

# **Employee Engagement in Changing Organizational Culture towards Environmental Sustainability**

## **A Case Study of Air Greenland**

Master's thesis

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30.05.2011.

Number of taps: 272.943

To our parents, who can't wait for us to graduate.

## Abstract

### Aim of the thesis

The aim of this case study paper is to investigate how the case company, Air Greenland could engage its employees in changing its organizational culture towards environmental sustainability. Furthermore, the study is considered to be relevant and contributes to filling the academic research gap based on the following four facts: 1. Air Greenland operates in the airline industry which faces high regulative and public pressure for more environmental responsibility, at the same time depends on polluting machinery in its business model. 2. The company is based in Greenland, a self governing territory with developing country traits and on such territories less research is focused. 3. The research aims to investigate not only management but also employee perspectives for a more holistic approach. 4. The company is at an initial phase of environmental commitment.

### Methodology and data collection

Case study and abductive approach were applied for research and analysis. The primary data collection process involved a mixture of quantitative and qualitative method. As for quantitative method, a survey was posted on the Air Greenland's Intranet. 'Out of 643 employees 112 responded giving an 17,4% response rate. As for qualitative method, explorative interviews with European airlines and semi structured interviews were conducted in form of face-to-face or phone talks with three Air Greenland employees and the advisor. As for secondary data, official company documents were revised and literature collected on sustainability, organizational culture, changing towards sustainability and employee engagement. Greenland and the airline industry were also investigated to gain an understanding of the national and industry context. Finally the case company itself is presented to set the scene for the data analysis.

### Main findings

First an overview was gained of the challenges and opportunities Air Greenland is facing in its environmental work deriving from the national and industry context and their implications on the change of organizational culture towards environmental sustainability. Secondly, the survey revealed overall positive attitude among respondents, including enthusiast and an employee potential to get engaged. In line with the subquestions, survey responses also revealed respondents' preferences. Accordingly, a list of recommendations were given on framing Air Greenland's environmental pursuit as a compelling argument which mobilizes supportive employees and potentially wins over resistors; on the forms of engaging employees requiring staff's active contribution; on engaging potential ambassadors to promote and participate in environmental work; channels and forms of communication to inform employees on the Air Greenland's environmental efforts; educating on environment (protection) bearing in mind the cultural diversity of the workforce; facilitating the idea exchange on energy efficiency and environment in an organized, long-term way; incentivizing environmentally responsible behavior (and thinking) and idea sharing and implementing existing employee ideas on energy efficiency and footprint reduction. All in all, it can be concluded that in line with the main and the subquestions, the thesis achieved its aim to analyze and make recommendations on how Air Greenland could engage its employees in changing its organizational culture towards environmental sustainability.

## Acknowledgements

We would like to express our thanks to our supervisors for their help and support:

Anne Mette Christiansen

Arno Kourula

to the interviewees for their time and help with the research:

Pia Christensen Bang, Air Greenland, with special thanks for her valuable help with the survey

Mette Steenholdt, Air Greenland

Christian Keldsen, Air Greenland

Anette Petersen, Invirke

Martin Lunow Hylsenberg Pedersen, PwC

Kati Ihamaki, Finnair

Martin Porsgaard, SAS

Gieri Hinnen, Swissair

and to Johanna Nurkka, Phd student at Aalto University for sharing her inspiring master's thesis.

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## List of Abbreviations

ASK	Available Seat Kilometer
ATAG	Air Transport Action Group
BPR	Business Process Reengineering
CEO	Chief Executive Officer
CO2	Carbon Dioxide
CSR	Corporate Social Responsibility
EU	European Union
EU ETS	European Union Emissions Trading System
GC	Global Compact
GLOBE	Global Leadership and Organizational Behavior Effectiveness Research Project
HR	Human Resources
IATA	International Air Transportation Association
ICAO	International Civil Aviation Organization
RBV	Resource Based View
SHRM	Strategic Human Resource Management
TQM	Total Quality Management
UNFCCC	United Nations Framework Convention on Climate Change
VCO	Voluntary Carbon Offsetting

# I. Introduction

## 1.1 Background

In recent years sustainability has become increasingly integral part of the business conduct in every industry. Those companies who aim to balance economic, social and environmental concerns in their operation have to engrain sustainability in the core of their values instead of treating it just as an add-on. As organizations are on the path of becoming sustainable, it is more and more apparent for business leaders that organizational culture change is essential for the shift towards sustainability (Bertels et al., 2010). Yet, despite the significant amount of academic and practitioner source on the topic, the question remains still open on how to engage employees in organizational culture change towards sustainability.

## 1.2 Research gap

Accordingly, this paper aims to investigate how a company could engage its employees in changing its organizational culture towards environmental sustainability. Furthermore, this case study is considered to be relevant and contributes to filling this academic research gap based on the following facts:

- Air Greenland operates in the airline industry which faces high regulative and public pressure for more environmental responsibility, at the same time depends on polluting machinery in its business model
- The company is based in Greenland, a self governing territory with developing country traits
- The research aims to investigate not only management but also employee perspectives
- The company is at an initial phase of environmental commitment

The air transportation industry is one of the main environmental polluters with an output of 2-4 % of all worldwide produced carbon emissions (Pels, 2008; Penner et al., 1999). Aviation companies are indeed under various stakeholder pressures to reduce their CO<sub>2</sub> footprint and become environmentally committed. Accordingly, airlines have to comply with environmental regulations and increasing stakeholder expectations despite their dependency on polluting machinery in their business model. This fact presents a paradox or extreme situation which Eisenhardt (1989) claims as necessary justification for a case study research, and at the same time presents an interesting topic to investigate: change of an airline's organizational culture towards environmental sustainability by involving employees.

A further fact which makes this case study relevant is that the company is based in a self governing territory with developing country traits. Out of hundred and forty-two thoroughly searched empirical studies, Western Nations were the focal point of interest rather than developing nations, as a result, the research gap on sustainability in such territories is apparent (Egri and Ralston, 2008). The case of Air Greenland is also in a unique setting considering the history of Greenland and its current self governing status. Greenland was colonized by Denmark for almost 300 years before the country earned its autonomy, however, still receives subsidy from the Danish state (Denmark Official Homepage, 2009). Even though most Greenlanders adopted westernized modern lifestyle, the country needs to elaborate and more strictly enforce national legislation, develop infrastructure and industries other than fishery in order to become economically independent in the future.

Most of the research papers on sustainability and environment investigated management perspectives with less focus on employee perspectives (Lockett, Moon & Visser, 2006). However, as Lynes and Andrachuk (2008) also pointed out, adding employee perspective to those of management gives a more holistic view of the organization, opens up further possibilities for strategy development and ensures a smoother implementation process. Furthermore, studying the involvement of employees in the process of organizational change towards sustainability is an underrepresented topic in academic papers (Lee, 2009).

Another fact adding to the relevancy of the case is that there is a lack of researched examples on companies in the initial phase of implementing sustainability in their culture and on failed implementation examples (Bertels et al., 2010). Implementation of sustainability in corporate culture is in fact a generally poorly researched topic, (Bansal, 2005; Sharma, 2002; Werre, 2003) and research investigating the process of how organizations transform their company culture further adds to current academic discussions. (Stubbs and Cocklin, 2008; Post and Altman, 1994)

### **1.3 Research questions and thesis structure**

In line with the main aim of the thesis and the specific case study context, the following main research question and subquestions have been identified:

**How could Air Greenland engage its employees in changing its organizational culture towards environmental sustainability?**

What are the supporting and challenging factors influencing Air Greenland's current and future environmental work deriving from the national and industry context?

