development of information and communication technologies (DaSilva & Trkman, 2014). Initially, the focus was attributed to *business model* of internet companies. In 2004-2007, scientific articles indicated a shift in this trend as the concern evolved to 'general business'. This era of evolution had a tremendous impact on the manner companies operated their business and afterwards, the terminology propagated to brick-and-mortar companies as well. Subsequently, the scientific literature production on the subject also collected a use of the term in a non-business related field (DaSilva & Trkman, 2014). Moreover, eminence of the terminology was also driven by new enterprises' business model that could alleviate poverty while pursing societal and profits objectives at the same time. This is the case of the bottom of the pyramid, also called untapped market of the poorest people, which has attracted the attention of both companies and academics (Seelos & Mair, 2007; Thompson & MacMillan, 2010).

1.1.4 Components of the business model

When it comes to the business model components, these are numerous and also constitute a non-exhaustive list. Magretta (2002) identified two main components: the activities related to *making* something and the activities related to *selling* something. Rosenbloom & Chesbrough (2002) mention a framework composed of *inputs* that are converted into *outputs*. Whereas Osterwalder & Pigneur (2010) have developed the *business model canvas* comprising 9 components: *customer segments*; *value propositions*; *channels*; *customer relationships*; *revenue streams*; *key resources*; *key activities*; *key partnerships*; *cost structure* (see Table 3). Business model components are various and vary depending on the scope of the researchers' investigations. A review of the literature across 12 definitions identified 42 distincts *business model* components (Shafer et al., 2005).

Table 3 - Business model components review

Authors	Specific components	Number	BM, BMI, E-BM
(Teece, 2010)	"It also outlines the architecture of **revenues**, **costs** and **profits** associated with the business enterprise delivering the value." (p. 173)	3	BM
(Magretta, 2002)	"Part one includes all the activities related to **making something** (designing it, purchasing raw materials, manufacturing, and so on). Part two includes all the activities associated with **selling something** (finding and reaching customers, transacting a sale, distributing the product or delivering the service."	2	BM

(Rosenbloom & Chesbrough, 2002)	"The business model provides a coherent framework that takes technological characteristics and potentials as **inputs**, and converts them through customers and markets into economic **outputs**."	2	BM
(Morris et al., 2005)	"Factors related to the **offering**, **market factors**, **internal capability factors**, **competitive strategy factors**, **economic factors**, **personal/investor factors**." (p. 730)	6	BM
(Shafer et al., 2005)	"**Strategic choices**, **value network**, **create value**, **capture value**." (p. 202)	4	BM
(Dubosson-Torbay et al., 2002)	"The **product innovation**, the **customer relationship**, the **infrastructure management**, the **financial aspects**." (p. 7)	4	E-BM
(Osterwalder et al., 2005)	"**Value proposition**, **target customer**, **distribution channel**, **relationship**, **value configuration**, **core competency**, **partner network**, **cost structure**, **revenue model**." (p. 10)	9	BM
(Amit & Zott, 2001)	"Each of the four value drivers that were identified in the analysis - **efficiency**, **complementarities**, **lock-in**, and **novelty**." (p. 503)	4	E-BM
(Afuah & Tucci, 2003)	"**Profit site**, **customer value**, **scope**, **price**, **revenue sources**, **connected activities**, **implementation**, **capabilities**, **sustainability**, **cost structure**."	10	E-BM

Source: Based and adapted from (Morris et al., 2005) & (Zott et al., 2011)

1.1.5 Business model and strategy

The term *business model* and *strategy* are both closely related, yet they are distinct concepts (see Table 4). The various terminologies on the subject as *business concept*, *strategy*, *revenue model*, and *business model* are often interchanged which can be quite confusing (Morris et al., 2005). Several authors indicate as well the lack of precise distinction among the concept of business model, strategy and tactics (Casadesus-Masanell & Ricart, 2010). Others express the fact that the term *business model* has been impacted by a cannibalizing tendency to other management terms, and hence it was often confounded with the term *strategy* (DaSilva & Trkman, 2014).

When reviewing the literature, scientific researchers tend to agree on the fact that the *business model* and *strategy* are two different components that interact with each other. Indeed, Casadesus-Masanell & Ricart (2010) state that: *"a business model is the direct result of strategy but is not, itself, strategy"*. Teece (2010) suggests that coupling both strategy and business model is necessary in order to protect competitive advantage deriving from new business model design. While Magretta (2002) illustrates the business model as being comparable to a system assembled of pieces that fit together which lack one critical component: *competition*. The latter is addressed by strategy and needs to be taken care of, as competition is crucial among enterprises.

DaSilva & Trkman (2014) indicate the contrast between the two terms that makes them distinct in two ways. Their first definition of strategy is that it *"shapes the development of capabilities that can alter current business models in the future*". Whilst the second one states *"that strategy reflects what a company aims to become, while business models describe what a company really is at a given time".* According to Seddon & Freeman (2004), *"a business model may be defined as an abstract representation of some aspect of a firm's strategy. However, unlike strategy, business models do not consider a firm's competitive positioning".* This indicates again that *competitive positioning* distinguishes strategy from business model. Surely, Porter (2001) describes that a strategy is an ability to define a unique value proposition. Not only does a company need to stay the course, it also needs to expand and broaden its singular positioning. Moreover, according to other academic scholars, the strategy evolves through the organization's business model and aims at designing dynamic capabilities able to respond to the unforeseen. Business models are bounded by these same dynamic capabilities (DaSilva & Trkman, 2014). At last, Dahan et al. (2010) distinguish both terms by stating that strategy can be presumed as a description or plan to advance from one situation to a desired future state. Actually, the essence of the business model is 'a description of a state'.

Table 4 - Business model and strategy

"A BM is more generic than a **business strategy**. Coupling **strategy** analysis with **business model** analysis is necessary in order to protect whatever competitive advantage results from the design and implementation of new business models. Selecting a **business strategy** is a more granular exercise than designing a **business model**." (p. 180) (DaSilva & Trkman, 2014)
"**Business models** describe, as a system, how the pieces of a business fit together. But they don't factor in one critical dimension of performance: competition. Sooner or later – and it is usually sooner – every enterprise runs into competitors. Dealing with that reality is **strategy**'s job." (Magretta, 2002)
"The **business model** starts by creating value for the customer, and constructs the model around delivering that value. There is some attention to capturing a portion of the value created, but the emphasis upon value capture and sustainability is much stronger in the realm of **strategy**. A second difference lies in the creation of value for the

business, versus creation of value for the shareholders. Oftentimes, the financial dimensions of a business are left out of the **business model**. A final difference, which we will explain below, lies in the assumptions made about the state of knowledge held by the firm, its customers and third parties. The **business model** construct consciously assumes that this knowledge is cognitively limited, and biased by the earlier success of the firm. **Strategy** generally requires careful, analytic calculation and choice, which assumes that there is a great deal of reliable information available." (Rosenbloom & Chesbrough, 2002)

"It is not a **strategy** but includes a number of **strategy** elements. Similarly, it is not an activity set, although activity sets support each element of a model." (p. 727)
"The **business model** has elements of both **strategy** and operational effectiveness." (p. 733) (Morris et al., 2005)

"While **business model** does facilitate analysis, testing, and validation of a firm's **strategic** choices, it is not in itself a **strategy**."
"**Business models** reflect these choices and their operating implications. They facilitate the analysis, testing, and validation of the cause-and-effect relationships that flow from the **strategic** choices that have been made. In some cases, executives can best effect this by directly translating one set of **strategic** choices into a single **business model**, which they can analyze, test, and validate. In other cases, executives may wish to consider a range of **business models** simultaneously, each representing a different set of strategic choices before drawing a conclusion about the best **business model** for their organization." (p. 203) (Shafer et al., 2005)

"The **business model** can be seen as the conceptual link between **strategy**, business organization, and systems. The **business model** as a system shows how the pieces of a business concept fit together, while **strategy** also includes competition and implementation." (p. 10) (Osterwalder et al., 2005)

"The distinction between "**business model**" and "**strategy**" is more than one of semantics. They are two different concepts." (p. 24) (Yip, 2004)

"**Business model** refers to the logic of the firm, the way it operates and how it creates value for its stakeholders; and **strategy** refers to the choice of business model through which the firm will compete in the marketplace." (p. 196) (Casadesus-Masanell & Ricart, 2010)

"A **strategy** can broadly be understood as a description, plan or process for how to move from the current situation to a desired future state. By contrast, a **business model** is a description of a state." (p. 328) (Dahan et al., 2010)

"Having a **strategy** is a matter of discipline. It requires a strong focus on profitability rather than just growth, an ability to define a unique value proposition, and a willingness to make tough trade-offs in choosing what not to do. A company must stay the course, even during times of upheaval, while constantly improving and extending its distinctive positionning. **Strategy** goes far beyond the pursuit of best practices. It involves the configuration of a tailored value chain-the series of activities required to produce and deliver a product or service- that enables a company to offer unique value." (Porter, 2001)

"A **business model** may be defined as an abstract representation of some aspect of a firm's **strategy**. However, unlike **strategy, business models** do not consider a firm's competitive positioning." (Seddon & Freeman, 2004)

1.1.6 Academic scholars findings

Academic researchers are unable to provide a common definition on the subject. Each author brings slightly different elements. However, by analyzing the definitions available within the literature, one element emerges repeatedly: the notion of value. Indeed, several authors address the notion of *value creation* and/or *value delivery* (see Table 5). Scholars indicate that the majority of accessible definitions in the literature concern the individual enterprise. In a nutshell, the two main points of focus are value creation and value offering although these can be formulated in different ways (Lambert & Davidson, 2013).

For instance, when constructing a business model, two main elements must be central: understanding how to deliver value to customers, while capturing value in the process. These two elements must be completed jointly (Teece, 2010). Other authors emphasize more on the rationale behind the value proposition of a business model. The designing process must concentrate on the resources and assets required to deliver this added value (Dubosson-Torbay et al., 2002). Several scholars emphasize more on the notion of value delivery by stating that internet does not change the underlying business model, but the value delivery systems may vary (Stewart & Zhao, 2000).

Table 5 - Academic scholars findings on business model

"Figuring out how to **deliver value** to the customer – and to **capture value** while doing so – are the key issues in designing a business model: it is not enough to do the first without the second. (p. 184)" (Teece, 2010)
"The ultimate role of the business model for an innovation is to ensure that the technological core of the innovation **delivers value** to the customer." (Rosenbloom & Chesbrough, 2002)
"The internet does not change the underlying business model, though it may change the organization and **cost structure** of supply chains and **value delivery** systems." (p. 291) (Stewart & Zhao, 2000)
"The survival and prosperity of all for-profit organizations is directly linked to their ability to both **create** and **capture value**; therefore, business models are applicable to all these. At the same time, an organization's business model is never complete as the process of making strategic choices and testing business model should be ongoing and iterative." (p. 206) (Shafer et al., 2005)
"The outcomes of this article should help the managers design a new business model by using the suggested framework and by which, asking the right questions, such as what is exactly my **value proposition**? How do I get a good feeling of the needs of my target market? To **deliver** the intended **added-value** to the market, what would be the required and most appropriate resources and assets?" (p. 22) (Dubosson-Torbay et al., 2002)
"The focus of this paper is on wealth creation, which has occupied much of the entrepreneurship literature. We draw on a wide body of literature in entrepreneurship and strategic management and use cross-case analysis of a unique

data set we developed, in order to identify common patterns of **value creation** in e-business. The analysis led to the development of the **value-drivers model**, which includes four factors that enhance the **value creation** potential of e-business: efficiency, complementarities, lock-in, and novelty. (p. 516)" (Dubosson-Torbay et al., 2002)
"We show how **resources** and **capabilities** can be configured across separate organizational structures into an overall business model that achieves the respective strategic objectives of the partners involved. Understanding how **value** can be created from resources in new configurations should enable better informed decisions about resource allocations. (p. 61)" (Seelos & Mair, 2007)

1.1.7 Critique on the topic

The subject of *business model* is vast, as are the assumptions and interpretations of researchers. From the literature, several criticisms are expressed by several scholars vis-à-vis business models. According to Magretta (2002), the terms *business model* and *strategy* are among the terms that are the most misused within management studies. Rosenbloom & Chesbrough (2002) mention that the term *business model* is not well defined within the scientific literature. Moreover, Morris et al. (2005) contribute to this critique by mentioning that the diversity on the subject create real challenges to delimitate the nature of the concept and its components. George & Bock (2011) add that although the topic has been discussed for over 15 years, its research status is still in a nascent state (see Table 6).

Table 6 - Academic scholars critique on business model

"The concept of a business model lacks theoretical grounding in economics or in business studies." (p. 175) (Teece, 2010)
"Today, "business model" and "strategy" are among the most sloppily used terms in business; they are often stretched to mean everything - and end up meaning nothing." (Magretta, 2002)
"While the term 'business model' is often used these days, it is seldom defined explicitly." (p. 532) (Rosenbloom & Chesbrough, 2002)
"No generally accepted definition of the term "business model" has emerged. Diversity in the available definitions poses substantive challenges for delimiting the nature and components of a model and determining what constitutes a good model." (p. 726) (Morris et al., 2005)
"A properly crafted business model has great power and can serve as an essential strategic tool for the firm, but concerns about business models can be traced to four common problem associated with their creation and use. Flawed assumptions underlying the core logic, limitations in the strategic choices considered, misunderstandings about value creation and value capture and flawed assumptions about the value network." (Shafer et al., 2005)
"The lack of a convergent, well-defined theoretical construct has led to inconsistent empirical findings in its effect on firm performance and organizational change." (p. 84)

"Despite more than 15 years of interest and enthusiasm for developing, understanding, and applying business model frameworks, rigorous research on business models remains in a nascent stage." (p. 107) (George & Bock, 2011)

"The literature shows that the topic of business models is often discussed superficially and frequently without any understanding of its roots, its role, and its potential." (p. 2) (Osterwalder et al., 2005)

"Our central observations are that no single entrepreneurship or strategic management theory can fully explain the value creation potential of e-business. Rather, each of the theories offers an important insight into one aspect of value creation in e-business." (p. 494) (Amit & Zott, 2001)

"The emerging BMI literature addresses an important phenomenon but lacks theoretical underpinning, and empirical inquiry is not cumulative." (p. 200)
"We find that the literature is lacking (to varying degrees) in all dimensions." (p. 201) (Foss & Saebi, 2017)

The business model concept appears not to be a recent concept as its was first mentioned in 1957 (Bellman et al., 1957). Throughout this first part of the literature review, scholars employ a multitude of distinct terminologies to relate to the topic and the number of definitions are manifold. The number of components that encompass the business model are also diverging in the literature. Indeed, out of 12 business model definitions, 42 components were identified (Shafer et al., 2005). However, two notions seem to emerge from the authors' research to date: the *value capture* and *value delivery*. With respect to discussions on the subject, the surge in scientific literature dates from the years 2000's and the advent of the internet (Foss & Saebi, 2017; Osterwalder et al., 2005). The *dot.com* era contributed substantially to the emergence of the concept as there existed this false belief that a good business model would necessarily generate huge profits (Magretta, 2002).

The business model has also been one of the most misused theme in the management literature. The latter has been confused with the business strategy, which are two distinct notions. This difference can be illustrated by Casadesus-Masanell & Ricart (2010) stating that *"business model refers to the logic of the firm, the way it operates and how it creates value for its stakeholders; and strategy refers to the choice of business model through which the firm will compete in the marketplace"*. There are also many criticisms on the subject, including the fact that this concept has been discussed for more than 15 years, and it still seems to be in a nascent state. Nowadays, when referring to the business model, the business model canvas along with its 9 'boxes' is often prevalent (Osterwalder & Pigneur, 2010).

As the reader is now more familiar with the concept of business model, it is relevant to approach theoretical concepts regarding Corporate Social Responsibility, the second core concept of this research. Becoming acquainted with CSR will enable to approach this concept in its entirety within the next point (point 1.3) which concerns the business model and CSR in the airline industry.

1.2 Corporate Social Responsibility

1.2.1 Definition and concept evolution

The concept of Corporate Social Responsibility is ambiguous and often subject to discussion as it lacks consensus among the academic scholars. Carroll (1979) provides a classification of authors' views on the subject of Corporate Social Responsibility and traces the evolution of the concept throughout the years (see Table 9). While Dahlsrud (2008) reveals the multitude of CSR definitions and classify them according to five main dimensions: the environmental; the social; the economic; the stakeholder; the voluntariness.

A first definition of the concept of Corporate Social Responsibility can be provided by Davis (1960) who refers to "*businessmen's decisions and actions taken for reasons at least partially beyond the firm's direct economic or technical interest*". While Backman (1975) states that *"social responsibility usually refers to the objectives or motives that should be given weight by business in addition to those dealing with economic performance (e.g. profits)"*. As opposed to the two first authors, Eells (1961) mentions the 'social aspect' of corporate social responsibility by stating that *"when people talk about corporate social responsibility they are thinking in terms of the problems that arise when corporate enterprise casts its shadow on the social scene, and of the ethical principles that ought to govern the relationships between the corporation and society".*

In contrast to the other's authors views on going beyond economic interests and performance, Friedman & Friedman (1962) assert that *"few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible"*. The authors emphasize that the only responsibility of corporation is performance. Whilst McGuire (1963) adds the notion of 'legal requirements' and states

that *"the idea of social responsibilities supposes that corporation has not only economic and legal obligations, but also certain responsibilities to society which extend beyond these obligations"*. Manne & Wallich (1972) add the notion of 'voluntarism' to the concept by stating: *"another aspect of any workable definition of corporate social responsibility is that the behavior of the firms must be voluntary"*.
The Committee for Economic Development (1971) describes that business expectations have widened into 'three concentric circles of responsibilities'. *"The inner circle includes the clear-cut basic responsibilities for the efficient execution of the economic function-products, jobs, and economic growth. The intermediate circle encompasses responsibility to exercise this economic function with a sensitive awareness of changing social values and priorities: for example, with respect to environmental conservation; hiring and relations with employees; and more rigorous expectations of customers for information, fair treatment, and protection from injury. The outer circle outlines newly emerging and still amorphous responsibilities that business should assume to become more broadly involved in actively improving the social environment"*. Davis & Blomstrom (1975) have the same viewpoint concerning this 'widening circle'. While Steiner (1975) considers Corporate Social Responsibility as a sequence of responsibilities. Therefore, the authors share the same line of reasoning as the Committee for Economic Development.

Ackerman & Bauer (1976) have a different view on the notion of 'responsibility'. Indeed, the authors suggest the notion of 'responsiveness' instead of 'responsibility' as "*it places emphasis on motivation rather than performance"*. In the same line, Hay et al. (1976) recommend that firm *"make decisions and actually commit resources of various kinds in some of the following areas (...)"* in the context of social responsibility.

As mentioned above, definitions available in the scientific literature concerning the meaning of Corporate Social Responsibility are various and do not all refer to the same components, nor do they have the same views (see Table 7).

Table 7 - Views concerning the meaning of social responsibility

Views	Authors
1. Profit making only	(Friedman & Friedman, 1962)
2. Going beyond profit making	(Backman, 1975; Davis, 1960)
3. Going beyond economic and legal requirements	(McGuire, 1963)
4. Voluntary activities	(Manne & Wallich, 1972)
5. Economic, legal, voluntary activities	(Steiner, 1975)
6. Concentric circles, ever widening	(Committee for Economic Development, 1971)(Davis & Blomstrom, 1975)
7. Concern for the broader social problem	(Eells, 1961)
8. Responsibility in a number of social problem areas	(Hay et al., 1976)
9. Giving way to special responsiveness	(Ackerman & Bauer, 1976)

Source: Based and adapted from (Carroll, 1979)

The authors' views on the topic are relevant as it depicts the evolution of the concept while addressing different points as well. This makes it possible to better define the scope of the subject and how far it seems to extend. Carroll (1979) as for her, describes in her own words the definition of Social Responsibility. She states that for a definition to be exhaustive, it needs to incorporate the *"economic, legal, ethical, and discretionary categories of business performance"*.

1.2.2 Pyramid of Corporate Social Responsibility

Along with the notion of Corporate Social Responsibility (CSR), the notion of Corporate Social Performance (CSP) has appeared. An emphasis is driven by the social performance in order to implement social goals and programs on the decision-making agenda (Carroll, 1991).

The pyramid of Corporate Social Responsibility has been conceived in order to encompass all corporation responsibilities (see Figure 1) (Carroll, 1991).
The base of the pyramid address the *economic* responsibility of the firm. In the past, the firm's main objective was to provide goods and services while capturing profits in the process. Therefore, it is crucial for the firm to be profitable in order to address the three other layers of responsibilities (see Appendix 5)(Carroll, 1991).

The second layer concerns the *legal* responsibility of the firm. This second aspect is crucial as well as it needs to be fulfilled by the firm towards the society. Indeed, the fundamental underlying obligations of the firm towards the society is to respect the rules (in this case the law), while operating its activities (see Appendix 5) (Carroll, 1991).

The third layer refers to the *ethical* layer, which encompass the notion of fairness and justice. It also relates to practices and activities that are not found in the law but are related to morals, values and justice. Ethical responsibility is considered as being expected of firm as those are more difficult to handle and require a higher performance than the one required by law (see Appendix 6) (Carroll, 1991).

The fourth layer relates to *philanthropic* responsibilities of the firm. It concerns the actions that firm undertake related to education, the arts or the community. The main difference between the ethical responsibility is that philanthropic actions are not expected but rather based on the voluntary nature of the company (see Appendix 6) (Carroll, 1991).

Although these four responsibilities layers are discussed separately, they are not mutually exclusive and they form the whole of the Corporate Social Responsibility. Besides, the pyramid aims at illustrating the dynamic tensions existing between one component and another. In practice, the firm should aim to fulfill all responsibilities as one (Carroll, 1991).

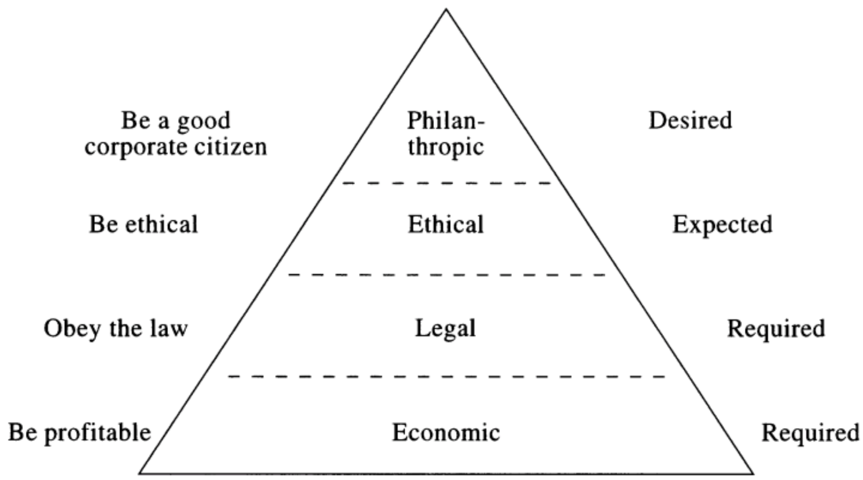

Figure 1 - Carroll's (1991) Pyramid of Corporate Social Responsibility

1.2.3 The triple bottom line

This concept is closely related to the CSR approach and it *“posits firm should commit to measuring their social and environmental impact – in addition to their financial performance – rather than solely focusing on generating profit, or the standard ‘bottom line’”* (Miller, 2020). The triple bottom line is also known as the ‘three P’s’ and is a concept that considers the firm’s impact on the three dimensions (people, planet, profit). Twenty-five years after the concept creation, only a few companies have adopted this approach to business, the pace and the scale are lacking. For a real shift to happen in the business world, it needs ‘the necessary radical intent’ and real innovations based on the triple bottom line (Elkington, 2018).

1.2.4 The stakeholder approach

In her paper, Carroll (1991) exposes the notion of stakeholders which represents groups that “*have a stake, a claim, or an interest in the operations and decisions of the firm”*. This terminology illustrates better to whom the business is answerable rather than the word ‘social’. In order for management to decide which stakeholders are important in their decision making, they must be considered according to two criteria: legitimacy and power. Therefore, a company's responsibility is to manage its stakeholders and be responsive to them in order to align the business objectives as closely as possible with those of the stakeholders. Other authors state that stakeholder theory *“defines CSR activities as being to satisfy the demands of various stakeholders”*, which is quite similar to Carroll's (1991) definition (Wang et al., 2015).

1.2.5 Corporate Social Responsibility to Corporate Social Responsiveness

Frederick (1994) outlines the evolution of the Corporate Social Responsibility concept and helps to understand the paradigm shift from the realization that companies have of social responsibilities until their implementation.

Corporate Social Responsibility (CSR1) is described as the obligation for corporations to consider social matters. Although the essence of this concept might seem clear, it has been the victim of many debates and the modalities of the concept have been challenged. Indeed, the latter has been multiple times criticized concerning its lack of clarity with regard to the insolvent nature of certain matters that were brought to light (vague

substance of the concept, combination of institutional mechanisms, cost-benefit analysis between economic and social goals, morals underpinning the concept are not agreed upon) (Frederick, 1994).
Around the years 1970, a new approach to the concept of Corporate Social Responsibility has risen which does not refer to 'responsibility' anymore but to the notion of 'responsiveness', which leads to the transition to Corporate Social Responsiveness (CSR2) (Frederick, 1994).

Frederick (1994) defines the notion of Corporate Social Responsiveness as being *"the capacity of a corporation to respond to social pressures"*. This new concept places more emphasis on the management of a corporation and the relationship it has with society. The development of the moral aspects, critics, and speculative generalities of the CSR1 have led to new debates concerning the analytical, methodical, comprehensive and proactive attitude of CSR2. The authors adds that *"the extent of CSR1 is often dependent largely upon the individual social conscience of the company's chief executive officer and of the managerial cadre generally, CSR2 looks to an institutionalized company policy for its successful implementation"*. Indeed, the question whether corporations must take their responsibilities is clear, it is now a question of defining how this will be achieved. Therefore, CSR2 has a character much more practical than CSR1 and more attention will be devoted to the activities of companies to meet their social responsibilities.

Dahlsrud (2008) explains that available definitions on CSR do not clearly define the extent to which corporations need to perform concerning their social responsibilities. Firm's optimal level of performance should depend on the stakeholders of the business. Hence, the stakeholder concept is crucial into determining the optimal performance to which corporations must rise.

The Corporate Social Responsibility concept is a broad concept that has given rise to much debate, particularly because companies can have a negative impact on society and its stakeholders. It turns out that the views on the topic have been very divergent. This is particularly the case of Friedman & Friedman (1962) which supported the fact that the responsibility of the company is only to be efficient and profitable in order to satisfy its shareholders. Little by little, the concept has evolved while integrating first economic and legal requirements (McGuire, 1963). Other authors will add the notion of voluntary activities afterwards (Manne & Wallich, 1972). Next, the focus on 'social' emerged by considering that corporation have responsibility towards the social sphere (Hay et al., 1976). At last, the Corporate Social Responsibility topic is not a question of debates anymore. The discussion focus now on the manner in which CSR can be implemented and managed within companies. It is therefore a paradigm shift between Corporate Social Responsibility (CSR1) towards Corporate Social Responsiveness (CSR2) (Frederick, 1994).

The triple bottom line approach is intimately connected to the CSR approach. The latter suggests that firms should measure their environmental and social impact in addition to their financial performance. The concept is also known as the 'three P's' and provides a framework to companies in terms of CSR (Elkington, 2018; Miller, 2020). The stakeholder approach is also included in the CSR, as CSR activities should satisfy the demands of various stakeholders (Wang et al., 2015).

The CSR concept has evolved over time, it is no longer a question of responsibility but of action. In particular, how CSR is implemented within companies, how it is measured and how it is part of the companies' strategy.

This section on Corporate Social Responsibility has allowed the reader to better understand the illustrated concepts. It is now the appropriate time to dive a little deeper into the third part of the literature by addressing the Business Model and the Corporate Social Responsibility within the airline sector. This last part of the literature will close the literature review, then the conclusion of the literature will summarize the main points of the literature review.

1.3 Business model and Corporate Social Responsibility in the airline industry

The airline industry is a sector that fascinates, interests and contributes to bringing people, cultures and businesses together. Although it has many positive implications, it also has negative repercussions on the environment and on a number of stakeholders. It is instructive to first briefly trace the evolution of the sector.

The airline industry is often subject to discussion whether it concerns specific practices adopted by certain airlines, or when the sector is impacted by large-scale events such as the Airline Deregulation Act of 1978, the 9/11 terrorist attacks, the financial crisis of 2008, and the COVID-19 crisis. Before 1978, the Civil Aeronautics Board was responsible for setting the rules and regulating the growth of the airline industry with regards to companies entrance, routes, prices. After President Jimmy Carter had signed the Airline Deregulation Act of 1978, the industry has become completely deregulated (Schiller, 2019) (see Airline Deregulation Act of 1978). In 2001, after the terrorist attacks in the Unites States, the airline sector has been the most impacted industry and it suffered enormous losses (Hoffer Gittell et al., 2006). Then, the global financial crisis of 2008 led to a significant decline in activity and passenger numbers (Lohmann & Koo, 2013). Nowadays, the last event that impacted tremendously the airline industry is the COVID-19 crisis, with the airline industry being among the most affected sectors (Bouwer et al., 2020).

The competition is fierce within the airline industry, and is determined by the way each airline operates its activities. Vidović et al. (2013) state that there exist three basic airlines strategies: the full service network carrier (FSNC) which operates and covers a broad geographic network, the low-cost carrier (LCC) which operates on medium-haul routes and the charter airlines which operates on long-haul routes. Whereas Tomová & Materna (2017) identify mainly two business models that prevail nowadays and fight for clients and market share: the traditional model (also called full service network carrier) and the low-cost business model. Consequently, these two models have influenced each other and a new model has emerged, the hybrid business model. Whilst Magdalina & Bouzaima (2021) identify from their research four distincts business models among which three mostly accepted business models: the FSCs, the LCCs and the hybrid which combines two sub-models. The first sub-hybrid model preserves some of the FSCs features and certain characteristics of the LCCs. While the second sub-hybrid has mostly LCCs features.

1.3.1 The traditional airline business model (FSC)

Traditional airlines, legacy carriers, full network service carriers (FSNCs) or full service carriers (FSCs) are all denominations to represent classical airlines which often used to be national companies. The FSC was founded before the deregulation of the airline markets (Pels, 2009). The industry has always suffered from a precarious situation in terms of financial resources. For instance, in terms of value creation, very few companies have been able to recover their capital loss. Thus, some economists declared that in the long run, the airline sector is an industry at a standstill since it does not allow its players to create value. However, during the 90's and the economic recovery, following the airline deregulation, the travel demand has been stimulated and legacy carriers started building networks around the so-called hubs (Franke, 2004).

The hub-and-spoke network[1] system is a distinctive element of FSC, which leads to high complexity and costs. The utilization of hub airports results in congestion and therefore is inconvenient for passengers having to endure waiting time and high price. The development was contradictory as airlines were expanding their portfolio of destinations which was both detrimental to the productivity of operations and customer satisfaction (Franke, 2004). Additionally, this system provides high frequency services from and to the central airport and is characterized by a geographical concentration around the hub (Pels, 2009).

According to Pels (2009), at that time, the performance of FSCs was rather poor compared to that of LCCs, many of them were not far from bankruptcy. Another distinctive element of FSCs is related to their membership in an airline alliance which allows among other things for passengers and baggage transfers among the flights of all its members (Eugenio-Martin & Perez-Granja, 2021).

Characteristics of the FSCs

The FSC business model is characterized by its hub-and-spoke network system. The important elements of the FSCs are: its wide range of services; its multiple passengers classes; its connected flights; national carriers usually representing full network service airlines; its primary airport usage; its international hub airports; its diversified fleet; its bundled services; its frequent flyer programs[2]; its network alliances; its wide range of destinations and high frequency flights (Eugenio-Martin & Perez-Granja, 2021; Gillen &

[1] *"It is a transport system in which passengers travel from smaller airports, stations, etc. to one large central airport, station, etc. to make longer trip"* (*Cambridge Dictionary*, 2021).
[2] *"A frequent flyer is someone who can get special benefits for flying a lot on a particular company's aircraft"* (*Cambridge Dictionary*, 2021).

Morrison, 2003; Štimac et al., 2012; Tomová & Materna, 2017; Vidović et al., 2013) (see Table 8).

1.3.2 Emergence of the LCC and its characteristics

The concept of *low-cost* carrier business model originates from the United States airline industry, more specifically it has been developed by Pacific Southwest Airlines. The airliner, based in San Diego conducted its airlines activity from 1949 to 1988 and only operated within the state of California. In 1971, Southwest Airlines, which had been founded a couple of years before began operating its activities in Texas with the same low-cost business model. After the Airline Deregulation of 1978, the company began to broaden its routes, which included other states and Mexico. It was approximately 20 years after the creation of Southwest that the low-cost concept was exported abroad. Indeed, following this, other low-cost companies were created in Europe and Asia e.g. Ryanair and AirAsia (Diaconu Maxim, 2012; *Southwest Media*, 2021; Villamizar, 2021). In 1997, after the implementation of the seventh, eighth, and ninth freedoms of the air, European airlines could conduct their activities without any limitations on the European Union's air routes. With these freedoms, low-cost airlines were able to enter the European international air market (Eugenio-Martin & Perez-Granja, 2021) (see Freedoms of the Air).

Since its appearance in the 90's, the prominence of the low-cost business model has grown rapidly and so did its market shares. In essence, LCCs focal point resides on drastically cutting the price of airline tickets to lead the market by price (Vidović et al., 2013). The players have been able to establish themselves as 'market makers' and not 'market takers' (Gillen & Morrison, 2003). Thus, their disruptive business model enabled them to generate new demand, and so LCCs airlines could capture clients of other means of transportation and regular clients from full network service carrier (de Wit & Zuidberg, 2012).

Characteristics of the LCCs

The LCC business model is characterized by its low-cost aspects. The important features of the LCCs are its emphasis on reducing costs and prices; its concern for maximizing efficiency; its usage of a uniform fleet mostly composed of one aircraft model; its usage of

secondary airports (regional and uncongested) with a point-to-point flights network (unlike FSCs focusing on hub-and-spoke system and primary airports); its direct online ticket sales system; its one passenger class; its non-free services; its high seat density; its non-expansion of network to long-haul flights; its high aircraft utilization; its lower staff number; its high productivity; its focus on minimizing time spent on the ground (known as the *turn*[3]) (Gillen & Lall, 2004; Štimac et al., 2012; Vidović et al., 2013) (see Table 8).
An important feature of LCCs is the clustering of their operations and services at secondary/regional airports (Dobruszkes et al., 2017), which charge less fees to airlines than primary airports (Vidović et al., 2013). For instance, in some italian airports low-cost companies were provided discounts on landing, discounts on terminal charges, revenue-guarantee schemes, and co-marketing agreement (Laurino & Beria, 2014). Additionally, airlines avoid hub airports by using direct flights, which contributes to diminishing their costs and streamlining their operations as secondary airport are less saturated than primary airports. LCC relieves traffic and support routes development (Dobruszkes, 2013; Suau-Sanchez & Burghouwt, 2011). Hence, few airports co-finance new routes opening (Vidović et al., 2013). Although LCCs concentrate on tourist, urbane area and secondary areas i.e. post-industrial, the airliners also compete with FSCs by providing access to primary airports (Dobruszkes, 2013). As a result of LCCs activities, secondary airports have been prosperous. The choice of LCCs by consumers as well as secondary airports illustrate consumers appeals towards bargain tickets, less traffic congestion and queuing time (Barrett, 2004).

Previously, LCCs were providing only short-haul flights, while nowadays and with the fierce competition, LCCs have had to broaden their network to medium-haul flights (Vidović et al., 2013). According to Gabor (2010), LCCs have had a crucial impact on the landscape of air transport services as well as on competition between airlines and regions. Dobruszkes (2006) asserts that *"the geography of low-cost networks is associated with the geography or EU air transport liberalization"*. Whereas LCCs impacted tremendously travel patterns, customers options related to transportation enlarged, with more flight prices alternatives (Dobruszkes, 2013; Dunn, 2011). Secondary airports with less traffic and direct flights (point-to-point) are two key elements that have contributed to the

[3] It is also referred to as the turnaround time. *"In fact, this is the time spent by aircraft on the ground between two flights"* (*Aeronewstv*, 2016).

advent of LCCs as part of the regional economic development of certain areas (Stoenescu & Gheorghe, 2017).

Table 8 - FSC vs LCC

Attributes	Full service network carrier	Low-cost carrier
Fleet	Strongly diversified fleet with low commonality (different aircraft model from small regional to large wide-body aircraft)	Standardized and uniform fleet, medium sized
Fleet handling	Slow aircraft handling caused by congestion at the hub airports	Fast aircraft handling (25 min)
Operation and maintenance costs of fleet	High operating and maintenance costs	Low operating and maintenance costs, lower fuel
Airports	Primary airports & international hub airports	Secondary airports
Flight types	Mixture of long-haul, medium-haul and short-haul flight with transfers	Direct point-to-point flights, no transfer of passengers, short-haul routes
Cabin classes	Diversity in cabin classes offers: regular, business, first class (high level of service in business and first class)	No selection of cabin classes
Seats policy	Assigned seats policy	Random seating policy, except if passengers pay the premium for assigned seats
Internal layout	Low seat density Quality material	High seat density Reduced quality material
Alliances	Network alliances	No network alliances
Prices policy	Multi-segment price policy, large price range and complex yield management	Single price policy
Distribution channel	Used to sell most tickets via travel agencies. Now the selling is done trough the airlines website	Direct communication with users via the internet or customer centre, decreasing costs by eliminating the profit of travel agencies
Product policy	Multi-segment product policy	Single product policy
On-flight services	No in-flight charged services Entertainement programs, separate registration of business passengers, VIP lounges, free catering Full service	In-flight charged services separately from flight ticket No frills[4]

[4] *"A no-frills product or a service is basic and has no extra or unnecessary details"* (*Cambridge Dictionary*, 2021).

Employees	High fixed salaries	Stimulation for employees (variable income up to 40%)
Travelers/loyalty programs	Travelers programs or other loyalty schemes	No
Structure of the network	Connection flights, hub-and-spoke network	Point-to-point system
Coverage of the network	Domestic, and long-haul flights (focus on respective home country)	Short-haul flights
Schedules	Wide range of destinations, high frequency of flights	Low flight frequency

Source: Adapted after (Tomová & Materna, 2017), (Vidović et al., 2013), (European Low Fares Airline Association, 2004), (Gillen & Morrison, 2003) & (Eugenio-Martin & Perez-Granja, 2021)

1.3.3 Porter's competitive strategy

Porter (1997) describes in a simple manner the theory of business strategy. The author states that companies engage in costly activities expecting to generate profits eventually. The competitive advantage of the firm will depend on the way it organizes its activities across its value chain. A firm will create competitive advantage by selecting the activities in which it will engage in as well as its configurations.

Firms can choose from three generic strategies to compete: competing on the basis of the costs; competing on the basis of differentiation; competing on the basis of a specific segment of the industry (focus) (Porter, 1997).

- **Cost leadership:** This strategy consists in achieving the lowest cost of the industry while still being able to provide the market with products at least as goods as competitors' products, if not at the risk that the products will suffer a price cut. By charging average price and enduring lower costs, the firm will perform better than the norm (Porter, 1997).
- **Differentiation:** By pursing this strategy, the firm aims at differentiating itself by delivering a product or service of high quality with distincts attributes that are more costly. To surpass competition, the firms needs to be able to charge a premium. This strategy must lead to higher margins for the firm (Porter, 1997).
- **Focus:** When following a focus strategy, the firm concentrates on a specific industry segments (Porter, 1997).