What are further potential barriers and facilitators to 'green change' that would support or hinder Air Greenland in changing its organizational culture towards environmental sustainability?

Does the current employee attitude potentially embrace or resist Air Greenland's environment related aims?

What is the reason behind this support or resistance and which are the convincing arguments in employees' perception to support Air Greenland's environmental pursuit?

Do employees have interest and potential to be engaged in Air Greenland's future environmental work? If yes, in what form do they prefer to be involved?

Who are the interested and enthusiastic employees in Air Greenland to be potential ambassadors, change agents, champions to take up, support, defend the cause, promote environmental work and inspire others?

Which communication forms and channels are preferred by employees to receive information on Air Greenland's environmental work and commitments?

In what form do employees prefer to be educated on the environment and Air Greenland's related work?

How should Air Greenland facilitate the idea exchange on energy efficiency and environmental work?

How are supervisors in Air Greenland perceived by employees? Are they perceived as trusting, approachable supervisors who encourage ideas and share information thereby supporting an open culture?

What incentives would motivate Air Greenland employees to have environmentally responsible behavior and thinking in their work, and eventually motivated to share ideas and get involved?

Do Air Greenland employees already have practical ideas on energy reduction and cost saving in their work environment?

As a consequence of various stakeholder pressures the case company is striving for increased environmental consciousness and enhanced environmental commitment which is one of the triple bottom lines of sustainability. Throughout the paper the focus is kept on the environmental considerations for which the term (environmental) sustainability or climate change is used consistently throughout the literature review. Furthermore, the thesis does not focus on low carbon emitting airplane technology or on the option of using alternative fuels in aviation, neither does it focus on external stakeholder pressure. The aim is, however, to see how environmental sustainability can be embedded by engaging employees from an organizational culture change approach.

The chapter on research methodology describes the key approaches to research, the secondary and primary data collection process and limitations. The primary data collection process involved a mixture of quantitative and qualitative method. As for quantitative method, a survey was created based on literature review to investigate possible ways of employee engagement in the case company. As for qualitative method, semi structured interviews were conducted in form of face-to-face or phone talks on the themes of sustainability, environmental commitment and strategy, employee engagement, organizational culture, national culture, and with occasional focus on communication or HR perspective depending on the position of the interviewee. These interviews served to gain a deeper understanding of the survey results and the secondary data.

In line with the aim of investigation, the literature review starts with a brief introduction where sustainability culture is defined as a concept of combining organizational culture and sustainability. The next section on change towards sustainability focuses on the key aspects of assessing readiness for change, the factors of diversity, capacity, capability; barriers to 'greening process' and managing resistance to change as these issues are considered to be the most relevant for the case company is in the early phase of its environmental commitment. Engaging employees during a major organizational change such as embedding sustainability into culture is the main aim of investigation of this thesis. Accordingly, the role of leadership, championing, communication, further involvement practices, training, incentives will be outlined as elements of employee engagement related to sustainability implementation. Following employee engagement, Greenland and the airline industry are presented to gain an understanding of how the national and industry context influences the case company's environment related work. Finally the case company itself is presented to set the scene for the data analysis.

Subsequently, in the data analysis chapter, findings from the secondary and primary data collection are presented and analyzed in order to answer the research questions and be able to give valuable recommendations. Related to the changing organizational culture towards environmental sustainability, the supportive and challenging influences on Air Greenland's environmental work deriving from the national and industry context are presented and analyzed based on secondary data and qualitative findings. In the followings, potential ways of employee engagement are presented and analyzed based on quantitative survey results combined with qualitative interview findings. Finally, based on employee input from quantitative data, mainly management perspectives from qualitative findings and secondary data from literature and company documents, recommendations will be given on employee engagement similarly to an action plan. The paper ends with a conclusion on how the thesis achieved its aim of investigation and contributed to academic research.

## **II. Research Methodology**

### **2.1 Research Design**

Before outlining the method of data collection, the key research approaches are explained. In line with the nature of the thesis paper, argumentation for the case study research and in particular the reasoning for a one-company-case-study is presented. Furthermore, abduction is described as the approach applied to data collection and data analysis.

#### **2.1.1 Case Study**

Case studies help researchers to deepen the understanding of a specific company situation, as such research design explores a complex phenomenon from different perspectives (Ghauri, 2004; Selltiz et al., 1976). According to Eisenhardt (1989), by focusing on one case company, researchers investigate the perspectives of a specific group of people or individuals in the organization. Gummesson (2000) claims that in a case study, not only the process, but also relations between the different characteristics of a case are researched from a holistic point of view. In addition, Yin (1994) argues that evidence collected during the course of data collection should produce findings and arguments which can stand firm against counterarguments. Ideally a case study example has unique features which are backed up by various information sources (Hartley 2004; Ghauri, 2004). For these purposes, data from personal interviews, verbal reports, annual reports or market and competition reports are used, in order to provide different views (Ghauri, 2004). Regarding the integrative part of a case study, a mixed method approach fits the chosen research design. The limitations of the case study involve limited statistical reliability and validity as well as limited possibility of further testing the research objectives. An additional main limitation of the case study method is that findings cannot be generalized as the case example stays unique in the context of the organizational setting (Gummesson, 2000). Nevertheless, findings of this case study add to deeper understanding of a specific research topic.

#### **2.1.2 Abduction**

In general, research applies two main methods, deductive or inductive approaches. Deductive approaches develop propositions from existing theory which are then tested in the real world. On the other hand, inductive approaches are based on 'grounded theory' where theory is systematically generated from data (Dubois and Gadde, 2002). Nevertheless, this paper applies an abductive approach which is close to an inductive approach;

however, abduction emphasizes the continuous interaction between theory and empirical observations to a higher degree than the inductive 'grounded theory' approach (Dubois and Gadde, 2002). An abductive approach is also different from a mix of deductive and inductive approaches as it does not develop new theories but builds on refining existing ones. In studies where abductive approach is applied, original frameworks and theories are successively modified partly as a result of unanticipated empirical findings and also of theoretical insights gained during the research process (Dubois and Gadde, 2002).

During a case study analysis it has to be understood how a company acts in a changing environment. To meet this challenge, an abductive approach was used for data collection and analysis in order to cope with the changes during the research process and match academic theory with the case company's reality. As multiple information sources in a case study imply discoveries of new layers about the researched topic and could lead to several shifts in direction of data analysis and theory (see Appendix 1), the findings of the questionnaire, the semi-structured interviews, case company documents and applying further theories were used in parallel. All in all, pieces of data have to be assembled as 'pieces of puzzle' where in the beginning few pieces fit the pattern, during the process many new pieces tend to appear which have to be selected carefully, to finally have one chosen but clear pattern of puzzle pieces. (Dubois and Gadde, 2002)

## 2.2 Data Collection

Air Greenland was at an early phase of environmental commitment when the research was conducted; accordingly, research was focused on proactively investigating the possible ways of employee engagement related to changing organizational culture towards sustainability. In the followings the process of primary and secondary data collection will be described, as well as the limitations of the applied research methods.

For secondary data collection relevant books, journal articles have been searched for which contain following keywords: sustainability, organizational culture, strategic change, changing towards sustainability, organizational greening, embedding sustainability into corporate culture, employee engagement, Greenland, Greenlandic culture, Greenlandic nature, airline industry, environmental management. The aim was to draw on related literature and investigate how to engage employees into changing organizational culture towards environmental sustainability. In line with the abductive approach, further literature and academic theories were selected and adapted to the case analysis parallel to data collection as for example official company documents such as Air Greenland's annual reports from 2002 until 2010. (see table 1)

The primary data collection involved a mixture of qualitative and quantitative methods (see table 1) to explain the dependencies between employee engagement, organizational culture, change and (environmental) sustainability; and also to see whether results from quantitative results and qualitative findings explain, contradict, complete each other to have a deeper understanding of overall findings and be able to give more valuable recommendations.

Primary Data collection		Secondary Data collection	
<b>Explorative interviews with environmental managers</b>	SAS, Finnair, Swissair	<b>Air Greenland Documents</b>	Annual Reports 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010
<b>Background interviews with external consultants on CO<sub>2</sub> footprint measurement and general background information</b>	PWC, Invirke		Environmental catalogue
<b>Data collection in case company Air Greenland</b>	Employee survey on Air Greenland's Intranet	<b>Journals and Books Keywords</b>	Sustainability, Organizational culture, Strategic change, Changing towards sustainability, Organizational greening, Embedding sustainability into corporate culture, Employee engagement, Greenland, National culture, Greenlandic culture, Greenlandic nature, Airline industry, Environmental management
	Interviews with current CSR manager, future CSR manager, HR employee, advisor to Air Greenland		

**Table 1:** Primary and Secondary Data Collection Overview

### 2.2.1 Explorative Interviews

At the beginning of the collection process, explorative interviews were conducted in form of semi-structured telephone interviews with environmental managers from different European airlines. The aim of the interviews was to gain a broader view on current standards and industry practices regarding employee engagement and sustainability implementation. Seven environmental managers of diverse airlines were contacted by email,



whereby three of them showed further interest in an interview. The environmental managers of SAS, Finnair and Swissair agreed for a half an hour phone interview to share on the current practices of environmental commitments and employee engagement at their company. The airlines vary, for instance, in the phase of implementation of environmental management, size, ownership model and yearly turnaround in comparison to Air Greenland. However, these findings only served as background information for the research (see Appendix 2). For collecting further background information two additional interviews were conducted: a face-to-face interview with the external consultant responsible for Air Greenland's risk assessment prior the strategy building process and also for developing an employee communication plan for strategy implementation. In addition, a phone interview was carried out with a further external consultant who measured the CO<sub>2</sub> footprint and created the baseline for CO<sub>2</sub> emissions for Air Greenland in 2010.

### 2.2.2 Quantitative Primary Data Collection

As for quantitative method, a survey was created based on literature review including eight close-ended multiple choice and two open ended questions to gain a picture of readiness for environmental sustainability, assess employee attitude to increased environmental commitment, reveal potential resistance or interest, and explore future possible ways of employee engagement. The questionnaire was announced as part of the thesis work of two students of Copenhagen Business School and posted on Air Greenland's Intranet 'InSite'. The survey was open from the 31st of March until 12th of April 2011 for 13 days. During the period out of the sample of 643<sup>1</sup> employees, 112 responded to the questionnaire, giving a 17,4% total response rate. (see Appendix 3) Regarding processing the survey's raw data, the research method software SPSS was applied in order to sort and analyze the data depending on research subquestions. For this, a codebook was created and data accordingly entered into the research tool (see Appendix 4). There is no strong correlation between the item questions, due to a limited amount of question items and a wide spectrum of question topics ranging from communication channels, project participation, motivation and organizational culture. However, questions were based on a complex and diverse literature review as well as theory. This is the explanation for a low Cronbach Alpha Value or Mean Inter-Item correlation, which often characterizes a survey with less than 10 item questions (Pallant, 2010).

In general, surveys are a preferred method of data collection if the research aims to examine the prevalence of attitudes, beliefs and behavior of a chosen survey population. A survey has the ability to accentuate differences between groups of people in their attitudes, beliefs and behavior and examines the causal propositions within

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<sup>1</sup> Number of employees taken from the Air Greenland Annual Report 2010.

these (Weisberg, Krosnick, Bowen; 1996). Furthermore, surveys have, unlike any other methods, the capability to describe the characteristics of a larger population and in most cases high reliability can be obtained as all subjects are standardized, thereby respondent subjectivity can be eliminated to some extent. In addition, in case of close ended questions, researchers are enabled to compare responses in a better way.

Applying a survey as research method with open and close ended questions has specific limitations. Regarding close ended questions, asking respondents to choose from the same preset answers ensures that replies are relevant to the research purpose as they enforce uniform definitions on participants. However, as a limitation, by using standardized replies, researchers might be missing answer options that might be the most appropriate to respondents and such preset answers might disregard context as well. A further weakness of the close ended questions might evolve if they are not tested in advance. Due to previous access to a smaller sample of Air Greenland employees, pre-testing was not conducted which could partly explain the lower overall return rate (Wilson, 1996). In case of open-ended questions, interviewees can express freely how they actually think about a specific topic, however, responses still have to be grouped by the researchers after the data collection (Weisberg, Krosnick, and Bowen; 1996). Furthermore, honesty and accuracy of the responses to open-ended questions can be a problem. Findings depend on respondents' motivation, honesty, memory and ability to respond, which can negatively influence data quality.

A further practical limitation of the applied survey method is firstly, that the survey was answered by random employees and it can be questioned if 17, 4% percent of employees who replied are representative for the entire workforce. Secondly, even though the Intranet is available to all occupational groups in the company, not every department accesses it in the same way. It was anticipated that technical, maintenance workers and cabin crew are assumingly less likely to fill in Intranet surveys than employees in functional departments who have to use computer in their daily office work. Nevertheless, this was proven wrong in the survey sample (see Appendix 6). Thirdly, it can be further argued that responses are biased to a certain extent in a volunteering sampling as those employees are assumed to have responded who are generally interested in environmental issues. This fact also questions how representative the results are for the entire workforce and does not necessarily give a true picture of the potential resistance and negative attitude. It can be also questioned whether the 'strong support' is more representative for employees with Scandinavian background and less to Greenlandic workforce based on the differences of attitude to nature and environment protection outlined in literature and revealed in empirical findings. However, an explanation might also be that Air Greenland employees are in general more aware of these issues than local society as a whole. Either way, the survey

research can still achieve its aim to reveal a tendency for potential employee engagement and reveal whether there is an employee base with potential to be mobilized for enhanced environmental work.

In an attempt to ensure higher response rate and to encourage participation, an incentive of winning a small prize was offered. However, it can be questioned how the fact that the survey was placed on the company's official Intranet influenced the employees participation rate. In fact, a survey that is run on the company's Intranet might be not seen as objective or anonymous, because the organization is able to trace back answers to a single employee's account. Unfortunately researchers were not aware of this possibility of the company when the survey was opened and it was only discovered when access to the responses was sent. Although, it is an advantage that employees are familiar with the survey design from previously conducted Air Greenland questionnaires, moreover, the response rate errors influenced by survey design, appearance or layout are reduced thereby. (see Appendix 3) In addition, it can also be criticized that the number of survey questions limited to ten can provide a fair picture on employee readiness, attitude, potential interest and resistance, and on all the possible ways of employee engagement. Still it was decided on ten core questions to enable the chance of a higher response rate which was understood as a efficient way to avoid one of the main obstacles of surveys.