Porter (1997) states that when a firm cannot select or pursue a specific strategy, it can become 'stuck in the middle' and affect the company's financial position. However, cost leadership and differentiation strategy can be combined when *"competitors have not made clear strategic choices and are mired in trying to decide"*; *"market share and relationships heavily influence cost"*; *"a firm innovates in a unique, powerful way"*.

1.3.4 Towards a hybridization of the business strategy

The hybridization of carriers business model is a complex, multi-sided and robust phenomenon influencing both full service and low-cost carriers (Tomová & Materna, 2017). The frontier that was once present between FSCs and LCCs has become less and less discernible since both business models are melding towards a hybridization model. This trend is observable in different ways and within different airlines (Magdalina & Bouzaima, 2021).

The motives for LCCs to undertake these changes are various. One driver could be related to expansion, which requires new markets in order to not be saturated. Since suburban cities' demand may already be depleted, these drivers might motivate LCCs to take advantage of large cities and its associated demand. Another explanatory reason could be attributed to increased competition from LCCs at secondary airports, that would motivate other LCCs to develop in primary airports. Further, following changes in the airline industry, primary airports slots are more accessible. Likewise, LCCs might now have enough strength to compete with legacy carriers or with intermediate budget airlines (Dobruszkes et al., 2017).

According to Magdalina & Bouzaima (2021), four clusters can be identified: the FSC; the hybrid 1; the hybrid 2; the LCC.

The **FSC** adopts part of LCC attributes such as features related to efficiency e.g. young fleet and high utilization rate (flight hours). This model is the only one which combines these four aspects: offer of complimentary beverages; codeshare[5] with other airlines,

[5] Codesharing is *" a system by which two or more airlines agree to offer a single ticket and to use the same flight number for connections to a place where only one of them goes"* (*Cambridge Dictionary*, 2021).

participation in international alliances, offer of wide range of fares. Lufthansa, SWISS and KLM are good representatives of the FSC model (see Table 9).

The **hybrid 1** is a combination of characteristics from both the FSC and the LCC. It encompasses attributes of the FSC: hub-and-spoke system; free carry-on bag allowance, subject to certain limitations; access to frequent flyer programs; lower densification of the aircraft layout; offer of non-economy seats; presence of older aircraft and twin-aisle aircraft; recognition of trade unions. It also comprises attributes of the LCC: low level of flight frequency; no complimentary beverages; no code sharing; no international alliances. Sun Express Germany and Air Italy are good representatives of the hybrid 1 model (one characteric difference).

The **hybrid 2** model is composed mostly of LCC characteristics. It encompasses attributes of the FSC: hub-and-spoke system; free carry-on bag allowance; flyer programs; recognition of trade unions; younger and homogenized fleet; only economy seats offer; absence of participation in international alliances; high utilization of the fleet (flight cycle). The closest representatives airlines of the model are: Vueling, Binter Canarias and Air Dolomiti (none match perfectly the model).

The **LCC** model adopts part of the FSC features. This model combines the following features: point-to-point network; no frequent flyer program; low flight frequency; no complimentary beverages; only economy seats; homogeneous fleet. The closest representatives airlines of the model are: Ryanair, easyJet, Wizz Air, Transavia and Voltea (match the model within two attributes, Wizz Air matches the model fully).

Table 9 - Four clusters model attributes

FSC	**Hybrid 1**	**Hybrid 2**	**LCC**
Operate young fleet High level of utilization (flight hours) Offer complimentary beverages Codeshare with other airlines Participate in international alliances Offer a wide range of fares	**FSC retained attributes** Hub-and-spoke system Free carry-on bag allowance Access to frequent flyer programs Lower densification of the aircraft layout Offers non-economy seats	**FSC retained attributes** Hub-and-spoke system Free carry-on bag allowance Access to frequent flyer programs Recognize trade unions Operate younger aircraft High densification of the aircraft layout	Point-to-point network High utilization of aircraft (both flight flight hours and flight cycles) No frequent flyer programs Free carry-on luggage (for 2/3 of airlines) Low flight frequency

	Above median number of employees to the number of aircrafts and to the number of employees to the number of passengers (PAX) Presence of older aircraft Recognize trade unions **LCC retained attributes** Low level of flight frequency No complimentary beverages No corporate programs No codesharing No international alliances Homogenized fleets High percentage of leased aircraft High utilization (flight hours) Reduced number of fare options	Less on-board comfort Offers only economy seating Small number of employees to PAX and small number of employees to the size of the fleet **LCC retained attributes** Lack of complimentary beverages Limited codesharing Absence of participation in international alliances Homogenized fleet High utilization rate of the fleet (flight cycle)	No complimentary beverages Lack of corporate programs Lack of codesharing Lack of involvement in alliances Only economy seats Homogeneous fleet highly utilized

Source: Based on (Magdalina & Bouzaima, 2021)

According to Tomová & Materna (2017), there exist three hybridization characters: *defensive*, *offensive* and *cooperative* hybridization. Defensive hybridization is defined as a response to the business model of rivals. Offensive hybridization is characterized by its aggressive and proactive nature, for example, an airline within another airline[6]. Cooperative hybridization describes cooperation among low-cost carriers within and between carrier alliances. This third type of hybridization appears to be either offensive or defensive in nature.

[6] *"Airline-within-airline is a lower cost subsidiary created by network airline"* (Pearson & Merkert, 2014).

Although Porter's (1997) work on competitive strategy states that firms can choose from three generic business strategy (cost-leadership, differentiation, focus), it seems that the recent strategies of airlines is no longer so distinctive. Indeed, it emerges from the scientific literature that the FSC and LCC business model are shifting to a hybrid business model (Magdalina & Bouzaima, 2021). The motives for this change are various and could be attributed to the required expansion to remain competitive with regards to other airlines. LCCs might now have enough strength to compete with legacy carriers (Dobruszkes et al., 2017). Airlines strategy have therefore an impact on the airlines business model.

The reader has been able to assess the evolution of business models in the airline industry. In order to approach our research question a little closer, it is now pertinent to examine the concept of Corporate Social Responsibility within the airline industry.

From this point, one may be more familiar with the notions of Corporate Social Responsibility. Consequently, it is appropriate to approach the concept of CSR in the airline industry and to learn about the findings of researchers in the field, though the availability of research on CSR in the aviation sector is scarce.

1.3.5 The notion of trade-offs

The notion of trade-offs situations can be defined as *"compromise situations when a sacrifice is made in one area to obtain benefits in another"* (Byggeth & Hochschorner, 2006). Implementing CSR initiatives within corporations does not always satisfy all the objectives. As mentionned earlier in Carroll's pyramid (point 1.2.2), tensions between the different levels of the pyramid exist. Actually, Hahn et al. (2010) argue that the win-win paradigm[7] which refers to aligning social, environmental and economic sustainability is a difficult recipe to obtain, as sustainable development is a rather complex principle. The win-win paradigm is criticized as being too optimistic. The existence of trade-offs and conflicts do exist within corporations and it needs to be analyzed and acknowledged to be overcome.

[7] *"The win-win paradigm constitutes the so-called business case for sustainability according to which environmental stewardship and social responsibility pay off for companies"* (Hahn et al., 2010).

1.3.6 The business case argument

Another key item refers to the business case argument[8]. Around 50 years ago, the author Friedman (1970) had a very clear vision on corporation's mission. In his opinion, for social and environmental matters to be solved, corporations should only focus on maximizing the shareholders interests, which will serve society eventually. Forty years later, Carroll & Shabana (2010) assert that *"the business-case arguments contend that firms which engage in CSR activities will be rewarded by the market in economic and financial terms"*. Other authors assert that environmental and social activities are only means about generating profits. Sometimes, the business-case view appears to maximize stakeholders' interest while it can be considered as only considering the shareholders' one (Schaltegger et al., 2019). According to (Schaltegger et al., 2011) *"a business model for sustainability can be defined as supporting voluntary, or mainly voluntary, activities which solve or moderate social and/or environmental problems"* and it enables a business to benefit from positive effects while creating value for customers and the social sphere. The authors also illustrate that in the context of the business case, there is a separation between the economic goals and the social and environmental goals. Instead of doing things in parallel or diagnosing trade-offs, it is crucial for management to align value creation for stakeholders and profit orientation (Schaltegger et al., 2019).

1.3.7 Corporate Social Responsibility in the airline sector

Nowadays, Corporate Social Responsibility is on the agenda of many sectors. The topic has also raised curiosity in the academic community and more precisely in the aviation sector (see Table 10), especially since the industry is known to engender negative impacts such as CO2 emission, air pollution, noise, and poor labor practice (Chang et al., 2015).

A first research topic revolves around CSR initiatives, reporting and practices in the airline sector. Research indicates that a majority of airlines pay particular attention to the environmental dimension of CSR (see point 1.2.3) (Cowper-Smith & de Grosbois, 2011). Okumus et al. (2020) have reached the same conclusion when analyzing the specific case of Turkish Airlines. Two major topics are frequently considered: the reduction of both CO2 emissions and aircraft noise. Although airlines communicate specific concerns in

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[8] *"The business case refers to the underlying arguments that provide rational justification for CSR initiatives from a primarily corporate economic/financial perspective"* (Carroll & Shabana, 2010).

their reports, initiatives are not necessarily set up to demonstrate their real commitment. The authors argue that *"this illustrates the situation in which an airline reports its commitment to a certain CSR goal, yet provides very few or no tangible courses of action to demonstrate its commitment"* (Cowper-Smith & de Grosbois, 2011). Moreover, only little attention is given by the researchers to CSR reporting. Also, the available literature on the subject demonstrates a lack of consistency in terms of reporting practices (Cowper-Smith & de Grosbois, 2011). Other authors have identified contrasts in terms of CSR reporting between the APEC based airlines and the EU based airlines while informing about the changing trend in terms of CSR reporting worldwide (Yang et al., 2020).

With regard to stakeholders, five groups belonging to the airline industry were identified: shareholders; customers; employees; government; the general public. It is assumed that airlines are responsible for their stakeholders' interests (Wang et al., 2015).

A second topic within the literature is about CSR influence on the firm's financial performance. The airline sector has the specificity to operate in a highly competitive ecosystem. In this matter, the role of CSR is crucial as it constitutes an excellent strategy and source of competitive advantage if it addresses and pursues both economic and social objectives (Porter & Kramer, 2006). Indeed, several authors have established that CSR contributes positively to business performance by increasing employee motivation and increasing consumer satisfaction (Brammer & Millington, 2005; Luo & Bhattacharya, 2006). Van Marrewijk (2003) asserts that for a CSR strategy to be successful, it is necessary to better engage stakeholders and address all specific challenges. Furthermore, an insightful point is that sustainability has been shown to have a causal effect on the increase in value of companies. This establishes a link between a firm's corporate sustainability[9] and the valuation by investors on the stock market (Lo & Sheu, 2007). Rotondo et al. (2019) have also conducted research related to the positive influence of CSR on the firm's financial performance. Their research indicates that integrating social responsibility objectives does not automatically influence the financial performance of the company but it may affect the long term financial of the firm (see Table 10). Whereas

[9] *"While corporate sustainability recognizes that corporate growth and profitability are important, it also requires the corporation to pursue societal goals, specifically those relating to sustainable development – environmental protection, social justice and equity, and economic development"* (Wilson, 2003).

according to Phillips et al. (2019), the promotion of a CSR culture and leadership influences positively the CSR performance, which can enhance customer satisfaction and financial performance.

A third subject in the literature concerns the external and internal influence on CSR adoption and initiatives. The first research with regards to CSR in the airline industry was conducted by Lynes & Andrachuk (2008) and aimed at illustrating the differences in terms of commitment towards CSR and also the differences in the management of these responsibilities. Subsequently, Cowper-Smith & de Grosbois (2011) have compared CSR airlines initiatives by designing a framework. The authors have identified four main themes: employee wellbeing and engagement; diversity and social equity; community wellbeing; economic prosperity. Among the undertaken initiatives, a particular attention was devoted to environmental concerns. Other authors emphasize the increasing interest of the airline industry in CSR, in order to assess their relative strengths and weaknesses to improve their performance. Yet, the authors mention that there is still little literature on the subject (Wang et al., 2015).

Other academic scholars have shown evidence that low cost airlines are well aware of the need to act responsibly as a corporation, yet actions are more difficult to identify. Low-cost airlines reports demonstrate a 'high degree of fragmentation' and are of 'variable quality'. Hence, after a basic analysis, it appears that reporting practices and the content nature is variable. The authors also analyzed airlines website, where CSR report were usually made available. They remarked there was no low-cost airlines which had direct CSR-related information on its home page (Coles et al., 2014). This is relevant as Coupland (2006) exposes the fact that significance of CSR can be evaluated according to its position in the hierarchy of website pages. In other words, the easier it would be to access CSR reports on airlines' websites, the more the subject would seem to be taken into consideration.

Moreover, corporations seem to have ackowledged the urge to take actions. It is necessary to say that the demand towards corporations to take social responsibilities has been agreed upon, though it appears there is inconsistency on the citizens' side. This 'intention-behaviour gap' is illustrated by their intentions towards corporate social responsibility while their behaviors seem opposite in terms of work-related and tourism activities (Barr et al., 2011).

Table 10 - Overview of researches and findings on CSR applied to the airline sector

Theme	Author	Research focus	Findings
(1) CSR influence on firm's financial performance	(Rotondo et al., 2019)	"This paper focuses on the social side of sustainability and aims to explore the extent to which integrating social sustainability objectives into the business model has a positive influence on a firm's financial performance, promotes sustainable innovation and enhances the firm's ability to withstand discontinuities such as the recent financial crisis."	"(…) Integrating social sustainability in the business model i) does not automatically influence financial performance, although it may have a role in the long-term financial outcomes of the firm ii) influences the characteristics and effectiveness of sustainable innovation iii) must be accompanied by intelligent managerial activity to be effective iv) does not necessarily lead to faster financial recovery in the aftermath of a discontinuity, but it does make a firm more resilient over a long-term basis."
	(Lee et al., 2018)	"Examine the relationship between (im)material CSR investment and firm performance and the moderating role of airline type and economic conditions based on the stakeholder theory and institutional pressure argument."	"This study finds that both material and immaterial CSR initiatives do not directly influence firm performance, but airline type and economic conditions do moderate the relationship. In specific, the study found that airlines' investments in material CSR initiatives show an indifferent effect on firm performance between low-cost and full-service carriers and also between non-recessionary and recessionary periods. On the other hand, investments in immaterial CSR initiatives present different impacts on firm performance between low-cost and full-service carriers and between non-recessionary and recessionary periods. In details, the effect is more negative for low-cost carriers and recessionary periods than full-service carriers and non-recessionary periods."
	(Phillips et al., 2019)	"Examines Corporate Social Responsibility in Leadership (CSRL) and Culture (CSRC) as valuable resources of the value chain capabilities, and its influence on CSR Performance	"Findings from this research highlights the importance of cultivating and promoting CSR culture and leadership so as to positively influence CSR performance, which can in turn enhance other aspects of firm performance specifically customer satisfaction and

		(CSRP), as well as its resulting effect on Customer Satisfaction (CS) and Financial Performance (FP) in the context of the airline industry."	financial performance. Hence, this research provides incentives for managers to invest in CSR in their quest for sustainable performance."
	(Wang et al., 2015)	"This paper intends to achieve two main aims. First, this study uses entropy to find the relative weights of performance measures of CSR. In so doing, we find that on-time performance, accident rate, flight frequency, growth of employees revenue, and employees revenue are relatively most important measures. Second, based on the results of entropy analysis, this study ranks the airlines in terms of CSR performance by grey relation analysis."	"This result show that most of the larger state-controlled airlines perform better in performance of CSR. Furthermore, the private airline has made relatively large improvement in its CSR performance. In addition, the listed airlines are better than non-listed airlines in CSR performance."
(2) CSR initiatives, practices, and reporting	(Coles et al., 2014)	"Examines corporate social responsibility (CSR) practices among the growing low-fares airlines (LFAs) flying between mainland Europe and the United Kingdom."	"The research discovered evidence that LFAs were aware of the need to act more responsibly but how far intentions resulted in action was difficult to establish. (…) The firm's own CSR-related texts do not represent a reliable basis for examining CSR among LFAs; they have a high degree of fragmentation and variable quality. (…) Very few LFAs had conducted a systemic audit of CSR-related activity. Integrative approaches are required to overcome the limitations of single methods, to contribute towards a fuller understanding of responsibility among LFAs, and to inform debate on whether it is necessary to regulate in order to encourage sustainable development in this high-growth sector."
	(Cowper-Smith & de Grosbois, 2011)	"Identifies initiatives related to corporate social responsibility (CSR) in the airline industry and evaluates the overall state of their adoption as reported by members of the three largest airline alliances."	"Four social and environmental themes were found, including employee wellbeing and engagement, diversity and social equity, community wellbeing and economic prosperity. (…) airlines report CSR initiatives using differing or inconsistent measurements, making evaluation and

			comparison of their performance and effectiveness difficult. Although a large number of airlines publishing CSR reports discussed their achievement of major goals (…) a much smaller number provided detailed information relating to specific initiatives implemented in order to contribute to these goals.”
	(Okumus et al., 2020)	“This study aims to investigate what Turkish Airlines as a global airline company reports for corporate social responsibility (CSR) efforts on its corporate website by developing a framework assessing reports of airline companies’ CSR practices.”	“The research findings suggest that Turkish Airlines publishes numerous reports highlighting their CSR activities. The study results show that Turkish Airlines reports its CSR activities through reports, documents and written policies. While the CSR reporting efforts deal with all CSR areas, the environmental dimension is the mostly emphasized area.”
	(Stevenson & Marintseva, 2019)	“The purpose of this study is to review the issues of CSR assessment and reporting in the aviation industry.”	“This study indicates that CSR assessment can be divided into techniques for rating and self-assessment. The article also presents a theoretical basis for the formation of CSR assessment techniques for airlines and airports.”
	(Yang et al., 2020)	“(…) the current study examines the economic, environmental and social themes of Global Reporting Initiative (GRI) Standards on CSR communication of the global airlines.”	“Our findings indicated a salient growing trend in CSR reporting in the economic dimension while GRI 201-Economic Performance was the most significantly reported sub-topic. Our study has also compared the CSR reporting practices between the APEC based airlines and EU based airlines. The results indicated that focus of CSR reporting was different in the two regions. This study provided a comprehensive understanding of how global airlines communicate their CSR practices and respond to stakeholders’ expectations via CSR reporting. This study informs both academics and practitioners about the changing trends of CSR development and reporting in the airline industry worldwide.”
(3) CSR influence on customer loyalty	(Kim et al., 2020)	“This study aims to take another look at corporate social responsibility (CSR) dimensions in airline industries and identify	“The current study reveals that customer loyalty increased when customers perceived airlines to be practicing desired CSR, but not required CSR. However, this effect varies

		the moderating effects of socio-economic characteristics on customer loyalty."	depending on the expected moderator of socio-economic variables. Regarding required CSR, customers with higher levels of either income or formal education showed increased customer loyalty. However, for desired CSR, only customers with higher levels of education showed significantly increased customer loyalty. Thus, the research findings imply that in order to effectively deliver CST strategies, airline CSR initiatives also need to take into consideration the socio-economic levels of targeted consumers."
	(Han et al., 2019)	"We explored the role of passengers' perception of airline corporate social responsibility in the generation of customer loyalty by considering the mediating effects of cognitive and affective evaluations and the moderating effect of gender."	"Findings will help airline practitioners develop effective strategies to improve passenger loyalty."
(4) External and internal influence on CSR adoption and initiatives	(Lynes & Andrachuk, 2008)	"This paper aims to develop a model that illustrates how various external, sector-specific and internal influences for Corporate Social and environmental responsibility (CSER) are interpreted, and then shaped into action at the level of the firm."	"Findings of the case study provide further evidence that motivations cannot be looked at in isolation of sectoral and cultural contexts. Secondly, it was seen how catalysts – the lens through which a firm sees and interprets motivations – can have an important impact in its level of commitment to corporate social and environmental responsibility (CSER)."

As seen in the above point, four themes were discussed within the literature concerning CSR in the airline industry: CSR influence on firm's financial performance; CSR initatives, practices and reporting; CSR influence on customer loyalty; external and internal influence on CSR adoption and initiatives. With respect to CSR initiatives, practices and reporting, it appears that a majority of airlines focus on the environmental dimension (when considering the triple bottom line approach) of CSR. Within the dimension environment, two topics are mainly addressed: CO2 emission reduction and aircraft noise reduction. A lack of consistency also occurs in terms of CSR reporting among airlines.

Moreover, commitments with regards to CSR do not always result in concrete initiatives to demonstrate this commitment (Cowper-Smith & de Grosbois, 2011).

A notion of trade-off may appear when implementing CSR initiatives within corporations. It is often difficult to implement initiatives that satisfy all the objectives of the firm. Indeed, trade-offs conflicts exist within corporation and these need to be analyzed and acknowledged to be overcome (Hahn et al., 2010). Another notion refers to the business case argument which is pertinent in this context as it refers to the underlying arguments that justify CSR initiatives from an economic perspective (Carroll & Shabana, 2010). While the business case argument may appear to maximize the stakeholders' interests, it is actually maximizing the shareholders' interests (Schaltegger et al., 2011).

Throughout the literature, the reader could assess the pre-existing knowledge on the topic. Therefore, the literature review allow one to have the context in mind when consulting the analysis. In the following part, the conclusion of the literature review will be covered, afterwards the methodological part will be detailed in order to explain the methods used to conduct this analysis.

Conclusion of the literature review

By first considering the business model literature to a large extent and then having set the context by addressing the business model of the airline industry, the reader was able to develop a better idea of the topic that would be addressed in this research. The concepts related to Corporate Social Responsibility and its implementation in the business allowed the reader to become familiar with the pre-existing concepts on the subject prior to entering the analytical part

First of all, it is not necessary to remind that the notion of business model has multiple terminologies and definitions. In the course of this research the *architecture* terminology will be considered as it seems to best describe the notion of business model within the airline industry. Hence, this paper explores a business case analysis of two distinct airlines creating value with different mechanisms. Therefore, the terminology *architecture* seems to be the appropriate terminology for this context (Dubosson-Torbay et al., 2002; Foss & Saebi, 2017; Osterwalder et al., 2005; Rosenbloom & Chesbrough, 2002; Teece, 2010; Timmers, 1998).

With respect to all available definitions on business model in the scientific literature, it is the definition of Osterwalder et al. (2005) which seems the most appropriate within the framework of this research. Since the authors refer to the value creation proposed by the company to one or several segments of consumers as well as its networks of partners. Osterwalder et al. (2005) state that *"A business model is a conceptual tool that contains a set of elements and their relationships and allows expressing the business logic of a specific firm. It is a description of the value a company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams."*

The notion of customer segments issued from the definition is crucial since this comparative analysis will allow to compare two very distinct airlines (low-cost vs legacy carrier), providing two value propositions both very similar and very different. Moreover, as documented in the literature, a form of hybridization of the business model is occuring;

one airline can now offer several value propositions and address different customer segments.

The *strategy* definition of Casadesus-Masanell & Ricart (2010) will be the definition adopted during this analysis as it includes the notion of value creation for *stakeholders*, and since undertaking CSR initiatives has a direct impact on stakeholders, this would seem to be the definition most in line with this paper's approach. Casadesus-Masanell & Ricart (2010) state that *"business model refers to the logic of the firm, the way it operates and how it creates value for its stakeholders; and strategy refers to the choice of business model through which the firm will compete in the marketplace"*.

Then, the notion of Corporate Social Responsiveness (CSR2) will be considered with regards to the second core concept; Corporate Social Responsibility. The issue at stake is not about questionning whether companies must take their corporate responsibility, it is rather a question of how will companies do so, and what methods and measures will be used to assess the environmental and social impact of the firm (Elkington, 2018; Miller, 2020).

In addition, the triple bottom line will be implied throughout the analysis and will enable to answer the research question as airlines undertake CSR initiatives which can be classified according to the three approaches illustrated in the triple bottom line approach (this notion will be slightly modified). Hence, the emphasis suggesting that firms need to measure their environmental and social impact will be addressed in the course of the analysis, as the latter will compare the reporting of CSR initiatives between two airlines (Elkington, 2018).

Next, the literature has enabled the identification of four major themes discussed within CSR in the airline industry: CSR influence on firm's financial performance; CSR initatives, practices and reporting; CSR influence on customer loyalty; external and internal influence on CSR adoption and initiatives. During the analysis, it will be the theme of CSR initiatives which will be further developed. Indeed, the analysis conducted in this paper will bring a contribution to the scientific literature as the current findings on the topic are rather scarce. Moreover, to date, there is no literature available that compares the integration of CSR within two airlines types, nor is it approached through a case-study analysis. This research will allow to bring new leads and/or to confirm current findings on the subject.

The research modalities that were undertaken throughout the case analysis of Air France-KLM and Ryanair will be illustrated in the methodological part. The latter will contribute to explain the research process put in place to conduct this case analysis. The research questions and the case-study methodology will be further developed.

Part 2: Methodology

This section of the document elaborates in details the methodology that was adopted in order to answer the research question. It is composed of three parts: the research aims and research questions, the case study research and the case study selection.

2.1 Research aims and research questions

2.1.1 Research aims

This research paper addresses the topic of Corporate Social Responsibility in the airline industry. The latter has become prominent in the current economy and especially since the airline deregulation in 1978. Although this sector has a favorable influence on the development and globalization of the economy, it also damages the environment and impacts its stakeholders (Chang et al., 2015). Thereupon, it is interesting to examine whether Corporate Social Responsibility is considered by airlines. The exploration of the CSR concept in the context of the airline industry will be conducted through the analysis of two distinct company cases: Air France-KLM and Ryanair. More specifically, this paper aims to provide answers or at least to identify possible answers to the following research question: *"Is Corporate Social Responsibility integrated into the business model of legacy carrier and low-cost airline? Two case studies".*

In attempting to answer this research question, an analysis will be developed in order to shed light on the questions surrounding this topic. This will allow for a better understanding of CSR considerations, practices and actions (if there are any), within companies while exploring whether this varies across business models.

2.1.2 Research questions

In an attempt to answer the main question (see point 2.1.1), the latter will be divided into two sub-research questions. Firstly, it seems essential to assess whether or not Corporate Social Responsibility is considered by the business model of Air France-KLM and Ryanair. Secondly, if Corporate Social Responsibility is considered, it is relevant to assess whether certain actions and initiatives are undertaken or not by the airlines to demonstrate their real commitment towards their corporate responsibility. To address these concerns, two sub-research questions were developed:

1) Is Corporate Social Responsibility addressed in the business model of Air France-KLM and Ryanair?
2) If Corporate Social Responsibility is addressed, is it reflected in concrete initiatives?

2.2 Case-study research methodology

The methodology selected to answer these two questions is based on an explorative qualitative approach using case studies. This will be achieved through the analysis of reports, press articles and websites of the analyzed companies. A thematic analysis will be conducted to categorize CSR considerations and initiatives among both airlines, if there are any. Hence, analyzing two airlines in depth and then comparing them seems to be an appropriate approach to conduct this exploratory research. The main objective being to learn more on CSR consideration and practices within the airline industry and among distinct airline business models as the subject is not well documented in the literature (Cowper-Smith & de Grosbois, 2011).

In the context of this research, a qualitative approach is more appropriate as the objective is to understand the phenomenon of CSR considerations, practices and reporting in the airline industry among two very distinct types of airlines. This research has a rather broad approach and serves more to build or at least attempt to build theory through an explorative dynamic rather than to confirm existing theories or to measure them. Indeed, qualitative approach unveil insights that quantitative research could not easily reveal (Eisenhardt & Graebner, 2007). Moreover, when consulting the scientifc literature, the case-study research methodology is convenient when the research aim is exploratory rather than confirmatory (Gerring, 2004). Hence, theory building appears to be more robust and generalizable with a multiple-case approach rather than a single-case research (Eisenhardt & Graebner, 2007). Several authors such as Okumus et al. (2020), Rotondo et al. (2019), and Lynes & Andrachuk (2008) have adopted the case study research approach in the same context of CSR applied to the airline industry. The inductive case analysis research is interesting since it integrates the context in which the phenomenon occurs. It is also a popular and relevant method as it enables to develop constructs and theoretical propositions which makes it consistent. Thus, inductive research produces new theory from data, then, deductive research apply and test the theory to data (Eisenhardt & Graebner, 2007).

Case-study research is subject to some criticism. It is worthwile to enumerate these misconceptions and to correct them before embarking on the case analysis. Flyvbjerg (2006) enumerates five common misunderstandings:

- Misunderstanding 1: General, theoretical (context-independent) knowledge is more valuable than concrete, practical (context-dependent) knowledge.

  "Predictive theories and universals cannot be found in the study of human affairs. Concrete, context-dependent knowledge is, therefore, more valuable than the vain search for predictive theories and universals."

- Misunderstanding 2: One cannot generalize on the basis of an individual case; therefore, the case study cannot contribute to scientific development.

  "One can often generalize on the basis of a single case, and the case study may be central to scientific development via generalization as supplement or alternative to other methods. But formal generalization is overvalued as a source of scientific development, whereas "the force of example" is underestimated."

- Misunderstanding 3: The case study is most useful for generating hypotheses; that is, in the first stage of a total research process, whereas other methods are more suitable for hypotheses testing and theory building.

  "The case study is useful for both generating and testing of hypotheses but is not limited to these research activities alone."

- Misunderstanding 4: The case study contains a bias toward verification, that is, a tendency to confirm the researcher's preconceived notions.
  "The case study contains no greater bias toward verification of the researcher's preconceived notions than other methods of inquiry. On the contrary, experience indicates that the case study contains a greater bias toward falsification of preconceived notions than toward verification."

- Misunderstanding 5: It is often difficult to summarize and develop general propositions and theories on the basis of specific case studies.

  "It is correct that summarizing case studies is often difficult, especially as concerns case process. It is less correct as regards case outcomes. The problems in summarizing case studies, however, are due more often to the properties of the reality studied than to the case study as a research method. Often it is not desirable to summarize and generalize case studies. Good studies should be read as narratives in their entirety."

As the reader is now more familiar with the research method employed, it is now necessary to define the reasons that led to the selection of these two cases.

2.3 Case study selection

The case study selection is based on the objective to discover and explore the companies' considerations about CSR matters. Therefore, selecting two distinct companies seems to be an adequate research approach. Ryanair has been selected to represent the low-cost airline business model since the latter is considered to be a pure LCC (Klophaus et al., 2012). The Air France-KLM Group has been selected as both Air France and KLM are great representatives of the FSC (Magdalina & Bouzaima, 2021). In addition, the airlines have not initiated their operations at the same time point in history and thus have a complete different story. KLM part of the Air France-KLM Group is one of the oldest airline company in the world (1919) while Ryanair was founded in a post war and globalization era (1985). Hence, atypical or extreme cases might be relevant as they can disclose more information (Flyvbjerg, 2006). Also, these two cases have been chosen for their potential to reveal theoretical insights (Eisenhardt & Graebner, 2007).

Part 3: Case study analysis

The third section of this paper is aimed at analyzing the two selected cases in order to strive to answer the two sub-questions that were developed in part two methodology. As a reminder the main research question was the following: "*Is Corporate Social Responsibility integrated into the business model of legacy carrier and low-cost airline? Two case studies".* The latter was divided into two sub-questions:

1) *Is Corporate Social Responsibility addressed in the business model of Air France-KLM and Ryanair?*
2) *If Corporate Social Responsibility is addressed, is it reflected in concrete initiatives?*

The analysis section will be divided into two main parts. First of all, it is essential to illustrate the background and development of the two companies analyzed for the reader to have a better understanding of the context. This will also illustrate the similarities and differences between both business models. Then, an evaluation will be performed regarding both airlines to determine whether or not Corporate Social Responsibility is addressed. Next, if CSR is considered by the airlines, an analysis will be conducted to assess whether they have undertaken concrete initiatives to determine their commitment or not.

3.1 Company overview

3.1.1 Air France-KLM's history

The Air France KLM Group was born in 2003 following a merger between Air France and KLM (see Appendix 7). The group combines Air France, KLM Royal Dutch Airlines, Transavia, Air France KLM Martinair Cargo and Air France Industries KLM Engineering & Maintenance (see Table 11). Among the reasons for this merger was the objective of reducing costs. The other being more strategic since the management understood that there was only room for three main airline groups in Europe (Air France KLM, 2021).

The two airlines (Air France & KLM) were founded before the World War II and were therefore considered as pioneer in the aviation sector. More specifically, KLM was founded in 1919 in the Netherlands by a consortium of investors and Air France was founded in France in 1933 from the combination of five French airlines (Air Union, Air

Orient, Société Générale de Transport Aérien (SGTA), CIDNA and Aéropostale) (see Appendix 8) (Air France KLM, 2021).

KLM initiated its first flight in 1920 from London to Amsterdam Airport Schiphol with an Airco DH 16 aircraft (see Appendix 9). One year later, a new aircraft, the Fokker (see Appendix 10) was used on the new established routes serving Amsterdam, Rotterdam, Brussels, Paris, London, Bremen, Copenhagen and Malmö. In 1919, the Lignes Latécoère which became Aéropostale (part of Air France) in 1927, began their activities by transporting mail. Little by little, the airline company flew on new routes: Toulouse-Barcelona, Casablanca-Dakar, Toulouse-St-Louis (Senegal). In 1929, regular long-distance routes were established by KLM from the Netherlands to their colony in Indonesia. In 1934, KLM completed its first transatlantic flight from Amsterdam to Curacao. Indeed, it was KLM that was the first European airline initiating flight route between Europe and America. In 1930, Aéropostale, then Air France crossed the Atlantic as well (Air France KLM, 2021).

During the second World War, airline activities were interrupted and Air France was nationalized. In 1946, activities have resumed, both KLM and Air France established their routes Amsterdam-New York and Paris-New York operated by a DC4 aircraft (see Appendix 11). In 1960, the jet made its appearance in the aviation scene which contributed to reducing flying time as well as the intermediate landings required. In 1989, KLM acquired a 20% share in an American airline: Northwest Airlines. In 1991, KLM increased its stake in Transavia from 40% to 80%. One year later, KLM launched its first customer loyalty program: the Flying Dutchman (later called Flying Blue). It was the 5th of May 2004 that Air France-KLM Group was officially established. The same year, three new airlines joined the SkyTeam international alliance (KLM, Northwest and Continental). In 2005, the frequent flyer program called Flying Blue was introduced for both airlines. The same year, Air France-KLM appeared on the Dow Jones Sustainability Index[10] (DJSI) and remained a leader until 2016. KLM published its first sustainability report in 1996 (*Air France KLM*, 2021a; Bailey, 2021; *KLM Corporate - KLM*, 2021).

[10] *"The Dow Jones Sustainability World Index comprises global sustainability leaders as identified by S&P Global through the Corporate Sustainability Assessment (CSA). It represents the top 10% of the largest 2,500 companies in the S&P Global BMI based on long-term economic, environmental, and social criteria"* (S&P Dow Jones Indices, 2021).

Table 11 - Air France-KLM Group Key Information

Key items	Data
Air France-KLM Group's CEO	Benjamin Smith
Air France-KLM Brands	Air France; KLM Royal Dutch Airlines; Transavia; Air France KLM Martinair Cargo; Air France Industries KLM Engineering & Maintenance
Number of passengers carried in 2020	34,065 M
Load factor	58,8%
Revenue 2020	11.1 billion euros
Net income	-7.1 billion euros

Source: Based on (Air France KLM Group, 2021c)

3.1.2 Ryanair's history

Ryanair Holdings plc is the mother company of Buzz, Laudamotion airline, Malta Air, and Ryanair (see Table 12). Ryanair airline was founded in 1985 by the Ryan family in Ireland (see Appendix 12). In July, the airline inaugurated its first route on a 15-seater Bandeirante aircraft (see Appendix 13) with daily flights from Waterford, Ireland to London Gatwick. At that time, two airlines (Aer Lingus and British Airways) detained a duopoly on the Dublin-London route. One year later, the regulatory authorities had permitted Ryanair to operate on this route as well with two turbo prop BAE748 aircrafts (see Appendix 14). With their competitive price (£99 instead of 209£ for Aer Lingus and British Airways), the company triggered the first airfare war in Europe.

In 1987, the airline started leasing three BAC1-11 aircrafts (see Appendix 15), which enabled the firm to operate on 15 routes (from Dublin to Liverpool, Manchester, Glasgow and Cardiff and from Luton to Cork, Shannon, Galway, Waterford and Knock). In 1999, the company rented out two ATR42 turbo aircrafts (see Appendix 16) and the firm ended its business class due to financial losses. In 1990, due to fierce competition with British Airlines and Aer Lingus, the airline had accumulated £20 million in losses which led the company to restructure. The family-owned company reinjected £20 million. With a new management, the company has established itself as the first low-cost airline in Europe.

In 1992, the European Union completed the airline deregulation in Europe (following the airline deregulation in the US in 1978) which enabled airlines to develop their activities and to compete freely in Europe. In 1995, Ryanair became the largest Irish airline operating routes from Dublin. In 1997, the company became public on the Dublin and NASDAQ Stock Exchanges. One year later, the company is voted 'Airline of the Year' and 'Best Managed National Airline'

In 2000, the airline launched its website allowing consumers to book tickets online as well as car rental, hotel accommodation, travel insurance and rail services. The airline continued to expand its fleet with eight new Boeing 737-800s[11]. In 2001, Brussels Charleroi Airport became Ryanair's first Continental European base[12] with a fleet of five B737-800s. In 2002, Ryanair is the largest low-cost airline in Europe. In 2003, Buzz was acquired by the firm, which enabled the airline to operate on 11 new regional airports in France. In 2004, the company owned the youngest fleet in the world (2-years old aircraft). The firm has the best punctuality in terms of flight schedule. It became 'The World's Favourite Airline'.

In 2008, the European Court of First Instance rejected the EU Commissions 2004 Charleroi decision (see The Commission's decision on Charleroi airport). Traffic kept growing and in 2012, 175 new aircrafts were ordered. In 2014, the 'Always Getting Better' program was launched. In 2016, Flexi-Plus and Leisure-Plus products were improved. Ryanair Sun was launched which is a charter airline. In 2018, Ryanair acquired 75% of Laudamotion, an Austrian airline. Ryanair established Environmental Policy that calls for the eradication of non-recyclable plastics by 2023. In 2019, Ryanair became the first EU airline to release CO2 emissions statistics on a monthly basis (66G CO2 per passenger/km) (see Appendix 17). In 2020, due to the COVID-19 crisis, traffic fell from 149m to 27,5m. The company also engaged on temporary cost saving agreements to limit job losses (see Appendix 18) (*History of Ryanair | Ryanair's Corporate Website*, 2021).