Further limitations concern language barriers. The survey was posted on the Intranet only in Danish due to time and resource constraints. In order to analyze the anticipated answers on the open survey questions, researchers' language skills in Danish as third and fourth language were one of the reasons for the language decision, thus Danish was the sole survey language presented. However, many employees are Greenlanders who partly prefer their native language even though Danish is also commonly spoken. Based on this limitation it can be also assumed that fewer Greenlanders filled in the survey and more respondents have Scandinavian backgrounds mainly filling officer and managerial positions. Furthermore, the questions were originally elaborated in English and later on translated into Danish by a Danish native speaker; however, translations can always run the risk that the original meaning is slightly altered. However, by applying a survey, the language barrier of the researchers and geographical distance to the researched company was overcome to some extent and still a variety of employee perspectives with different backgrounds could be collected.

### **2.2.3 Qualitative Primary Data Collection**

As for qualitative method, semi structured interviews were conducted in form of phone and face-to-face talks with three Air Greenland employees and the advisor on the themes of sustainability, environmental commitment and strategy, management commitment, employee engagement, organizational culture, national

culture, and depending on the position of the interviewee with focus on communication or HR perspective. These interviews served to gain a deeper understanding of the survey results, secondary data, current stage and aims of the company regarding environmental sustainability. As the company was in an early stage of their commitment, non-probability sampling and in particular a purposive sample approach with a focus on key decision makers was chosen. Furthermore, it has been widely argued in green literature that for change towards sustainability a close cooperation of environmental responsible, HR function and top management is necessary (Smith, 2008; Strandberg, 2009). Accordingly, the aim was to conduct interviews with the current and future CSR manager(s) and the advisor for CSR and (environmental issues), the CEO and the HR manager, however, the CEO and the manager referred to time constraints and were unfortunately not available for an interview. Although the survey revealed employee preferences among others on forms of involvement, communication, motivation which requires HR's highly important contribution to be implemented, as outlined in literature and further interview findings. In fact, the major aim of the planned interview with the HR representative was to reveal whether this crucial contribution can be granted from the function's side. Accordingly, the non-availability of the HR manager, as a key decision maker, means a particular limitation on fulfilling the aim of investigation and intent to provide valuable recommendations. Due to time constraints further managers and employees, taking part in the risk assessment or in the actual strategy building process, could not be interviewed either. What is more, survey respondents would have been asked to leave their contact information for voluntary phone interviews, however, due to technical problems this note was not posted with the survey. Thus, additional employee interviews could not be conducted within the given time frame of masters' thesis.

In depth, semi-structured (phone) interviews have been conducted with the following employees and consultant:

- Christian Keldsen, Compliance and CSR Manager, Air Greenland; telephone interviews 28 March, 2011 for 40 minutes and 01<sup>st</sup> April, 2011 with follow-up questions for 17 minutes. (for questions see Appendix 7)
- Anne Mette Christiansen, Advisor, Air Greenland; face-to-face interview 01<sup>st</sup> April, 2011, Copenhagen, lasting for 92 minutes. (for questions see Appendix 8)
- Pia Christensen Bang, former Communication Officer and since 01. April 2011 Manager for, CSR & Communication, Air Greenland; face-to-face interview 6<sup>th</sup> April, 2011, Frederiksberg, lasting for 74 minutes. (for questions see Appendix 9)

- Mette Steenholdt, HR employee, Air Greenland; telephone interview 03. May, 2011, lasting for 31 minutes. (for questions see Appendix 10)

All 5 interviews were recorded and transcribed by the researchers which produced a solid amount of interview primary data with 61 pages; interviews ranged between 17 min and 90 min of recorded material.

In order to bridge the distance to the research objects in a cost effectively manner, qualitative data collection was mainly conducted through phone interviews. However, interviews conducted via the Internet phone provider Skype had disadvantages due to technically insufficient quality connections as well as technical interruptions during calls to Greenland. Hence, these conditions fostered misunderstandings and time delays of voice transmission during interviews and in the voice recordings. Additional practical limitations concerning phone interviews were eg. that on-site observations could not be made by interviewers, which could have provided further data about the environment of the interview objects and case company. As a further limitation, sudden changes in interviewees' schedules led to shorter interview times on the phone and additionally complicated primary data collection, as the interview guide had to be adjusted on the spot, which also had negative influence on data quality. An additional limitation in the semi-structured interviews can be the unconsciously transmitted, biased attitude regarding the researched topic from the interviewers' side. During the face-to-face and phone interviews this could have also influenced the findings of the primary data.

Furthermore, in every case, both interviewers and the interviewee had three different native languages and cultural backgrounds, accordingly English had to be used as common language to overcome language barriers. This fact, however, could have lead to imbalances between the interviewer and interviewee's relationship based on their partly different English levels. These different language levels could contribute to a defense position and shorter replies from the interviewee. Nevertheless, advantages of interviews in a second language are simple language use and a tendency towards a sharper and more straightforward communication.

Not only language, but as well cultural differences were perceivable throughout interviews, especially with reference to the interviewed native Greenlandic HR employee. During this particular phone interview, several miscommunications occurred on both sides which were indicated by recurring requests for repeating the questions or further explanations from the interviewee. Furthermore, the interview object was forwarding the interviewers two times directly to her supervisor with the argument that she is not able to answer these particular questions. Although, as more details were given to the interviewee, she could answer some more general questions with more ease which is most likely attributed to her high context oriented Greenlandic cultural background. This showed that next to the explorative interviews with environmental managers, explorative interviews with a focus on the cultural aspects of Greenlanders would have been a valuable input

and part of researcher's preparation for possible specific behavior, displayed attitudes or habits in an interview situation or primary data on Greenlander's understanding of sustainability and attitude to nature. There was namely only one Greenlandic/Danish person among the interviewees and further information on Greenlanders was received from Danes which can be biased.

In addition, access to key decision makers was rather challenging, but as a matter of fact necessary in order to gain insight to knowledge that was not yet communicated among employees apart from the case company's management. Not only gaining access to primary data was a complicated task, but also access to further secondary data like a recently conducted risk assessment by the external consultant that included a range of employee interviews on site. This hindered access to valuable information leading to more customized recommendations; however is mainly attributed to an early phase of the company's internal effort to become more environmentally committed.

#### 2.2.4 Reliability, validity

The research data can be considered valid as it is, on one hand, using critical case study analysis, and on the other hand, applies a holistic approach using different data collection methods ranging explorative interviews, quantitative and qualitative primary data to secondary data. The data can also be considered valid as both interviewers were present at the interviews and checked on bias. Additionally, it was ensured that the focus is kept on the aim of the research throughout the whole research process. Internal data can be considered reliable as it can be assumed that if the research was repeated, there would not be significant differences between the findings. Interviewees can also be considered reliable sources of information due to their work experience in the field and position in the company as direct responsible. In line with research methodology literature, coding and transcription was carried out as suggested and always done in the same manner by the researchers, implying that task delegation was identical throughout the data collection. Further, the researchers were critical towards their findings and conclusions, transparent in their research methods, research process and also pointed out limitations and possible further improvements as future research opportunities originating from their research. (further discussion on reliability and validity see Appendix 11)

### III. Literature Review

As outlined in the introduction, in recent years sustainability has become increasingly integral part of the business conduct in every industry, furthermore, it has been widely argued that companies striving for sustainability have to integrate the concept in the core of their values. For organizations already on the path of becoming increasingly sustainable, it is more and more apparent that organizational culture change is essential to achieve sustainability which inevitably requires engaging employees and all members of the organization (Bertels et al., 2010). As a result, in line with the research question on how should the case company engage its employees in changing organizational culture towards sustainability, and to set the context for case study, the literature review covers the following key areas:

1. Sustainability culture
2. Change towards sustainability
3. Employee engagement
4. Greenland
5. Airline industry
6. Air Greenland case presentation

#### 3.1 Introduction: Sustainability Culture

Before presenting the literature on integrating sustainability in organizational culture, the term ‘sustainability culture’ has to be understood. For this, both sustainability and corporate culture need to be defined.

##### 3.1.1 Sustainability

The most frequently cited definition of ‘sustainability’ comes from the World Commission report ‘Our common future’ (1987) which describes sustainability as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ (Brundtland, 1987). In the business life sustainability means managing according to a concept which Elkington (1998) described as the ‘triple bottom line’: integrating and balancing environmental and social considerations with economic issues in decision making processes. Both scholars and practitioners have argued extensively for the business case of sustainability commitment, additionally, a recent report on embedding sustainability in organizational culture claims that “sustainable businesses are resilient and create economic value, healthy ecosystems and strong

communities.” (Bertels et al., 2010, p.9.) Sustainable businesses have the ability to survive and thrive on the long run as they have strong and balanced connections to economic, environmental and social systems. No wonder that those companies which have recognized the value of sustainability commitment strive for it, however, as Bertels et al. (2010) and both academic and practitioner literature points out, few -if any- have already achieved sustainability. An essential condition to achieving this state is embedding sustainability into corporate culture.

### 3.1.2 Organizational culture

Like sustainability, corporate culture has also various definitions. One of the most widely discussed models is Edgar Schein’s which describes organizational culture on three levels. (see Figure 1.) “Organizational culture is a pattern of basic assumptions which a group has invented, discovered or developed in learning to cope with its problems of external adaptation and integration, which have worked well enough to be considered valid, and therefore to be taught to new members as the correct way to perceive, think and feel in relation to problems...” (Schein, 1985, p.14).

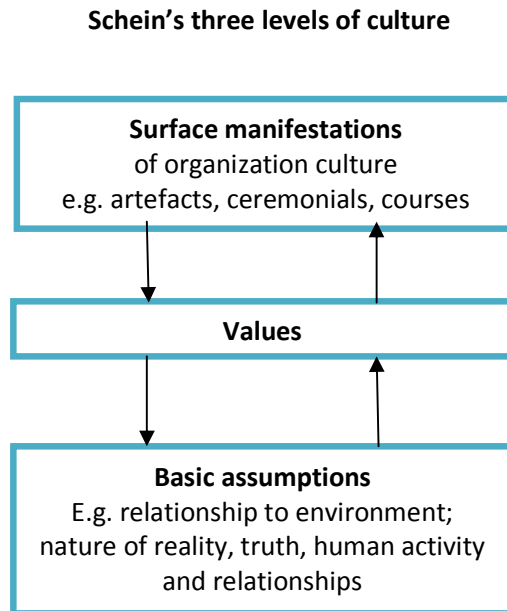
Huczynski and Buchanan (2007) argue that Schein views culture as a sharing of meanings and basic assumptions among employees which senior executives can manage if they understand the culture and how it operates. Schein’s first level of ‘surface manifestation of culture’ refers to visible objects. That is the most apparent and accessible aspect perceived by the people which includes both physical things and visible, audible behavior patterns. At this level, culture is manifested in objects, architecture, rituals and language, all sending a message to the organization’s visitors, customers and employees.

The second level of Schein’s model concerns organizational values. Values have personal or organizational worth or meaning to the founders or senior management. They are typically based on moral, societal or religious principles learned in childhood and modified through experience. Huczynski and Buchanan (2007) further on describe that values might be often unspoken but mould organizational members’ behaviors; can be consciously or unconsciously held thereby reflecting generally held beliefs. Values underpin the surface manifestations and even though they are not visible, individuals can be made aware of them. According to Huczynski and Buchanan (2007) several commentators would argue that values distinguish organizations as they affect those basic assumptions which Schein describes as true organizational culture.

Finally, the third level of Schein’s model which is in his view the organizational culture itself, includes assumptions that individuals hold about the organization and how it functions. These are related to human



behavior, nature of reality and the organization's relationship to the environment. Huczynski and Buchanan (2007) further claim that they are difficult to assess as they are invisible, preconscious and taken for granted.



**Figure 1:** Source - Schein, 1985<sup>2</sup>

### 3.1.3 Sustainability culture

Indeed, the academia often refers to organizational culture as a set of shared assumptions, values, norms, expected behavior patterns and symbols. Organizational culture sets and reinforces expectations for its members about what is valued and 'how things should be done' thereby guiding their actions and proceedings in the decision making process. Accordingly, culture is frequently referred to be 'the way we do things around here'. The organization develops its culture over the years and provides an identity to its members about 'who we are' and 'what we do'; furthermore, it gets reinforced and reshaped daily by the members (Bertels et al., 2010). The report integrates the concepts and defines the culture of sustainability as "one in which organizational members hold shared assumptions and beliefs about the importance of balancing economic efficiency, social equity and environmental accountability" (Bertels et al, 2010, p.10.). According to another definition, 'green organizational culture' is "the extent to which the assumptions, values, symbols and artefacts of the organization reflect a desire or need to operate in an environmentally sustainable manner (Harris and Crane, 2002, pp. 218-219).

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<sup>2</sup> Schein cited in Huczynski and Buchanan, 2007. p. 625.

## 3.2 Change towards sustainability

To connect sustainability culture to change, Bertels et al., (2010) highlight that despite the large strategic change literature and the experience in implementing specific culture change, the shift towards sustainability culture poses some new challenges. The authors explain this by the key difference that most change programs are confined by the boundaries the organization, whereas, sustainability extends beyond its boundaries as it is a societal issue. The change drivers for sustainability are often external and the direct benefits may not be apparent right away. Furthermore, change can be initiated internally by members who feel a need for 'doing the right thing', while, key change triggers may also reside in supply chain or with stakeholders beyond the organization's control. Consequently, organizations aiming to shift towards sustainability must engage in stakeholder dialogues and inter organizational collaboration. At last, but most importantly, transforming to a sustaining organization requires profound change and breaking down the organization's current paradigm (Bertels et al., 2010).

Indeed, embedding environmental sustainability in the organizational culture is a long-lasting change process. As the case company is in the early phase of changing for enhanced environmental commitment, assessing readiness, being aware and overcoming the potential barriers to green change are valuable considerations. As some aspects have not yet been widely researched on green change, specific factors and managing resistance to change are presented from strategic change management literature as follows.

1. Assessing readiness for change
2. Specific factors: diversity, capacity, capability
3. Barriers to greening process
4. Managing resistance to change

### 3.2.1 Assessing readiness for change

Especially in case of organizations that are in the initial phase of taking up more environmental commitment, assessing the organizational members' readiness for change is a justifiable and important step to take. Accordingly, in the followings relevant literature on leading organizational change towards corporate sustainability is presented.