Table 12 - Ryanair Group Key Information

Key items	**Data**
Ryanair Group's CEO	Michael O'Leary
Ryanair Group Brands	Buzz; Laudamotion (Lauda); Malta Air ; Ryanair

[11] The Boeing 737-800 is the only aircraft which will finally constitute the Ryanair's fleet.
[12] *"A base is an airport at which the airline permanently bases aircraft and crew and from where it operates routes. Both fleet and personnel return to the base at the end of the day. The aircraft based at the airport do not necessarily always have to be the same tail numbers, but the airline will typically keep a consistent complement of aircraft at base"* (*CAPA Center for Aviation*, 2013)

Number of passengers carried in 2019-2020	149 M
Load factor	96%
Revenue 2020	8,495 M
Net income 2020	649 M

Source: (Ryanair, 2021) & (*History of Ryanair | Ryanair's Corporate Website*, 2021)

3.2 Company's concerns and initiatives towards CSR

In order to evaluate the Corporate Social Responsibility concerns and initiatives of the two companies (if any), CSR-related information was collected through the available data coming from their websites, annual reports and sustainability reports. The analysis is conducted under several angles in order to have a global approach on the subject. It aims to be as complete, understandable and comprehensive as possible to improve the knowledge on this specific topic, while answering the main research question.

To begin, a first angle of view will allow to classify the reported airlines initiatives based on their theme, it will also enable to enumerate the number of initiatives undertaken by both airlines. Then, a second angle will identify the nature of the CSR initiatives. Next, a third angle of view will aim at illustrating and describing the reporting format used by both companies to communicate to their stakeholders. Afterwards, a fourth angle of view will concentrate on the key stakeholders that are addressed by the CSR initiatives. At last, a fifth view will discuss the means of communication, channels used by the airlines to report their initiatives.

3.2.1 Classification of reported initiatives on a theme-based approach

This first part aims at providing an overview of the CSR initiatives that were undertaken by the airlines by classifying them by dimensions, themes and goals (see Appendix 19 & 20). It also enables the reader to have a better comprehension on the number of initiatives as well as the importance attributed to each theme.

3.2.1.1 Air France-KLM

The Air France-KLM Group counts a total of 193 initiatives that have a CSR-related objective. These are divided among four main dimensions specific to the company: environment (68); customer trust (37); employee journey (47); societal value (41).

The dimension *environment* as its name suggests, encompasses all environment-related initiatives contributing to reduce the Group's environmental impact. Six themes are addressed within this dimension: carbon footprint (18); sustainable aviation fuel (SAF) (14); noise hindrance (10); air quality (4); waste and circular economy (15); biodiversity (7) (see Table 13).

The dimension *customer trust* comprises the initiatives developed to improve customer satisfaction and travel experience. Four themes are addressed within this dimension: operational safety (7); confidentiality and data protection (6); customer dialogue (17); accessibility of products and services for all (7).

The dimension *employee journey* gathers all the initiatives that aim at developing a motivating and safe environment for employees. Five themes are addressed within this dimension: working conditions and social dialogue (9); human capital development (14); health, safety and quality of life in the workplace (6); diversity and inclusion (11); innovating and involving employees (7).

The dimension *societal value* combines all the initiatives that aim at generating a social and environmental value for new generations and communities by supporting projects or creating new business opportunities. Four themes are addressed within this dimension: local development (17); social partnerships (13); solidarity linked to the health crisis (2); sustainable procurement (9).

Table 13 - Overview of Air France-KLM's CSR initiatives

CSR dimension	**Theme**	**Goal**
Environment (68)	Carbon footprint (18)	Improve Group's efficiency and reduce carbon footprint (9)
		Reduce CO2 emissions (5)
		Reduce energy consumption (3)
		Reduce fuel consumption (1)
	Sustainable Aviation Fuel (SAF) (14)	Contribute to SAF (7)
		Support research on SAF creation (2)
		Promote knowledge of SAF (2)
		Promote emergence of SAF industries (1)
		Ensure adequate supply of SAF to fly CO2 neutral by the end of this century (1)
		Stimulate SAF regulations (1)
	Noise hindrance (10)	Reduction in noise footprint (4)
		Share the framework for sustainable development (4)
		Contribute to French and Dutch government policies (2)
	Air quality (4)	Promote the use of public transport (2)
		Reduce local impact and increase employees awareness (1)

		Reduce emissions in the environment of aircraft handling (1)
	Waste and circular economy (15)	Recycling items (6)
		Reusing/Recycling items (3)
		100% recycled waste in 2020 (1)
		Avoid water wastage and reduce water consumption (1)
		Optimize management of hazardous waste (1)
		Recycling water, optimize engine performance (1)
		Reduce catering and cleaning waste (1)
		Repair waste (1)
	Biodiversity (7)	Combat illegal trading in protected species (3)
		Compensate for CO2 emissions (2)
		Contribute to reforestation (1)
		Promote preservation of biodiversity (1)
Customer trust (37)	Operational safety (7)	Manage flight safety (1)
		Identify risks generated by the COVID19 (1)
		Develop a safety culture (1)
		Ensure the protection of staff, customers, aircrafts (1)
		Guarantee health conditions (1)
		Guarantee food services that are safe for customers (1)
		Guarantee food quality (1)
	Confidentiality and data protection (6)	Manage cybersecurity (3)
		Protect data (1)
		Improve monitoring of data (1)
		Assess the effectiveness of the privacy compliance framework (1)
	Customer dialogue (17)	Improve customer satisfaction (7)
		Support customer feedback (3)
		Co-create with customers (2)
		Analyze competitive environment (1)
		Safeguard a consistent product and service delivery around the world (1)
		Involve customers on sustainability topics (1)
		Develop sustainable solutions (1)
		Evaluate the Group's CSR strategy (1)
	Accessibility of products and services for all (7)	Foster accessibility of product and services (6)
		Support traveling kids (1)
Employee journey (47)	Working conditions and social dialogue (9)	Protect health conditions (2)
		Define contribution scheme (2)
		Foster commitment (1)
		Preserve cohesion (1)
		Reconstruction plan to take place in full transparency (1)
		Mitigate the impact of the crisis (1)
		Limit forced layoffs (1)
	Human capital development (14)	Foster outplacements (2)
		Training employees to cope with unforeseeable situations (2)
		Foster inclusive talent management (1)
		Foster training (1)
		Support employees (1)
		Foster learning for employees (1)
		Empower high potential women (1)
		Enhance collective performance (1)
		Foster talents (1)
		Supporting interns (1)
		Training employees (1)
		Facilitate dialogue within teams (1)
	Health, safety and quality of life in the workplace (6)	Prevent risk (2)
		Guarantee optimal working conditions (2)
		Support employees (1)
		Develop health measures (1)
	Diversity and inclusion (11)	Ensure equal treatment (2)
		Increase the number of women in management positions (1)
		Encourage women to access the highest management positions (1)
		Promote inclusivity (1)

		Increase diversity and inclusion awareness (1)
		Foster equal opportunity (1)
		Promote diversity (1)
		Commit to recruitment of disabled people (1)
		Raising awareness (1)
		Employ people with a distance to the labor market (1)
	Innovating and involving employees (7)	Contribute to innovation (1)
		Promote and support digital (1)
		Create new business for Air France (1)
		Aim at creating memorable experiences for employees (1)
		Build sustainable growth (1)
		Foster participation in innovative idea (1)
		Promote sustainability awareness (1)
Societal value (41)	Local development (17)	Foster cooperation (4)
		Strengthen competitiveness and development of the region (2)
		Support future generation (2)
		Foster inclusion (1)
		Contribute to employment (1)
		Integrate young local job seekers (1)
		Creation of sustainable employment (1)
		Stimulating economic development (1)
		Promote responsible and sustainable tourism (1)
		Promote local entrepreneurship (1)
		Foster skills development (1)
		Guarantee reliability performance of track equipment in African locations (1)
	Social partnerships (13)	Support children (3)
		Support employee initiatives (2)
		Support aviation organization (2)
		Support employee involvement (1)
		Support integration of disadvantaged people (1)
		Support ravages of sex tourism (1)
		Support young people (1)
		Combat diseases (1)
		Support employee involvement (1)
	Solidarity linked to the public health crisis (2)	Provide support during crisis (2)
	Sustainable procurement (9)	Foster responsible catering (3)
		Empower buyers (2)
		Foster a responsible procurement process (1)
		Build long-term relationships with suppliers (1)
		Promote and protect SME ecosystem (1)
		Reduce single-use plastic usage by 80% by 2025 (1)

Source: Based on Air France-KLM Sustainable Development Strategy 2020 (see Appendix 19)

3.2.1.2 Ryanair

The Ryanair airline counts a total of 46 initiatives that have a CSR-related objective. These are divided among three main dimensions specific to the company: environment (30); people (5); societal (11).

The dimension *environment* encompasses all environment-related initiatives contributing to reduce the airline's environmental impact. Seven themes are addressed within this dimension: CO2 emissions (22); fuel and energy consumption (1); market based measures (1); noise hindrance (3); plastic reduction (1); regulations (1); support environmental responsibility (1) (see Table 14).

The dimension *people* combines all initiatives that aim at improving the relationships with employees as well as fostering their engagement and development in the company. Four themes are addressed within this dimension: training and development (2); employee engagement (1); employees representative & trade unions (1); gender diversity (1).

The dimension *societal* comprises all initiatives that aim at contributing to a social impact. Four themes are addressed within this dimension: contribution to NGO and charities (7); education (1); European Union (1); sustainable aviation (1).

The dimension *customer* gathers the initiatives that aim at improving the value proposition and customer experience. One theme is addressed within this dimension: value proposition (1).

Table 14 - Overview of Ryanair's CSR initiatives

CSR dimension	Theme	Goal
Environment (30)	CO2 emissions (22)	Limit CO2 emissions (16)
		Offset carbon (5)
		Call EU attention (1)
	Fuel and energy consumption (1)	Call EU and fuel manufacturers attention towards biofuels incentives (1)
	Market based measures (1)	Participate in the EU Emissions Trading System (ETS) (1)
	Noise hindrance (3)	Limit the impact of aircraft noise (2)
		Limit the impact of aircraft noise and emissions (1)
	Plastic reduction (1)	Reduce non-recyclable plastics (1)
	Regulations (1)	Comply with mandatory regulations
	Support environmental responsibility (1)	Support environmental responsibility (1)
People (5)	Training and development (2)	Foster training and development (2)
	Employee engagement (1)	Foster worker engagement (1)
	Employees representative & trade unions (1)	Foster relationships with employees (1)
	Gender diversity (1)	Foster gender diversity (1)
Societal (11)	Contribution to NGO and Charities (7)	Sponsor charities and festivals (4)
		Support children (1)
		Support ill children (1)
		Support hospitals, schools and child welfare programs (1)
	Education (1)	Support education (1)
	European Union (2)	Support EU economy and collaboration (1)
		Support EU integration and education mobility (1)
	Sustainable aviation (1)	Support sustainable aviation (1)
Customer (1)	Value proposition (1)	Foster continuous progress and innovation with regards to services offered (1)

Source: Ryanair Environmental Policy Vol. 2-2020, Ryanair's Website and Ryanair Annual Report 2020 (see Appendix 20)

3.2.1.3 Comparison of the two airlines

When examining CSR initiatives of both airlines a first observation, quite obvious, can be made concerning the difference in terms of number of initiatives reported by Air France-KLM (193) and Ryanair (46). Air-France KLM undertakes approximately four times more initiatives than Ryanair. It also appears that both airlines do not report all their initiatives by using the same terminology in terms of CSR dimensions. The two airlines refer to the dimension *environment* by mentioning this same terminology. On the contrary, Air France-KLM employs the term *customer trust* while Ryanair uses the term *customer* (although not mentioning it explicitly as a dimension). Air France-KLM also uses the term *employee journey* while Ryanair employs the term *people*. However, when diving into the initiatives, it appears that the reported ones can be attributed to the following dimensions: environment, customer, employee, societal.

A second observation between the airlines is the emergence of the environmental dimension as the one that gathers the most initiatives (68 for Air France-KLM & 30 for Ryanair). It also occurs that the second dimension with the most initiatives at Air France-KLM is the employee dimension, which is not the case for Ryanair for whom the second dimension with the most initiatives is the societal one. The third dimension with the most initiatives at Air France-KLM is the dimension customer trust (or customers) while it is the people (or employees) dimension at Ryanair.

A third observation concerns the themes that combine the most initiatives. In the dimension environment at Air France-KLM, the majority of initiatives relate to carbon footprint (also CO2) (18), which is the same at Ryanair with the theme CO2 emissions (22). In fact, the theme CO2 emissions is the one that regroups the largest number of initiatives in both airlines. The second and third theme with the most initiatives within the dimension environment at Air France-KLM are waste and circular economy (15) and sustainable aviation fuel (14). At Ryanair, the other themes within the dimension environment do not stand out clearly. In the dimension customer journey (also customers), the theme standing out at Air France-KLM is the theme customer dialogue (17). While at Ryanair, there is only one theme within this dimension. In the employee journey dimension (or employee), the themes that arise the most at Air France-KLM are the human capital development (14) and diversity and inclusion (11). The theme with the most initiatives within the same dimension at Ryanair is the training and development theme, which is closely related to the theme human capital development at Air France-KLM. Although, this theme gathers only two initiatives which does not make it stand out in a significant way. In the dimension societal value (also societal), two themes stand out at Air France-KLM, the local development (17) and social partnerships (13). At Ryanair, within the same dimension, the theme that emerges is the contribution to NGO and Charities (7).

3.2.2 Nature of the CSR initiatives

The nature of CSR initiatives is particular to each airline since companies do not necessarily have the same approach as regards to their responsibilities as economic actors. First, it is pertinent to analyze whether these responsibilities are directly related to the company's activities. Second, it is also relevant to analyze the degree to which the company takes its responsibilities as an economic actor. This reflects whether the airline's concerns are expressed in a real commitment or if the airline is more detached from its social responsibility concerns. To evaluate the nature of the CSR initiatives, an emphasis will be placed on the themes with the most initiatives as analyzed in the previous point (see point 3.2.1).

As the theme carbon footprint (or CO2 emissions) stood out in the dimension environment for both airlines, it is worth diving a little deeper to look at the nature of the initiatives undertaken by the two airlines (see point 3.2.1). The Sustainable Aviation Fuel initiatives at Air-France-KLM will also be analyzed as they contribute towards reducing the carbon footprint as well.

3.2.2.1 Air-France-KLM

With regards to carbon footprint, the Group has set the target to reduce its CO2 emissions by 50% per passenger kilometer by 2030. To reach its objective, the Group has developed initiatives on fleet renewal, improving operational efficiency, promoting and using sustainable fuels, and carbon offsetting. The Group also has the goal to contribute to the establishment of a sustainable fuel industry for aviation by supporting and promoting Sustainable Aviation Fuel (SAF) (Air France KLM, 2021b).

A first set of initiatives concerns the Sustainable Aviation Fuel initiatives. Among them, the Sustainable Aviation Fuel (SAF) program, was launched in January 2021. It enables the Group's Corporate customers to estimate their CO2 emissions generated by their travel and to determine an annual contribution to the program. The funds will be invested in the sourcing and consumption of SAF (*Air France KLM Group*, 2021b). Others initiatives were undertaken to stimulate the industry, as the Group is part of working groups:

- Air France, the Air Transport Aviation Group (ATAG) and the French Civil Aviation Research Council promote knowledge of biofuels to raise public authority awareness to support the biofuels industry in France.
- KLM purchased 15,642 liters of SAF and is searching if SAF can be produced locally
- Air France signed an Engagement for Green Growth in 2017 with three French Ministries and four industrial companies. It aims at promoting the emergence of a SAF industry.
- Air France has supported several new Sustainable Aviation Fuel production programs since July 2020 in France and elsewhere in Europe. The Group is actively seeking to unite forces through a consortia with industrial and logistics partners.
- Air France and KLM support regulatory incentives to stimulate regulations: European Advanced Biofuels Flightpath, ART, Fuels Forum, Ini-FCA French Future Alternative Fuels initiative and BioPort Holland.
- Air France-KLM are part of the Clean Skies for Tomorrow (CST) coalition. It has launched policy proposal to deploy SAF in Europe. It is to be submitted to the European Commission to detail a clear European Strategy to increase SAF.

A second set of initiatives concerns the fleet modernization which aims to convert it into a fleet more fuel-efficient. Air France-KLM works to reduce the onboard weight in order to reduce fuel consumption. Routes are also optimized and Air France-KLM is involved in the SESAR program which contributes to the targets of the Single European Sky (SES) to better manage air traffic. Flight operations and aircraft performance are optimized as well (Air France KLM, 2021b).

A third set of initiatives concerns the carbon offsetting initiatives. Certain initiatives are mandatory and airlines must therefore comply with them. The European Union has constrained all intra-European flights to the application of the European Union Emission Trading Scheme for greenhouse gas emission quotas (EU-ETS). The International Civil Aviation Organization (ICAO) has established the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), which aims at limiting the CO2 emissions from international aviation. The implementation of CORSIA will be launched between 2021 and 2026. The EU will implement the CORSIA offsetting within the current EU Emissions Trading Scheme regulation. In Air France-KLM's views, the same CO2 emissions should not be imposed to CORSIA and the EU-ETS. The Group claims for an impact study and asserts "*the need for the prior design of a carbon adjustment mechanism at the borders of the European Union, to protect the European airlines from 'carbon leakage'."* Other initiatives are undertaken on a voluntary basis by Air France, KLM and Transavia. The airlines allow their individuals and corporate customers to calculate their CO2 emissions and to offset them on a voluntary basis. Air France also became partner with the Trip and Tree program which allow customers to contribute to the project by funding tree planting. KLM uses CO2ZERO which enable passengers to contribute to a carbon offsetting project in Panama (Air France KLM, 2021b).

3.2.2.2 Ryanair

To lower its emissions, Ryanair commits to lowering its emissions to below 60 grams of CO2 per passenger km by 2030. The airline also affirms being Europe's cleanest, greenest airline. It supports the Paris Agreement (limit global temperature rise to less than 2°C), the European focus (to set Net Zero targets) and the International Air Transport Aviation (IATA) target (aviation sector that emits a net 50% less CO2 against 2005 levels) (*Ryanair Environmental Policy Vol 2 - 2020*, 2020).

A first set of initiatives are related to investment in a more fuel-efficient fleet which enables to carry more passengers (4%), reduce fuel consumption (by 16%) and cut noise emissions (by 40%).

A second set of principles are related to biofuels usage. The airline's principles are the following:

- SAF are an opportunity for the aviation sector due to their potential to reduce lifecycle greenhouse gas emissions

- Governments and fuel suppliers must prioritize the development of SAF that deliver significant lifecycle CO2 savings
- SAF in aviation should be regulated by one set of global rules that treat all airlines equally
- The methods of quantifying lifecycle CO2 savings from SAF should apply uniformly to all airlines
- The CO2 savings from an airline's use of SAF must be traceable and verifiable

The airline also calls for action by the European Union and Member States to create policies to support SAF initiatives:

- Creating additional SAF production capacity in Europe
- Stimulating the production and availability of raw materials
- Prioritizing support mechanisms to cover additional costs for products delivered into market
- Supporting the development of worldwide blending, international standards and sustainability criteria

Ryanair also calls for fuel manufacturers to provide incentives for airlines to purchase SAF. The airline has also developed in 2018 a voluntary offsetting scheme. It enables passengers to offset their CO2 emissions by contributing to environmental charities and NGO's (First Climate, Renature Monchique, Native Woodland Trust, Irish Wale and Dolphin Group) (*Ryanair Environmental Policy Vol 2 - 2020*, 2020).

3.2.2.3 Comparison of the two airlines

A first observation that appears is that Air France-KLM undertakes more concrete initiatives than Ryanair. With regards to SAF, Air France-KLM seems to undertake more initiatives (part of working groups, signed agreements, supports regulatory incentives) than Ryanair. Indeed, when consulting Air France-KLM's initiatives, the airline appears to take more action or at least work towards the aim to foster biofuels development and sourcing. On the contrary, Ryanair appears to undertake initiatives, but only to a certain extent. The airline conveys the impression that it is concerned by the topic of biofuels. However, when it comes to undertake initiatives, the airline mainly calls for actions from the European Commission and Member States.

A second observation that arises is that both airlines' concerns are quite similar. The two companies address concerns and initiatives with regards to CO2 emission, fuel-efficient fleet, SAF, and noise hindrance (although not mentioned above). The CO2 emission theme emerges as a predominant theme, it also encompasses other themes such as fuel-efficient fleet and SAF.

It is instructive to recognize that both airlines undertake to some extent, the same type of initiatives with regards to CO2 reduction (offsetting scheme, fuel-efficient fleet, CO2 objectives and targets). It is not quite exactly the case when comparing the airlines' approach to SAF.

At last, the most initiatives undertaken by both airlines aim at diminishing their CO2 emissions, which makes sense as their core activities (carrying passengers in their aircrafts) has great negative impacts on the environment. Therefore, to answer the first question of the point 3.2.2, the airlines' initiatives are directly related to their core activities. Then, to answer the second question, it would appear that both airlines seem to have a close approach with regards to CO2 reduction (offsetting scheme, fuel-efficient fleet, CO2 objectives and targets), even though Air France-KLM undertakes more initiatives. Hence, both airlines diverge in terms of their approach and level of initiative-taking to SAF.

3.2.3 Reporting format of the CSR initiatives

The manner in which CSR considerations and initiatives are reported is useful, it contributes to enriching the analysis. The method used for reporting CSR initiatives does not require to respect a specific framework. Thus, this third part of the analysis enables the reader to have an overview on the format employed by both airlines to report on their CSR activities. This analysis will also compare the format employed by the two airlines.

3.2.3.1 Air France-KLM

All the information concerning Air France-KLM CSR initiatives were collected from its Sustainable Development website page. To find the airline CSR webpage, one has to visit their website, then a tab allows to access it in one click (see Appendix 21). When browsing through the webpage, the navigation is intuitive as the webpage is well-structured. Each

CSR dimension includes specific themes, and these themes include the initiatives in an organized manner (see Appendix 21). Information concerning their CSR initiatives can also be found either in their Corporate Social Responsibility Report or in their annual report (see point 3.2.4). The airline also provides a timeline concerning its business sustainability strategy which outlines its achievements in terms of CSR (see Appendix 8).

3.2.3.2 Ryanair

Most of the information concerning Ryanair CSR initiatives were collected from its Corporate website page. To find the airline CSR webpage, one has to visit their website, then click on *Help*, then click on *About Us* (see Appendix 22). The navigation is not particularly intuitive since it requires research to find the airline's CSR initiatives. The CSR data is splintered in various places (see point 3.2.4). In addition, the initiatives are rather fragmented and are not classified by CSR dimensions nor by themes. The airline makes a distinction between CSR, Environment and Charities and Partners (see Appendix 22). Information concerning their CSR initiatives can also be found either in their Annual Report, Environmental Policy – Vol 2 – 2020 or on other pages of the airline's website.

3.2.3.3 Comparison of the two airlines

When consulting the two airline's website, one's may notice that the format are quite different. Air France-KLM provides a vast amount of detailed information in a structured way. It is relatively simple to understand the areas of focus and what the company intends to communicate as the airline gathers its CSR actions under a same page to illustrate its sustainable development strategy (see Appendix 21). With regards to Ryanair, a first observation is made when one notices that the company has organized the layout with three distinct areas: Corporate Social Responsibility, Environment and Customer Care (see Appendix 22). The layout presented by the airline makes one assume that the company provides information on its conducted initiatives as if it were general information. It also conveys the assumption that the airline values the importance of the environment and customers areas as both of them are separated from the CSR area.

In addition, when consulting the Air France-KLM's initiatives, one may assume that the airline places more importance on the CSR issue than Ryanair since the information is better presented and seems to be part of a real sustainable strategy. However, it is important to keep in mind that these are only assumptions since there are no required formats for reporting on CSR initiatives. It is also possible that some initiatives are not reported even though they are being undertaken by one or another airline. Therefore, caution should be exercised when analyzing and observing the reporting formats.

3.2.4 Key Stakeholders

This section of the analysis aims at evaluating the stakeholders groups that are most considered by Air France-KLM and Ryanair. It will allow to evaluate whether the airlines' initiatives and concerns towards CSR are global or if they focus more one or more particular dimension(s).

3.2.4.1 Air France-KLM

Air France-KLM appears to undertake approximately the same number of initiatives in each of the four dimensions. The dimension environment gathers most of the initiatives (see Figure 2).

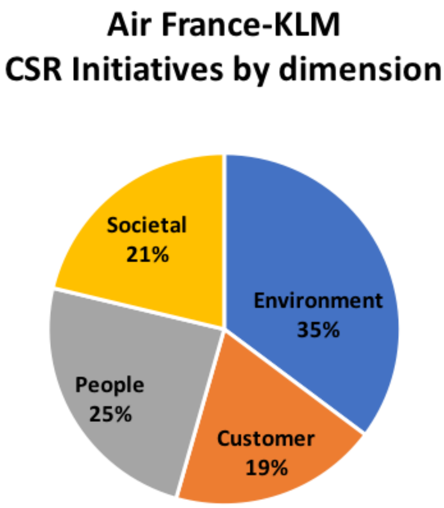

Figure 2 - Air France-KLM CSR Initiatives by dimension

3.2.4.2 Ryanair

Ryanair appears to undertake most of its initiatives that are classified within the environment dimension (see Figure 3). With regards to stakeholders, Ryanair occurs to have only started to pay attention to its customers in 2014 (see Always Getting Better Program).

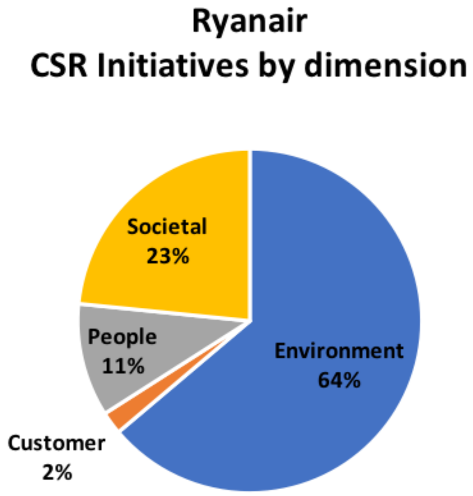

Figure 3 - Ryanair CSR Initiatives by dimension

3.2.4.3 Comparison of the two airlines

Air France-KLM's CSR initiatives are equally distributed in terms of number of initiatives by dimension. While Ryanair's CSR initiatives are less equally distributed. However, both airlines undertake most of their initiatives that are related to the environment.

It is important to note that this analysis evaluate the amount of initiatives undertaken by the airlines, which does not necessarily means that a dimension gathering more initiatives has a greater impact than a dimension gathering less initiatives. In this case, the evaluation is based in terms of number of initiatives and not on impact.

3.2.5 Means of communication to report on CSR concerns and initiatives

Airlines do not necessarily have the same practices to communicate their concerns and initiatives. Therefore, it is instructive to illustrate and compare the means used by airlines to communicate their CSR concerns.

3.2.5.1 Air France-KLM

The airline reports its CSR concerns and initiatives through multiple channels of communications (see Table 15). The company uses its webpages to convey its CSR reporting of the current year and uses press releases to communicate on its CSR concerns and initiatives. Based on its website publications, the airline started publishing CSR report in 2004. CSR reporting was conveyed through specific reports on CSR between the year

2004-2005 and 2006-2007. During the year 2007-2008, the company did not publish a specific report on CSR. Then, between the year 2008-2009 and 2015, the company published specific CSR reports. In 2016, the airline started to implement its CSR report within its Annual report.

With regards to CSR-related policy, the airline introduced its Supplier Sustainability Code of Conduct in 2004, its Corporate Social Responsibility Statement in 2006 , its Sustainable Procurement Policy in 2009, and its Air France-KLM Principles in 2020 (see Appendices documents).

The airline is also concerned by the United Nations Sustainable Development Goals and has assigned a page dedicated on the subject. The company also details its engagement towards its stakeholders with a page illustrating its stakeholders map (see Appendix 23). A materiality matrix[13] depicts the priorities of the Group (see Appendix 24). The airline introduced its Social Rights and Ethics Charter in 2008 (see Air France- KLM Social Rights and Ethics Charter). The airline illustrates its actions toward Human Rights as well (see Appendix 25).

3.2.5.2 Ryanair

The airline reports its CSR concerns and initiatives through multiple channels of communications (see Table 15). The company uses its webpages to convey its CSR reporting of the current year and uses press releases to communicate on its CSR concerns and initiatives. Based on its website publications, the airline started publishing CSR report in 2015. Since this date, the CSR reports have always been included into the Annual Reports until this year.

Regarding their CSR-related policy, the airline introduced its Always Getting Better (AGB) program in 2014 and its Anti-Bribery & Anti-Corruption Policy in 2020 (see Appendices documents).

[13] It is a tool that depicts the level of a firm's Corporate Social Responsibility priorities based on two axes: the importance for the stakeholders and the importance for the firm.

The company does not have a SDGs related page, nor a stakeholder engagement and materiality matrix. The airline introduced its Code of Business Conduct & Ethics in 2020.

Table 15 - Communication means to report on CSR concerns and initiatives

Airline	CSR-related web pages	CSR-related press release	CSR annual report	CSR-related policy	SDGs related page	Stakeholder engagement	Materiality matrix	Ethics related policies
Air France-KLM	Yes	Yes	2004-2005; 2005-2006; 2006-2007; 2008-2009; 2009-2010; 2010-2011; 2011; 2012; 2013; 2014; 2015; 2016; 2017; 2018; 2019; 2020	Supplier Sustainability Code of Conduct (2004); Corporate Social Responsibility Statement (2006); Sustainable Procurement Policy (2009); Air France-KLM Principles (2020)	Yes	Yes	Yes	Social rights and Ethics Charter (2008)
Ryanair	Yes	Yes	2015; 2016; 2017; 2018; 2019; 2020	Always Getting Better Customer Charter (2014); Anti-Bribery & Anti-Corruption Policy (2020)	No	No	No	Code of Business Conduct & Ethics

Source: Based on (Coles et al., 2014) & Air France-KLM and Ryanair websites

3.2.5.3 Comparison of the two airlines

The means of communication employed by both airlines are quite similar. Air France-KLM provides more in-depth information than Ryanair. Air France-KLM has started reporting on CSR in 2004 while Ryanair started in 2015 (based on the available reports on both airlines' website). Air France-KLM provides information as regards to their engagement towards SDGs and their stakeholders, while providing a matrix as well. While Ryanair does not appear to report this type of CSR-related information.

As the reader may have noted, the case of Air France-KLM and Ryanair depict similarities and differences in relation to CSR concerns and initiatives. The analysis provided an opportunity to develop and compare in details the undertaken initiatives. It is necessary to recall that the two airlines were founded at a different time in history and operate according to a different business model. Moreover, as Corporate Social Responsibility are expected and desired of firms, the latter's are not forced to consider nor undertake CSR-related initiatives. The analysis uncovered the airlines' CSR in details. The research will now be discussed in the Part 4 Discussion and will be illustrated in a more holistic way by including scientific literature.

Part 4: Discussion

Throughout this analysis section, many insights were discovered regarding the CSR reporting of the two cases that are being investigated. These findings will contribute to answer the research question that was formulated earlier in this paper (see point 2.1). It is now important to take a step back to better apprehend the question at stake and to have an overview of the subject. This section will consist in synthesizing the results obtained while placing them in their context so as to ensure a holistic approach. The structure of this section will be as follows. The first part will remind the distinct characteristics of the cases at stakes. Then, both cases will be replaced into their industrial perspective. At last, findings will be discussed in their context.

At the beginning of this paper the business model was discussed, it resulted that many definitions were prevalent among the academic community. The *architecture* terminology used by several scholars was retained as it suits well this case-study research (Dubosson-Torbay et al., 2002; Foss & Saebi, 2017; Osterwalder et al., 2005; Rosenbloom & Chesbrough, 2002; Teece, 2010, p. 20; Timmers, 1998). The definition that was retained is the definition provided by Osterwalder et al. (2005): *"a business model is a conceptual tool that contains a set of elements and their relationships and allows expressing the business logic of a specific firm. It is a description of the value a company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams."* Indeed, the two airlines' *architectur*e to create and deliver value to society are truly distinct even though a certain hybridization trend is identified by several scholars within the airline industry (Dobruszkes et al., 2017; Magdalina & Bouzaima, 2021; Tomová & Materna, 2017).

It is also worth reminding the difference between the business model and strategy terminology, Casadesus-Masanell & Ricart (2010) state that *"a business model is the direct result of strategy but is not, itself, strategy"*. Porter (2001) describes a strategy as an ability to define a unique value proposition. By referring to Porter's work, Air-France KLM whose business model is considered as an FSC, follows a strategy of differentiation while Ryanair, whose business model is considered as an LCC, follows a cost-efficient strategy (Magdalina & Bouzaima, 2021). Moreover, both airlines' business model and strategy are very distinct and so are their history. Air France-KLM falls within the context of the beginning of commercial aviation and is one of the oldest airlines worldwide. The airline Ryanair is much younger and its evolution is part of the airline deregulation and competitive era.

This academic research aimed at exploring the Corporate Social Responsibility in the airline context, more specifically, whether Corporate Social Responsibility was integrated (or not) into the business model of the legacy carrier (Air France-KLM) and the low-cost airline (Ryanair). This comparative analysis via case studies allowed the identification of Corporate Social Responsibility within both airlines. Indeed, both Air France-KLM and Ryanair integrate CSR to a certain extent into their business model. This confirms the first research sub-question: "*Is Corporate Social Responsibility addressed in the business model of Air France-KLM and Ryanair?*".

The continuation of the research enabled to discover that both Air France-KLM and Ryanair are concerned by Corporate Social Responsibility matters, and have undertaken initiatives related to these concerns as well. It demonstrates their commitment, again, to a certain extent towards their initial concerns, since both airlines are not engaged in CSR with the same degree. From the research, it appeared that both airlines address four CSR dimensions. The dimension environment emerges as the largest in terms of number of initiatives undertaken, which appears to make sense as the industry affects negatively this dimension. Therefore, undertaking environmental initiatives contribute to cope with airlines' negative impact on the planet. This also corresponds to the research of Cowper-Smith & de Grosbois (2011), and Okumus et al. (2020) which demonstrate that the environmental dimension is the most considered one. It enables to confirm the second sub-research question: "*If Corporate Social Responsibility is addressed, is it reflected in concrete initiatives?*"

Another insight that emerged is that Air France-KLM's CSR initiatives are rather balanced. Indeed, the airline addresses all its CSR with the same proportion, in terms of number of initiatives. On the contrary, Ryanair's CSR initiatives are not as balanced. When diving into the environmental initiatives, both airlines set specific targets to cope with CO2 emissions (fuel-efficient fleet, CO2 offsetting scheme, SAF). Air France-KLM appears to be a little more engaged than Ryanair towards Sustainable Aviation Fuel concerns. The airline is more active into developing and supporting a Sustainable Aviation Fuel industry than Ryanair as demonstrated by its initiatives (see Appendix 19 & 20). Regarding the reporting format employed by both airlines, it is approximately the same for the two companies. Air France-KLM reports its CSR initiatives in more depth than Ryanair and refers to the SDGs and its stakeholders more extensively. Ryanair's reporting is a little bit more fragmented. This finding is in line with Coles et al. (2014) findings on LCCs regarding the high degree of fragmentation and variable quality found in LCCs' CSR texts. Although both airlines employ CSR reporting practices which are close to each other, these practices lack consistency. The comparative analysis between Air France-KLM and Ryanair confirms what arises from the literature. Cowper-Smith & de Grosbois (2011) demonstrated that airlines report their CSR-related initiatives by using inconsistent or differing measurements, this renders their comparison difficult.

Results of this analysis have demonstrated that CSR concerns and initiatives are integrated in both Air France-KLM and Ryanair's business models. The analysis went further by demonstrating what is the most emphasized CSR dimension for both airlines while describing in details a few undertaken initiatives. It also demonstrated that both airlines do not consider all dimensions evenly which raises new questions. The findings contribute to build and extend the literature on CSR reporting within the airline industry. Nonetheless, it is crucial to draw the reader's attention to the limitations of this paper, which will be discussed in the next part.

Part 5: Limitations and future research

This section illustrates the limitation of this paper. Indeed, although, the findings appear to confirm and agree with several academic scholars' research, it does not mean that the findings may not be biased to a certain degree. Several limitations were identified and are grouped according to distinct aspects. This paper is first limited by the information source, the scarcity in the literature also contributes to reducing the findings, the methodology used, and the author's judgment are also contributing to the limitations of this work.

First of all, the information used throughout the analysis was collected directly from the airlines' website, annual reports and sustainability reports. Although, one may believe the integrity and transparency of both airlines, the available information may be improved at its best or presented in a favorable manner by the airlines. The raison d'être of both companies must not be forgotten, even though, the value delivery is of the utmost importance, so is the value capture. Both airlines are therefore required to continue their operations in order to remain competitive and profitable. The Corporate Sustainable Responsibility Strategy also allows companies to achieve some of their objectives.

Then, the question of scarcity within the literature concerning the topic could be considered as a limitation. For that reason, I covered most of the available scientific literature on the subject, which is quite recent.

Next, the methodology employed may be criticized as well as it is only based on sources collected from the airlines themselves. Practitioners interview among both airlines could have contributed to reveal certain issues, notably the fact that some initiatives can be undertaken by the airline although this does not appear on the internet or at least not to its full extent. In this case, an analysis of other airlines may have been helpful.

At last, I may suffer an anchoring bias since I consulted the scientific literature on CSR in the airline industry prior to beginning my analysis. Hence, my analysis regarding the topic might have been influenced by my education and background.

This allows me to conclude that my research has been carried out in the most consistent way possible, although it has some limitations as mentioned above.

It is needless to say that this research has brought to light a tremendous amount of questions. Indeed, this analysis contributed to analyze two cases of airline CSR reporting, but the question of initiatives impact could be developed extensively. Also, it would be insightful to compare other airlines in order to demonstrate if the business model has a causal effect on the CSR reporting and integration by the company or the opposite. Then, exploring the low-cost value proposition with regards to the airline's CSR concerns could be enlightening. The level of integration of CSR could also be related to the level of development or management of the company. Hence, questioning the real motives of companies regarding their actions would allow to evaluate the ethics and morality of the airlines' leaders.

Conclusion

In an era where flying has become a banality, planes have become a prominent manner to commute quickly and affordably. Along with the development of the legacy carriers, pioneers of the commercial aviation, low-cost airlines have emerged, challenging the incumbents of the industry by offering a distinct value proposition (unbundled transportation offer with no-frills services onboard at a low fare).

Although this surge in airlines' activities development creates value and contributes to the global economic growth, it also inflicts an undeniable environmental and social cost. Airlines' operations affect the environment, stakeholders, and society in general in a negative way. Air transport activities generate carbon emission, have a tremendous impact on the air and the biodiversity, cause noise hindrance, etc. These implications raise questions about airlines' corporate responsibility.

Following this questioning about the social and environmental responsibility of airlines, I sought to explore the subject of Corporate Social Responsibility in the airline sector. More precisely, I wished to explore whether CSR was integrated in two very different companies, which led me to the following research question: *"Is Corporate Social Responsibility integrated into the business model of legacy carrier and low-cost airline? Two case studies"*.

As my concern about Corporate Social Responsibility in the airline industry, was not well documented in the literature, I opted to use an exploratory approach. More specifically, I was led to conduct a qualitative research analysis based on a case-study. Indeed, from the scientific literature, the case-study research methodology stood out as convenient when the research aim is exploratory. In addition, selecting two extreme airlines cases (legacy carrier versus low-cost airline), is more appropriate since it can reveal more information.

Throughout the analysis, airlines were identified as being concerned by environmental, social, and societal matters. Multiple initiatives are developed by both Air France-KLM and Ryanair in order to mitigate and reduce the negative consequences of their activities. The first research question: *"Is Corporate Social Responsibility addressed in the business model of Air France-KLM and Ryanair?"* was therefore confirmed. Indeed, both companies report concerns about certain CSR dimensions such as environmental, social and societal related topics.