For instance, Doppelt (2008) argues that one of the first steps the role of a change agent entails is to assess the readiness for change of the individual or group for shifting to sustainable thinking. To determine the current stage of change and the level of confidence for embracing it, electronic surveys or in a more informal setting asking simple questions are appropriate tools. Doppelt (2008), however, points out the importance of being specific when describing the particular way of thinking and behavior that needs to be changed. He gives the examples ranging from considering CO<sub>2</sub> footprint measurement or prioritizing sustainability in decision making to smaller actions such as turning off computer in the office or in the individual's private home. Doppelt (2008) also highlights that the more specific and easy to understand the criteria and the definition are for cognitive and behavioral changes, the easier it is to assess change readiness. The author suggests using true/false, multiple choice and likert scale questions for the sake of simplicity.

However, at the initial phase of the change process the desired cognitive and behavioral changes might not be known, accordingly, simple interest should be assessed such as energy efficiency. Doppelt (2008) also calls the attention to the possible difference in the stage of readiness between groups or among group members. The author gives the example of a group already using recycling but still being disinterested in climate change issues.

Doppelt (2003) argues that no matter if it is top down or bottom up initiated, it is always beneficial to understand the starting point. The author states that if the organization has already the willingness to embrace the concept of sustainability, destabilizing the status quo might not be necessary. Continuous training, education and leadership support, commitment might suffice. On the other hand, as Doppelt (2003) argues, if the values and norms of the organization are neutral or opposing to environmental and social commitment, then a major effort might be needed to undermine the current 'business-as-usual'. The author presents a list of questions (see Table 2) that can be asked from employees and stakeholders to assess the readiness for change in the organization. If the respondents reveal that sustainability should be a top priority of the organization or they would expect greater commitment to it, then winning members for the case might be easier. On the contrary, if members do not voice complaints over or even praise the current practices and do not expect greater sustainability commitment, then an extensive, continual effort will likely be required to break down the current organizational paradigm which supports the status quo (Doppelt, 2003).

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**Do you believe that environmental and social welfare issues should have equal priority with profitability and shareholder value?**

**If you said yes to the question above, to what extent do you believe the organization is doing all it can to protect the environment and social welfare?**

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If you said no to the first question, do you see any risk to the organization from making these issues a priority?

To what extent are social and environmental welfare issues a priority in your private or family lives?

Questions for HR staff include:

What issues elicit the most frequent complaints from employees? What are these complaints about?

When people praise the organization, or their unit, what specific aspects do they rave about?

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**Table 2:** Source - Doppelt, 2003<sup>3</sup>

### 3.2.2 Diversity, Capacity, Capability

There are also several factors influencing the process of changing organizational culture to sustainability, from which diversity, capacity and capability are considered to be relevant for the case company. This section also draws on the strategic management literature as these factors have not yet been widely researched in academic sources on green change. However, for a case company employing a culturally diverse workforce and being in the initial stage these factors are essential for successful change process.

#### 3.2.2.1 Diversity

Balogun and Hailey (1999) define diversity as a degree of diversity existing among staff. Change may affect groups with different subcultures or national cultures, employees might also differ in the way they identify with the organization through their team, job, department, division. Professional groups might also identify more with their profession than with their employing organization.

For assessing diversity Balogun and Hailey (1999) suggest that three aspects of diversity have to be considered when selecting the appropriate change approach:

- Uniformity vs. diversity: different national cultures, subcultures, occupational groups in division and department
- The impact of these sources of diversity on staff loyalty and commitment to the organization as a whole

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<sup>3</sup> Doppelt, 2003: *Leading change toward sustainability*, p. 105-106.

- The extent to which the change agent aims at reducing or increasing levels of diversity as one of the outcomes of change.

Balogun and Hailey (1999) argue that diversity has implications on the design choices. The authors claim that if high degree of diversity is due to different national cultures a change process targeting value or output might be the most appropriate- unless time is restricted. (see Appendix 12) Value statements also have a universal message. Prescribing behaviors across diverse national groups within the same organization would clash with behavioral norms within groups of same nationality. Balogun and Hailey (1999) further imply that a high level of diversity also has implications for change roles. In a large corporation the local staff might identify more with the head of their business division or department rather than with the CEO, therefore, assigning responsibility for business division leaders to implement change is wiser. Change start point is also influenced by high levels of diversity. If diversity exists across divisions or department then implementing change at the whole organization might be less appropriate. Balogun and Hailey (1999) further highlight that diverse professional and occupational identities have to be taken into account during the change process, especially if some are powerful. The authors argue that a professional representative should be involved in the change team to increase acceptability of the change among peers. Otherwise education and collaboration are the solutions to recognize the freedom and authority professionals have in their job. However, Balogun and Hailey (1999) point out that behavioral prescription is not likely to be received well by professionals with discretion in their work. For homogeneous group of employees who also strongly identify with the organization behavior prescriptions and top-down changes are likely to work well (Balogun and Hailey, 1999).

### 3.2.2.2 Capacity

According to Balogun and Hailey (1999), capacity refers to how much resource can the organization invest in the planned change process in terms of

- money,
- people,
- and time.

The authors argue that it is necessary to consider which key resources are limited in any change scenario, which can be assessed as part of a resource audit.

Regarding financial resources Balogun and Hailey (1999) point out that change interventions, for instance, involving management development, introducing new technology or relocation, redesign of office require considerable investments. Concerning time, Balogun and Hailey (1999) further argue that important questions have to be addressed about how much time senior management can devote to leading change. Middle managers can also feel highly pressed if they have to implement change initiatives while continuing to deliver on their normal performance targets. If the change agent wants general managers to focus on change initiatives then time has to be allocated for it. Some organizations chose to remove managers' responsibility for routine tasks temporarily for them to be able to focus on change implementation. In terms of human resources, the questions have to be raised whether there is sufficient number of people or managers competent in change implementation and committed to the goals of the change (Balogun and Hailey, 1999).

Balogun and Hailey (1999) point out that limited resources allocated to the change project in terms of financials, time and communication is likely to result in unsuccessful change implementation. Failure to invest sufficiently in change management might lead to wasting even more money. Capacity inevitably has influence on the design choices as well. Balogun and Hailey (1999) argue that incremental change is less costly but only if the capability of the line managers and the management systems supporting the change process are in place. Change targeting value change requires heavy investment in communication, education, training, personal development to achieve the target. Investment is needed both in terms of money and managerial time. Targeting output or behavior requires much lower time and financial investment, however, might not deliver the desired results. Balogun and Hailey (1999) further claim that collaborative, educative or participative change styles require high levels of capacity. Less time and money is needed for directive styles, however, there is a risk that in that case resistance will not be appropriately managed. Choosing the right people for key roles is also a question of capacity. The CEO might be the most charismatic leader in the organization; however, if he or she cannot devote enough time to leading the change process then alternative candidates have to be considered. In case the financial resources are not constrained and only time pressure is at hand then external consultants can be brought in to lead through change or an internal change action team can be set up (Balogun and Hailey, 1999).

### 3.2.2.3 Capability

According to Balogun and Hailey (1999), capability refers to how good is the organization at managing change. Assessing capability requires locating change expertise within the organization, how much change the staff experienced in the past, degree of expertise for handling change at individual, managerial and departmental

level. The question has to be addressed whether the organization possess the necessary skills and abilities to manage change before designing and implementing it.