Then, both airlines were found to undertake concrete initiatives that could be gathered into four CSR dimensions: environment, societal, people, and customer. The dimension environment is the one that stands out the most in terms of number of initiatives undertaken by the airlines. Moreover, these initiatives demonstrate the airlines' commitment towards their CSR concerns but to a certain extent as both airlines are not engaged in CSR in an identical manner. For instance, the initiatives undertaken by Air France-KLM are more balanced in terms of number of initiatives, with respect to the four dimensions, while Ryanair's initiatives are predominantly found in the environmental dimension. The second sub-research question: "*If Corporate Social Responsibility is addressed, is it reflected in concrete initiatives?"* was therefore confirmed as well.

Further, Air France-KLM emerges as being more engaged than Ryanair towards the dimension environment. Indeed, the airline undertakes concrete initiatives that demonstrate its commitment to foster and support the Sustainable Aviation Fuel industry, while Ryanair's initiatives are mostly call for actions from the European Commission and Member States.

Concerning the reporting format used by both airlines, it is closely similar although differing on certain aspects. In contrast, Air France-KLM's format of reporting is more exhaustive and provides more in-depth information than Ryanair. The latter is a little more fragmented. However, both reporting format lack consistency in terms of format used, measurement units, and manner of reporting information on CSR initiatives.
These findings enable to understand how Corporate Social Responsibility is addressed in two very distinct airlines. Overall, the analysis permitted to answer the main research question: *"Is Corporate Social Responsibility integrated into the business model of legacy carrier and low-cost airline? Two case studies".*

This paper has contributed to explore the subject of Corporate Social Responsibility in the airline industry by confirming certain aspects related to the environmental dimension.

It has also emphasized the extent to which the two analyzed airlines commit towards their CSR concerns as well as the types of initiatives that are being undertaken.

Thus, the research has given rise to new issues and questions. For instance, it would be interesting to analyze whether the business model has a causal link on the adopted CSR or the opposite. The initiatives' impact could also be analyzed in further research. Then, exploring the low-cost value proposition with regards to the airline's CSR concerns could be insightful, as well as the level of integration of CSR with regards to the level of development of the airline. At last, comparing other legacy carriers and low-cost airlines could help to identify links and uncover relationships between business models, their CSR strategy and the CSR initiatives undertaken.

From a personal standpoint, exploring the literature on the topic has taught me much on the content of the topic and especially about one facet of the aviation I had no knowledge of. Although I already had basic knowledge in CSR from my academic background, conducting this research has allowed me to learn in depth how CSR is handled within the airline industry. Moreover, conducting scientific research has enabled me to acquaint myself with synthesizing scientific articles and conducting qualitative case-study research methodology. It therefore taught me about adopting a scientific approach through a topic of interest. At last, this research has raised my awareness of the urgency of the environmental responsibility that companies must exercise, as economic actors in our global society, and it has strengthened my interest in sustainability issues.

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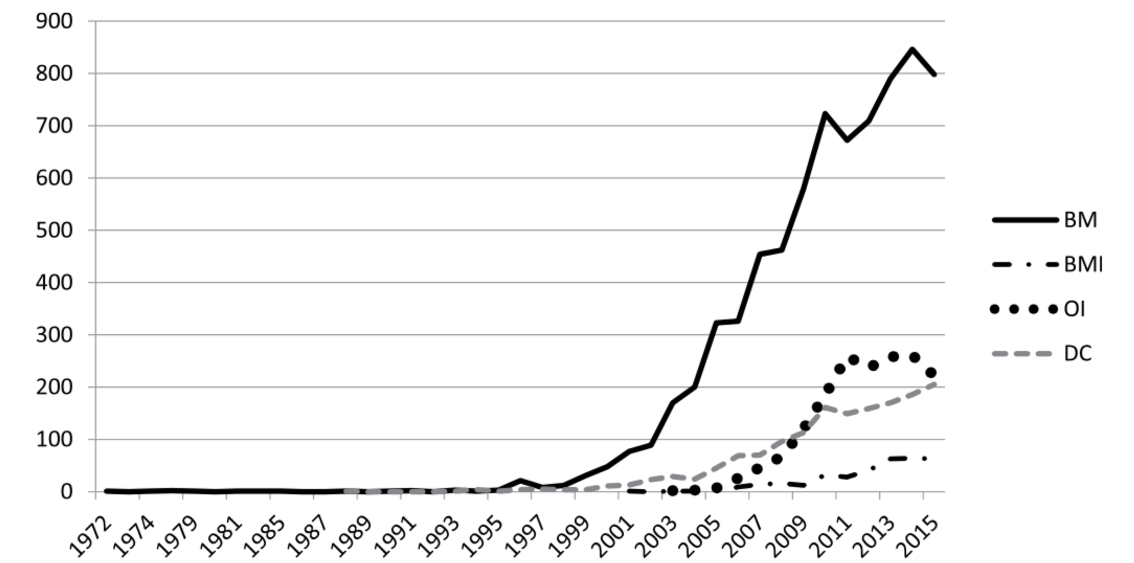
Appendices

Appendix 1

Use in the scholarly literature of some key, related macroconstructs

Figure 1
Use in the Scholarly Literature of Some Key, Related Macroconstructs



Source: Scopus, 1972–2015. "Business model" (BM), 7,391 hits; "business model innovation" (BMI), 349 hits; "open innovation" (OI), 1,700 hits; "dynamic capability" (DC), 1,562 hits (peer reviewed and otherwise). Scopus searched for the terms "business model," "business model innovation," "open innovation," and "dynamic capability" in the search field "abstract, title, keyword" within the field of "social sciences and humanities," thereby excluding physical, health, and life sciences (January 2016).

Source: 8/16/21 11:29:00 AM

Appendix 2

Number of papers published on business models vs. the NASDAQ trend

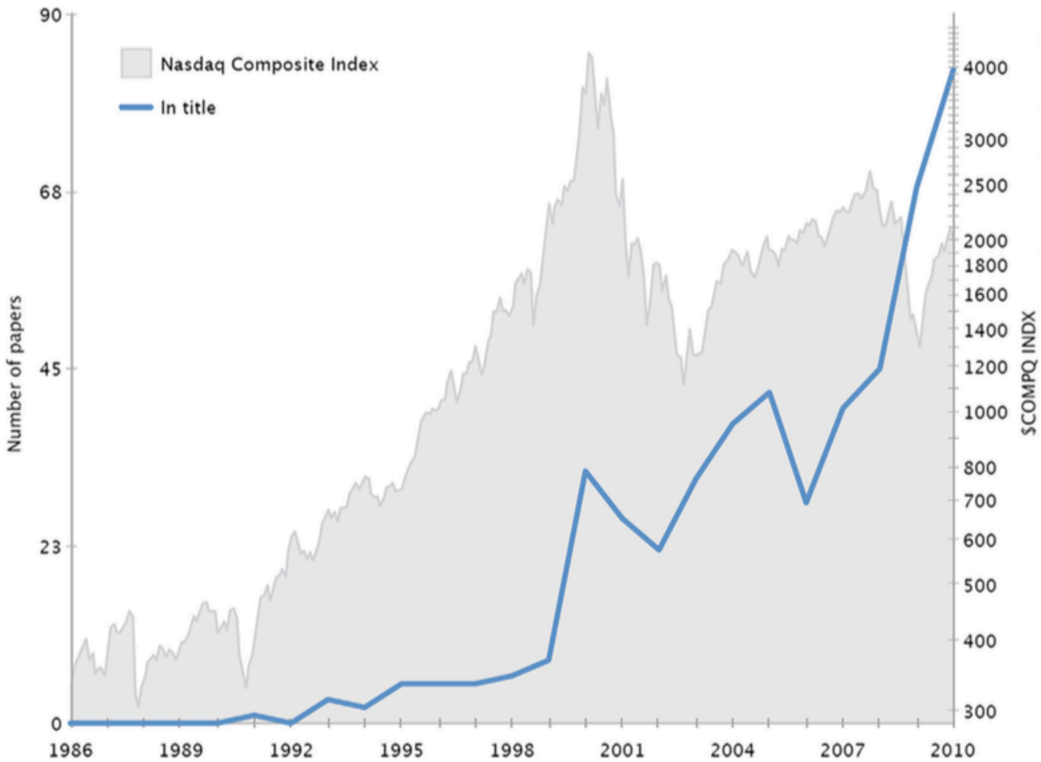


Figure 1. Number of papers published on business models vs. the NASDAQ trend

Source: (DaSilva & Trkman, 2014)

Appendix 3

A cross-section of business model definitions

Table 1 A cross-section of business model definitions.

Conceptual focus	Scope	
	Network	Enterprise
Activities	Zott and Amit (2010, p. 216) . . . a system of interdependent activities that transcends the focal firm and spans its boundaries. The activity system enables the firm, in concert with its partners, to create value and also to appropriate a share of that value	Afuah (2004, p. 9) A business model is the set of which activities a firm performs, how it performs them, and when it performs them as it uses its resources to perform activities, given its industry, to create superior customer value (low-cost or differentiated products) and put itself in a position to appropriate value
Value	Weill and Vitale (2001, p. 34) A description of the roles and relationships among a firm's consumers, customers, allies, and suppliers that identifies the major flows of product, information, and money, and the major benefits to participants	Osterwalder and Pigneur (2009, p. 14) A business model describes the rationale of how an organization creates, delivers, and captures value

Source: (Lambert & Davidson, 2013)

Appendix 4

Dominant themes of empirical studies of the business model

Table 2 Dominant themes of empirical studies.

The business model as the basis for enterprise classification	Business models and enterprise performance	Business model innovation
Amberg and Schröder (2007)	Arampatzis (2004)	Brink and Holmén (2009)
Bigliardi et al. (2005)	Aspara et al. (2010)	Casadesus-Masanell and Ricart (2010b)
Bonaccorsi, Giannangeli, and Rossi (2006)	Camisón and Villar-López (2010)	Chanal and Caron-Fason (2010)
Camisón and Villar-López (2010)	Casadesus-Masanell and Ricart (2010b)	Chan-Olmsted and Ha (2003)
DeYoung (2005)	Currie (2004)	Chung et al. (2004)
Eriksson et al. (2008)	de Reuver et al. (2009a)	de Reuver et al. (2009b)
Fisken and Rutherford (2002)	de Reuver et al. (2009b)	de Reuver et al. (2009c)
Flouris and Walker (2007)	de Reuver and Haaker (2009)	Giesen et al. (2007)
Giesen et al. (2007)	DeYoung (2005)	Giesen et al. (2010).
Glick (2008)	Dunford et al. (2010)	Kuivalainen et al. (2007)
Ha and Ganahl (2004)	Fetscherin and Knolmayer (2004)	Lindgren et al. (2010)
Janssen and Kuk (2007)	Feller et al. (2008)	Maitland et al. (2005)
Kauffman and Wang (2008)	Fisken and Rutherford (2002)	Mensing (2007)
Khan and Fitzgerald (2004)	Flouris and Walker (2007)	Moyon and Lecocq (2010)
Koh, Gunasekaran, and Saad (2005)	Giesen et al. (2007)	Ng (2005)
Konde (2009)	Giesen et al. (2010)	Pauwels and Weiss (2008)
Koo et al. (2004)	Glick (2008)	Pohle and Chapman (2006)
Leem et al. (2004)	Kallio et al., (2006)	Porra (2000)
Li (2002)	Kauffman and Wang (2008)	Sosna et al. (2010)
Martin and Sellitto (2004)	Kindström (2010)	Willemstein et al. (2007)
Morris et al. (2006)	Kshetri (2007)	
Nosella et al. (2005)	Kuivalainen et al. (2007)	
Palmer and Lindermann (2003)	Mair and Schoen (2007)	
Patzelt et al. (2008)	Mensing (2007)	
Rasheed (2009)	Moingeon and Lehmann-Ortega (2010)	
Sabatier et al. (2010)	Morris et al. (2006)	
Sánchez and Ricart (2010)	Ojala and Tyrväinen (2006)	
Weill & Vitale, 2002	Ordanini et al. (2004)	
Westerlund et al. (2007)	Patzelt et al. (2008)	
Willemstein et al. (2007)	Pohle and Chapman (2006)	
Zott and Amit (2007)	Rasheed (2009)	
Zott and Amit (2008)	Rédis (2009)	
	Sabatier et al. (2010)	
	Sánchez and Ricart (2010)	
	Serifsoy (2007)	
	Sosna et al. (2010)	
	Stubbs & Cocklin (2008)	
	Wu et al. (2010)	
	Zott and Amit (2007)	
	Zott and Amit (2008)	

Source: (Lambert & Davidson, 2013)

Appendix 5

Economic and Legal components of Carroll's Pyramid of CSR

Economic Components (Responsibilities)	Legal Components (Responsibilities)
1. It is important to perform in a manner consistent with maximizing earnings per share.	1. It is important to perform in a manner consistent with expectations of government and law.
2. It is important to be committed to being as profitable as possible.	2. It is important to comply with various federal, state, and local regulations.
3. It is important to maintain a strong competitive position.	3. It is important to be a law-abiding corporate citizen.
4. It is important to maintain a high level of operating efficiency.	4. It is important that a successful firm be defined as one that fulfills its legal obligations.
5. It is important that a successful firm be defined as one that is consistently profitable.	5. It is important to provide goods and services that at least meet minimal legal requirements.

Source: (Carroll, 1991)

Appendix 6

Ethical and Philantropic components of Carroll's Pyramid of CSR

Ethical Components (Responsibilities)	Philanthropic Components (Responsibilities)
1. It is important to perform in a manner consistent with expectations of societal mores and ethical norms.	1. It is important to perform in a manner consistent with the philanthropic and charitable expectations of society.
2. It is important to recognize and respect new or evolving ethical/moral norms adopted by society.	2. It is important to assist the fine and performing arts.
3. It is important to prevent ethical norms from being compromised in order to achieve corporate goals.	3. It is important that managers and employees participate in voluntary and charitable activities within their local communities.
4. It is important that good corporate citizenship be defined as doing what is expected morally or ethically.	4. It is important to provide assistance to private and public educational institutions.
5. It is important to recognize that corporate integrity and ethical behavior go beyond mere compliance with laws and regulations.	5. It is important to assist voluntarily those projects that enhance a community's "quality of life."

Source: (Carroll, 1991)

Appendix 7

Air France logo

AIRFRANCE KLM GROUP

Source : (*Air France KLM*, 2021a)

Appendix 8

Air France-KLM Timeline

Timeline				
Period		**CSR highlights**	**Date**	**Business highlights**
			1919	Founding of KLM
			1920	KLM operates its first flight between London and Amsterdam
			1921	KLM introduces regular long-distance route between the Netherlands and Indonesia
			1933	Founding of Air France (combination of 5 French airlines (Air Union, Air Orient, Société Générale de Transport aérien (SGTA), CIDNA and Aéropostale
			1934	KLM creates a trans-Atlantic service between Amsterdam and Curaçao
World War II	1940-45		1940	Both companies suspended during the war
			1945	Both companies suspended during the war
			1946	Creation of first regular service between Europe and North America
			1950	Arrival of the first jet planes (Civil Aviation Boom)
			1952	Air France transfers its base from Le Bourget airport to Orly
			1958	Inauguration of new route to Tokyo
Jet plane revolution	1960-80			Operation of the 1st Boeing 707s by Air France reducing Paris-New York flight time to 8 hours. Douglas DC-8s for KLM
			1961	Air France sets up its operations and workshops at Orly South
			1967	KLM inaugurates its first flight from Schipol new airport
			1970	Air France begins operating 707s with 500 passengers seating capacity on its long-haul routes
			1971	KLM does the same
			1974	Air France moves to the new Paris-Charles de Gaulle 1 terminal due to Orly's inability to meet demand
			1976	Air France introduces the jet Concorde (connecting Paris-New York in 3 hours and 45 minutes)
			1980	Air space opened up to competition
			1989	Alliance between KLM and Northwest airline (US) to offer customers convenient access to both their networks
			1990	Air France take over UTA (Union de transport aérien)
			1991	Open skies agreement between the Netherlands and the US
				KLM founds its regional airline KLM Cityhopper (by merging NLM Cityhopper and Netherlines)
			1992	KLM creates the first European hub to connect its medium and short-haul flights at Schipol airport
			1993	Joint-venture between KLM and Northwest
			1997	Air Inter is taken over by Air France
		KLM receives ISO 14001 certification	1999	Air France's capital open to private companies
Global consolidations and alliances	2000-10		2000	Air France integrates Regional Airlines, Flandre Air, Proteus, BritAir and CityJet to create its regional centre
				SkyTeam alliances (passengers) and SkyTeam Cargo (cargo operations) launched by Air France, Aeromexico, Delta Airlines and Korean Air
			2001	CZA Czech Airlines and Alitalia join SkyTeam allaince (pool networks to offer the customer of each airline easy and transparent access to the destinations of the SkyTeam alliances)
The first steps towards corporate responsibility	2003-21	Air France joins the UN Global Compact	2003	Merger of Air France and KLM
		Air France introduces its CSR charter for suppliers	2004	KLM, Northwest and Continental join SkyTeam

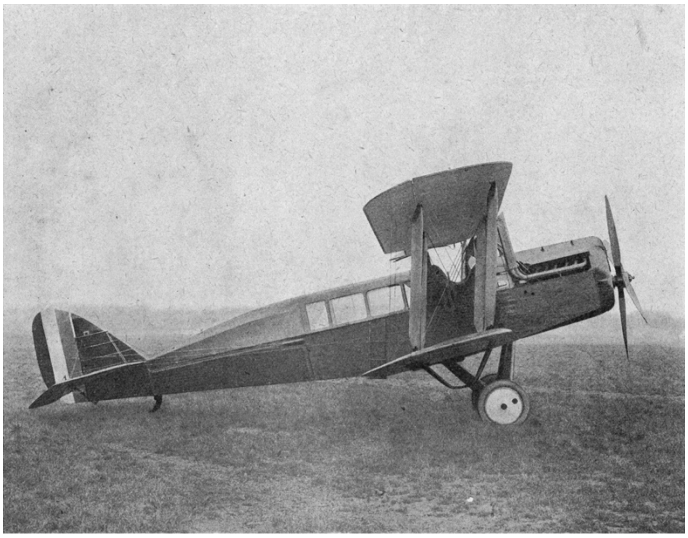
			2005	Joint Cargo Team: Integration of Air France Cargo and KLM Cargo
				Flying blue: Integration of Air France and KLM frequent flyer programme
		KLM joins the UN global Compact	2006	Aeroflot (Russian) join SkyTeam
		Air France is the signatory of the French Diversity Charter		
		Air France-KLM introduces its CSR statement		
		Air France introduces its financial whistleblower procedure		
		Air France signes the Corporate Social Responsibility Statement		
		KLM introduces its financial whistleblower policy	2007	China Southern Airlines
				Transavia France is lanched for medium-haul flights
				Boarding Satellite (S3) is opened for the SkyTeam (to board passengers)
		Air France implemented gender wage equalization and equitable salary management measures	2008	The Group acquires the Dutch cargo Martinair
		Air France implements its workplace Harassment Prevention Charter		
		Air France-KLM signs its Social Rights & Ethics Charter		
		Air France-KLM introduces its Sustainable development charter for Suppliers		
		Air France receives ISO 14001 certification		
		KLM launches its Employee Code of Conduct	2009	The Group Acquires 25% of Alitalia
		Air France-KLM launches its Procurement Code of Ethics for employees		Joint venture agreement between Air France KLM and Delta Airlines (US) to jointly operate their trans-Atlantic routes
				A380 Inaugural flight
		Air France signs the first three-year agreement on the Method for the Prevention of Psychological Risks and Promoting Quality of Life in the Workplace	2010	Alitalia join the joint venture
				Joint venture agreement between Air France and China Southern on the Paris-Guangzhou route
		Air France qualifies its UN Global Compact communication on progress at Advanced Level	2011	
			2012	The Group strikes to restore its competitiveness and offer through customer service and high quality service
				Hop! Regional airline is launched
		KLM amends its Financial Whistleblower Policy into a general Whistleblower Policy	2013	
		Air France introduces the Human Resources Code of Ethics for Recruitment, Selection, and Redeployment		
		Air France-KLM starts using EcoVadis for suppliers assessments and introduces a risk mapping for suppliers (social, environment, ethics)		
		Air France-KLM introduces its Sustainable Procurement Policy to help employees with sustainability compliance	2014	
		Air France receives OHSAS 18001 certification		
		Air France-KLM introduces its Supplier CSR Code of Conduct	2015	
		Air France-KLM is No.1 in Transportation sector of the Dow Jones Sustainability Index/ RobecoSAM between 2008 and 2015		
		KLM qualifies its UN Global Compact communication on progress at Advanced Level		
		Air France & KLM first sign the UK Modern Slavery Act statement	2016	
		Air France-KLM integrated in the Dow Jones Sustainability Index World and Europe. No.1 in Airline sector between 2005 and 2016		
		Air France and KLM launch their Compliance committees, to monitor the adherence to related codes and regulations and, for KLM, to the KLM Code of Conduct	2017	
		KLM organizes dialogue with 50 public and private stakeholders about sustainability, compliance and human rights		
		Air France-KLM combine its risk mapping by country and by procurement type (for social, environment, ethics, supply chain dimensions) for suppliers with an assessment plan that focussess on higher risk suppliers		
		Air France laucnhes the "Osons le dire/Dare to say it" initiative to fight against sexism at work		
		Air France updates the scope of its internal whistleblower procedure to enable employee to report any situation arising within the scope of the duty of vigilance		

		KLM launches its Employee Code of Conduct	2009	The Group Acquires 25% of Alitalia
		Air France-KLM launches its Procurement Code of Ethics for employees		Joint venture agreement between Air France KLM and Delta Airlines (US) to jointly operate their trans-Atlantic routes
				A380 Inaugural flight
		Air France signs the first three-year agreement on the Method for the Prevention of Psychological Risks and Promoting Quality of Life in the Workplace	2010	Alitalia join the joint venture
				Joint venture agreement between Air France and China Southern on the Paris-Guangzhou route
		Air France qualifies its UN Global Compact communication on progress at Advanced Level	2011	
			2012	The Group strikes to restore its competitiveness and offer through customer service and high quality service
				Hop! Regional airline is launched
		KLM amends its Financial Whistleblower Policy into a general Whistleblower Policy	2013	
		Air France introduces the Human Resources Code of Ethics for Recruitment, Selection, and Redeployment		
		Air France-KLM starts using EcoVadis for suppliers assessments and introduces a risk mapping for suppliers (social, environment, ethics)		
		Air France-KLM introduces its Sustainable Procurement Policy to help employees with sustainability compliance	2014	
		Air France receives OHSAS 18001 certification		
		Air France-KLM introduces its Supplier CSR Code of Conduct	2015	
		Air France-KLM is No.1 in Transportation sector of the Dow Jones Sustainability Index/ RobecoSAM between 2008 and 2015		
		KLM qualifies its UN Global Compact communication on progress at Advanced Level		
		Air France & KLM first sign the UK Modern Slavery Act statement	2016	
		Air France-KLM integrated in the Dow Jones Sustainability Index World and Europe. No.1 in Airline sector between 2005 and 2016		
		Air France and KLM launch their Compliance committees, to monitor the adherence to related codes and regulations and, for KLM, to the KLM Code of Conduct	2017	
		KLM organizes dialogue with 50 public and private stakeholders about sustainability, compliance and human rights		
		Air France-KLM combine its risk mapping by country and by procurement type (for social, environment, ethics, supply chain dimensions) for suppliers with an assessment plan that focussess on higher risk suppliers		
		Air France laucnhes the "Osons le dire/Dare to say it" initiative to fight against sexism at work		
		Air France updates the scope of its internal whistleblower procedure to enable employee to report any situation arising within the scope of the duty of vigilance		
		Air France signs the 10th three-year agreement on the employment and retention of people with disabilities	2018	
		KLM launches its Diversity & Inclusion senior management circle, and signs the Dutch declaration for more female in management "Talent to the the Top" in 2019		
		Air France signs the 5th Agreement on Professional Equality between Women and Men		
		Air France-KLM Board of Directors creates a Sustainable Development and Compliance Committee		
		Air France-KLM is drafting a human rights policy, amending the Social Rights & Ethics Charter	2019	
		Air France launches an internal awareness campaign to help operational staff identify and report any behavior that may be linked to human trafficking		
		Air France-KLM is planning engagement of stakeholders to come a risk mapping for human rights risks regarding its employees		
		Air France-KLM has revised and tightened up its Sustainable Procurement Policy		
		Dow Jones Sustainability Inded Air France-KLM N°1 in Airline sector		
COVID 19		Publication of the Air France-KLM Principles	2020	
		Launch of the world's first SAF Cargo Programme		

Source: Based on (Air France KLM Group, 2021a); (Air France KLM, 2021d); (Air France KLM, 2021c)

Appendix 9

Airco DH16



Source: (*Airco DH16*, 1920)

Appendix 10

Fokker

Source : (Airways Magazine, 2019)

Appendix 11

DC4

Source : (Wikipedia, 2021)

Appendix 12

Ryanair logo

Appendix 13

Bandeirante aircraft

Source: (*History of Ryanair | Ryanair's Corporate Website*, 2021)

Appendix 14

Turbo prop BAE748 aircraft

Source: (*History of Ryanair | Ryanair's Corporate Website*, 2021)

Appendix 15

BAC1-11 aircraft

Source: (*BAC One-Eleven*, 2021)

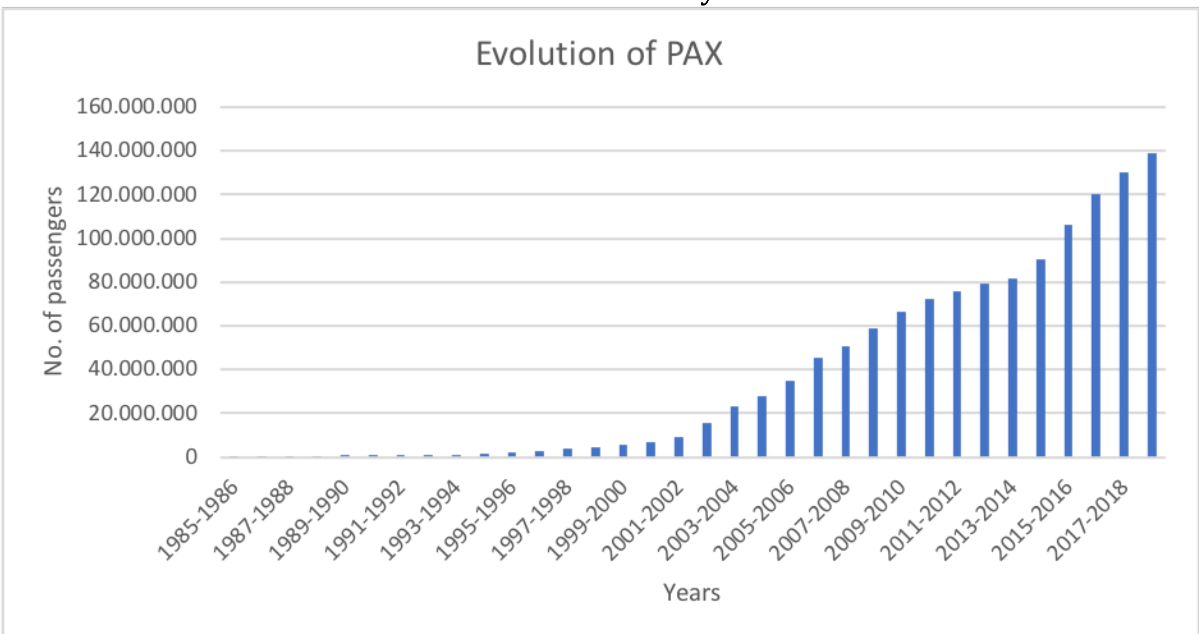
Appendix 16

ATR42 aircraft

Source: (*AirTeamImages*, 2021)

Appendix 17

Evolution of PAX at Ryanair



Source: Based on (*History of Ryanair | Ryanair's Corporate Website*, 2021)

Appendix 18

Ryanair Group Timeline

Timeline			
Period	CSR highlights	Date	Business highlights
		1985	Foundation of Ryanair
		1986	Ryanair obtains the permission from the regulatory authorities to challenge duopoly British Airways and Aer Lingus' on the Dublin-London route
		1987	Ryanair obtains its first jet aircraft by leasing three BAC1-11 aircraft from Tarom airline
		1988	Ryanair launches two new routes from Dublin to Brussels and Munich
		1989	The business class product is abandonned due to continuing losses
			The fleet comprises 6 x BAC1-11 jets and 3 x ATR42
		1990	Restructuring due to £20m in losses
			Relaunched as Europe's first low fares airline
Gulf War		1991	First time profit of Ryanair
		1992	Routes are removed (from 19 to 6)
		1993	The fleet increases to 11 x BAC1-11 and 6 B737 are bought
		1994	Two new routes are launched (from Dublin to Manchester and Glasgow Prestwick
		1995	Becomes the largest passenger airline on the Dublin-London route
		1996	The Open Skies deregulation is completed by the European Union
			Ryanair is voted Best Value Airline
		1997	Ryanair becomes a public company
		1998	Continues to open up new routes in Europe
			Voted Airline of the Year by the Irish Air Transport Users Committee
			New shares are issued to afford new aircrafts
		1999	New routes are opened
		2000	Ryanair website is launched
		2001	First Continental European base at Brussels Charleroi Airport
		2002	Second Continental European base in Frankfurt
			Order of 125 aircrafts to Boeing
		2003	Buzz is acquired by Ryanair
			Two new Continental European bases are opened (Milan Bergamo and Stockholm Skavsta)
		2004	Two new bases are launched in Rome Ciampino and Barcelona Girona
	Ryanair completed its fleet replacement program (began in 1999)	2005	Five new bases are launched at Liverpool John Lennon Airport, Shannon in the West of Ireland, Pisa, Nottingham East Midlands and Cork
		2006	Ryanair remains the only airline to guaratnee 'no fuel surcharges ever'
		2007	New routes are opened (201) and 3 new UK bases (Bournemouth, Birmingham and Belfast)

		2002	Second Continental European base in Frankfurt
			Order of 125 aircrafts to Boeing
		2003	Buzz is acquired by Ryanair
			Two new Continental European bases are opened (Milan Bergamo and Stockholm Skavsta)
		2004	Two new bases are launched in Rome Ciampino and Barcelona Girona
	Ryanair completed its fleet replacement program (began in 1999)	2005	Five new bases are launched at Liverpool John Lennon Airport, Shannon in the West of Ireland, Pisa, Nottingham East Midlands and Cork
		2006	Ryanair remains the only airline to guaratnee 'no fuel surcharges ever'
		2007	New routes are opened (201) and 3 new UK bases (Bournemouth, Birmingham and Belfast)
			Ryanair productivity is ten times better than principal competitors (10,000 passengers are carried per employee)
		2008	New routes are opened (223) and 4 new bases (Alghero, bologna, Cagliari and Edinburgh)
		2009	New bases are opened (Bari, Brindisi, Faro, Leeds Bradford, Oslo Rygge, Pescara, Porto and Trapani)
		2010	New bases are opened (Barcelona El Prat, Gran Canaria, Kaunas, Lanzarote, Malta, Seville, Tenerife and Valencia)
		2011	New bases are opened (Baden, Billund, Budapest, Pahos, Palma de mallorca and Wroclaw)
		2012	New bases are opened (Chania, Eindhoven, Fez, Krakow, Maastricht, Marrakech and Zadar)
		2013	New bases are opened (Athens, Brussels, Lisbon and Rome)
	Always Getting Better Customer Charter is launched	2014	
			New bases are opened (Bratislava, Cologne, Gdansk, Glasgow and Warsaw)
	ESG Policy (correct date?)	2015	Always Getting Better programme is improved and new bases are opened (Belfast, Berlin, Corfu, Gothenburg, Ibiza, Milan Malpensa)
		2016	Always Getting Better programme now includes and improved app, improved Flexi-Plus and Leisure-Plus products
			New bases are opened (Bucharest, Corfu, Frankfurt Main, Hamburg, Ibiza, Nuremberg, Prague, Sofia, Timisoara and Vilnius)
		2017	The airline has 87 bases
First environ	First environmental policy: committment to eliminate all non-recyclable plastics over the next five years (by 2023)	2018	Ryanair took 75% stake in Austrian airline Audamotion
	First Airline to release monthly CO2 emissions statistics (66g CO2 per passenger/km)	2019	
COVID19	Code of Business Conduct & Ethics	2020	New bases are opened (Billund, Riga, Stockholm, Corfu, Rhodes, Chania, Zadar & Zagreb)

Source: Based on (*History of Ryanair | Ryanair's Corporate Website*, 2021) & (Ryanair, 2021)

Appendix 19

Air France-KLM CSR Initiatives

Initiatives #	Hierarch	Group	Airline	CSR Dimension	Theme	Sub-theme	Goal	Initiative ty	Initia	Initiative	Details	Date	Source
1	1	Air France KLM	All	Environment	Carbon Footprint	Fuel saving measures	Improve Group's efficiency and reduce carbon footprint	Global	In	Sustainable Aviation Fuel (Fuel Plan)	Fuel-efficient aircraft, weight reducti	26.01.21	Website - Sustainable development str
2	1,1	Air France KLM	All	Environment	Carbon Footprint	Fuel saving measures	Improve Group's efficiency and reduce carbon footprint	Global	In	Invest in fuel efficient fleet	Focus on simplification and rationalization to make		Website - Sustainable development str
3	1,2	Air France KLM	All	Environment	Carbon Footprint	Fuel saving measures	Improve Group's efficiency and reduce carbon footprint	Global	In	Onboard weight reduction	Onboard materials are chosen to reduce fuel consum		Website - Sustainable development str
4	1,3	Air France KLM	All	Environment	Carbon Footprint	Fuel saving measures	Improve Group's efficiency and reduce carbon footprint	Global	In	Route optimization (SESAR program)	Optimization of routes and flights paths, Group invo		Website - Sustainable development str
5	1,4	Air France KLM	All	Environment	Carbon Footprint	Fuel saving measures	Improve Group's efficiency and reduce carbon footprint	Global	In	Optimizing flight operations	Pilots are trained to apply the most fuel-efficient pr		Website - Sustainable development str
6	1,5	Air France KLM	All	Environment	Carbon Footprint	Fuel saving measures	Improve Group's efficiency and reduce carbon footprint	Global	In	Optimizing aircraft performance	innovations in all reas of maintenance to improve ai		Website - Sustainable development str
7	2	Air France KLM	All	Environment	Carbon Footprint	Fuel saving measures	Improve Group's efficiency and reduce carbon footprint	Global	In	Partnership with Solar Impulse Foundation	Promote identification and rapid im	09.12.19	Website - Sustainable development str
8	3	Air France KLM	Air France Industries KLM	Environment	Carbon Footprint	Fuel saving measures	Improve Group's efficiency and reduce carbon footprint	Global	In	PROGNOS Solution	Offer innovative benefits and environmental, optim		Website - Sustainable development str
9	4	Air France KLM	KLM	Environment	Carbon Footprint	Fuel saving measures	Improve Group's efficiency and reduce carbon footprint	Micro	In	Part of Flying-V Project	Partnership with TU Delft to design v	01.01.19	Website - Sustainable development str
10	5	Air France KLM	All	Environment	Carbon Footprint	Carbon offsetting	Reduce CO2 emission	Global	Out	Mandatory CO2 compensation	Since 2012, all intra-European airlines have been su		Website - Sustainable development str
11	6,1	Air France KLM	Air France-KLM-Transavia	Environment	Carbon Footprint	Carbon offsetting	Reduce CO2 emission	Global	In	Voluntary carbon offsetting and support for	Offer their individual and corporate customers the c		Website - Sustainable development str
12	6,2	Air France KLM	Air France	Environment	Carbon Footprint	Carbon offsetting	Reduce CO2 emission	Micro	In	Voluntary carbon offsetting and support for	When purchasing flight ticket, customers can help t		Website - Sustainable development str
13	6,3	Air France KLM	KLM-Transavia	Environment	Carbon Footprint	Carbon offsetting	Reduce CO2 emission	Micro	In	Compensation service CO2ZERO	It enables passengers to offset their carbon emission		Website - Sustainable development str
14	6,4	Air France KLM	Air France	Environment	Carbon Footprint	Carbon offsetting	Reduce CO2 emission	Micro	In	Offsetting 100% of CO2 emission (EcoAct pa	Offsetting 100% of CO2 emissions by partnering up v		Website - Sustainable development str
15	7	Air France KLM	Air France-KLM	Environment	Carbon Footprint	Ground energy consum	Reduce energy consumption	Global	In	Carbon-neutral ground operations target by 2030			Website - Sustainable development str
16	8	Air France KLM	All	Environment	Carbon Footprint	Ground energy consum	Reduce energy consumption	Micro	In	Plan to rationalize the Group's floor area	An increase in the per m2 utilization	01.01.20	Website - Sustainable development str
17	9	Air France KLM	All	Environment	Carbon Footprint	Ground energy consum	Reduce energy consumption	Micro	In	Initiative based on the increased use of rene	Toulouse and Valbonne in the South of France, wher		Website - Sustainable development str
18	10	Air France KLM	KLM	Environment	Carbon Footprint	Ground energy consum	Reduce fuel consumption	Micro	In	Electrical alternatives to the ground propul	KLM has trialed electrical alternatives to the ground		Website - Sustainable development str
19	11	Air France KLM	Air France-KLM	Environment	Sustainable aviation fuel (SAF)	Securing strict sustain	Contribute to sustainable fuel	Global	In	Members of a sustainable certification body	There were founder members of the S	01.01.08	Website - Sustainable development str
20	12	Air France KLM	Air France-KLM	Environment	Sustainable aviation fuel (SAF)	Stimulating the indust	Support research on creation of a Sustainable Aviation Fu	Global	In	Member of working groups			Website - Sustainable development str
21	12,1	Air France KLM	Air France	Environment	Sustainable aviation fuel (SAF)	Stimulating the indust	Promote knowledge of biofuel for aviation	Global	In	Promote knowledge on biofuels for aviation	Partnership to raise public authority awareness of th		Website - Sustainable development str
22	12,2	Air France KLM	Air France	Environment	Sustainable aviation fuel (SAF)	Stimulating the indust	Promote knowledge of biofuel for aviation	Global	In	Participate in the establishemene tof the Fr	It is managed by the National Alliance for Coordinat		Website - Sustainable development str
23	12,3	Air France KLM	KLM	Environment	Sustainable aviation fuel (SAF)	Stimulating the indust	Contribute to sustainable fuel	Micro	In	KLM and SkyNRG investigate the feasibility of producing SAF locally		01.01.20	Website - Sustainable development str
24	12,4	Air France KLM	Air France	Environment	Sustainable aviation fuel (SAF)	Stimulating the indust	Promote emergence of sustainable aviation biofuels indu	Global	In	Signed an Engagement for Green Growth	Signed with the French Ministry for t	01.01.17	Website - Sustainable development str
25	12,5	Air France KLM	Air France	Environment	Sustainable aviation fuel (SAF)	Stimulating the indust	Support research on creation of a Sustainable Aviation Fu	Global	In	Supported several new Sustainable Aviation	Bya ctively seeking industrial and log	01.07.20	Website - Sustainable development str
26	12,6	Air France KLM	Air France-KLM	Environment	Sustainable aviation fuel (SAF)	Stimulating the indust	Stimulate biofuels regulations	Global	In	Involved in initiatives: European Advanced Biofuels Flightpath, ART Fuels Forum, Ini-FCA French			Website - Sustainable development str
27	12,7	Air France KLM	Air France-KLM	Environment	Sustainable aviation fuel (SAF)	Stimulating the indust	Ensure adequate supplies of SAF to be able to fly CO2-neu	Global	In	Part of Clean Skies for Tomorrow (CST) coali	It was established within the Global Economic Foru		Website - Sustainable development str
28	13	Air France KLM	KLM	Environment	Sustainable aviation fuel (SAF)	Innovating in the supp	Contribute to sustainable fuel	Global	In	KLM one of the founders of SkyNRG	It is the current worldwide market leader for Sustain		Website - Sustainable development str
29	14	Air France KLM	KLM	Environment	Sustainable aviation fuel (SAF)	Innovating in the supp	Contribute to sustainable fuel	Global	In	Commitment to developing and purchasing	KLM is the first airline in the world to	01.01.19	Website - Sustainable development str
30	15	Air France KLM	KLM	Environment	Sustainable aviation fuel (SAF)	Innovating in the supp	Contribute to sustainable fuel	Global	In	First commercial passenger flight from Amst	This first flight on synthetic kerosene	01.01.20	Website - Sustainable development str
31	16	Air France KLM	KLM	Environment	Sustainable aviation fuel (SAF)	Involving customers ar	Contribute to sustainable fuel	Global	In	Launch of the KLM Corporate BioFuel progr	It was a first for aviation. IN 2020, th	01.01.12	Website - Sustainable development str
32	17	Air France KLM	Martinair cargo	Environment	Sustainable aviation fuel (SAF)	Involving customers ar	Contribute to sustainable fuel	Global	In	Launch the world's first SAF Programme for	This cargo SAF programme eables frei	01.12.20	Website - Sustainable development str
33	18,1	Air France KLM	Air France-KLM	Environment	Noise hindrance	Reducing noise at sour	Reduction in noise footprint	Global	In	Pro-active policy of fleet renewal (ICAO Cha	The most exacting standard covering acoustic qualit		Website - Sustainable development str
34	18,2	Air France KLM	Air France-KLM	Environment	Noise hindrance	Reducing noise at sour	Reduction in noise footprint	Global	In	Withdrawal of noisiest aircraft of the fleet	B747s and A340 were removed from operational ser		Website - Sustainable development str
35	19,1	Air France KLM	All	Environment	Noise hindrance	Reducing noise at sour	Reduction in noise footprint	Global	In	Implementation of continuous descent or N	These procedures reduce significantly noise pollutio		Website - Sustainable development str
36	19,2	Air France KLM	All	Environment	Noise hindrance	Reducing noise at sour	Reduction in noise footprint	Global	In	Solutions are sought with the French and Du	They are assessing the environmental benefits of the		Website - Sustainable development str
37	20,1	Air France KLM	KLM	Environment	Noise hindrance	Dialogue with resident	Share the framework for sustainable development	Global	In	Took part in the Minder Hinder program wit	Program with Schipol and Air Traffic	01.01.20	Website - Sustainable development str
38	20,2	Air France KLM	KLM	Environment	Noise hindrance	Dialogue with resident	Share the framework for sustainable development	Global	In	Participates in Het Regioforum	It adresses issues surrounding noise with the local co		Website - Sustainable development str
39	20,3	Air France KLM	Air France	Environment	Noise hindrance	Dialogue with resident	Share the framework for sustainable development	Global	In	Dialogue and participate in the context of th	Air France participates at all the French airports whe		Website - Sustainable development str
40	20,4	Air France KLM	Air France	Environment	Noise hindrance	Dialogue with resident	Share the framework for sustainable development	Global	In	Involved in Night Flights working Group	This working group notably proposed continuous de		Website - Sustainable development str
41	21,1	Air France KLM	Air France-Transavia	Environment	Noise hindrance	Dialogue with resident	Contribute to French and Dutch government policies	Global	Out	Contribution to the French Tax on Air Trans	It was paid to the government and ar	01.01.20	Website - Sustainable development str
42	21,2	Air France KLM	KLM	Environment	Noise hindrance	Dialogue with resident	Contribute to French and Dutch government policies	Global	Out	KLM has contributed to noise taxes	Contribution of €754 million noise taxes		Website - Sustainable development str
43	22	Air France KLM	All	Environment	Air Quality	Operational procedure	Reduce emissions in the environment of aircraft handling	Global	In	Other equipment usage	Ground Support Equipment (GSE) usage instead of A		Website - Sustainable development str
44	23	Air France KLM	Air France	Environment	Air Quality	Ecomobility solutions	Reduce local impact and increase employees awareness	Global	In	Air France mobility plans	Aim to increase employee awarenees and to reduce		Website - Sustainable development str
45	24,1	Air France KLM	KLM	Environment	Air Quality	Ecomobility solutions	Promote the use of public transport	Global	In	Proving free access to transport around Schipol and KLM's offices to its employees			Website - Sustainable development str
46	24,2	Air France KLM	KLM	Environment	Air Quality	Ecomobility solutions	Promote the use of public transport	Global	In	Launched the app Toogethr	Available for employees to stimulate carpoolong an		Website - Sustainable development str
47	25,1	Air France KLM	All	Environment	Waste and circular economy	Catering and cleaning	Reduce catering and cleaning waste	Global	In	Ites were removed and meal follow an optin	This is done thanks to two main levers: the adjustme		Website - Sustainable development str
48	25,2	Air France KLM	KLM	Environment	Waste and circular economy	Catering and cleaning	Reusing items	Global	In	Closed loop tray (Onboard Hospitality Awar	The trays are washed and reused unle	01.01.20	Website - Sustainable development str
49	25,3	Air France KLM	Air France	Environment	Waste and circular economy	Catering and cleaning	Recycling items	Micro	In	Sorting of on-board waste on flights to Paris		01.01.19	Website - Sustainable development str
50	25,4	Air France KLM	KLM	Environment	Waste and circular economy	Catering and cleaning	Recycling items	Global	In	Onboard recycling			Website - Sustainable development str
51	26	Air France KLM	All	Environment	Waste and circular economy	Catering and cleaning	Recycling items	Global	In	Engaging with authorities on CAT1 waste	International catering use is subject to strict EU regu		Website - Sustainable development str
52	27	Air France KLM	Air France	Environment	Waste and circular economy	Catering and cleaning	Recycling items	Global	In	Committed to replacing 80% of single-use p	Removing SUPs wherever possible, replacing these p		Website - Sustainable development str
53	28	Air France KLM	Group	Environment	Waste and circular economy	Production waster	Repairs waste	Global	In	Prevents waster of aeronautical components by developing alternative repairs			Website - Sustainable development str
54	29,1	Air France KLM	All	Environment	Waste and circular economy	Production waste	Reusing and recycling items	Global	In	Reuse and recycle the fabric of used uniform	Through collection of these items and collaboration		Website - Sustainable development str
55	29,2	Air France KLM	KLM	Environment	Waste and circular economy	Production waste	Recycling items	Global	In	Reuse of unifrms and carpeting	Used uniforms and old business class	01.01.13	Website - Sustainable development str
56	29,3	Air France KLM	Air France	Environment	Waste and circular economy	Production waste	Reusing items	Global	In	Agreement with the Agence du Don en natu	To avoid the destruction of products	01.01.17	Website - Sustainable development str
57	30	Air France KLM	All	Environment	Waste and circular economy	Production waste	Optimize management of hazardous waste	Global	In	Subject to tracing system and optimized ma	This approach is reflected in the optimized maanger		Website - Sustainable development str
58	31	Air France KLM	Air France	Environment	Waste and circular economy	Office waste	100% recycled waste in 2020	Global	In	Implementation of waste collection system	This system relies on easily identifiable color coding		Website - Sustainable development str
59	32	Air France KLM	KLM	Environment	Waste and circular economy	Office waste	Recycling items	Global	In	Recycling activities in the office environment are being introduced at each renovation			Website - Sustainable development str
60	33	Air France KLM	Air France Industries KLM	Environment	Waste and circular economy	Saving water	Avoid water wastage and reduce water consumption	Global	In	EcoShine method	Used to clean the exterior of aircraft, it uses 80 time		Website - Sustainable development str
61	34	Air France KLM	Air France Industries KLM	Environment	Waste and circular economy	Saving water	Recycling water, optimize engine performance	Global	In	Developed a system to increase engine on-w	Engine water was can be carried out during a mainte		Website - Sustainable development str
62	35	Air France KLM	Air France	Environment	Biodiversity	Customer offsetting	Contribute to reforestation	Global	In	Founder member of A Tree for You associati	Brings together donors and tree-plan	01.01.19	Website - Sustainable development str
63	36	Air France KLM	KLM	Environment	Biodiversity	Customer offsetting	Compensate for CO2 emissions	Global	In	CO2ZERO program	KLM has contributed to Gold Standa	01.01.08	Website - Sustainable development str
64	37	Air France KLM	Air France	Environment	Biodiversity	Offsetting domestic flig	Compensate for CO2 emissions	Global	In	Offsetting scheme 100% domestic flights wi	Customers are able to undertake car	01.01.20	Website - Sustainable development str
65	38	Air France KLM	Air France	Environment	Biodiversity	Promote preservation	Promote preservation of biodiversity	Global	In	Member of the Aéro Biodiversité associatio	It evaluates and higlights airport bio	01.01.20	Website - Sustainable development str
66	39	Air France KLM	Air France-KLM	Environment	Biodiversity	Combating traffic in pr	Combatting illegal trading in protected species	Global	In	Signatories of the Buckingham Palace Decla	It formalizes the commitment to combatting illegal		Website - Sustainable development str
67	40	Air France KLM	Air France	Environment	Biodiversity	Combating traffic in pr	Combatting illegal trading in protected species	Global	In	Awareness-raising program	For frontline ground staff to help the	01.01.20	Website - Sustainable development str
68	41	Air France KLM	Air France	Environment	Biodiversity	Combating traffic in pr	Combatting illegal trading in protected species	Global	In	Working group to plan coordinated activities		01.01.17	Website - Sustainable development str
69	42	Air France KLM	All	Employee journey	Working conditions and social dialogu	Social dialogue and reg	Preserves cohesion	Global	In	Fostering a constructive and transparent so	By pursuing a policy based on treating individuals w		Website - Sustainable development str
70	43	Air France KLM	Air France	Employee journey	Working conditions and social dialogu	Signature of major agre	Reconstruction plan to take place in full transparency	Global	In	Efficiency agreements signed with the Cabin	It enables the number of cabin crew on board the ai		Website - Sustainable development str
71	44	Air France KLM	KLM	Employee journey	Working conditions and social dialogu	Signature of major agre	Mitigate the impact of the crisis	Global	Out	Mandatory loan package negotiations	After negotiations, KLM and the unio	01.10.20	Website - Sustainable development str
72	45	Air France KLM	KLM	Employee journey	Working conditions and social dialogu	Signature of major agre	Limiting forced lay offs	Global	In	Social Plans for Cabin Crew and Ground Sta	Based on measures aimed at limiting	01.01.20	Website - Sustainable development str
73	46	Air France KLM	KLM	Employee journey	Working conditions and social dialogu	Signature of major agre	Define contribution scheme	Global	In	Agreement of a defined contribution schem	Between KLM and the unions	01.01.20	Website - Sustainable development str
74	47	Air France KLM	KLM	Employee journey	Working conditions and social dialogu	Signature of major agre	Define contribution scheme	Global	In	Reach of a negotiation result with Ground Staff on a Defined Contribution Schem		01.01.20	Website - Sustainable development str
75	48	Air France KLM	Air France-KLM	Employee journey	Working conditions and social dialogu	Working conditions du	Protect health conditions	Global	Out	Implementation of public health protocol adapted to the crisis		01.03.20	Website - Sustainable development str
76	49	Air France KLM	Air France-KLM-Transavia	Employee journey	Working conditions and social dialogu	Working conditions du	Protect health conditions	Global	In	Development of remote working and protection measures for non eligible		01.01.20	Website - Sustainable development str
77	50	Air France KLM	All	Employee journey	Working conditions and social dialogu	Employee commitmen	Foster commitment	Global	In	Flight plan	Roadmap is at the level of every division of the airlin		Website - Sustainable development str
78	51	Air France KLM	All	Employee journey	Human capital development		Foster inclusive talent management	Global	In	Launched policy to inclusive talent manage	By using a talent development grid created jointly b		Website - Sustainable development str
79	52	Air France KLM	All	Employee journey	Human capital development	Skills development pla	Foster training	Global	In	Pursue policy of prioritizing training			Website - Sustainable development str
80	53	Air France KLM	KLM	Employee journey	Human capital development	Skills development pla	Foster outplacements	Global	In	Creation of the Loket Blauwe	To help find temporary outplacements for employee		Website - Sustainable development str
81	54	Air France KLM	Transavia	Employee journey	Human capital development	Skills development pla	Foster outplacements	Global	In	Creation of WeCare platform	To help find temporary outplacements for employee		Website - Sustainable development str
82	55	Air France KLM	KLM	Employee journey	Human capital development	Skills development pla	Support employees	Global	In	Design of the SharePoint website	help employees find support		Website - Sustainable development str
83	56	Air France KLM	Air France-KLM	Employee journey	Human capital development	Skills development pla	Foster learning for employees	Global	In	Award for the best Blended Learning program (Air France) and best learning tech (KLM)			Website - Sustainable development str
84	57	Air France KLM	Air France-KLM	Employee journey	Human capital development	Developping leadershi	Enable high-potential women to develop their skills withi	Global	In	Offer the Femmes de Talent training, the Women on Board program			Website - Sustainable development str
85	58	Air France KLM	Air France	Employee journey	Human capital development	Developping leadershi	Enhance collective performance	Global	In	Implemented new continuous performance	Based on continuous performance m	01.01.19	Website - Sustainable development str
86	59	Air France KLM	KLM	Employee journey	Human capital development	Developping leadershi	Foster talents	Global	In	Creation of a new format and process for performance appraisals			Website - Sustainable development str
87	60	Air France KLM	Air France-KLM	Employee journey	Human capital development	Air France and KLM vol	Training employees to cope with unforeseeable situation	Global	In	Air France and KLM Volunteers programs			Website - Sustainable development str
88	61	Air France KLM	Air France-KLM	Employee journey	Human capital development	Air France and KLM vol	Training employees to cope with unforeseeable situation	Global	In	Developed a joint Care Team training course		01.01.19	Website - Sustainable development str
89	62	Air France KLM	All	Employee journey	Human capital development	Young professional dev	Supporting interns	Global	In	Partnership with SODESI to provide individual support		01.01.20	Website - Sustainable development str
90	63,1	Air France KLM	Air France-KLM	Employee journey	Human capital development	International staff	Training employees	Global	In	Sales Excellence Development Program (Our journey)			Website - Sustainable development str
91	63,2	Air France KLM	Air France-KLM	Employee journey	Human capital development	International staff	Facilitate dialogue within teams	Global	In	WhatsUp tool			Website - Sustainable development str
92	64	Air France KLM	All	Employee journey	Health, safety and quality of life in the	Risk prevention	Prevent risk	Global	In	Workplace Harassment Prevention Charter			Website - Sustainable development str
93	65	Air France KLM	All	Employee journey	Health, safety and quality of life in the	Risk prevention	Prevent risk	Global	In	Measures and reports indicators realted to health and safety at work			Website - Sustainable development str
94	66	Air France KLM	All	Employee journey	Health, safety and quality of life in the	Health: awareness and	Develop health measures	Global	Out	Managing impact of COVID19		01.03.20	Website - Sustainable development str
95	67	Air France KLM	All	Employee journey	Health, safety and quality of life in the	Health: awareness and	Support employees	Global	Out	Hot lines development		01.03.20	Website - Sustainable development str
96	68	Air France KLM	Air France-KLM-Transavia	Employee journey	Health, safety and quality of life in the	Health: awareness and	Guarantee optimal working conditions	Global	Out	Remote working measures deployed	Measures deployed to support remote working for e		Website - Sustainable development str
97	69	Air France KLM	KLM	Employee journey	Health, safety and quality of life in the	Health: awareness and	Guarantee optimal working conditions	Global	In	Organization of webinars	Stress in the Workplace Week, MYHe	01.10.20	Website - Sustainable development str
98	70	Air France KLM	KLM	Employee journey	Diversity and inclusion	Gender equality	Increasing the number of women in management positio	Global	In	Signing of the Talent to the Top Charter	This Charter helps to bring the right f	01.03.19	Website - Sustainable development str
99	71	Air France KLM	Air France-KLM	Employee journey	Diversity and inclusion	Gender equality	Encourage women to access the highest management pos	Global	In	Femmes de Talent coaching program (Air France) and the Female Leadership Program (KLM)			Website - Sustainable development str
100	72	Air France KLM	All	Employee journey	Diversity and inclusion	Gender equality	Ensure equal treatment	Global	In	Male-female comparative indicators tracking			Website - Sustainable development str
101	73	Air France KLM	All	Employee journey	Diversity and inclusion	Gender equality	Ensure equal treatment	Global	In	Creation of internal networks Women for Tomorrow (WoTo) and Women on Board			Website - Sustainable development str
102	74,1	Air France KLM	All	Employee journey	Diversity and inclusion	Gender equality	Promote inclusivity	Global	In	Internal campagin, signatory of the Diversity Charter, member of the StOpE initiative			Website - Sustainable development str
103	74,2	Air France KLM	All	Employee journey	Diversity and inclusion	Gender equality	Increase diversity and inclusion awareness	Global	In	Women on Board and LGBTI Over the Rainbow			Website - Sustainable development str
104	75	Air France KLM	All	Employee journey	Diversity and inclusion	Fostering equal opport	Foster equal opportunity	Global	In	Association with L'Autre Cercle's LGBT+ commitment charter		01.01.19	Website - Sustainable development str
105	76	Air France KLM	KLM	Employee journey	Diversity and inclusion	Fostering equal opport	Promote diversity	Global	In	Participation in the Work Place Pride Global		01.01.20	Website - Sustainable development str
106	77	Air France KLM	Air France	Employee journey	Diversity and inclusion	Disabled people	Commit to recruitment of disabled people	Global	In	Negotiation agreement on Disability was signed		01.01.21	Website - Sustainable development str
107	78	Air France KLM	All	Employee journey	Diversity and inclusion	Disabled people	Raising awareness	Global	In	Awareness raising initiatives during European Disability Employment Week			Website - Sustainable development str
108	79	Air France KLM	KLM	Employee journey	Diversity and inclusion	Disabled people	Employ people with a distance to the labour market	Global	In	KLM Inclusief as part of Luchtvaart inclusifed in collaboration with LCS (Luchtvaart Community			Website - Sustainable development str
109	80	Air France KLM	Air France	Employee journey	Innovating and involving employees	Innovation programs	Contributing to innovation	Global	In	Developping innovation Program (DIP)			Website - Sustainable development str
110	81	Air France KLM	Air France	Employee journey	Innovating and involving employees	Innovation programs	Promote and support digital	Global	In	Inauguration of Digital Factory		01.09.18	Website - Sustainable development str
111	82	Air France KLM	Air France	Employee journey	Innovating and involving employees	Innovation programs	Creating new businesses for Air France	Global	In	Boost the Future program			Website - Sustainable development str
112	83	Air France KLM	KLM	Employee journey	Innovating and involving employees	Innovation programs	Aims at creating memorable experiences for employees	Global	In	Fair & Recognition Awards			Website - Sustainable development str
113	84	Air France KLM	KLM	Employee journey	Innovating and involving employees	Innovation programs	Build sustainable growth	Global	In	Innovation ecosystem		01.01.20	Website - Sustainable development str
114	85	Air France KLM	Air France-KLM	Employee journey	Innovating and involving employees	Innovation programs	Foster participation in innovative idea	Global	In	Cash4BlueHeart event - Yammer community (on-line social network for all employees)			Website - Sustainable development str

Initiatives #	Hierarch	Group	Airline	CSR Dimension	Theme	Sub-theme	Goal	Initiative ty	Initia	Initiative	Details	Date	Source
115	86	Air France KLM	Air France-KLM	Employee journey	Innovating and involving employees	Sustainability awarene	Promote sustainability awareness	Global	In	Different channels available	Yammer platform, My Learning online training platf		Website - Sustainable development str
116	87	Air France KLM	Air France-KLM	Customer trust	Operational safety	Flight safety	Manage flight safety	Global	In	Evaluation method for operational risks recommended by the European Aviation Safety Agency			Website - Sustainable development str
117	88	Air France KLM	All	Customer trust	Operational safety	Flight safety	Identifying risks generated by the COVID	Global	In	Safety studies part of the international coop	Participation in the work of the International Air Tra		Website - Sustainable development str
118	89	Air France KLM	All	Customer trust	Operational safety	Flight safety	Developing a safety culture	Global	In	Flight Safety network teams	They analyze the signals coming from the Safety Man		Website - Sustainable development str
119	90	Air France KLM	Air France-KLM	Customer trust	Operational safety	Security	Ensures the protection of staff, customers, aircraft	Global	In	Security Departments			Website - Sustainable development str
120	91	Air France KLM	Air France-KLM-Transavia	Customer trust	Operational safety	Health security	Guarantee health conditions	Global	In	Air France Protect			Website - Sustainable development str
121	92	Air France KLM	All	Customer trust	Operational safety	Food safety	Guarantee food services that are safe for customers	Global	In	Quality control procedures	Management system deployed on four processes, ma		Website - Sustainable development str
122	93	Air France KLM	Air France	Customer trust	Operational safety	Food safety	Guarantee food quality	Global	In	First airline in the world to attain ISO 22000		01.01.06	Website - Sustainable development str
123	94	Air France KLM	All	Customer trust	Confidentiality and data protection	Data and IT systems pro	Manage cybersecurity	Global	In	Manages and cooperates with the relevant European agencies (EASA, ENISA)			Website - Sustainable development str
124	95	Air France KLM	KLM	Customer trust	Confidentiality and data protection	Data and IT systems pro	Manage cybersecurity	Global	In	Takes part in the cybersecurity working grou	Takes part in the working groups of the main profess		Website - Sustainable development str
125	96	Air France KLM	All	Customer trust	Confidentiality and data protection	Data and IT systems pro	Manage cybersecurity	Global	In	Development of 4 major cybersecurity prog	A program directed at more effective cybersecurity t		Website - Sustainable development str
126	97	Air France KLM	All	Customer trust	Confidentiality and data protection	Data privacy	Protect data	Global	Out	European General Data Protection Regulation (GDPR)		25.05.18	Website - Sustainable development str
127	98	Air France KLM	All	Customer trust	Confidentiality and data protection	Data privacy	Improve monitoring of data	Global	In	Implementation of improved meeting struc	Register of processing activities was finalized and ali		Website - Sustainable development str
128	99	Air France KLM	All	Customer trust	Confidentiality and data protection	Data privacy	Assess the effectiveness of the privacy compliance framew	Global	In	Internal Auditing program			Website - Sustainable development str
129	100	Air France KLM	All	Customer trust	Customer dialogue	Customer insight	Co-create with customers	Global	In	Intouch online community (co-creation programs)			Website - Sustainable development str
130	101	Air France KLM	Air France	Customer trust	Customer dialogue	Customer insight	Co-create with customers	Global	In	Customer club	132 voluntary clients that help improve and design		Website - Sustainable development str
131	102	Air France KLM	All	Customer trust	Customer dialogue	Customer insight	Support customer feedback	Global	In	Quantitative and qualitative surveys, infligh	In order to ensure that customer feedback is taken in		Website - Sustainable development str
132	103	Air France KLM	Air France	Customer trust	Customer dialogue	Customer insight	Support customer feedback	Global	In	Tool implementation to analyze clients comments		01.01.20	Website - Sustainable development str
133	104	Air France KLM	All	Customer trust	Customer dialogue	Customer insight	Support customer feedback	Global	In	Net Promoter Score (NPS) indicator is the customer reference indicator at Air France-KLM			Website - Sustainable development str
134	105	Air France KLM	All	Customer trust	Customer dialogue	Customer insight	Analyze competitive environment	Global	In	Benchmarking			Website - Sustainable development str
135	106	Air France KLM	All	Customer trust	Customer dialogue	Customer insight	Safeguard a consistent product and service delivery arour	Global	In	Quality observer program	Flying Blue members are invited to perform objectiv		Website - Sustainable development str
136	107	Air France KLM	Air France-KLM	Customer trust	Customer dialogue	Customer insight	Improve customer satisfaction	Global	In	eSCORE online program	Measures passenger satisfaction on all Air France and		Website - Sustainable development str
137	108	Air France KLM	All	Customer trust	Customer dialogue	Striving for exellence in	Improve customer satisfaction	Global	In	Implementation of health and reimburseme	Communication was also adapted for customers (bo		Website - Sustainable development str
138	109	Air France KLM	All	Customer trust	Customer dialogue	Striving for exellence in	Improve customer satisfaction	Global	In	Customer continuity system	Employees can share information about clients and		Website - Sustainable development str
139	110	Air France KLM	All	Customer trust	Customer dialogue	Striving for exellence in	Improve customer satisfaction	Global	In	Phoenix program	To meet the expectation sof our international custo		Website - Sustainable development str
140	111	Air France KLM	All	Customer trust	Customer dialogue	Striving for exellence in	Improve customer satisfaction	Global	In	Awarded the "Podium de la Relation Client"	Selected on the basis of a BearingPoint and Kantar TI		Website - Sustainable development str
141	112	Air France KLM	All	Customer trust	Customer dialogue	Striving for exellence in	Improve customer satisfaction	Global	In	Insight customer feedback after landing			Website - Sustainable development str
142	113	Air France KLM	KLM	Customer trust	Customer dialogue	Striving for exellence in	Improve customer satisfaction	Global	In	Collaboration wuth Return to Sender on "G	Unique gifts provide the crew with another tool to a		Website - Sustainable development str
143	114	Air France KLM	All	Customer trust	Customer dialogue	Involving customers in	Involve customers on sustainability topics	Global	In	Takes Care Label and platform			Website - Sustainable development str
144	115	Air France KLM	KLM	Customer trust	Customer dialogue	Involving customers in	Develop sustainable solutions	Global	In	Fly Responsibly	KLM invited airlines, partners, custo	29.06.19	Website - Sustainable development str
145	116	Air France KLM	All	Customer trust	Customer dialogue	Involving customers in	Evaluate the Group's CSR strategy	Global	In	Materiality analysis	Reissued very two years. It enabled c	01.01.19	Website - Sustainable development str
146	117	Air France KLM	Air France	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	Saphir assistance service for passengers (Ser	Created for passengers that require dedicated servic		Website - Sustainable development str
147	118	Air France KLM	Air France	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	Partnership with multiple associations	Dedicated to disability and has forget strong links w		Website - Sustainable development str
148	119	Air France KLM	KLM	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	KLM Cares	Dedicated service assisting PDRM customers with th		Website - Sustainable development str
149	120	Air France KLM	Air France	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	Key Customer Club	For disabled and reduced mobility people (PDRM) w		Website - Sustainable development str
150	121	Air France KLM	Air France-KLM	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	Upgraded pages on the Air France and KLM website devoted to PDRMs			Website - Sustainable development str
151	122	Air France KLM	Air France-KLM	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	Awareness raising workshops on PDRM people			Website - Sustainable development str
152	123	Air France KLM	Air France	Customer trust	Accessibility of products and services f	Kids Solo	Support traveling kids	Global	In	Kids Solo service			Website - Sustainable development str
153	124	Air France KLM	All	Societal value	Solidarity chain linked to the public health crisis		Provide support during crisis	Global	In	Air Bridge between China and Europe	Transportation of masks and medical equipment		Website - Sustainable development str
154	125	Air France KLM	All	Societal value	Solidarity chain linked to the public health crisis		Provide support during crisis	Global	In	Donations of food and materials			Website - Sustainable development str
155	126	Air France KLM	Air France	Societal value	Local development	Long term cooperation	Foster cooperation	Global	In	Cooperation as member of the Board of the Club des Acteurs du Grand Roissy			Website - Sustainable development str
156	127	Air France KLM	Air France	Societal value	Local development	Long term cooperation	Foster cooperation	Global	In	Continue participation in Orly International			Website - Sustainable development str
157	128	Air France KLM	Air France	Societal value	Local development	Long term cooperation	Foster cooperation	Global	In	Support the Grand Paris Express Metro rail p	It will connect both Paris-Orly and Paris-Charles de C		Website - Sustainable development str
158	129	Air France KLM	Air France	Societal value	Local development	Long term cooperation	Foster cooperation	Global	In	Work alongside other large companies to pool mobility solutions			Website - Sustainable development str
159	130	Air France KLM	KLM	Societal value	Local development	Long term cooperation	Strengthen competitiveness and development of the regi	Global	In	Partnership with Amsterdam Airport Schiph	Strengthen competitiveness and development of the		Website - Sustainable development str
160	131	Air France KLM	Air France	Societal value	Local development	Long term cooperation	Strengthen competitiveness and development of the regi	Global	In	Commitment to overseas territories (passengers and goods)			Website - Sustainable development str
161	132	Air France KLM	Air France-KLM	Societal value	Local development	Committed to inclusio	Foster inclusion	Global	In	Partnership with network of associations	To advocate inclusion through awareness, training a		Website - Sustainable development str
162	133	Air France KLM	Air France	Societal value	Local development	Committed to inclusio	Contribute to employment	Global	In	Signatory of the Corporate and Neighborho	It supports the government initiative	01.01.13	Website - Sustainable development str
163	134	Air France KLM	Air France	Societal value	Local development	Committed to inclusio	Support future generations	Global	In	Internship, experience placements and students sponsoring			Website - Sustainable development str
164	135	Air France KLM	Air France	Societal value	Local development	Committed to inclusio	Support future generations	Global	In	Partnership with Sodesi and workshops for students			Website - Sustainable development str
165	136	Air France KLM	Air France	Societal value	Local development	Committed to inclusio	Integrate young local job seekers	Global	In	Contribution through JEREMY association			Website - Sustainable development str
166	137	Air France KLM	KLM	Societal value	Local development	Committed to inclusio	Creation of sustainable employment	Global	In	Co-founder of the Aviation Community Schiphol			Website - Sustainable development str
167	138	Air France KLM	All	Societal value	Local development	Local development at c	Stimulating economic development	Global	In	Donations and shipment of emergency equi	Example: In solidarity with Lebanon which suffered		Website - Sustainable development str
168	139	Air France KLM	Air France-KLM	Societal value	Local development	Local development at c	Promote responsible and sustainable tourism	Global	In	Partnerships with NGO, universities and sus	NHTV and Wageningen University (KLM), ATR (Air Fra		Website - Sustainable development str
169	140	Air France KLM	Air France-KLM	Societal value	Local development	Local entrepreneurship	Promote local entrepreneurship	Global	In	Participation in Africarena	Through a sustainable development challenge to lim		Website - Sustainable development str
170	141	Air France KLM	Air France	Societal value	Local development	Local entrepreneurship	Foster skills development	Global	In	Participation in foundation of IAMA (Institu	It provides the whole range of training related to the		Website - Sustainable development str
171	142	Air France KLM	Air France	Societal value	Local development	Local entrepreneurship	Guarantee reliability performance of track equipment in	Global	In	Sales service of second hand equipment (MATEA)			Website - Sustainable development str

Initiatives #	Hierarch	Group	Airline	CSR Dimension	Theme	Sub-theme	Goal	Initiative ty	Initia	Initiative	Details	Date	Source
138	109	Air France KLM	All	Customer trust	Customer dialogue	Striving for exellence in	Improve customer satisfaction	Global	In	Customer continuity system	Employees can share information about clients and		Website - Sustainable development str
139	110	Air France KLM	All	Customer trust	Customer dialogue	Striving for exellence in	Improve customer satisfaction	Global	In	Phoenix program	To meet the expectation sof our international custo		Website - Sustainable development str
140	111	Air France KLM	All	Customer trust	Customer dialogue	Striving for exellence in	Improve customer satisfaction	Global	In	Awarded the "Podium de la Relation Client"	Selected on the basis of a BearingPoint and Kantar TI		Website - Sustainable development str
141	112	Air France KLM	All	Customer trust	Customer dialogue	Striving for exellence in	Improve customer satisfaction	Global	In	Insight customer feedback after landing			Website - Sustainable development str
142	113	Air France KLM	KLM	Customer trust	Customer dialogue	Striving for exellence in	Improve customer satisfaction	Global	In	Collaboration wuth Return to Sender on "G	Unique gifts provide the crew with another tool to a		Website - Sustainable development str
143	114	Air France KLM	All	Customer trust	Customer dialogue	Involving customers in	Involve customers on sustainability topics	Global	In	Takes Care Label and platform			Website - Sustainable development str
144	115	Air France KLM	KLM	Customer trust	Customer dialogue	Involving customers in	Develop sustainable solutions	Global	In	Fly Responsibly	KLM invited airlines, partners, custo	29.06.19	Website - Sustainable development str
145	116	Air France KLM	All	Customer trust	Customer dialogue	Involving customers in	Evaluate the Group's CSR strategy	Global	In	Materiality analysis	Reissued very two years. It enabled c	01.01.19	Website - Sustainable development str
146	117	Air France KLM	Air France	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	Saphir assistance service for passengers (Ser	Created for passengers that require dedicated servic		Website - Sustainable development str
147	118	Air France KLM	Air France	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	Partnership with multiple associations	Dedicated to disability and has forget strong links w		Website - Sustainable development str
148	119	Air France KLM	KLM	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	KLM Cares	Dedicated service assisting PDRM customers with th		Website - Sustainable development str
149	120	Air France KLM	Air France	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	Key Customer Club	For disabled and reduced mobility people (PDRM) w		Website - Sustainable development str
150	121	Air France KLM	Air France-KLM	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	Upgraded pages on the Air France and KLM website devoted to PDRMs			Website - Sustainable development str
151	122	Air France KLM	Air France-KLM	Customer trust	Accessibility of products and services f	Passengers with disabil	Foster accessibility of product and services	Global	In	Awareness raising workshops on PDRM people			Website - Sustainable development str
152	123	Air France KLM	Air France	Customer trust	Accessibility of products and services f	Kids Solo	Support traveling kids	Global	In	Kids Solo service			Website - Sustainable development str
153	124	Air France KLM	All	Societal value	Solidarity chain linked to the public health crisis		Provide support during crisis	Global	In	Air Bridge between China and Europe	Transportation of masks and medical equipment		Website - Sustainable development str
154	125	Air France KLM	All	Societal value	Solidarity chain linked to the public health crisis		Provide support during crisis	Global	In	Donations of food and materials			Website - Sustainable development str
155	126	Air France KLM	Air France	Societal value	Local development	Long term cooperation	Foster cooperation	Global	In	Cooperation as member of the Board of the Club des Acteurs du Grand Roissy			Website - Sustainable development str
156	127	Air France KLM	Air France	Societal value	Local development	Long term cooperation	Foster cooperation	Global	In	Continue participation in Orly International			Website - Sustainable development str
157	128	Air France KLM	Air France	Societal value	Local development	Long term cooperation	Foster cooperation	Global	In	Support the Grand Paris Express Metro rail p	It will connect both Paris-Orly and Paris-Charles de C		Website - Sustainable development str
158	129	Air France KLM	Air France	Societal value	Local development	Long term cooperation	Foster cooperation	Global	In	Work alongside other large companies to pool mobility solutions			Website - Sustainable development str
159	130	Air France KLM	KLM	Societal value	Local development	Long term cooperation	Strengthen competitiveness and development of the regi	Global	In	Partnership with Amsterdam Airport Schiph	Strengthen competitiveness and development of the		Website - Sustainable development str
160	131	Air France KLM	Air France	Societal value	Local development	Long term cooperation	Strengthen competitiveness and development of the regi	Global	In	Commitment to overseas territories (passengers and goods)			Website - Sustainable development str
161	132	Air France KLM	Air France-KLM	Societal value	Local development	Committed to inclusio	Foster inclusion	Global	In	Partnership with network of associations	To advocate inclusion through awareness, training a		Website - Sustainable development str
162	133	Air France KLM	Air France	Societal value	Local development	Committed to inclusio	Contribute to employment	Global	In	Signatory of the Corporate and Neighborho	It supports the government initiative	01.01.13	Website - Sustainable development str
163	134	Air France KLM	Air France	Societal value	Local development	Committed to inclusio	Support future generations	Global	In	Internship, experience placements and students sponsoring			Website - Sustainable development str
164	135	Air France KLM	Air France	Societal value	Local development	Committed to inclusio	Support future generations	Global	In	Partnership with Sodesi and workshops for students			Website - Sustainable development str
165	136	Air France KLM	Air France	Societal value	Local development	Committed to inclusio	Integrate young local job seekers	Global	In	Contribution through JEREMY association			Website - Sustainable development str
166	137	Air France KLM	KLM	Societal value	Local development	Committed to inclusio	Creation of sustainable employment	Global	In	Co-founder of the Aviation Community Schiphol			Website - Sustainable development str
167	138	Air France KLM	All	Societal value	Local development	Local development at c	Stimulating economic development	Global	In	Donations and shipment of emergency equi	Example: In solidarity with Lebanon which suffered		Website - Sustainable development str
168	139	Air France KLM	Air France-KLM	Societal value	Local development	Local development at c	Promote responsible and sustainable tourism	Global	In	Partnerships with NGO, universities and sus	NHTV and Wageningen University (KLM), ATR (Air Fra		Website - Sustainable development str
169	140	Air France KLM	Air France-KLM	Societal value	Local development	Local entrepreneurship	Promote local entrepreneurship	Global	In	Participation in Africarena	Through a sustainable development challenge to lim		Website - Sustainable development str
170	141	Air France KLM	Air France	Societal value	Local development	Local entrepreneurship	Foster skills development	Global	In	Participation in foundation of IAMA (Institu	It provides the whole range of training related to the		Website - Sustainable development str
171	142	Air France KLM	Air France	Societal value	Local development	Local entrepreneurship	Guarantee reliability performance of track equipment in	Global	In	Sales service of second hand equipment (MATEA)			Website - Sustainable development str
172	143	Air France KLM	All	Societal value	Sustainable procurement	Pursuing a responsibl	Foster a responsible procurement process	Global	In	Responsible procurement policy (Sustainab	Procurement works with EcoVadis, a company spec		Website - Sustainable development str
173	144	Air France KLM	All	Societal value	Sustainable procurement	Empowering the buyer	Empowering buyers	Global	In	Development of buyer skills	Establishment of an internal process to develop th		Website - Sustainable development str
174	145	Air France KLM	All	Societal value	Sustainable procurement	Empowering the buyer	Empowering buyers	Global	In	Procurement Action Plan	Sets out the sustainability undertakings as a strategi		Website - Sustainable development str
175	146	Air France KLM	Air France-KLM	Societal value	Sustainable procurement	Mobilizing and innoval	Build long-term relationships with suppliers	Global	In	Supplier Relations Management Program (S	The program puts issues like CSR central to discussio		Website - Sustainable development str
176	147	Air France KLM	All	Societal value	Sustainable procurement	Mobilizing and innoval	Promote and protect SME ecosystem	Global	In	Participate in initiatives, member of SME Pa	Initiatives such as the creation of an innovation cou		Website - Sustainable development str
177	148	Air France KLM	All	Societal value	Sustainable procurement	Measures in favor of re	Foster responsible catering	Global	In	Prioritization of local products, responsible, certified protected origin products, organic food p			Website - Sustainable development str
178	149	Air France KLM	All	Societal value	Sustainable procurement	Measures in favor of re	Reducing its usage by 80% by 2025	Global	In	Monitoring single-use plastic use	In order to eliminate single-use plastic		Website - Sustainable development str
179	150	Air France KLM	KLM	Societal value	Sustainable procurement	Measures in favor of re	Foster responsible catering	Global	In	Member of Responsible Soy (RTRS) and Sustainable Palm Oil (RSPO)			Website - Sustainable development str
180	151	Air France KLM	KLM	Societal value	Sustainable procurement	Measures in favor of re	Foster responsible catering	Global	In	Choosing of partners (when possible) that share the sustainable mission			Website - Sustainable development str
181	152	Air France KLM	Air France	Societal value	Social partnerships	Longstanding partners	Support children	Global	In	Corporate Foundation to help disadvantaged children		01.01.92	Website - Sustainable development str
182	153	Air France KLM	Air France	Societal value	Social partnerships	Longstanding partners	Support children	Global	In	Air France Humanitarian Aid Department	Supported 27 NGOs helping children in need of med		Website - Sustainable development str
183	154	Air France KLM	Air France	Societal value	Social partnerships	Longstanding partners	Supporting integration of disadvantaged people	Global	In	Partnership with Acting for Life NGO			Website - Sustainable development str
184	155	Air France KLM	Air France	Societal value	Social partnerships	Longstanding partners	Support ravages of sex tourism	Global	In	Information relay on the ravages of sex touri	Through funding and on-board dissemination of the		Website - Sustainable development str
185	156	Air France KLM	Air France-KLM	Societal value	Social partnerships	Longstanding partners	Support aviation organization	Global	In	Support the French and Dutch Aviation Without Borders			Website - Sustainable development str
186	157	Air France KLM	KLM	Societal value	Social partnerships	Longstanding partners	Support aviation organization	Global	In	Cooperative agreement with Wings of Support			Website - Sustainable development str
187	158	Air France KLM	Transavia	Societal value	Social partnerships	Longstanding partners	Support young people	Global	In	Peter Pan Holiday Club Foundation (33 years ago) and work with JINC			Website - Sustainable development str
188	159	Air France KLM	Transavia	Societal value	Social partnerships	Longstanding partners	Support children	Global	In	Support the Louis Carlesimo association			Website - Sustainable development str
189	160	Air France KLM	Transavia	Societal value	Social partnerships	Longstanding partners	Combat diseases	Global	In	Support the association Les Hôtesses de l'Air Contre le Cancer and Les Hommes de l'Air			Website - Sustainable development str
190	161	Air France KLM	Air France-KLM	Societal value	Social partnerships	Longstanding partners	Support NGOs	Global	In	Members of the Flying Blue can donate their Miles to NGOs			Website - Sustainable development str
191	162	Air France KLM	Air France-KLM	Societal value	Social partnerships	Employee initiatives	Support employee initiatives	Global	In	Air France Citizenship Day (3rd) took place		01.01.20	Website - Sustainable development str
192	163	Air France KLM	KLM	Societal value	Social partnerships	Employee initiatives	Support employee initiatives	Global	In	KLM Blue Heart Event			Website - Sustainable development str
193	164	Air France KLM	Air France	Societal value	Social partnerships	Employee initiatives	Support employee involvement	Global	In	Friends of Air France Foundation			Website - Sustainable development str