Balogun and Hailey (1999) argue that capabilities need to exist in three levels:

- Individual
- Managerial
- Organizational

The authors explain that individual capability is about the ability of individuals in the organization to manage change within themselves. Everyone who has gone through it knows that change can be an overwhelming experience. However, the more reflective the individual, the more experience with change, the more effective at handling it assumingly. It can save the organization considerable amount of time and money on personal development trainings if this capability is embedded within people. Staff might also show less resistance and needs less persuasion from management and peers.

Balogun and Hailey (1999) further explain that the second level of capability is at managerial level. It has to be assessed whether line and general managers are able to counsel and help staff through the change process; whether the management team has the appropriate communication skills to convey clear messages about the change and their commitment to it; and if the organization knows which managers have high competence in steering change. Balogun and Hailey (1999) reveal that successful change implementations had the following characteristics:

- Middle managers followed through consistently on change initiatives
- There was a focus on clustered and coherent change interventions
- Managers were assessed and held accountable for managing change and also rewarded for their efforts

Finally, Balogun and Hailey (1999) claim that the third level of capability is vested in the organizational level. The authors argue that change units can be established everywhere and change experts can be located within strategic planning, HR, CEO office, OD, internal communications.

Balogun and Hailey (1999) outline the implications of capability on design choices in the following way. The authors argue that transformational change is fairly hard to attain if the organization lacks the capabilities. Incremental process during which managerial capability is developed and various management systems are

established to aid the process is more appropriate. Value led change is also highly difficult to implement if the organization lacks the skills to purposefully and successfully change the values and attitude of staff. For example collaboration change style also requires particular skills such as facilitation. Accordingly, consultant might need to be involved to guide the organization through the process. Change levers are also affected by capability. For example HRM function has to possess both operational excellence and strategic understanding of the change process to fulfill its key role in the implementation (Balogun and Hailey, 1999).

### 3.2.3 Barriers to green change

According to the green management literature, in order to attain sustainability, organizations need to embrace new environmentally responsible values, beliefs and behaviors. Accordingly, sustainability is widely viewed in the academic world as green culture change of the organizations. However, there are inevitably certain factors that do not facilitate, rather act as barriers to greening, being aware of these to be able to overcome them is highly important.

In their study Harris and Crane (2002) interviewed forty-four managers to identify factors influencing the greening of organizational culture. In the followings, those aspects of the factors will be presented that act as barriers to green change.

- Performance beliefs
- Industry macrocultures
- Organizational barriers
- Cultural fragmentation
- Symbolic events
- Alternative business philosophies
- Resistance to change

Managers who believed that attempting sustainability growth would negatively influence the traditional performance indicators such as sales, profits, market share revealed that there were few manifestations of greening organizational culture. Furthermore, where performance was measured on short-term profit and growth, more objections and concerns were raised by the respondents (Harris and Crane, 2002).

The study also suggested that while tertiary industries, regional governments and consumer product firms can report a greater degree of organizational greening, industrial and professional services firms could



demonstrate it to a much lower extent. However, lack of stakeholder pressure or legal requirements might also be reasons for this, the authors still concluded that some macrocultures present more 'green values' than others (Harris and Crane, 2002).

According to the authors, internal organizational barriers can include behaviors, systems and structures for which centralized decision making, diversity, internal politics and focus on information systems were raised as examples. Post and Altman (1994) also identified several organizational barriers to green change such as staff and top management attitude characterized by disengagement and disinterest in environmental issues; discrepancy between management's espoused commitment actions throughout the organization due to lack of quality communication and entrenched, old operating procedures and assumptions about running the business. (see Appendix 13)

Cultural fragmentation presenting various subcultures was also identified as a possible impediment for green change. The study concluded that the greater the number, size and power of subcultures, the lower is the organizational spread of green consciousness. For instance, geographical isolation of the business unit, or the power of professional subculture can hinder the spread of green ideas, furthermore, functional subcultures can also give organizational members the perception that green issues are the 'province' only of certain departments or divisions (Harris and Crane, 2002).

Managers also revealed that certain symbols and symbolic events and actions can also have a powerful and pervasive negative effect on cultural green change; whereas, an example for the alternative or even conflicting business philosophies would be if generating sales or profits as the dominant philosophy would exclude other considerations like environmental performance. Production and market oriented firms can also view the importance of green issues dependent on the market needs (Harris and Crane, 2002).

Individuals' resistance to green change was also revealed irrespective of the industry or ranking of the managers' position. Several managers considered greening only as fashionable management fad just like SHRM, TQM or BPR.

According to Balogun and Hailey (1999) most barriers to change arise from old organizational culture and powerful stakeholders of which existing organizational culture provides some of the strongest barriers to change implementation. This argument is reiterated by both Harris and Crane (2002) and Fineman (1997) who also claim that existing cultural habits are often a source of obstacles of green change. In line with these assumptions Lyon (2004) argues that ensuring a successful change towards a sustainable culture implies a change from a target driven organizational philosophy towards a value driven approach.

### 3.2.4 Managing resistance to change

Doppelt (2003) emphasizes the need for effectively managing resistance when changing culture towards sustainability. Change agents indeed have to be on clear terms with potential sources of resistance (see Appendix 14) and possible ways to deal with it. Accordingly, relevant parts of the change management literature are presented.

Kotter and Schlesinger (2008) identified the following six techniques for managing change resistance:

- Education and commitment
- Participation and involvement
- Facilitation and support
- Negotiation and agreement
- Manipulation and co-optation
- Implicit and explicit coercion

Managers should share their knowledge and the change objectives with those affected in form of major training program, face-to-face counseling, staff meetings and through memos and reports. Organizational members need to be also informed about the problems giving reason for change. When facts are communicated and opposing views reconciled then resistance originating from misunderstanding and lack of accurate information can be avoided. This approach is especially suitable when management trusts its employees and in return they will appear credible in the eye of the workforce.

Another option to have on board those who might resist change is to involve them in planning and implementing it in forms of task forces, working parties, focus groups or consultative process. Collaboration can help to reduce opposition and generate commitment. Involvement not only helps to reduce fear of the individuals but also gives opportunity to use their knowledge and skills. This approach works the best when participants have the willingness and ability to contribute effectively.

Employees might be in need of peer support groups, counseling and therapy to overcome their stress and fears associated with change. Developing individual awareness of the need for change and self-awareness of feelings towards it and how it can be altered may be necessary.

It can be also necessary to reach a mutually agreeable compromise meaning that the particular change has to be adjusted to meet the requirements of powerful resisters. Management may rather need to negotiate instead of impose change in case certain individuals or groups in the organization resist effectively.

Manipulation and co-optation involves covert actions to avoid potential resistance. In this case management might deliberately give proposals which appeal to key stakeholder groups and provides selective information emphasizing the benefits of change to play down its disadvantages. Co-optation refers to giving key resisters direct decision-making power and perhaps even high paid, managerial positions.

In case there is profound disagreement between the parties and no chance for shifting attitudes management might abandon attempts to achieve consensus and apply force in form of offer to fire, transfer, demote employees or block their career prospects. However, this sort of tactic is only likely to be successful in case rapid change is needed as otherwise people understandably resent such techniques (Kotter and Schlesinger, 2008).