Source: Based and adapted from (*Air France KLM-Sustainable Development Strategy 2020*, 2021)

Appendix 20

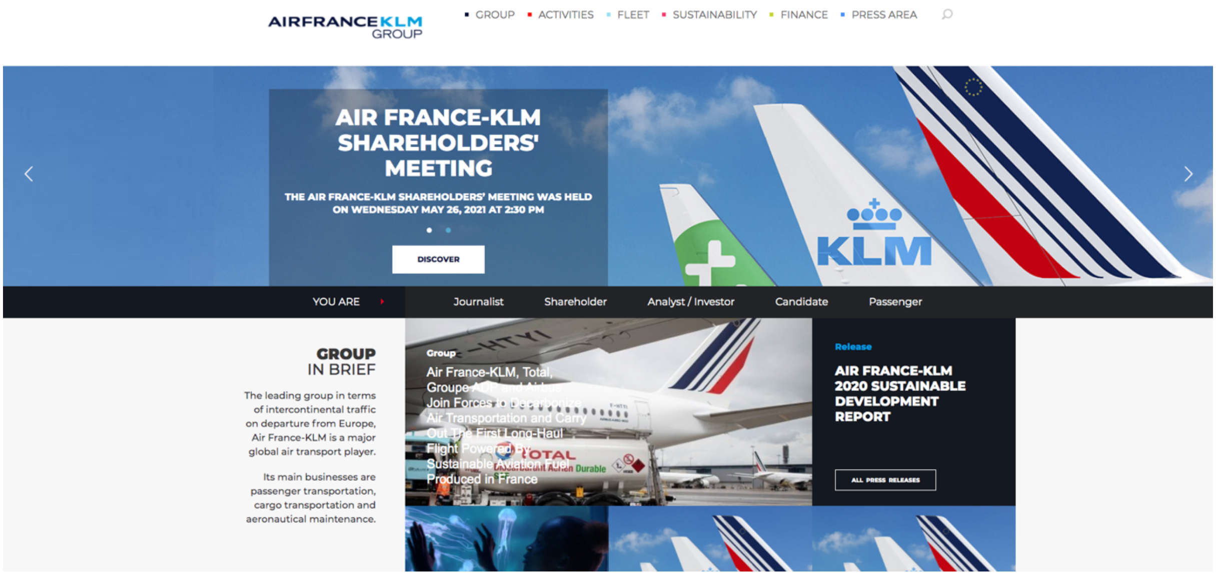
Ryanair CSR Initiatives

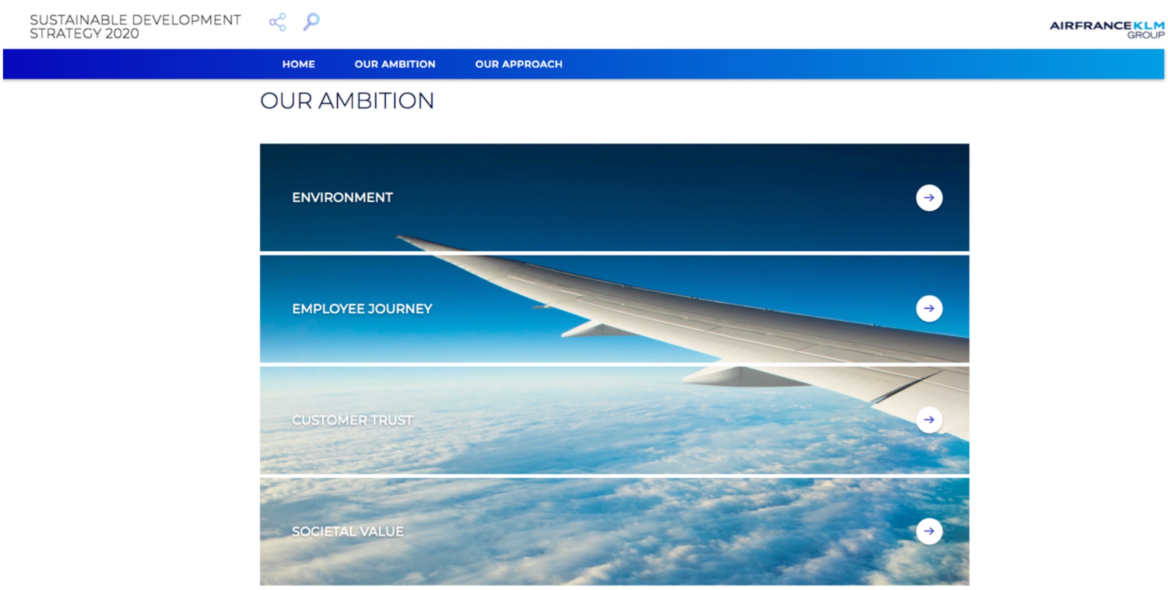
Initiatives #	Hierarch	Group	Airline	CSR Dimer	Theme	Sub-theme	Goal	Initi	In	Initiative	Details	Date	Source
1	1	Ryanair Group	Ryanair	Environment	Regulations		Comply with mandatory regulations	Macro	Out	Continue complying with environmental ru	That apply to our sites, our people and operations		Environmental policy - Vol 2 - 2020
2	2	Ryanair Group	Ryanair	Environment	Noise hindrance		Limit the impact of aircraft noise	Macro	In	New Boeing 737 fleet (noise reduction by 40% and emissions by 16%)			Environmental policy - Vol 2 - 2020
3	3	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Reducing emissions to below 60 grams of CO2 per passenger by 2030			Environmental policy - Vol 2 - 2020
4	4	Ryanair Group	Ryanair	Environment	CO2 emissions	Carbon offsetting	Offset carbon	Macro	In	Voluntary passengers scheme to offset CO2	Funds raised from these guest donations will be dis	01.01.18	Environmental policy - Vol 2 - 2020
5	4,1	Ryanair Group	Ryanair	Environment	CO2 emissions	Carbon offsetting	Offset carbon	Macro	In	Partnership with First Climate	Funds are used to support a project in Uganda		Environmental policy - Vol 2 - 2020
6	4,2	Ryanair Group	Ryanair	Environment	CO2 emissions	Carbon offsetting	Offset carbon	Macro	In	Partnership with Renature Monchique	It helps revitalise the ecology of the Monchique region (Algarve		Environmental policy - Vol 2 - 2020
7	4,3	Ryanair Group	Ryanair	Environment	CO2 emissions	Carbon offsetting	Offset carbon	Macro	In	Partnership with The Native Woodland Trus	A portion of all Ryanair customer' donations go towards the pu		Environmental policy - Vol 2 - 2020
8	4,4	Ryanair Group	Ryanair	Environment	CO2 emissions	Carbon offsetting	Offset carbon	Macro	In	Partnership with the Irish Wale and Dolphin Group			Environmental policy - Vol 2 - 2020
9	5	Ryanair Group	Ryanair	Environment	Plastic reduction		Reduce non-recyclable plastics	Macro	In	Remove all non-recyclable plastics over 5 years			Environmental policy - Vol 2 - 2020
10	6	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	2050 industry climate target	In line with IATA's 2050 Climate Target, we commit to help avi		Environmental policy - Vol 2 - 2020
11	7	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Increase load factor to diminish per passenger emissions			Environmental policy - Vol 2 - 2020
12	8	Ryanair Group	Ryanair	Environment	Market based measures			Macro	Out	Participation in the EU Emissions Trading System (ETS)		01.01.12	Environmental policy - Vol 2 - 2020
13	9	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Investment in led lighting projects across all our office and hangar sites			Environmental policy - Vol 2 - 2020
14	10	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Commitment to maximizing solar power at all our facilities			Environmental policy - Vol 2 - 2020
15	11	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Reduction of holding and taxiing at seconda	It cust emissions		Environmental policy - Vol 2 - 2020
16	12	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Continuous Descent Operations	A continuous rate rather than a stepped descent during approa		Annual Report 2020
17	13	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Continuous Climb operations	It optimizes aircrafts take off profile to climb to the most fuel-e		Annual Report 2020
18	14	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Electric Ground Handling Equipment	Ryanair has invested heavily in the use of electric ground halnd		Annual Report 2020
19	15	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Electronic Flight Bag (EFB)	It enables access to up to date flight plans, allowing pilots to m		Annual Report 2020
20	16	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Ground Power Units (GPU) vs Aircraft Power	The Group implemented a policy of using a Ground Power Uni		Annual Report 2020
21	17	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Performance Based Navigation (PBN)	It ensures that we fly the most accurate flight paths for greater		Annual Report 2020
22	18	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Low 'Cost Index'	Flying at marginally slower speeds to reduce fuel burn and emi		Annual Report 2020
23	19	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Single engine taxi policy	It cust noise and emissions (82% of arrivals is on single-engine t		Environmental policy - Vol 2 - 2020
24	20	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Ground-Power use during turnarounds	It saves 9 kg fuel per flight and improves air quality		Environmental policy - Vol 2 - 2020
25	21	Ryanair Group	Ryanair	Environment	Noise hindrance		Limit the impact of aircraft noise	Macro	In	Noise recognition awards	Ranked #1 of 30 airlines for Noise Abatement Compliance at Lo		Environmental policy - Vol 2 - 2020
26	22	Ryanair Group	Ryanair	Environment	Noise hindrance - Fuel and energy		Limit the impact of aircraft noise and emissions	Macro	In	Noise and emissions compliance	100% of Ryanair aircraft meet ICAO Environmental Protection		Environmental policy - Vol 2 - 2020
27	23	Ryanair Group	Ryanair	Environment	Support environmental responsil		Support environmental responsibility	Macro	In	Support UN Global Compacts			Environmental policy - Vol 2 - 2020
28	24	Ryanair Group	Ryanair	Environment	CO2 emissions		Limit CO2 emissions	Macro	In	Report CO2 emissions monthly	First airline to report monthly CO2 emissions		Environmental policy - Vol 2 - 2020
29	25	Ryanair Group	Ryanair	Environment	CO2 emissions		Call EU attention	Macro	In	Call on EU and Member States to reform European Sky - 10% less emissions			Environmental policy - Vol 2 - 2020
30	26	Ryanair Group	Ryanair	Environment	Fuel and energy consumption		Call EU and fuel manufacturers attention	Macro	In	Call on the EU and fuel manufacturers to provide incentives for biofuels use			Environmental policy - Vol 2 - 2020
31	27,1	Ryanair Group	Ryanair	Societal	Contribution to NGO and Chariti		Support children	Macro	In	Partnership with the Irish Society for the Pr	Contribution of 400,000€ so far		Website - Ryanair Group Corporate
32	27,2	Ryanair Group	Ryanair	Societal	Contribution to NGO and Chariti		Support ill children	Macro	In	Partnership with Fundación Pequeño Deseo	More than 5 years of partnership	01.01.16	Website - Ryanair Group Corporate
33	27,3	Ryanair Group	Ryanair	Societal	Contribution to NGO and Chariti		Support hospitals, schools and child welfare programmes	Macro	In	Partnership with Scratchcard Partners	Last 5 years Scratchcard sales have generated over €2 million,		Website - Ryanair Group Corporate
34	27,4	Ryanair Group	Ryanair	Societal	Support sustainable aviation rese		Support sustainable aviation	Macro	In	Partnership with Trinity College Dublin (Sus	Launch of Ryanair Sustainable Aviation Research Centre. The p		Website - Ryanair Group Corporate
35	27,5	Ryanair Group	Ryanair	Societal	Education		Support education	Macro	In	Partnership with Trinity College Dublin (Ent	Supports the new position of Ryanair Professor of Entrepreneu		Website - Ryanair Group Corporate
36	27,6	Ryanair Group	Ryanair	Societal	Contribution to NGO and Chariti		Sponsor charities and festival	Macro	In	Partnership with Cheltenham Festival			Website - Ryanair Group Corporate
37	27,7	Ryanair Group	Ryanair	Societal	Contribution to NGO and Chariti		Sponsor charities and festival	Macro	In	Partnership with Fairyhouse			Website - Ryanair Group Corporate
38	28	Ryanair Group	Ryanair	Societal	Contribution to NGO and Chariti		Sponsor charities and festival	Macro	In	Partnership with Punchestown Festival			Website - Ryanair Group Corporate
39	29	Ryanair Group	Ryanair	Societal	Contribution to NGO and Chariti		Sponsor charities and festival	Macro	In	Partnership with Leopardstown Christmas Festival			Website - Ryanair Group Corporate
40	30	Ryanair Group	Ryanair	Societal	European Union		Support EU economy and collaboration	Macro	In	Contribute to European Economy & Integration			Website - Ryanair Group Corporate
41	31	Ryanair Group	Ryanair	Societal	European Union		Support EU integration and education mobility	Macro	In	Partnership with Erasmus Student Network	Offer students huge savings, with fare discounts, free bags and		Website - Ryanair Group Corporate
42	32	Ryanair Group	Ryanair	People	Employee engagement		Foster workforce engagement and updated	Macro	In	Communication channel to communicate w	Fleet Tweet, Ryanair TV, Safety TV, intranet website		Annual Report 2020
43	33	Ryanair Group	Ryanair	People	Employee representative groups		Foster relationships with employees	Macro	In	Long term collective agreement with trade u	Since recognizing trade unions, we have concluded	01.01.17	Annual Report 2020
44	34	Ryanair Group	Ryanair	People	Gender diversity		Foster gender diversity	Macro	In	Diversity and inclusion program	Committed to improving the ratio of male to female employee		Annual Report 2020
45	35	Ryanair Group	Ryanair	People	Training & development		Foster training and development	Macro	In	Investment in four training center	Using the latest aircraft and cabin simulators and online tools		Annual Report 2020
46	36	Ryanair Group	Ryanair	People	Training & development		Foster training and development	Macro	In	Offering of Graduate programs	Offering of graduates programs and internship ranging from 12		Annual Report 2020
47	37	Ryanair Group	Ryanair	Customer	Value proposition		Foster continuous progress and innovation in services offer	Macro	In	Always Getting Better programme			Ryanair Website

Source: Based and adapted from (*Air France KLM-Sustainable Development Strategy 2020*, 2021); (Ryanair, 2021) & (*History of Ryanair | Ryanair's Corporate Website*, 2021)

Appendix 21

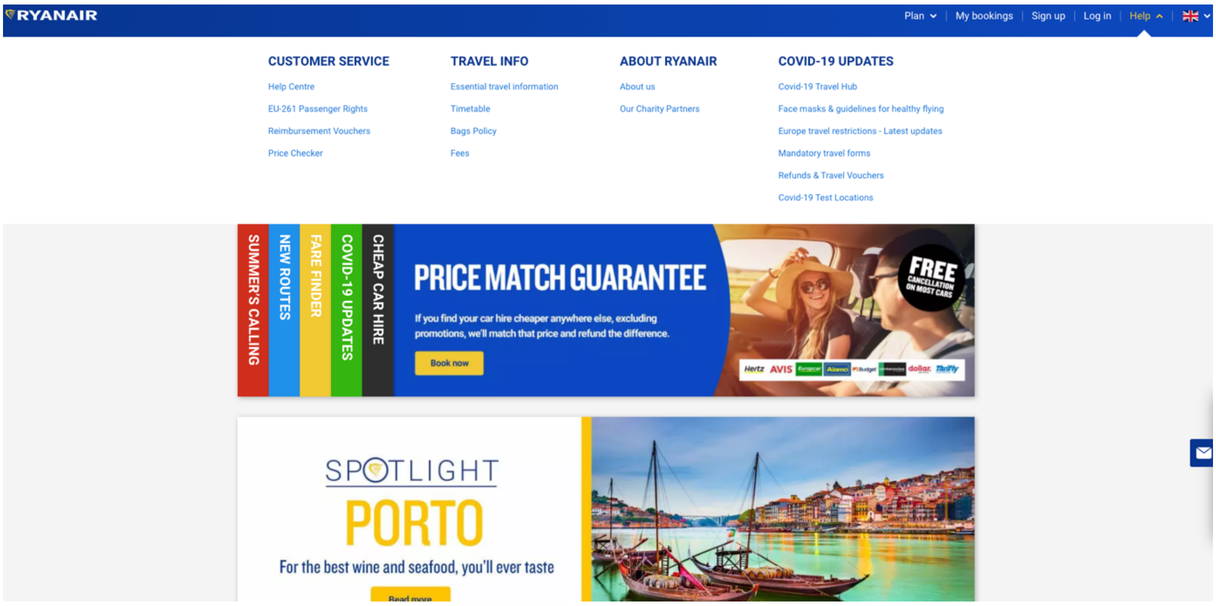
Air France-KLM Website homepage





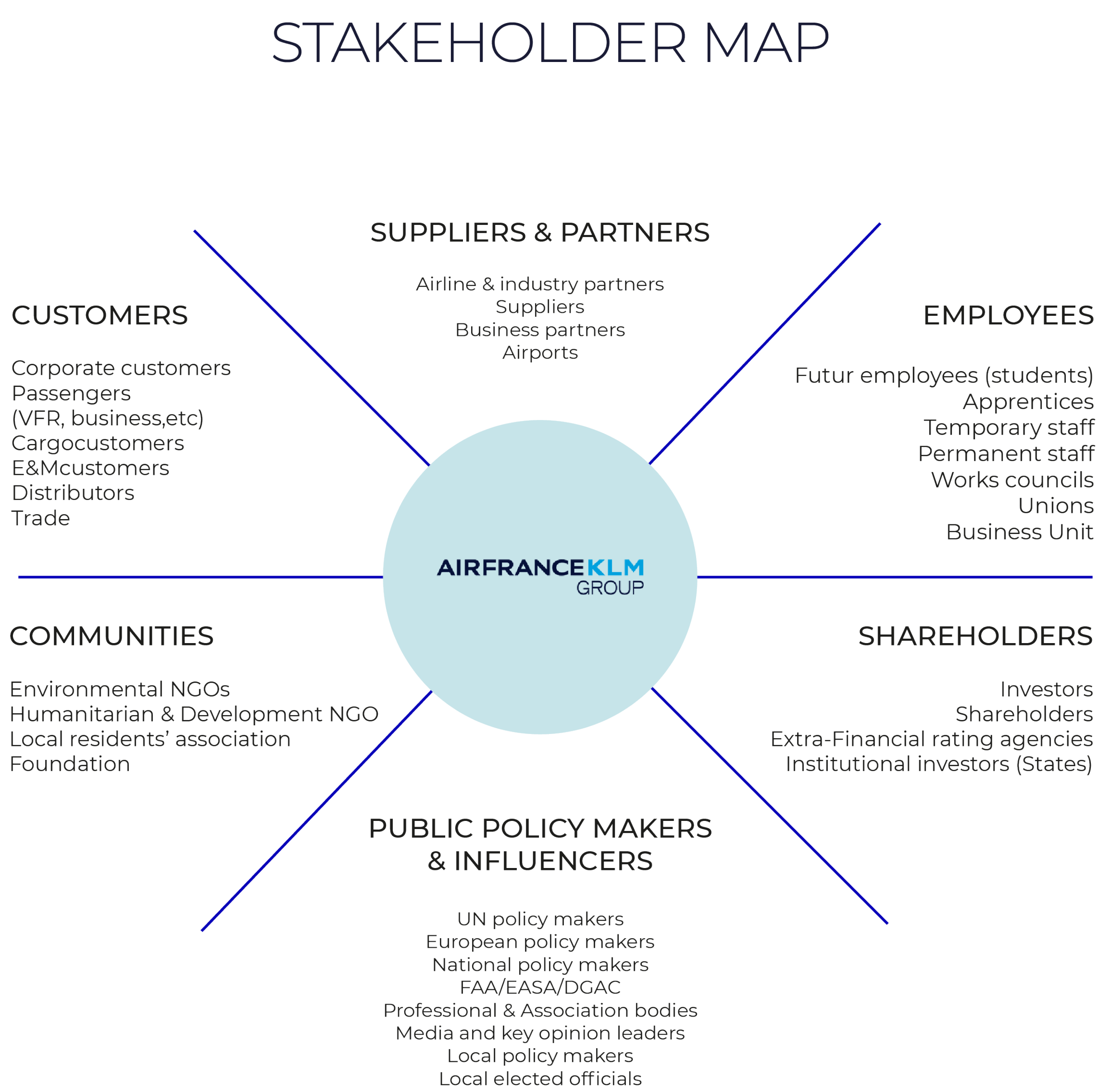
Appendix 22

Ryanair Group Website homepage



Appendix 23

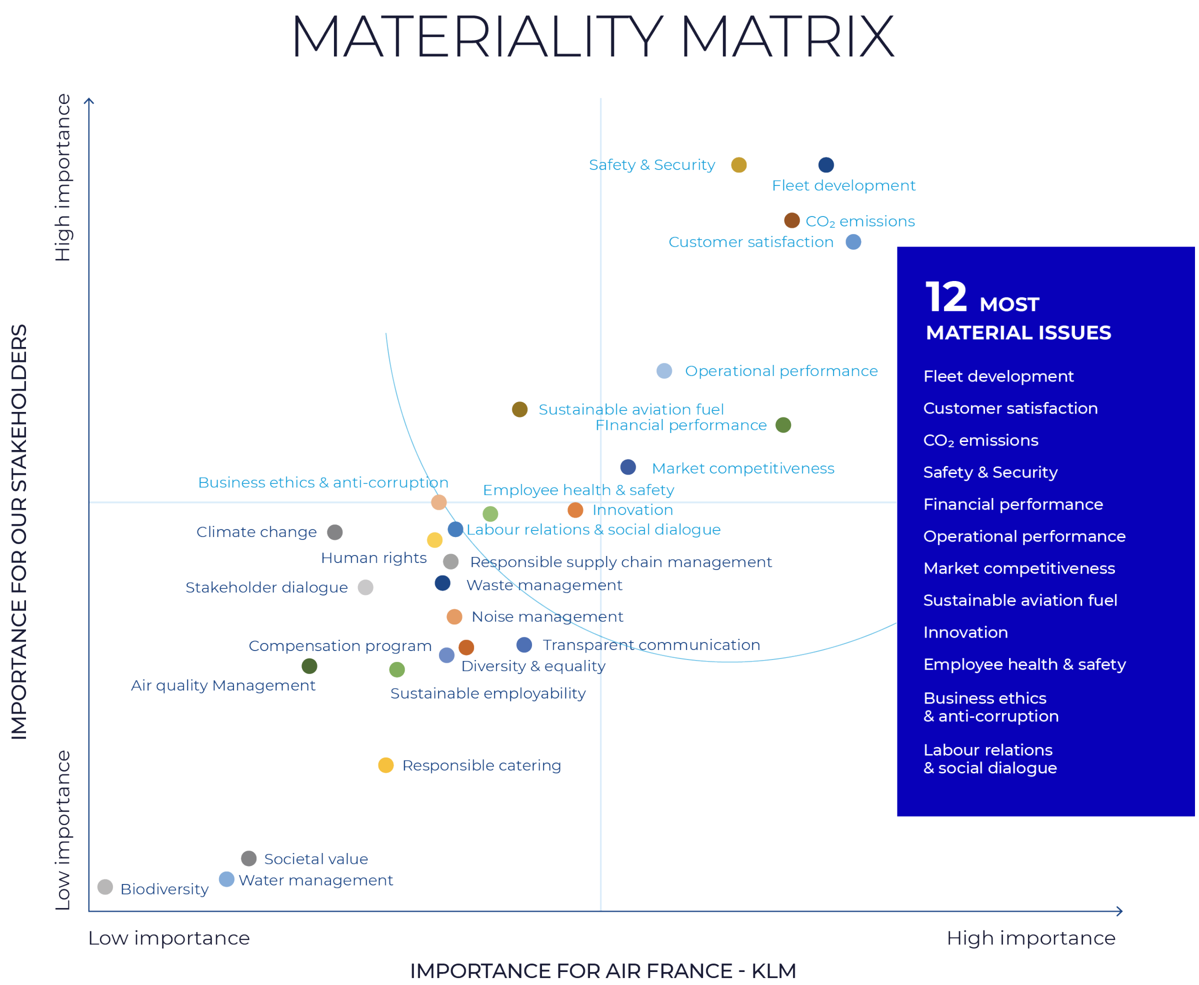
Air France KLM Group stakeholder map



Source : (*Air France KLM Group*, 2021b)

Appendix 24

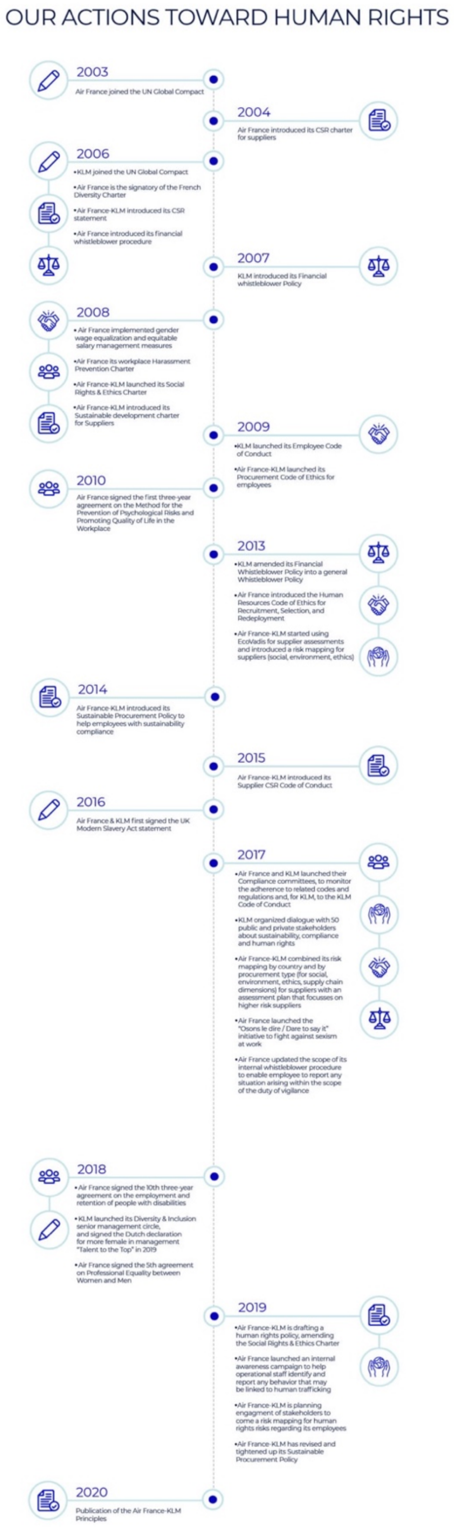
Air France KLM Group Materiality matrix



Source : (*Air France KLM Group*, 2021b)

Appendix 25

Air France KLM Group actions towards human rights timeline



Source : (*Air France KLM Group*, 2021b)

Airline Deregulation Act of 1978

Conference report filed in House (10/12/1978)

(Conference report filed in House, H. Rept. 95-1779)

Airline Deregulation Act - Amends the Federal Aviation Act of 1958 to direct the Civil Aeronautics Board in the performance of its duties with respect to interstate and overseas air transportation to consider the following as being in accordance with the public convenience and necessity: (1) the maintenance of safety as the highest priority in air commerce; (2) placing maximum reliance on competition in providing air transportation services; (3) the encouragement of air service at major urban areas through secondary or satellite airports; (4) the avoidance of unreasonable industry concentration which would tend to allow one or more air carriers to unreasonably increase prices, reduce services, or exclude competition; and (5) the encouragement of entry into air transportation markets by new air carriers, the encouragement of entry into additional markets by existing air carriers, and the continued strengthening of small air carriers.

Stipulates that the Federal Government shall have preemptive rights with regard to interstate air transportation.

Directs the Board and the Secretary of Transportation to submit a report to Congress by January 1, 1980, on the feasibility and appropriateness of devising formulas by which States and their political subdivisions could share part of the costs of mail subsidies and small community air service subsidies.

Expresses the Congressional intent that the implementation of this Act shall not diminish the present high standards of safety in air transportation. Requires the Secretary of Transportation to submit annual reports to the Congress and the Board on the effects of the implementation of this Act on the level of air safety and to take such steps as may be necessary to ensure that the present high safety standards are maintained. Directs the Secretary to make annual recommendations to Congress regarding the level of surveillance necessary to enforce air safety regulations and the level of staffing necessary to carry out such surveillance.

Directs the Secretary by July 1, 1979, to conduct a review and to submit a report to the appropriate authorizing committees of Congress and to the Administrator of the Federal Aviation Administration of the safety regulations and inspection procedures applicable to the various classes of air carriers to ensure that all such classes are providing the highest possible level of safe, reliable air transportation. Directs the Administrator to promulgate such safety regulations and inspection procedures as are deemed necessary to meet such goal.

Directs the Board by May 1, 1979, to prepare and submit a report to Congress on whether air carriers should be permitted to sell tours directly to the public or to acquire control of persons authorized to sell tours to the public.

Sets forth time limits during which the Board must act on air route applications. Authorizes the Board to determine such applications without an oral evidentiary hearing.

Revises the standards which the Board is to apply in issuing certificates of public convenience and necessity for interstate or overseas air transportation. Directs the Board to issue such a certificate upon a finding that the applicant is able to properly perform the air transportation specified in the certificate and such transportation is consistent with the public convenience and necessity (under the present standard the public convenience and necessity would have to require such service).

Authorizes intrastate air carriers operating aircraft capable of carrying 30 or more persons to enter into through service and joint fare agreements with other air carriers or foreign air carriers.

Stipulates that if an air carrier providing nonstop round trip service between any two points in the 48 contiguous States in interstate air transportation or between any two points in overseas air transportation fails to provide specified minimum flight schedules between two points the Board shall grant such route to the first qualified applicant who applies to provide such service and shall suspend the authority of the carrier not using its authority to provide such service.

Authorizes air carriers holding a certificate to engage in foreign air transportation to transport persons, property, and mail between points in the United States between which they are authorized to operate scheduled flights in foreign air transportation. Limits such authority to one round-trip flight per day between any such pair of points unless the Board authorizes additional service. Establishes an automatic market entry program under which air carriers certificated by the Board or certain intrastate air carriers certificated by a State regulatory authority may petition the Board for a certificate to engage in nonstop service between any one pair of points in interstate or overseas air transportation in addition to any pair of points authorized by the existing certificate or license held by such a carrier for each of the years 1979, 1980, and 1981. Authorizes the Board, on an emergency basis, to modify the automatic market entry program in order to avert substantial public harm to the national air transportation system. Directs the Board to conduct a study of the procedure for certification of air carriers under such program to evaluate whether such procedure is consistent with the goals of this Act and the effectiveness of this procedure as compared with other procedures for certification. Requires the Board to report the results of such study to the Congress by December 31, 1980.

Authorizes the Board to issue experimental certificates to engage in temporary air transportation services when the Board determines that a test period is desirable to evaluate the proposed new services.

Stipulates that air transportation services applied for by a carrier shall be deemed to be consistent with the public convenience and necessity unless the Board finds otherwise based upon a preponderance of the evidence.

Prohibits the Board from including a closed-door restriction in any certificate issued after the enactment of this Act. Stipulates that any closed-door restrictions in existence at that time shall have no force or effect. Exempts from such prohibition closed-door restrictions between points within the State of Hawaii and those restrictions which resulted from the sale, transfer, or exchange by any air carrier of its authority to provide air transportation to another air carrier.

Sets forth time limitations during which the Board must consider applications seeking to remove or modify a term, condition, or limitation attached to a certificate.

Prohibits the Board from restricting the marketability, flexibility, accessibility, or variety of charter trips except where so required by the public interest. Stipulates that no such restriction shall be more stringent than those in effect on October 1, 1978. Prohibits carriers from carrying charter and scheduled passengers on the same flight.

Prohibits air carriers from operating unless they are in compliance with regulations or orders issued by the Board governing the filing and approval of policies of insurance or plans for self-insurance. Authorizes the Board to require air carriers to file performance bonds or equivalent security arrangements.

Directs the Board to establish simplified procedures for the disposition of applications for certificates or permits to engage in air transportation and for the alteration, suspension, or transfer of such certificates or permits.

Terminates the current subsidy air carriers receive for the transportation of mail on January 1, 1986. Directs the Board in determining the subsidy to be paid to disregard a carrier's revenues other than the revenue received from the service for which the compensation is being paid until January 1, 1983.

Revises the rate determination elements for local service air carrier compensation for the years 1964, 1965, and 1966.

Requires individuals applying to the Board for approval of an airline merger or acquisition of control agreement to transmit a copy of such application to the Attorney General and the Secretary of Transportation. Prohibits the Board from approving transactions which would result in, or be in furtherance of, a conspiracy or combination to monopolize air transportation in any region of the United States. Prohibits the Board from approving transactions which would substantially lessen competition or which would tend to create a monopoly unless the Board finds that the anticompetitive effects of the proposed transaction are outweighed by the public interest. Sets forth time limits during which the Board must act on such applications.

Allows air carriers to file agreements or requests for authority to discuss agreements or cooperative working arrangements with the Board. Enumerates factors and conditions which the Board is to take into account in approving or disapproving such agreements or requests. Places the burden of proving the anticompetitive effects of such agreements on the party opposing the agreement or request. Requires the Board to notify the Attorney General and the Secretary of Transportation and to give such individuals an opportunity to submit written comments on such filed documents.

Terminates any mutual aid agreements between air carriers currently in effect. Requires the approval of the Board for any future mutual aid agreements. Prohibits the Board from approving such an agreement unless it provides that: (1) any air carrier will not receive payments for any period which exceed 60 percent of the direct operating expenses during such period; (2) benefits will not be payable for more than eight weeks during any labor strike and that benefits shall not be payable for losses incurred during the first 30 days of such strike; and (3) any party to such agreement will submit the issues causing any labor strike to binding arbitration if the striking employees so request.

Authorizes the Board, if the public interest so requires, to exempt persons affected by its orders from the antitrust laws to the extent necessary to enable such a person to proceed with a Board approved transaction and those transactions necessarily comtemplated by a Board order.

Authorizes the Board to exempt any person or class of persons from air carrier economic regulation if it finds that such an exemption is consistent with the public interest.

Exempts air carriers which provide passenger service solely with aircraft having a maximum passenger capacity of less than 56 passengers or with aircraft having a maximum payload capacity of less than 18,000 pounds (commuter air carriers) from the requirement that such carriers hold a certificate of public convenience and necessity and such other requirements as the Board may promulgate by regulation. Authorizes the Board to increase such passenger or property capacities from exemption when the public interest so requires.

Directs the Board to ensure that essential air transportation services are provided to all points which are listed on air carrier certificates on the date of enactment of this Act. Directs the Board to determine what constitutes essential air transportation to each point. Sets forth notification requirements for air carriers proposing to reduce or suspend essential air service. Authorizes the Board to require such a carrier to continue such services if a substitute carrier cannot be found. Establishes a subsidy program under which the Board is to compensate carriers required to perform such services.

Directs the Board to review all points which have been deleted from air carrier certificates between July 1, 1968, and the enactment of this Act and to determine whether such points should be made eligible for such community-based subsidy program. Authorizes the Board to add additional points in Alaska and Hawaii to such program. Stipulates that the total number of points receiving such a subsidy shall not exceed the total number of points receiving local service air carrier compensation on July 1, 1968.

Authorizes carriers after January 1, 1983, to file an application with the Board seeking to replace a carrier receiving a local service air carrier subsidy. Directs the Board to grant such an application if the applicant shows that it can provide substantially improved air services and the amount of required compensation will be decreased.

Directs the Administrator of the Federal Aviation Administration to establish safety standards for compensated commuter air carriers which will assure that the level of safety provided persons on such carriers is, to the maximum extent feasible, equivalent to the level of safety provided to persons traveling on certificated air carriers.

Terminates the guaranteed essential air transportation subsidy program ten years after the enactment of this Act.

Stipulates that the President may only disapprove actions of the Board concerning certificates to engage in foreign air transportation or permits issued to foreign air carriers solely on foreign relations or national defense considerations which are within the President's jurisdiction and not upon the basis of economic or carrier selection considerations.

Restricts the authority of the Board in disapproving fares on the basis that they are too high or low. Authorizes air carriers, as of July 1, 1979, to increase their fares up to five percent above the standard industry fare level without the Board's approval in any market in which the carrier carries less than 70 percent of the traffic. Authorizes carriers to reduce their fares up to 50 percent below the standard industry fare level, unless the Board determines that such a decrease would be predatory. Authorizes the Board to increase such percentage for downward flexibility. Defines "standard industry fare level" as that level in effect on July 1, 1977, as semiannually modified by the Board.

Establishes time limitations during which the Board must act on applications submitted to it.

Establishes sunset provisions with respect to the Civil Aeronautics Board and specified provisions of the Federal Aviation Act of 1958, to become effective on December 31, 1981.

Directs the Board by January 1, 1984, to prepare and submit to the Congress a comprehensive review of its implementation of the provisions of this Act. Stipulates that such assessment shall be accompanied by a detailed opinion from the Board as to whether the public interest requires the continuation of the Board and its functions beyond January 1, 1985.

Amends the Airport and Airway Development Act of 1970 to stipulate that any public airport which on the date of the enactment of this Act is regularly served by a certificated air carrier (other than a charter air carrier) shall be deemed to be an air carrier airport for purposes of such Act until September 30, 1980.

Extends the federally guaranteed aircraft purchase loan program for five years. Makes commuter carriers and intrastate carriers eligible to participate in such program. Increases the amount of loans which may be guaranteed under such program.

Directs the Secretary of Labor to make monthly payments to eligible airline employees who have been deprived of employment or who have been adversely affected with respect to compensation as a result of the change in the regulatory structure of the air transportation industry created by this Act. Requires air carriers, in hiring employees, to give preference to the terminated or furloughed employees of another carrier. Establishes the Airline Employees Protective Account in the Treasury to make such assistance payments. Terminates such employee protection program ten years after the enactment of this Act.

Directs the President to create a board to investigate and report on the dispute between Wien Air Alaska, Inc., and the Air Line Pilots Association. Requires the board to submit its report to the President within 30 days of its creation.

Prohibits the Secretary of Transportation or the Administrator of the Federal Aviation Administration from imposing administrative aviation user charges which did not exist on January 1, 1973, or from increasing such fees if they were in effect on such date without congressional approval.

Source: (Cannon, 1978)

Freedoms of the Air

First Freedom of the Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State or States to fly across its territory without landing (also known as a First Freedom Right).

Second Freedom of the Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State or States to land in its territory for non-traffic purposes (also known as a Second Freedom Right).

Third Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State to put down, in the territory of the first State, traffic coming from the home State of the carrier (also known as a Third Freedom Right).

Fourth Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State to take on, in the territory of the first State, traffic destined for the home State of the carrier (also known as a Fourth Freedom Right).

Fifth Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State to put down and to take on, in the territory of the first State, traffic coming from or destined to a third State (also known as a Fifth Freedom Right).

ICAO characterizes all "freedoms" beyond the Fifth as "so-called" because only the first five "freedoms" have been officially recognized as such by international treaty.

Sixth Freedom of The Air - the right or privilege, in respect of scheduled international air services, of transporting, via the home State of the carrier, traffic moving between two other States (also known as a Sixth Freedom Right). The so-called Sixth Freedom of the Air, unlike the first five freedoms, is not incorporated as such into any widely recognized air service agreements such as the "Five Freedoms Agreement".

Seventh Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State, of transporting traffic between the territory of the granting State and any third State with no requirement to include on such operation any point in the territory of the recipient State, i.e the service need not connect to or be an extension of any service to/from the home State of the carrier.

Eighth Freedom of The Air - the right or privilege, in respect of scheduled international air services, of transporting cabotage traffic between two points in the territory of the granting State on a service which originates or terminates in the home country of the foreign carrier or (in connection with the so-called Seventh Freedom of the Air) outside the territory of the granting State (also known as a Eighth Freedom Right or "consecutive cabotage").

Ninth Freedom of The Air - the right or privilege of transporting cabotage traffic of the granting State on a service performed entirely within the territory of the granting State (also known as a Ninth Freedom Right or "stand alone" cabotage).

Source: Manual on the Regulation of International Air Transport (Doc 9626, Part 4)

Source: (*Freedoms of the Air*, n.d.)

The Commission's decision on Charleroi airport

IP/04/157

Brussels, 3 February 2004

The Commission's decision on Charleroi airport promotes the activities of low-cost airlines and regional development

The European Commission today took a major decision of significance for the future of air transport by ensuring full competition between carriers operating out of regional airports. It authorises certain forms of aid which permit genuine development of new routes under clearly defined conditions. However, other direct aid granted by the Walloon Region and partly by BSCA is incompatible with the proper functioning of the internal market and will have to be repaid. The Commission is thus committing itself firmly to promoting increased competition which will enable low-cost carriers to establish themselves throughout the European Union, subject to compliance with uniform rules on competition between carriers, and for the maximum benefit of consumers. "This legal decision is well balanced: it brings greater transparency into contractual relations between airlines and airports, especially regional airports", stressed Loyola De Palacio, Vice-President of the Commission with responsibility for energy and transport. "It will also help the development of 'low-cost' operations, which are very clearly what consumers want, whilst also ensuring equitable conditions of competition for all airlines. All players in the same arena must be able to play by the same ground rules. All airlines must be aware of the possibilities offered and only genuine competition is truly capable of safeguarding consumers' rights", she explained.

Today's decision is good for regional development and will result in increased development of low-cost airlines throughout the European Union, for the maximum benefit of consumers. Thus, there will be a level-playing field for all air transport sector operators, in order to ensure fair competition.

The case of Charleroi:

The Commission was required to deliver its opinion on a complaint lodged in 2001 concerning the advantages granted to Ryanair at Charleroi airport by ***Brussels South Charleroi Airport*** **(BSCA), the airport's managing body, and the Walloon Region (Belgium).** When considering this case, the Commission took full account of the main thrusts of European policy and law in the context of the single market for air transport.

The Commission had to determine whether the **measures taken in favour of Ryanair** by the Walloon Region and BSCA, a public undertaking controlled by the Walloon Region, **were compatible or not with the private market investor principle**.

In the case of Charleroi, the Commission concluded that no private operator in the same circumstances as BSCA would have granted the same advantages. Since the **private market investor principle had not been adhered to in this case, the advantages granted to Ryanair constitute State aid**[1] which could distort competition in favour of Ryanair.

Compatibility of the aid granted:

The Commission, however, took the view that the aid granted to Ryanair at Charleroi could be compatible with the common market in the context of transport policy[2], insofar as they permit the development and improved use of secondary airport infrastructure which is currently underused and represents a cost to the community as a whole[3].

Today's decision should allow Ryanair to keep some of the aid already granted to it. This is the aid intended for the launch of new air routes (marketing and publicity), to which may be added one-shot incentives, provided that the Belgian authorities meet the conditions imposed by the Commission.

However, **certain forms of aid cannot be authorised**, in particular the discounts on airport charges such as were granted at Charleroi, which go beyond the discounts already foreseen in the Belgian legislation, which are non-discriminatory and fully transparent, the reduced ground handling fees, which are not offset by possible surpluses from other, purely commercial activities (parking, shops, etc.), one-shot incentives paid when new routes were launched, where no account was taken of the actual costs of launching such routes, and the aid provided in respect of the Dublin-Charleroi route, which is not new, because it was launched in 1997.

In general terms, the European Commission aims to guarantee that the advantages granted at a particular airport are not discriminatory and benefit from a greater transparency.

Annex:

Content and impact of the Commission's decision on Charleroi airport

1. Why did the Commission need to take a decision?

The Commission received a complaint in January 2002 concerning advantages granted at Charleroi airport. As guardian of the Treaties, it had to verify the legality of the agreements that had been entered into and their compatibility with European law. A formal investigation[(4)] into the advantages granted to Ryanair by the Walloon Region and by the airport management body BSCA (*Brussels South Charleroi Airport*) was launched on 11 December 2002. The Commission is today announcing the conclusions of the formal investigation, during which it received twelve contributions from airlines, including Ryanair, airport management bodies and other parties.

2. What advantages were granted at Charleroi airport?

The advantages granted to Ryanair in 2001 may be summarised as follows:

- The Walloon Region granted Ryanair, under a private-law contract, a preferential rate for landing charges at Charleroi of EUR 1 per boarding passenger, which is about 50% of the standard rate set in a decree which had been published in the Official Journal. No other airline benefits from this.
- BSCA granted various types of advantages to Ryanair:
    - a contribution towards promotional activities of EUR 4 per boarding passenger, over 15 years and for up to 26 flights daily. No other airline benefits from this.
    - initial incentives amounting essentially to EUR 160 000 per new route opened, for 12 routes, or EUR 1 920 000 in total; EUR 768 000 in reimbursements for pilot training; EUR 250 000 for hotel accommodation costs. No other airline benefits from this.
    - a preferential rate of EUR 1 per passenger for ground handling services, whereas the rates normally charged to other airlines is EUR 8-13. .No other airline benefits from this.

3. What is the prudent private investor criterion?

The Commission had to determine whether the **measures taken in favour of Ryanair** by the Walloon Region and BSCA, a public undertaking controlled by the Walloon Region, **were or were not in keeping with the private investor principle**.

According to this principle, which has been repeatedly endorsed by the Court of Justice, aid is not considered to include investments or advantages which are granted if, at the time when an investment or a commercial contract is being considered, the public undertaking is in the same situation as a comparable private firm, guided by the same objectives of long-term profitability. This principle helps ensure equal treatment between public-sector operators, such as BSCA, and private firms.

It is thus necessary to verify:

- whether the level of profit expected when the advantage was granted is in line with what a private firm would expect. In order to do this, it is necessary to analyse the risk associated with the market

concerned, the cost of the capital, the information which the undertaking possessed when it took its decision and risks inherent in the operation;
- the undertaking cannot exploit certain advantages deriving from its public status, such as easier access to financing or the absence of the risk of bankruptcy;
- the public undertaking cannot also decide to take account of indirect positive effects, such as regional economic development or job creation, to underpin its analysis, for they would not have been used by a private investor as criteria for taking a decision.

4. Did BSCA take the prudent private investor approach?

In the Charleroi case, the Commission concluded that no private operator in the same circumstances as BSCA would have granted the same advantages.

The investigation showed that when the contract was signed with Ryanair, BSCA was exposed to the risk of losses exceeding the company's aggregate current result over a ten-year period, which is estimated to be about EUR 35 million, and this would have wiped out any hope of a fair return on the investment over the reference period.

Moreover, BSCA signed the agreements with Ryanair on the basis of a business plan which, in the Commission's view, does not conform to the private investor criterion, for it had factored in substantial future revenue, amounting to almost EUR 27 million, not arising from the contract signed with Ryanair but received from hypothetical carriers which were assumed to be regular users. It also omitted to take into account its contribution to the marketing of all 26 potential flights agreed with Ryanair, amounting to more than EUR 6 million. These two factors were sufficient to reduce almost to zero the result expected for the period in question.

Lastly, BSCA also used its special connections with the Walloon Region and the advantages stemming therefrom in order to improve the profit forecast. This is particularly true with regard to the subsidy to cover maintenance costs and fire, for which there was no longer any legal basis when the contract was signed. BSCA had allowed not only for its continued existence but also for a future increase, amounting to a benefit of nearly EUR 14 million over the ten years of the business plan. The same is true of the transfer of 35% of the aviation charges into the environment fund, because the maximum level of this charge was assumed to have been fixed, when in fact the legal act formally setting the amount was not adopted by the Walloon authorities until six months after the contract was signed, resulting in a risk to the value of EUR 9 million. The Commission takes the view that these last two assumptions, which were subject to the political discretion of the region, would not have been made by a private investor in the absence of formal clarification of the legal situation.

Since, therefore, the private market investor principle was not adhered to in this case, the advantages granted to Ryanair constitute State aid[(5)] which could distort competition in favour of Ryanair. It should be noted that this aid does not correspond, either, to investment in airport infrastructure and cannot therefore be deemed compatible with classic instruments of Community law such as regional development aid. In fact, it takes the form of operational aid.

5. What aid at Charleroi is compatible with the common market?

The **Commission considered that some of the aid granted to Ryanair may be compatible with the common market in the context of transport policy**[(6)], insofar as it fosters the development and improved use of secondary airport infrastructure which is currently underused and represents a cost to the community as whole[(7)].

Today's decision should therefore mean that Ryanair can keep part of the aid already granted, net of the money to be recovered. This includes BSCA's contribution to the financing of a joint promotion and publicity company with Ryanair, which could be considered to be aid to the start-up of new air routes. It encourages better use of regional airports, in keeping with the Community's objective for air transport. To the sums received by Ryanair in 2001-2003, could be added part of one-shot incentives referred to above provided that the Belgian authorities comply with the conditions imposed by the Commission.

In order for such aid to be authorised, the Belgian authorities must ensure that it meets the following conditions:

- It must be **necessary for the opening of new routes**, serve as an incentive, be proportional to the objective pursued, be granted with due regard for the principles of transparency, equal treatment and non-discrimination between operators, be accompanied by a mechanism for imposing penalties should the carrier fail to comply with his commitments, and it must not be aggregated with aid which serves a social objective or with public service compensation payments.
- It must be **of limited duration** (five years in the case of point-to-point European routes, and not 15 years) and correspond to a maximum intensity of 50% of the net start-up costs incurred, and the airport must have control over such costs and the aid must be available in the future to any airline which is established at Charleroi. This being the case, Ryanair could also be granted similar aid in the future, albeit limited to five years in each case, for the opening of new routes excluding routes which replace previously operated routes.

6. Which aid is incompatible?

However, the Commission has no alternative but to request the **recovery** of other aid which distorts competition in the common market, namely:

- **Reduced airport charges**. Reductions are possible only if they are granted in a manner which does not discriminate against any user, and if they are granted for a limited period. If these conditions were met, the discounts would not count as State aid (cf. the 'Manchester' case). They are not met in this case, as Ryanair is the sole beneficiary and is to receive such treatment for a period of 15 years.

  When granting advantages exclusively to Ryanair through a bilateral deal which received no publicity, in particular landing charges below the standard rate, the Walloon Region acted in a regulatory capacity and not as an undertaking. This aid must be recovered from the recipient, except for the part of the official rebate already foreseen in the Walloon legislation. The guarantees given to Ryanair in this connection for the future must be withdrawn.

  In future, the Walloon Region will obviously still be able to introduce a new standard rate which acts as an incentive, but it must be applied transparently to all airlines.

- **Reduced ground handling fees**. Reductions are possible if an airport can demonstrate that any losses made on this service, provided in a competitive environment, are not offset by revenue from airport authority tasks or airport services of general economic interest, for which separation of accounts is required.

  The reductions granted to Ryanair by BSCA, which take the form of a preferential tariff for ground handling services and would not enable the airport to cover its costs in respect of this activity, must therefore be recovered. The amount concerned could be at least EUR 4 million for the 2001-2003 period. However, as long as the two million passengers per annum threshold laid down in Directive 96/67 liberalising the ground handling sector is not reached, BSCA could also use any surpluses there may be from its other, purely commercial activities (parking, shops, etc.) to cover its deficit on the ground handling side..

- **One-shot incentives provided for the opening of new routes**. Such incentives which do not take account of the actual costs of opening the routes concerned are not justified. Contributions of this kind were paid to Ryanair in respect of staff recruitment, training and accommodation costs, the opening of new routes and the provision of premises. In principle, there is nothing about them which would prevent them from being treated like start-up aid, as described below. However, since in this case they have been provided on a flat-rate basis and are not tied to any objective, it might be necessary to recover them.
- **Aid provided for the Dublin-Charleroi route.** This route is not "new" within the meaning of start-up aid (it opened in 1997); the aid granted in respect of this route must therefore be recovered.

7. What is the impact on low-cost airlines?

With this decision, the Commission gives a clear signal in favour of the extension of the model of low-cost airlines. Since 1992, using all the political, legal and legislative means at its disposal, t**he Commission has always encouraged the opening-up of the air transport market to competition.** In fact, it is thanks to liberalisation in that competition has increased in the European Union, allowing new low-cost airlines to develop and Ryanair to expand. The wider and more affordable range of services on offer benefits Europe's consumers: **the existence of low-cost airlines is proof that this Commission policy has succeeded**. The **Commission** intends to proceed further along this path and **will therefore continue to ensure fair competition for everyone** in the single market for air transport.

8. Will the decision be good for regional development?

The Commission's decision does not prevent agreements between regional airports and low-cost airlines. Quite the contrary, for the **Commission encourages any initiative which enables better use to be made of airport infrastructure** which is under-used and welcomes any arrangement which would help to solve the problems of air transport congestion and give Europe's citizens greater choice when it comes to flying: in this connection, secondary airports are extremely well-placed to play a key role. They are also a very significant factor in regional economic development. **Today's decision** by the Commission **helps to clarify the framework** within which the two parties may collaborate, which should **facilitate the conclusion of many more agreements throughout the European Union.**

9. Will this decision impact on fares?

No. A low-cost airline which is in good financial health must be able to offer cheap fares without using State aid. The Commission is convinced that Ryanair is, and will continue to be, following this decision, quite capable of offering its service at low cost, just as other low-cost carriers do and will continue to do. Today's decision does not have an impact on market offerings or prospects for lower fares. By authorising start-up aid under certain conditions, the Commission is paving the way for agreements which make new routes serving regional airports viable. It will help in particular in the long term to introduce **increased competition which should result in the development of low-cost carriers throughout the European Union, especially at regional airports, for the maximum benefit of consumers**.

(1) Within the meaning of Article 87(1) of the EC Treaty.

(2) By reference to Article 87(3)(c) of the EC Treaty: The following shall be compatible with the common market: ... aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest.

(3) **Such development benefits the regions by ensuring a better return from existing public goods and facilitating regional economic development, in particular through job-creation and tourism; it benefits the Member State concerned by encouraging spatial planning and better use of existing airports as opposed to the construction of new infrastructure or extensions; and it benefits the European Union whose need to develop airport capacity was pointed out in the White Paper on Transport and which provides part of the financing for airports through its regional policy, the TENs and the EIB.**

(4) **See OJ C18, 25.01.2003.**

(5) Within the meaning of Article 87(1) of the EC Treaty.

(6) By reference to Article 87(3)(c) of the EC Treaty: The following shall be compatible with the common market: ... aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest.

(7) **Such development benefits the regions by ensuring a better return from existing public goods and facilitating regional economic development, in particular through job-creation and tourism; it benefits the Member State concerned by encouraging spatial planning and better use of existing airports as opposed to the construction of new infrastructure or extensions; and it benefits the European Union whose need to develop airport capacity was pointed out in the White Paper on Transport and which provides part of the financing for airports through its regional policy, the TENs and the EIB.**

Source: (*The Commission's Decision on Charleroi Airport Promottes the Activities of Low-Cost Airlines and Regional Development*, 2004)

Supplier Sustainability Code of Conduct

Supplier Sustainability Code of Conduct

AIRFRANCE KLM GROUP

AMBITION

Air France-KLM Group's ambition is to set the standard for sustainability in the airline industry. As a large purchaser of a variety of products and services, ranging from fuel to onboard catering products, we aim to integrate sustainability in our supply chain by sourcing products and services that minimize our environmental footprint and have a positive social impact. We seek to jointly create sustainable value with our suppliers based on mutual trust, transparency, joint innovation, and knowledge sharing.

PURPOSE AND SCOPE

This Supplier Sustainability Code of Conduct-hereinafter referred to as the Supplier Code- is based on the ten principles of the UN Global Compact as well as related international standards including but not limited to the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the Children's Rights and Business Principles, the Core Conventions of the International Labour Organization (ILO) and the OECD Guidelines for Multinational Enterprises. By adopting this Supplier Code, Air France and KLM set forth their requirements for all suppliers-hereinafter referred to as the Supplier(s)-conducting business with Air France and KLM.

Air France-KLM will update this Supplier Code to remain current with ongoing developments in sustainability.

LEGAL COMPLIANCE

The Supplier will comply with all relevant international legislation as well as the relevant local or national legislation of the countries in which they operate. Air France and KLM recognize that many of their Suppliers operate in different legal and cultural environments throughout the world, and that meeting the standards established in this Supplier Code is a dynamic process. Suppliers are therefore encouraged to continuously and pro-actively improve their operations. Air France and KLM are willing to assist suppliers in this process.

HUMAN RIGHTS AND LABOR CONDITIONS

HUMAN RIGHTS

The Supplier will respect and support human rights as set out in the Universal Declaration of Human Rights and defined by the International Labour Organization (ILO) and ensure no involvement in human rights abuses.

NON-DISCRIMINATION AND FAIR TREATMENT

The Supplier shall not discriminate, and shall promote equal opportunity, in hiring and employment practices, including wages, on the grounds of criteria such as of ethnic origin, color, religion, gender, age, physical ability, national origin, sexual orientation, political affiliation, union membership, medical condition or marital status.

Every employee shall be treated with respect and dignity. Mental or physical coercion or punishment, or threat of physical abuse or punishment, any kind of sexual or other harassment and other forms of intimidation are prohibited.

FORCED LABOR

The Supplier shall not under any circumstance use or benefit from, any form of forced or compulsory labor or any other form of involuntary labor or service which is extracted from any person under coercion, harassment, the menace of any penalty such as the use of physical punishment, confinement or threats of violence as a method of discipline or control as defined by the ILO.

CHILD LABOR, ILLEGAL EMPLOYEMENT AND DECENT WORK FOR YOUNG WORKERS.

The use of child labor by the Supplier is strictly prohibited. No child under the age of 15 years old is allowed to work, subject to exceptions allowed by the ILO. In case child labor is identified, the Supplier must take appropriate action to responsibly manage the removal of child labor from its business in a way that is in the best interest of the child.

If the Supplier employs young people between the age of 15 and 18, the Supplier must treat them with particular consideration. They shall not perform work which, by its nature or the circumstances in which it is carried out, is likely to jeopardize their health, safety or morals.

The Supplier shall not employ any unregistered workers and undertakes to honor all obligations with respect to reporting to the administrative, labor and tax authorities as required in the countries concerned.

FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

The Supplier should grant its employees the right to Freedom of Association and Collective Bargaining, as permitted by and in accordance with applicable laws and regulations.

The Supplier shall ensure that managers and employees have a transparent, fair and confidential complaints mechanism in place enabling them to report workplace grievances.

FAIR REMUNERATION, WAGES AND WORKING HOURS

The Supplier must comply with all applicable legal and regulatory requirements applicable to working hours and shall compensate its employees for overtime work.

The Supplier shall also provide its employees with the minimum wages and benefits, and other premium arrangements, as defined by applicable law and applicable industry standards. In any event, wages should always meet the minimum income necessary for a worker to meet their basic needs. In the absence of any legal standards, the remuneration must be sufficient according to the ILO Convention (ILO C131- Minimum Wage Fixing Convention) and/or guidelines provided by SAI (SA8000®: 2014).

The employees shall be granted their annual leave, and sick leave, without any form of repercussion, and female employees shall be granted their stipulated maternity leave rights in case of pregnancy.

HEALTH AND SAFETY

The Supplier shall provide its employees with a safe and healthy workplace to prevent accidents and injury to health. To that effect the Supplier shall take a proactive approach to health and safety by implementing policies, systems and training designed to prevent accidents, injuries and protect workers' health.

The Supplier shall identify and be prepared for emergency situations. The Supplier shall regularly train employees on emergency planning, responsiveness as well as medical care.

LOCAL COMMUNITIES

The supplier shall operate with respect for local communities and indigenous people and their rights and title to property and land. We expect our Suppliers to understand the cultural and economic context in which they are working, to operate safely and responsibly, to be mindful of the well-being of communities and to foster positive social and economic relationships with local communities. In particular, they should ensure that the situation of vulnerable groups such as women and children is taken into account.

ENVIRONMENT

Air France and KLM require their Suppliers to comply with all applicable local, national and international environmental legislation.

Suppliers shall adopt a proactive approach towards minimizing environmental impacts. They are expected to have an environmental management system in place, based on international standards such as ISO 14001 or comparable, designed to identify, control and mitigate significant environmental impacts.

Waste of resources and materials, including energy and water, should be reduced or eliminated by practices such as modifying production, maintenance and facility processes, materials substitution, conservation, recycling and re-use.

The use of natural resources in products and services should be reduced, by proactively searching for sustainable and/or renewable alternatives.

ETHICS, ANTI-CORRUPTION AND BRIBERY

Air France and KLM expect their Suppliers to comply with all applicable international, national and local laws and regulations, to strive to adhere to international and industry standards and to uphold high standards of integrity, transparency and governance.

The Supplier declares it forbids its employees the offer or payment of bribes to its customers or to the business associates of its customers. The Supplier also declares it forbids its employees to offer, receive or request bribes to/from third parties, such as customers, suppliers and authorities, whether for their own benefit or that of their families, friends, associates or acquaintances.

Suppliers should avoid any apparent or actual conflicts of interest, and are expected to communicate to their Air France or KLM counterpart any situation that may appear as a conflict of interest.

Further details on the anti-corruption and bribery policies are included in the Air France KLM anti-bribery manual and may be included in the agreement between Air France, KLM and the Suppliers.

SUSTAINABLE PROCUREMENT

Air France-KLM requires that their Suppliers ensure that the standards of this Supplier Code are actively promoted with their own supply chain partners and integrated into their business operations including their selection of suppliers. The sustainable procurement policies and practices of Air France and KLM's Suppliers are monitored through self-assessments.

DATA PROTECTION AND PRIVACY

Air France-KLM require their Suppliers and business partners to take adequate measures to ensure sufficient protection of data received from Air France KLM and to ensure the rights of privacy of its employees and their personal data. The Supplier is expected to treat these data in accordance with the EU General Data Protection Regulation (GDPR) as well as any applicable national legislation relevant to the protection of data and privacy.

MONITORING & ENFORCEMENT

Air France KLM may ask their suppliers to conduct a sustainability self-assessment. To manage and monitor the level of the sustainability performance in its supplier base. These assessments help to determine whether the Supplier meets Air France KLM's sustainability requirements

Air France or KLM may reconsider its relationship with a supplier that does not comply with this Supplier Code and does not meet our minimum requirements.

AGREEMENT & SIGNATURE

I, undersigned, on behalf of (Company's name) have read and understood this policy. I agree to comply with the standards laid out in this Supplier Code and to commit to the continuous progress of my company on the sustainability topics covered by this Supplier Code.

Company name:

Date:

Signed by:

Title:

(Electronic) signature

Air France KLM Corporate Social Responsibility Statement

AIR FRANCE KLM
CORPORATE SOCIAL RESPONSIBILITY STATEMENT

The **AIR FRANCE KLM** Group combines two airlines with their own identities and brands, which have a long-standing commitment both to protecting the environment and to promoting social values.

The Group is well aware of how its operations affect the environment, particularly where noise and emissions are concerned, and seeks to minimize their impact.

At the same time, our activities meet the growing demand for mobility worldwide, thus contributing to economic development by connecting regions and to social development by connecting cultures.

Following our signature of the United Nations' Global Compact and based on our long-term business management vision, our Group strives to set corporate social responsibility standards in the airline industry.
We do this by implementing a set of clearly-defined commitments to ensure that profitable growth goes hand in hand with environmental quality and social progress.

AIR FRANCE KLM is committed to developing trust with all its stakeholders.

- We act with integrity and strive to build trust with our customers and business partners.
- We proactively pursue dialogue notably with representatives of the airport community.
- We are systematically accountable for our economic, social and environmental results and guarantee transparency in the information we provide.
- We strive to contribute to regional development in areas where we operate, particularly with regard to employment and economic growth.
- We undertake to enforce Human Rights, to oppose all forms of child or forced labour, to apply the law and to request our suppliers and subcontractors to comply with these principles.
- We are actively involved in setting international standards for a responsible air transport industry.

AIR FRANCE KLM considers safety and security to be unquestionable obligations.

AIR FRANCE KLM is committed to building a socially responsible Group both on a national and international scale.

- We offer safe and motivating working conditions.
- We foster employment and mobility through personal development and by enhancing skills.
- We strive to promote diversity as reflected in society, and to ensure equal opportunities among all staff.
- We pursue social dialogue as a guiding principle and ensure that our employees and their representatives are kept informed and consulted.

AIR FRANCE KLM

AIR FRANCE KLM is committed to investing in environmental protection that goes beyond regulatory compliance.

- We endeavour to introduce the best available technologies in fleet renewal and to operate the most efficient procedures and operations to reduce noise and limit emissions.
- We adopt a responsible approach to limiting world emissions of carbon dioxide, by endorsing the participation of air transport in a fair Emissions Trading Scheme.
- We develop eco-designed services by thoroughly analyzing all sites and processes to identify opportunities where we can improve our environmental performance.
- We ensure that all premises of AF, KLM and their subsidiaries comply with environmental protection regulations.
- We encourage awareness and promote creativity among all our employees by supporting innovative projects that factor in environmental considerations.
- We request our suppliers and subcontractors to implement measures aimed at reducing the environmental impact of their activities.

This policy strives to ensure that the above commitments are implemented by all employees of AIR FRANCE KLM and their subsidiaries and pursued company-wide in all our day-to-day tasks.
We do this by implementing dedicated action plans for each airline, where we set objectives and audit the results.
We expect our suppliers and employees as well as all others who are committed to building a responsible air transport industry, to endorse the above commitments.

Paris & Amsterdam, July 4, 2006

Jean-Cyril Spinetta

Chairman and
Chief Executive Officer
of Air France and
Air France-KLM

Leo van Wijk

President and
Chief Executive Officer of KLM
Vice-Chairman of the Board of Directors
of Air France-KLM

AIR FRANCE KLM

Air France KLM Sustainable Procurement Policy

Sustainable Procurement Policy

Amstelveen/Roissy, 02 March 2020

Introduction

Air France and KLM's ambition is to set the standard in CSR and to remain front runner in the airline industry. The group integrates sustainability within the supply chain to provide customers with responsible and innovative products and services, and offer reliability with a proactive focus on sustainability. This should create value for its customers and improve the social and environmental footprint of our services, contributing to the UN Sustainable Development Goals.
Our suppliers play a crucial role in reaching above objectives, as the way our supply chain partners act has a large influence on our risks and opportunities. This whole process of enhancing sustainability is managed with great care. Creating value chains together with our partners and the business is key in our strategy.

Jurriaan Lombaers
SVP & Group CPO
Air France KLM Procurement

Christian Gauthier
CPO Air France

Sustainable Procurement Policy

Air France-KLM's Sustainable Procurement Policy is based on three main elements:

1. Supplier Sustainability Code of Conduct
2. Supplier CSR performance framework
3. Continuous improvement and supplier partnering

1. **Supplier Code of Conduct & Sustainable Development Charter**
   The Air France KLM Sustainable Development Charter (see appendix) must be used in all sourcing activities. (Potential) Suppliers must always be requested to sign the charter or provide an equivalent of their own, to be validated by the Air France-KLM official in charge of Sustainable Procurement. The Air France KLM Sustainable Development Charter is detailed with the Air France KLM Supplier Code of Conduct (see appendix). It is our ambition to have 80% of our Suppliers having signed the Sustainable Development Charter by 2021

2. **Supplier CSR performance framework**
   To verify whether our Suppliers comply with the Air France KLM Sustainable Development Charter, we request our suppliers to undergo a third party assessment. Currently, Air France KLM uses the services of EcoVadis for these assessment, although other third parties can be considered. Selection of to be assessed suppliers is based on a risk mapping methodology. Suppliers that are active in High/Severe Risk categories have to be assessed with priority. On top of the assessment, Air France KLM can perform at any time an on-site Sustainability Audit. The Air France KLM Risk Mapping uses the International Standard Industrial Classification (ISIC) [i] categories. A detailed explanation of the methodology and scope of the Purchasing Category Risk Mapping is available for Air France KLM procurement staff.

3. **Continuous improvement and supplier partnering**
   The Air France KLM Procurement organization across its 7 Procurement Categories (Airport &Navigation Fees, Airport Services, Corporate & Marketing, Engineering & Maintenance, Fuel, Inflight Services and IT)is focused and committed to continuously search for Sustainable Procurement & Innovation opportunities in our Supply Chain. For examples please click here and here.

   This commitment is reflected in Sustainable Procurement targets for our Procurement teams, dedicated Sustainable Procurement Officers in Procurement and ongoing trainings. Furthermore, all Procurement Staff has signed our Code Of Ethics for Employees (see appendix).

We welcome partnering together with our suppliers and the airline industry to jointly drive the sustainability agenda quicker forward.

Suppliers are expected to fully understand their CSR impact and have continuous improvement plans in place to improve their performance. Suppliers that score a minimum of 35 points on the EcoVadis assessment are considered as compliant. Suppliers scoring less than 35 points are requested to provide an improvement plan.

Assessment score, compliance status and follow up

Overall Score (1/100)	Theme Score (1/100)	Sustainable Procurement Compliance Status	Supplier Follow up Actions
≥ 35	**≥ 35**	Compliant	Assessment every 3 years
≥ 35	**< 35**	Compliant	Assessment every 3 years + Corrective Action Plan
< 35	**-**	Non-compliant	Assessment in 1 year + Corrective Action Plan

APPENDIX

1. **Air France KLM Supplier Sustainability Code of Conduct**
2. **Air France KLM Code of Ethics for Employees**

Air France KLM Principles

Air France-KLM Principles

AIRFRANCE KLM GROUP

INTRODUCTION

Our Principles: what are they & why do we have them?

The Air France-KLM Group is committed to create a work environment where everybody can flourish and is able to contribute the best way possible to our Group performance. Our principles are leading the way in our behavior towards one another. They are the foundation for the social, economic and cultural cohesion within each company and within Air France-KLM, which is essential to be able to share in the benefits of growth.

We are an airline Group with three powerful and authentic brands, Air France, KLM, Transavia, and other subsidiaries. Each company with its own identity and a rich history we are proud of, which serves as the fundament for our future. All its employees are our most important asset. We are united in driving the Air France–KLM Group towards its leading position in Europe.

The management of the Air France-KLM Group and the Air France-KLM European Works Council (EWC) have jointly set out the values and fundamental rights which underpin the identity of the companies within the Group, and guide their social and ethics policy. Together we agreed on the principles for the Air France-KLM Group, as described in this document.

The purpose of this guiding document is to foster a climate of mutual trust, respect, transparency and confidentiality in a work environment where health, safety and the quality of life is a major priority on which there may be no compromise. It requires continuous and extensive cooperation from us all.

We need all to be fully committed to live up to our principles and respect our way of working, as our day-to-day business is driven by the Air France-KLM Group's ethic principles. We like you to speak up and address each other on inadmissible behavior. As we have a zero tolerance for non-compliance. We are all the ambassador of ethical conduct and transparent professional practices.

We all have the responsibility to protect and enhance the Group's reputation, culture and brands. Individually and collectively, we make the difference for our colleagues and for our customers.

Benjamin Smith

Chief Executive Officer Air France-KLM

Anne Rigail

Chief Executive Officer Air France

Pieter Elbers

Chief Executive Officer KLM

François Cabrera

General Secretary European Works Council

Air France-KLM

In the Air France-KLM Group:

We treat each other with RESPECT, we support a ‘speak-up’ culture where our employees, partners and customers are free to share their ideas and opinions, and confident that they are heard.

We have TRUST and are confident in the ability of our employees to make the right decisions, to reconcile economic ambitions with social and ethical concern.

We promote TRANSPARENCY in the execution of our professional practices.

We create an environment of CONFIDENTIALITY, which allows employees to report behaviors in a confidential manner.

Our Approach: how do we live Our Principles?

Commit, Assess, Implement, Report – our consistent approach to maximising our positive impact is inspired by the UN Guiding Principles on Business and Human Rights. We are committed to respecting human rights, the environment, and ethical standards. At the same time, we recognise that our activities have greater impacts in some areas over others. To address the most important human rights and sustainability issues for our business we identify what they are through regular risk *assessment*; *implement* specific action plans; *report* on our efforts to help us review what areas to focus on.

EXAMPLE DIAGRAM

Commit: we act to respect human rights, the environment, and ethical standards.

Assess: we identify our businesses' most salient impacts on human rights and sustainability through regular risk assesment.

Implement: we develop specific action plans targeting the most important human rights and sustainability issues for our activties.

Report: we listen and communicate regularly to our internal and external stakeholders. We review and if necessary update our focus areas in context of our actvities and world developments.

Scope: who do these Principles apply to?

Our Principles define us. First and foremost, they apply to all employees of the Air France-KLM Group, including part-time and temporary contracts. They serve as a shared foundation for all companies of the Group and support further policies, procedures, rules, and Codes of Conduct. An equivalent high ethical standard is required from all third parties we engage with, suppliers and business partners included. We actively promote our expectations throughout our supply chain through regular communication and specific processes.

Overall, our Principles affect all Air France-KLM stakeholders in some shape or form – we encourage all our customers, shareholders, business partners, and local communities to engage with them.

Our Ethical Check: bringing Our Principles to life

We are all responsible for creating a company and society we can take pride in. Our respectful behaviour strives to create a safe and productive work environment; and we hold each other accountable which means: we are open, communicate our concerns, and listen to each other.

Our Ethical Check is a set of hypothetical questions designed to guide your ethical decision-making. Ask yourself these questions regularly to 'check' your behaviour is safe, legal, and reflects well on our company. They do not replace internal structures; you should always speak to your manager and colleagues. We use common sense – if we are uncomfortable with a decision or aren't sure how to proceed we ask for help.

1. Am I following applicable regulations?
2. Am I respecting the safety, security and wellbeing of others or myself?
3. Would I be comfortable explaining this action to my family, friends, and co-workers?
4. Would I be comfortable if it was made public to our customers and investors (discussed on television, published in a newspaper)?
5. Would I be comfortable with someone else behaving this way?

If you reply 'No' to any of these questions, don't move forward on your own. Ask your colleagues and manager for guidance and rethink your next steps together.

Our Commitments to globally-recognised standards

Our sense of responsibility translates into firm commitments to national, regional, and global standards on human rights, ethics, and sustainability. As signatory and participant of the United Nations Global Compact since 2003 we strive to integrate the ten principles throughout our business activities and strategy. We are likewise inspired by the United Nations Sustainable Development Goals and dedicated to making our contribution. Our Approach is aligned with these shared standards and updated regularly according to world developments.

We respect and protect human rights as described by the Universal Declaration of Human Rights and the International Labour Organisation's Conventions on Fundamental Principles and Rights at Work. We work with internal and external stakeholders to stay current on ways to improve.

Diversity & Inclusion

We have zero tolerance for any form of discrimination and unequal treatment. We do not discriminate, disadvantage or harm others on the basis of any distinction including *race, sex, national or social origin, religion, age, disability, sexual orientation or gender identity, trade union memberships, political or other opinion*. Bullying, harassment, and any other harmful behaviour which stems from discrimination has no place within our Group and our corporate culture.

We have zero tolerance for any form of harassment, whether of a sexual, verbal, physical, or psychological nature. We are committed to increase the awareness of protection and improve prevention measures. Moreover, we recognise that genuine diversity not only means guaranteeing equal opportunities but also actively empowering minority groups and individuals.

When Air France-KLM was born in 2003 it brought together three exceptional airlines (Air France, KLM and Transavia), subsidiaries and a uniquely diverse group of people all over the world. Our multicultural spirit has defined us in our industry and enabled us to meet the needs of our customers worldwide. We have never ignored our differences – rather, we celebrate and draw them out. Leveraging our diversity has been the key to our success.

We believe that a truly diverse and inclusive company takes commitment and dedicated work. We want our company to accurately reflect society. Consistent assessment of how we are doing in all levels of our organization allow us to develop clear objectives to improve. We celebrate our differences by learning and listening to each other. We fundamentally believe that our teams and business thrive when they bring together different perspectives.

Diverse by design –connecting people and cultures from around the world.

Health & Safety

Safety is integral to everything we do. It is our number one commitment to ourselves, each other and our customers. Safety goes beyond the normal expectations – it means working in an environment prioritising each other's wellbeing. In the air and on the ground we meet the highest air transport standards worldwide. Our strong safety management system is the result of a rigorous and organised structure combined with a caring culture.

Safe describes our work environment. As employees of the Air France-KLM Group we commit to each other that our actions will not harm or make others feel unsafe in any way.

It is our collective and individual responsibility to bring our best selves to work every day. To this end we prioritise our health and a good work-life balance through various programs, benefit schemes and support systems.

Working conditions

Our world and industry are constantly changing. As pioneers, we welcome change, stay agile and adapt our practices. Working at Air France-KLM is an opportunity to embody this ethos of life-long learning. We invest in skills development and training. The remuneration and working hours of employees comply with local legal and contractual standards.

Freedom of association, collective bargaining and social dialogue

We respect our employee's freedom of association and right to collective bargaining by actively engaging in social dialogue. In accordance with the law, our employees have the right to join, form, and participate in trade unions, employee organizations and representative bodies, without fear of reprisal. We are committed to enhancing our social dialogue worldwide through inclusive, honest, and transparent communication. Their application is a combined effort with local labour unions, local representative bodies and the European Works Council and represents our authentic commitment to work side by side.

Environment

We are committed on a daily basis to reducing our environmental impact and offering our customers a responsible travel experience. We are therefore stepping up our commitments and setting ambitious targets to reduce CO2 emissions for flight and ground operations and reducing non-recycled waste from the cabin and ground activities. We continue minimizing noise hindrance and reduce other local emissions.

Our environmental responsibilities are met by our Climate Action Plan to reduce our carbon footprint:

- Fleet modernization and contributing to aeronautical research
- Sustainable Aviation Fuel and participating in research into renewable energies
- Operational measures, such as applying eco-design principles, weight reduction projects, and route optimization
- Supporting the implementation of the global climate agreement (CORSIA) with a fair contribution for aviation
- Regulatory and proactive offsetting
- Supporting environmental programs
- Carbon offsetting for customers

We commit to contribute to the United Nations Sustainable Development Goals.

Local communities

We are committed to respecting the local communities in proximity of our business activities.

We take local actions to minimise the impact that our activities may have on local communities.

We are conscious of each other’s differences and relationship to property and land. In order to foster positive social and economic relationships we consistently engage in dynamic dialogue with people living and working near our operations. Our Paris and Amsterdam hubs are vibrant centres of economic activity. We leverage our unique position to empower people through employment and trade opportunities.

Beyond our businesses we are proud to support social initiatives around the world as well as the work of the various societal initiatives of Air France, KLM , Transavia and other subsidiaries.

Modern Slavery and Human Trafficking

We strongly condemn all forms of Modern Slavery (for example forced labour or child labour) and commit to doing our part in its elimination. Respect for human rights and the absence of modern slavery is included in the due diligence process with suppliers. In line with IATA's 2018 resolution on combatting human trafficking, we work with a variety of stakeholders, including local authorities and governments. Through information and awareness campaigns, our employees are able to help identify and report potential human trafficking situations.

Privacy and Digital Ethics

Respect, Trust, Transparency and Confidentiality form the foundation on which we operate. Respecting the privacy and protecting the information of our employees and customers is imperative. We comply with national, regional, and international regulations on privacy and personal data management.

Digitalization offers immense possibilities for us to improve the experience of our customers and employees. We stay at the forefront of digital developments by simultaneously leveraging these opportunities and considering their ethical implications. Fostering an open dialogue allows us to exchange ideas on topics including, integrating diversity in the design process and considering the environmental impact of our information systems. Our dynamic approach to digital ethics reflects our commitment to continuously improve.

Business Ethics

We do not compromise on our business ethics and compliance with laws and regulations. The policies and procedures in place at Group and airline level provide detailed guidance on compliance. Our individual and collective behaviour reflects on Air France-KLM as a whole and we are each responsible for staying aware and up to date on what is expected of us. Our Business Ethics are a fundamental part of our shared Principles and must be rigorously applied to our operations.

Anti-Bribery

It is strictly forbidden to offer or accept bribes to influence decision making. It is also prohibited to use your influence or request someone to use his/her influence for obtaining or retaining business.
Find out more:

- AFKL Anti-Bribery Manual
- AFKL Gift & Hospitality Policy

Lobbying

We openly engage with public authorities to explain the constraints and benefits of our activities and promote our mutual interests. While carrying out these activities, we adhere to internal and external laws and regulations. Any relationship with public authorities for lobbying purposes must be made aware and supervised by the relevant manager.

Insider Trading

Company information needs to be treated responsibly. This especially applies to inside information that can have a significant impact on share prices or that can be misused for personal gain. *Find out more*:

- AFKL Compliance rules regarding securities trading

Fair Competition & Anti-Trust

We comply with the competition laws which apply to our highly competitive environment.
Find out more:
- AFKL Competition Law Compliance Manual

Conflicts of Interest

We avoid situations where private interests work against or may appear to oppose the interests of the Air France-KLM Group.
Find out more:
- AFKL Anti-Bribery Manual

Trade Restrictions, Export Control & International Sanctions

We comply with measures taken by the authorities to restrict the proliferation and/or use of some goods or services (export controls) as well as restrictions or bans on their delivery to certain countries, organisations and/or individuals (trade restrictions).

Communication & Advertising

Our culture of trust requires honest internal and external communication. We do our utmost to provide accurate information and refrain from false or misleading statements.

Fraud

It is prohibited to engage in fraudulent activities, which we describe as any act that intentionally deceives or misleads others mainly to obtain an unjust or illegal advantage that (eventually) could lead to a disadvantage for the company.

Third Parties

We expect a high standard of ethical behaviour and respect of human rights from all third parties we work with. Our Principles represent our values and must be respected throughout our supply chain. All Air France KLM employees interacting with suppliers and sub-contractors are dedicated to making this a reality and continuously develop our sustainable approach to Procurement.

We conduct risk assessment and due diligence to ensure that our business partners reflect sustainable practices, respect for human rights, and ethical conduct. We also reserve the right to perform on-site sustainability audits and request our suppliers to complete Corporate Social Responsibility self-assessments. Our new and existing business relationships are evaluated according to these criteria. We work with them and external bodies to achieve our sustainability and human rights goals together.

Application and Governance

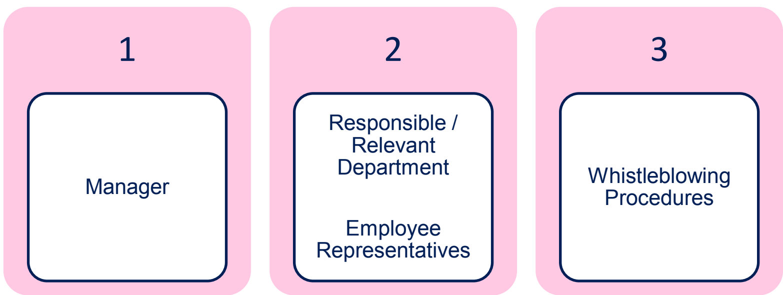
Our Principles define us. The meaningful impact we seek to create requires commitment and follow-through. By virtue of working for Air France KLM we pledge to bring these Principles to life.

To lead by example is important to us. Carried at the most senior level, the Air France – KLM Board of Director's Sustainability and Compliance Committee oversees and guides the application of our Principles. Working with the CEO committee, they set and review the Group's strategy on sustainability, human rights, and business ethics. Monitoring our Principles is a joint responsibility with the EWC, who annually review their effectiveness and any outstanding cases. Consistent with our values and dedication to continuous improvement, we openly report internally and externally on our progress.

Communication

Living our Principles requires consistent and clear communication at all levels of our organization and supply chain. Understanding these Principles is vital to their effectiveness. We promote awareness by, for example, information campaigns, but not limited to, and encourage open discussions on ways to improve and implement these values in our day-to-day business.

Implementation: *Reporting your concerns*



1. **Manager** – The first point of contact to make a report is your hierarchical manager.
2. **Escalation point :**
    - **Responsible / Relevant Department** – If reporting to a hierarchical manager is impossible or undesirable, individuals may also submit their reports to a relevant department or the Compliance Officers. Certain Principles have specific reporting mechanisms in place for which detailed information can be found in the applicable policy. (e.g. Human Resources, Compliance Office, Procurement, Data Protection Office).

- Company Employee Representatives in countries where it exists, or as a last resort individuals can contact the Select Committee of the European Works Council.

3. **Whistleblowing Procedures** – In exceptional circumstances a report can be made using the Whistleblowing Procedures available on the airline's online portal.

Prior to opening a case, individuals are encouraged to follow the escalation process mentioned above.

We listen to each other openly and without prejudice. Creating an atmosphere of tolerance and transparency is our priority. We therefore encourage our colleagues to speak up about their concerns. It is important for us to have clear and easy reporting channels.

Many of our Principles are detailed in policies and documents with specific reporting mechanisms and procedures. The resources are available on our external corporate websites or internal intranet platforms. Employees are encouraged to make use of these.

Retaliation

Transparency and Trust are intrinsic to our corporate culture and crucial to the effectiveness of our Principles. We do not retaliate against those reporting their concerns using this structure. Any case brought forward shall be dealt with fairly and confidentially.

Air France KLM Social Rights and Ethics Charter

Editorial

By Alexandre De Juniac

The epitome of the values and rights underpinning the AIR FRANCE KLM Group's identity and cohesion, the Social Rights and Ethics Charter applies to all employees of the two companies and their subsidiaries.

An ambitious action plan spanning the Group as a whole, this Charter tackles various issues such as labour relations, ethics requirements and the respect for the environment and sustainable development principles. It highlights our vision of an open, united world, based on both economic responsibility and social and environmental progress.

Negotiated with and signed by the staff representatives within the AIR FRANCE KLM European Works Council, this Charter is a prime example of how successful our contractual policy proves to be when it comes to achieving fair, balanced development.

Every employee is now encouraged to become acquainted with this Charter and proactively endorse it.

Preamble

The AIR FRANCE KLM Group and the AIR FRANCE KLM European Works Council (AFKL EWC) have jointly set out in this document the values and fundamental rights which underpin the identity of these two companies, and guide their social and ethics policy. These values and rights are the foundation for social, economic and cultural cohesion within each company and within the Group, which is essential to be able to share in the benefits of growth.

The purpose of this Charter is to foster a climate of enhanced mutual trust and respect in a work environment in which no form of discrimination or harassment may be tolerated. The development of a work environment favorable to the good economic and commercial performance of the Group and each of its companies, to progress in labour relations and personnel advancement requires continuous and extensive cooperation on the part of all.

Annexed to this Charter is the “AIR FRANCE KLM Corporate Social Responsibility Statement” which, in line with the United Nations Global Compact signed by the Group, identifies the commitments entered into by AIR FRANCE KLM to ensure that its activity goes hand in hand with the promotion of social values and environmental quality. To this end, and to guarantee safe and reliable passenger personal involvement of each employee is crucial. This statement fits in with and extends the application of the present Social Rights and Ethics Charter (see Appendix 1).

All the provisions of this Charter are drafted in compliance with the provisions and laws of each country as well as with individual and collective labour agreements.

1. Scope

The present Charter applies to AIR FRANCE and KLM and all their subsidiaries and sub subsidiaries in which they exercise dominant influence, as defined by French Law, and which have signed the Charter and are based in Europe (according to the "Protocol for European Works Council in the AIR FRANCE KLM Group").

A list has been drawn up in Appendix 2, which will be updated every year conformed to the Protocol for the EWC and communicated to the Select Committee members of the European Works Council AIR FRANCE KLM.

When a change in shareholding or shareholders leads to the withdrawal of a company from the scope of this agreement, the Charter no longer automatically applies. On the other hand, when a new company enters this scope, its management shall be requested to sign the Charter.

The present Charter applies to all employees of these companies in Europe. Beyond this geographical scope, the present Charter must be a source of inspiration to in actions by local management.

2. Fundamental rights

Companies of the AIR FRANCE KLM Group endorse the core principles and rights set forth in the United Nations Declaration of Human Rights and the Charter of Fundamental Rights of the European Union. These are the universal and indivisible values of human dignity, freedom, equality and solidarity.

3. Social rights

Companies of the AIR FRANCE KLM Group are committed to promoting and complying with the Conventions of the International Labour Organization[1] and its Declaration concerning Fundamental Principles and Rights at the workplace as well as the Social Charters adopted by the European Union and the Council of Europe.

These companies consider these rights to be essential to the improvement of individual and collective labour conditions.

To this end, they undertake:

- to oppose child labour and the exploitation of children,
- to facilitate employment for the disabled,
- at the very least to apply the labour legislation of the European Union and its Member States and all national collective agreements,
- to respect the trade unions right in all the countries concerned.

(1) In particular The freedom of association and the recognition of the rights to collective negotiation (Conventions 87 and 98). The elimination of discrimination in terms of employment and profession (Conventions 100 and 111). The abolition of child labour (Conventions 138 and 182). The elimination of all forms of forced or compulsory labour (Conventions 29 and 105).

4. Health, safety and dignity at the workplace

Every employee of the companies of the AIR FRANCE KLM Group is entitled to labour conditions which respect his/her health, safety and dignity.

All measures relating to the improvement of health, safety and dignity at the workplace are deemed priorities and shall be actively pursued and reinforced.

5. Employment, wages, working time and working conditions

5.1 Each Company of the AIR FRANCE KLM Group undertakes to promote the employability and mobility of their employees, in the framework of a management style which anticipates economic, technological, competitive and organizational changes in order to maintain security and stability of employment and promote diversity in both companies to reflect society at large.

In this framework, employee training is an important, ongoing investment. It is essential that the resources are reviewed regularly to reinforce the employability of employees.

5.2 Wages and benefits shall at least be on a level that complies with the legal and contractual standards of the country concerned or local labour conditions (individual and collective agreements).

Employees who individually and/or collectively and extensively contribute to the development and the success of their company, should be able to benefit from this through any kind of compensation and/or benefits.

5.3 Working times and conditions shall comply with relevant national legislation and with individual and collective agreements in effect in each country concerned.

6. Social dialogue

Companies of the AIR FRANCE KLM Group (see Appendix 2) undertake to promote the development of responsible social dialogue and a relationship based on trust at all level. The aim is to consolidate and improve contractual processes wherever needed, in full respect of the institutions representing employees in each country. In this context, these companies also agree to ensure that their employees and/or their representatives are always informed and consulted in due course.

7. Equality

Equal opportunity will be promoted. In this context, companies of the AIR FRANCE KLM Group (see Appendix 2) will avoid any form of discrimination including race, colour, ethnic or social origin, religion or beliefs, political or trade union preferences, national origin, disability, age or sexual orientation.

Equality must be guaranteed between men and women in terms of employment, working conditions, career opportunities and remuneration.

8. Subcontracting

Companies of the AIR FRANCE KLM Group (see Appendix 2) will be particularly attentive to ensuring that these principles and fundamental social rights are respected by all subcontractors with whom they maintain relations anywhere in the world, in the respect of the Procurement principles defined in the Sustainable Development Charter, described in Appendix 3. The contact person at the Procurement Division will attentively monitor the situation, particularly in case of specific problems.

9. Circulation

Each company will ensure that each of its employees is made aware of the present Charter, at the time of its entry into effect, through appropriate channels. After that the Charter will be made available in accordance with the practices of each company. It will be published in French, English and Dutch.

10. Application of the Charter

The General Management of each company of the AIR FRANCE KLM Group (see Appendix 2) and the AIR FRANCE KLM European Works Council (AFKL EWC) shall oversee the application of this social Charter. Monitoring its effective application will be the responsibility of the AFKL EWC, consulting with but not substituting itself for the representative bodies in the countries concerned. In this way, the Select Committee of AIR FRANCE KLM European Works Council will be in a position to alert the appropriate personnel representatives and divisions so as to ensure application of the Charter. All procedures which could guarantee the monitoring of the Charter application are described in Appendix 4. Once a year, the agenda of the AFKL EWC will include a report on the application of the Charter.

11. Entry into effect

This Charter will come into effect on July 10, 2013 in all companies of the AIR FRANCE KLM Group (see Appendix 2) after being signed by:

- the CEO of the AIR FRANCE KLM Group,
- the CEO of AIR FRANCE,
- the CEO of KLM,
- the General Secretary and the Deputy General Secretaries of the AFKL EWC.

This Charter is applicable for an unlimited duration and replaces the former Social Rights and Ethics Charter, effective as of March 1st, 2008.

This Charter will be registered with the competent authorities as stipulated by French Law, applicable to the present text.

If necessary, a revision of this text can be initiated by agreement of the signatories of the present document.

The member companies

- AIR FRANCE KLM
  - Air France
    - C.R.M.A.
    - (via Air France Finance)
    - Air France Consulting
      - Quali Audit
    - Cityjet
      - VLM Airlines
        - VLM Netherlands BV
    - France Aviation
    - Bluelink S.A.
      - Bluelink International S.A.
        - Bluelink International CZ
    - (via Sodecom)
      - Crimée Voyages
    - Sodesi
    - HOP!
      - HOP!-Brit Air
        - Icare
        - Lyon Maintenance
      - HOP!-Regional
      - HOP!-Airlinair
    - Sodexi
    - Transavia France
    - Servair S.A.
      - A.C.N.A.
      - Prestair
      - Special Meals Catering
      - P.A.C. (Paris Air Catering)
      - (via S.I.A.)
        - Catering PTP
        - Servair Solution Italia
        - SRFF (Servair Retail Fort-de-France)

        - SIA Afrique
        - SIA International
        - SIA Commerces et Services
    - Lyon Air Traiteur
    - Servair Formation
    - Passerelle CDG
    - Servantage
    - Skylogistic
    - Martinique Catering
    - O.A.T. (Orly Air Traiteur)
    - S.O.G.R.I. (Guyane)
    - S.O.R.I. (Guadeloupe)
    - SVRLS@LA REUNION
- KLM
  - Blue Crown BV
  - Cygnific BV
  - European Pneumatic Component Overhaul and Repair (EPCOR)
  - International Airline Services Ltd
  - KLM Health Services BV
  - KLM Catering Services Schiphol BV
  - KLM Cityhopper BV
  - KLM Cityhopper UK Ltd
  - KLM UK Ltd
  - KLM Equipment Services BV
    - ETS
  - KLM Luchtvaartschool BV
  - Martinair
  - Cobalt Ground Services Ltd

Alexandre De Juniac

CEO of AIR FRANCE KLM

Frédéric Gagey

CEO of AIR FRANCE

Camiel Eurlings

CEO of KLM

François Cabrera

AIR FRANCE KLM
European Works Council
General Secretary

Fenna Den Hartog

AIR FRANCE KLM
European Works Council
Deputy General Secretary

Marta Schreiner

AIR FRANCE KLM
European Works Council
Deputy General Secretary

Roissy, July 10th 2013

APPENDIX 1

AIR FRANCE KLM CORPORATE SOCIAL RESPONSIBILITY STATEMENT

The AIR FRANCE KLM Group combines two airlines with their own identities and brands, which have a long-standing commitment both to protecting the environment and to promoting social values.

The Group is well aware of how its operations affect the environment, particularly where noise and emissions are concerned, and seeks to minimize its impact.

At the same time, our activities meet the growing demand for mobility worldwide, thus contributing to economic development by connecting regions and to social development by connecting cultures.

Following our signature of the United Nations' Global Compact and based on our long-term business management vision, our Group strives to set corporate social responsibility standards in the airline industry.

We do this by implementing a set of clearly-defined commitments to ensure that profitable growth goes hand in hand with environmental quality and social progress.

AIR FRANCE KLM is committed to developing trust with all its stakeholders.

- We act with integrity and strive to build trust with our customers and business partners.

- We proactively pursue dialogue notably with representatives of the airport community.

- We are systematically accountable for our economic, social and environmental results and guarantee transparency in the information we provide.

- We strive to contribute to regional development in areas where we operate, particularly with regard to employment and economic growth.

- We undertake to enforce Human Rights, to oppose all forms of child or forced labour, to apply the law and to request our suppliers and subcontractors to comply with these principles.

- We are actively involved in setting international standards for a responsible air transport industry.

AIR FRANCE KLM considers safety and security to be unquestionable obligations.

AIR FRANCE KLM is committed to building a socially responsible Group both on a national and international scale.

- We offer safe and motivating working conditions.

- We foster employment and mobility through personal development and by enhancing skills.

- We strive to promote diversity as reflected in society, and to ensure equal opportunities among all staff.

- We pursue social dialogue as a guiding principle and ensure that our employees and their representatives are kept informed and consulted.

AIR FRANCE KLM is committed to investing in environmental protection that goes beyond regulatory compliance.

- We endeavour to introduce the best available technologies in fleet renewal and to operate the most efficient procedures and operations to reduce noise and limit emissions.

- We adopt a responsible approach to limiting world emissions of carbon dioxide, by endorsing the participation of air transport in a fair Emissions Trading Scheme.

- We develop eco-designed services by thoroughly analyzing all sites and processes to identify opportunities where we can improve our environmental performance.

- We ensure that all premises of AIR FRANCE, KLM and their subsidiaries comply with environmental protection regulations.

- We encourage awareness and promote creativity among all our employees by supporting innovative projects that factor in environmental considerations.

- We request our suppliers and subcontractors to implement measures aimed at reducing the environmental impact of their activities.

This policy strives to ensure that the above commitments are implemented by all employees of AIR FRANCE KLM and their subsidiaries and pursued company-wide in all our day-to-day tasks. We do this by implementing dedicated action plans for each airline, where we set objectives and audit the results.

We expect our suppliers and employees as well as all others who are committed to building a responsible air transport industry, to endorse the above commitments.

APPENDIX 2

LIST OF COMPANIES IN THE AIR FRANCE KLM GROUP, MEMBERS OF THE SOCIAL RIGHTS AND ETHICS CHARTER ON JULY 10TH, 2013

- AIR FRANCE KLM
  - Air France
    - C.R.M.A.
    - (via Air France Finance)
    - Air France Consulting
      - Quali Audit
    - Cityjet
      - VLM Airlines
        - VLM Netherlands BV
    - France Aviation
    - Bluelink S.A.
      - Bluelink International S.A.
        - Bluelink International CZ
    - (via Sodecom)
      - Crimée Voyages
    - Sodesi
    - HOP!
      - HOP!-Brit Air
        - Icare
        - Lyon Maintenance
      - HOP!-Regional
      - HOP!-Airlinair
    - Sodexi
    - Transavia France
    - Servair S.A.
      - A.C.N.A.
      - Prestair

- Special Meals Catering
- P.A.C. (Paris Air Catering)
- (via S.I.A.)
  - Catering PTP
  - Servair Solution Italia
  - SRFF (Servair Retail Fort-de-France)
  - SIA Afrique
  - SIA International
  - SIA Commerces et Services
- Lyon Air Traiteur
- Servair Formation
- Passerelle CDG
- Servantage
- Skylogistic
- Martinique Catering
- O.A.T. (Orly Air Traiteur)
- S.O.G.R.I. (Guyane)
- S.O.R.I. (Guadeloupe)
- SVRLS@LA REUNION

- KLM
  - Blue Crown BV
  - Cygnific BV
  - European Pneumatic Component Overhaul and Repair (EPCOR)
  - International Airline Services Ltd
  - KLM Health Services BV
  - KLM Catering Services Schiphol BV
  - KLM Cityhopper BV
  - KLM Cityhopper UK Ltd
  - KLM UK Ltd
  - KLM Equipment Services BV
    - ETS
  - KLM Luchtvaartschool BV
  - Martinair
  - Cobalt Ground Services Ltd

APPENDIX 3

SUSTAINABLE DEVELOPMENT CHARTER

Both Chairmen of AIR FRANCE and KLM have made a commitment to support and promote the principles of the "UN Global Compact" which fall within the sphere of influence of the AIR FRANCE KLM Group, and to incorporate them in the Group's strategy and day-to-day operations with its partners.

This document formalizing AIR FRANCE and KLM's commitment to ethics and sustainable development has prompted the Procurement Organization to remind their providers of goods and services (hereafter referred to as "Suppliers" or individually as the "Supplier") of the principles that each undertakes to defend and respect when entering into a contract with AIR FRANCE and KLM.

By entering into a contract with AIR FRANCE and/or KLM, the Supplier commits to respect specifically the principles of the following areas:

Ethics:

> TO RESPECT THE PRINCIPLES DEFENDED BY THE INTERNATIONAL LABOUR ORGANIZATION

The Supplier undertakes to respect the principles defended in the Conventions of the International Labour Organization and, in particular, the abolition of child labour and the elimination of all forms of compulsory or forced labour.

> NOT TO HAVE RECOURSE TO ILLEGAL EMPLOYMENT AND TO RESPECT CURRENT LABOUR REGULATIONS

The Supplier undertakes not to employ

unregistered workers. In particular, it undertakes to honour all obligations with respect to reporting to the administrative, labour and tax authorities as required in the country concerned.

> TO WORK AGAINST CORRUPTION
The Supplier declares it forbids the offer or payment of bribes to its customers or to the business associates of its customers. It also declares that it forbids its employees to request or accept bribes, whether for their own benefit or that of their families, friends, associates or acquaintances.

Labour Standards:

> TO RESPECT LABOUR REGULATIONS AS WELL AS ALL REGULATIONS SPECIFIC TO ITS ACTIVITIES

The Supplier undertakes in particular:

- Not to practice any form of discrimination with respect to hiring or personnel management, and to promote equality in professional treatment,
- Not to use any form of mental or physical coercion, or corporal punishment for disciplinary purposes,
- To respect current legislation with regard to working schedules, remuneration, training, collective bargaining, health and safety.

> TO PUT IN PLACE MEASURES FOR RISK PREVENTION TO ENSURE SAFETY IN THE WORK PLACE, A PRIME CONCERN IN THE CONDUCT OF ITS ACTIVITIES

> TO IMPLEMENT QUALITY MEASURES AND PROMOTE PROFESIONNAL TRAINING FOR ITS PERSONNEL.

Environmental Protection:

> TO ADHERE TO THE PRINCIPLES OF ENVIRONMENTAL PROTECTION

The Supplier declares that it supports and respects the fundamental principles of environmental protection through the implementation of an environmental policy aimed at alignment with the best practices in the profession.

> TO RESPECT CURRENT ENVIRONMENTAL REGULATIONS

The Supplier undertakes to ensure scrupulous respect of local, national and international regulations in effect as well as general environmental protection principles in the framework of its activities on behalf of the AIR FRANCE and/or KLM.

> TO CONTROL THE IMPACT OF ITS ACTIVITIES ON THE ENVIRONMENT AND TO ADOPT A POLICY OF CONTINUOUS IMPROVEMENT

The Supplier undertakes to control the impact of its activities on the environment by adopting measures to identify the environmental consequences of these activities. It undertakes to set up a process of continuous improvement in its management and control of the environmental impact of its activities.

> TO PROMOTE THE PRINCIPLES OF THIS CHARTER AMONG ITS OWN PARTNERS AND SUPPLIERS

The Supplier undertakes to promote the principles set forth above in its dealings with its own suppliers, service providers and/or sub-contractors. It also assures AIR FRANCE and KLM that it will ensure that its suppliers, service providers and/or sub-contractors respect all the principles set out in this Charter.

> TO AGREE THAT AIR FRANCE AND/OR KLM MAY CARRY OUT AUDITS TO VERIFY APPLICATION OF THE PRINCIPLES OF THIS CHARTER.

APPENDIX 4

PROCEDURE FOR MONITORING THE APPLICATION OF THE CHARTER

1. Responsibility for the application of the Charter

1.1 The management team of each signatory company is responsible for the distribution and the proper application of the Charter.

1.2 The management team of each signatory company shall appoint a contact person at the appropriate level of the hierarchy.
The names of the contact persons shall be published in order to inform all employees and the Select Committee of the AIR FRANCE KLM European Works Council.

1.3 Contact persons
The role of the contact persons is defined as below:
- Facilitate communication on the Charter to management and employees, and ensure that the Charter is available for each employee,
- Advise management on how to apply the Charter,
- Collect and report on complaints filed, make proposals, present a report each year to the management of the concerned company,
- Represent the company (or Group) in order to present and promote the AIR FRANCE KLM Social Rights and Ethics Charter

1.4 Corporate coordinating Contact Persons (CCP)
- The contact person appointed by AIR FRANCE for France and the French subsidiaries
- The contact person appointed by KLM for the Netherlands and the Dutch subsidiaries.
- The joint AIR FRANCE KLM contact person for European countries other than France and the Netherlands

shall respectively play the role of coordinator within their respective geographic perimeter.
In case of claims regarding Procurement, Corporate coordinating Contact persons (CCPs) may refer to the Procurement contact Person to analyze the claim.

2. Claims filed by an employee concerning the application of the Charter

The provisions in this paragraph have a subsidiary character. They only apply when no other contractual or legal framework exists which ensures at least an equal level of protection, as guaranteed by this Charter and concerns the same purpose.

2.1 Any employee or group of employees in one of the companies stated in Appendix 2 may ask for remedial action to be taken should they consider that the Charter is not properly applied.

2.2 In this case, the contact person is informed, by a formal claim in writing, by one of the representatives (on site or in the regional management) in compliance with national legislation and in accordance with the principle of subsidiarity, chosen by the employee or the group of employees.

2.3 The implementation and claims process are detailed in the current application Memorandum of the Charter.

3. Monitoring the application of the Charter

Each year, this issue will be on the agenda of one of the AIR FRANCE KLM European Works Council meetings.

The Select Committee of the AIR FRANCE KLM European Works Council will prepare a report concerning the application of the Charter together with the three contact persons (CCP).

The final report will be presented in the plenary meeting of the AIR FRANCE KLM European Works Council.

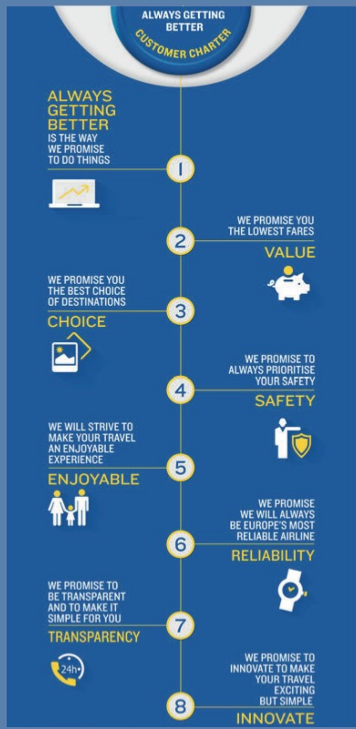
Ryanair Always Getting Better program

ALWAYS
GETTING
BETTER
"THE RYANAIR BIBLE"

In September 2013, Ryanair announced our Always Getting Better (AGB) customer experience programme. This strategy committed the entire business from our board to our management team and over 12,000 aviation professionals, to listen to our customers, fix the things they don't like, improve the inflight experience, transform our digital platform and introduce new services. All without compromising our low fares and the on-time flights which our customers demand.

With 'AGB', we have made customer service our primary focus. Customers wanted allocated seating and a free second carry-on bag, so we introduced them. We cut airport and bag fees, improved our website, launched a new mobile app, designed a new Business Plus feature and Family Extra product, returned to GDS distribution and relationships with Corporate Travel Agents and we also opened a Groups travel department.

The rules we live by - our Customer Service Charter (diagram right)



Ryanair Holdings PLC

Anti-Bribery
&
Anti-Corruption Policy
2020

Contents

1. INTRODUCTION

The Ryanair Group (consisting of Ryanair Holdings plc and its group companies) ("the Group") is committed to doing business with customers, suppliers, and other parties in a way that is fair, honest, transparent and benefits everyone involved. We will uphold all laws relevant to countering bribery and corruption in all the jurisdictions in which we operate, including but not limited to the Irish Criminal Justice (Corruption Offences) Act 2018, the U.S Foreign Corrupt Practices Act 1977, the UK Bribery Act 2010, the Italian Criminal Code (with particular reference to articles 316 et seq.), the Italian Legislative Decree no. 231 of 8 June 2001 and the Italian Law no. 190 of 6 November 2012 (collectively, the Anti-Corruption Laws).

The Board of Directors has overall responsibility for this Policy and Group Internal Audit team will monitor the implementation of this Policy through the internal audit process. The Group CFO has day-to-day responsibility for monitoring and updating this Policy.

Management at all levels are responsible for ensuring those reporting to them understand and comply with this policy and are given adequate and regular training on it. They should create a culture in which every employee and any third party to which the Group outsources work, knows that we will not tolerate bribery or any form of corrupt practice.

This Policy does not form part of any employee's contract of employment and we may amend it at any time.

2. SCOPE AND APPLICABILITY

This Policy applies and is addressed to all persons working for us or on our behalf in any capacity, including directors, whether full-time, part-time, fixed-term and/or agency employees, contractors, external consultants, third-party representatives and business partners.

3. BRIBERY AND CORRUPTION

Bribe means a financial or other inducement or reward for action which is illegal, unethical, a breach of trust or improper in any way. Bribes can take the form of money, gifts, loans, fees, hospitality, services, discounts, the award of a contract or any other advantage or benefit.

Bribery includes offering, promising, giving, accepting or seeking a Bribe.

Corruption is any abuse of a position of trust in order to gain an undue advantage. Bribery is a means of causing corruption.

All forms of Bribery are strictly prohibited. Specifically, you must not:

a) Give, promise to give or offer any payment, gift, hospitality or other benefit in the expectation that a business advantage will be received in return, or to reward any business advantage received;

b) accept any offer from a third party that you know or suspect is made with the expectation that we will provide a business advantage for them or anyone else;

c) give, promise to give or offer any payment (sometimes called a facilitation payment) to a government official, agent or representative in any country to facilitate or speed up a routine or necessary procedure;

d) threaten or retaliate against another person who has refused to offer or accept a Bribe or who has raised concerns about possible Bribery or Corruption.

4. GIFTS, BUSINESS ENTERTAINMENT AND HOSPITALITY

Gifts are benefits of any kind given to someone as a sign of appreciation or friendship, without any expectation of receiving anything in return.

Hospitality includes meals, invitations to events, functions or other social gatherings in connection with matters related to the business of the Group.

Entertainment generally includes attendance at plays, concerts and sports events.

You may not give or offer a Gift to, or accept a Gift from, anyone with whom the Group conducts business where the gift would exceed customary courtesies associated with accepted ethical airline and general commercial practice. Receiving or giving gifts of cash is strictly prohibited.

Hospitality and Entertainment are acceptable provided they fall within reasonable bounds. Hospitality or Entertainment which is offered for something in return – a 'quid pro quo' and Entertainment of an inappropriate nature are not acceptable.

You must declare and keep a written record of all Gifts, Hospitality or Entertainment given or received which exceed a nominal value (approx. €500). You must also submit all expenses claims relating to Gifts, Hospitality or Entertainment to third parties without delay.

5. FACILITATION PAYMENTS

Facilitation payments are small, unofficial payments typically paid to speed up an administrative process or secure a routine government action by an official.

We do not make, and will not accept, facilitation payments or "kickbacks" of any kind.

6. CHARITABLE DONATIONS AND LOBBYING

Donations are benefits given by the Group in the form of money and/or in-kind contributions.

Lobbying describes interactions with policy makers and other external stakeholders with the intent to represent the Group's perspective in the policy making process.

Any charitable donations by any employee which might in any way be perceived as Bribery or Corruption must be expressly approved in advance by a Z Manager. Detailed records must be kept of any sponsorship or charitable donations made.

Lobbying should not be carried out for any corrupt or illegal purposes, or to improperly influence any decision. Relevant functions (e.g., Ryanair's Head of Public Affairs) provide guidance on how lobbying should be conducted based on the values of transparency, honesty and integrity. Any lobbying activities must be reported to the respective manager.

7. THIRD PARTIES

A **Third Party** is any natural person or legal entity with whom the Group interacts and who poses, due to the nature of their business, a Bribery risk.

If we are outsourcing any activity to a Third Party, we must have controls in place to ensure that they do not engage in Bribery or other forms of corrupt practices on our behalf. The specific controls that we put in place need to match the risk in question. All written agreements with Third Parties must include, as a minimum, standard contract provisions relating to compliance with Anti-Corruption Laws and this Policy.

Third Parties may be paid by cheque or wire transfer only, and never in cash. All payments will be made pursuant to invoices, receipts or other documentation documenting services rendered in detail.

8. DOING BUSINESS WITH GOVERNMENT AND PUBLIC OFFICIALS

Employees must be especially vigilant in dealings with governments, public bodies and with all public officials. Activities that may be permissible when working with private sector partners may be improper or illegal when working with governments, public bodies or public officials. Any relationship with governments, public bodies or public officials must be in strict compliance with the rules and regulations to which they are subject and any benefit conveyed to a public official must be fully transparent, approved by Z Manager, properly documented, accounted for and within the limits set by the applicable laws.

Employees who have any questions regarding whether interactions with public officials are appropriate should immediately contact their supervisor. Public officials include (but are not limited to) elected public representatives, ministers of government and other public office holders, State employees, judges, jury members and any other person employed by or acting on behalf of the public administration of any State.

9. RECORD KEEPING

No payment of the type envisaged by this Policy on behalf of the Group may be approved without adequate supporting documentation or made with the understanding that all or part of such payment is or has been used for purposes other than those identified in supporting documents (see also the Ryanair Holdings plc Code of Business Conduct and Ethics, *Accounts and Records*).

All accounts, invoices, and other records relating to dealings with Third Parties, including suppliers and customers, should be prepared and maintained with strict accuracy and completeness.

10. DISCIPLINARY ACTION

Any person to whom this Policy applies who breaches this Policy will face disciplinary action, which could result in dismissal for gross misconduct. Breaches of the Anti-Corruption Laws could also subject the individual who committed the violation to civil or criminal penalties, including substantial fines and potentially lengthy imprisonment. Any person other than an employee who breaches this Policy may have their contract terminated with immediate effect.

11. BREACHES AND REPORTING

If you are offered a Bribe, or are asked to make one, or if you suspect that any Bribery, Corruption or breach or non-compliance with this Policy has occurred or may occur, you must notify your manager or a personnel manager without delay. In the event that you feel that you are unable to discuss this matter with your manager or a personnel manager, please refer to the Whistleblowing Policy and Procedures.

The policy and reporting procedures are set out in the Ryanair Holdings plc Code of Business Conduct and Ethics. We are committed to ensuring no one suffers any detrimental treatment as a result of refusing to take part in Bribery or Corruption, or because of reporting in good faith their suspicion that an actual or potential Bribery or other Corruption offence has taken place, or may take place in the future.

12. TRAINING AND COMMUNICATION

This Policy forms part of the induction process for all employees, and regular training will be provided as necessary.

All our suppliers, contractors and other Third Parties we outsource activities to must be informed of our zero-tolerance approach to Bribery and Corruption.

Date: **16 September 2020**

Abstract :

Being able to fly has long been the dream of men. In the era we live in, moving from one side of the world to the other has become a banality. The environmental and societal impact linked to the simplicity of these means of travel raises questions about the Corporate Social Responsibility of airlines. This paper aims at exploring whether CSR is integrated into the business model of legacy carrier and low-cost airline. This analysis is conducted through a business model comparison of two case studies: Air France-KLM and Ryanair. Throughout this paper, the CSR initiatives of both airlines are analyzed under distinct angles. The findings are then put into context in view of the current knowledge and discussions on the subject, and contribute to add to the existing scientific literature. This case analysis offers added value by comparing two very different companies in depth.

UNIVERSITÉ CATHOLIQUE DE LOUVAIN
Louvain School of Management

Place des Doyens, 1 bte L2.01.01, 1348 Louvain-la-Neuve
Boulevard Emile Devreux 6, 6000 Charleroi, Belgique
Chaussée de Binche 151, 7000 Mons, Belgique

www.uclouvain.be/lsm