Changing towards sustainability	Chapter summary -Key thoughts
<b>Assessing readiness for change</b>	Determine the level confidence embracing sustainable thinking by surveys or informal talks. If the organization has already the willingness to embrace the concept, continuous training, education and leadership support, commitment might suffice. If the values and norms are neutral or opposing to environmental and social commitment, then the current 'business-as-usual' has to be undermined.
<b>Diversity, capacity, capability</b>	Implications of professionally, culturally diverse workforce; (lack) of capacity in terms of money, time and people and (lack) of capability on individual, managerial, organizational level on the change process.
<b>Barriers to green change</b>	Key factors influencing the greening of organizational culture: industry macrocultures, organizational barriers, cultural fragmentation, resistance to change.
<b>Managing resistance to change</b>	Six techniques for managing resistance: education and commitment, participation and involvement, facilitation and support, negotiation and agreement, manipulation and co-optation, implicit and explicit coercion.

### 3.3 Employee Engagement

Having employees on board during a major organizational change such as embedding sustainability into culture is essential. Accordingly, in the followings the role of leadership, championing, communication, further involvement practices, training and incentives will be outlined as elements of employee engagement related to sustainability implementation aligned with the research question. These practices motivate employees to get involved, reinforce the importance of sustainability in the organization, support and encourage those who make efforts to embed sustainability, help to develop new ideas and practices to bring the organization closer to its sustainability goals and support the implementation of sustainability commitments.

1. Leadership
2. Championing
3. Communication
4. Involvement practices
5. Training
6. Incentives

#### 3.3.1 Leadership

According to Bertels et al., (2010) the role of the leadership is crucial in enacting the desired roles and behaviors managers want the employees to display and thereby signal that sustainability is a priority for the organization. Both practitioners and academics highlight that the commitment of the board and senior management is an essential requirement for making sustainability initiatives successful, and sends a strong signal to employees regarding its importance.

Dunphy et al. (2003) emphasize that the CEO has a key role in setting sustainability on the corporate agenda and communicating with the board to adopt it fully to the organization. Strandberg (2009) also points out that sustainability commitment has to be a board and management imperative at first hand. Wirtenberg et al. (2008) further argue that people are more likely to try and continue engaging in new behaviors if those are modeled by others who they respect and admire. Several other researchers found positive relation between management commitment to sustainability and its implementation or embedding cultures of sustainability. (Adriana, 2009; del Brio et al., 2008; Bansal, 2003; Bowen 2004; DuBose, 2000; Esquer-Peralta et al., 2008; Goodman, 2000; Holton et al., 2010; Molnar and Mulvihill, 2003). Moreover, Andersson et al. (2005) state that

employees will internalize sustainability values if supervisors encourage them to do so based on the espoused sustainability values of the top management. However, researchers have also found examples of negative modeling which can be highly detrimental for the ongoing green initiatives. Harris and Crane (2002) present a negative instance when a manager at a Christmas party 'dumps the idea of green efforts'. The authors argue that such symbolic actions can have significant negative effect on the cultural aspects of green change.

Epstein (2008) suggests that senior managements shows its commitment and 'walks the talk' by prioritizing sustainability in the decision making. Howard-Grenville et al.'s (2008) study reveals that indeed employees value clear management support and back up when they prioritize sustainability in their decision making. Doppelt (2003) also suggests leaders to recognize and appraise employees when they replace unsustainable behaviors with sustainable ones. In his other book Doppelt (2008) further argues that senior management should maintain strong commitment to sustainability and climate change initiatives by stressing its importance and prioritizing the issue as the first topic discussed at staff meetings. Smith (2008) also points out that there is a significant risk of employees reacting cynically to any new program of engagement on climate change unless leadership demonstrates commitment to make real, lasting changes. Werre (2003) argues for the CEO's showing continuous interest in the work of the sustainability committee and participating in the meetings and discussions.

Bertels et al. (2010) reveal that leadership speaking openly about organizational sustainability goals and the progress on achieving them is also a signal of commitment to sustainability. Company presentations, leadership speeches, press releases can serve as ways for reiterating the message, whereas, stating commitments in the sustainability report can serve as a driver for internal performance and making departments publicly responsible to meeting the goals. For instance, the managers in Howard-Grenville et al.'s (2008) study shared boldly their facilities environmental commitment and often raised the topic when communicating with externals. Interviewees also shared how their image with the local community motivated them to work for more sustainable performance.

Besides the leadership's signaling commitment to sustainability, Bertels et al. (2010) argue that responsibility should also be allocated to senior managers also on board level to account for sustainability deliverables. Organizations can create new roles or hold existing roles responsible for sustainability goals including managing environmental compliance, dealing with stakeholders, monitoring and reporting on progress towards sustainability. Bertels et al. (2010) further on suggest establishing a role for sustainability executive who directly reports to the board or the CEO as the actions of the Board and the senior leadership send strong

signals to the organization members. Wei-Skillern (2004) also describes that a board level sustainability development group and committee were appointed to elaborate a strategy and roadmap for the case company to integrate sustainability into business. In line with the new policies an annual report has to be published, management framework was elaborated and key performance indicators developed to monitor progress and improve performance. Holton et al. (2010) also found that when executives took direct responsibility for sustainability commitment, change has naturally cascaded down to all lower level of the organization. Adriana (2009) also found that appointing a responsible in the board of directors and personal dedication are key for successful environmental change implementation.

Smith (2008) cites examples to demonstrate how leadership can be a foundation on which a successful employee engagement program is built. For instance, the CEO of Marks&Spencer personally commissioned the research that lead to the 'Plan A' initiative, chairs the CSR committee, constantly reinforces 'Plan A' messages and sends personal messages of thanks and encouragement to employees engaged in the efforts. By now 'Plan A' initiatives are among key issues in the company which is also reflected by the fact that the CSR committee was renamed to 'How We Do Business Committee'. Smith (2008) further instances IKEA's CEO and Group President who advocated that CO<sub>2</sub> emissions are continuously measured and made carbon emissions a 'Red Thread'. British Telecom (BT) also has a senior management team called 'Carbon Task Force' whose responsibility is to deliver the carbon reduction strategy. The Task Force members are called 'Carbon Busters', and they are also the ones who ensure that 'Carbon Clubs', employee teams active on climate change, gain access to resources for implementing new ideas on reducing carbon emissions. The 'Carbon Task Force' also brainstorms ideas on new potential carbon reduction initiatives and publishes these for 'Carbon Clubs' for employees to develop these further. (Smith, 2008, p. 6.) Finally, Smith (2008) refers to initiative of key directors at Tesco who all publicly committed to the 'Green Pledge' campaign, pledging for example 'holiday in the UK' or 'take the train to work'.

### 3.3.2 Championing

Embedding sustainability in the organizational culture is inevitably a change process which also needs change agents, champions who take up, support, defend and move forward the cause.

Champions can be defined as "individuals who, through formal organizational roles and/or personal activism, attempt to introduce or create change in a product, process, or method within an organization" (Ginsberg and Abrahamson, 1991 in Anderson and Bateman, 2000, p. 549). Anderson and Bateman (2000), based on the

definitions of various researchers, see three levels of the championing process: identifying or elaborating an important issue, framing it as attractive and selling it to corporate decision makers. Champions are indeed the ones who are able to recognize the significance of sustainability, promote it and build it into the corporate agenda. In Benson and Ross's (1998) study, a critical success factor for embedding the new ethics initiative was to appoint a champion for leading the program who was known and respected by the colleagues, a person with integrity and credibility. Strandberg (2009) suggests identifying such individuals and setting up champion teams in which employees from all parts of the organization can come together during work time to brainstorm and launch green initiatives. Molnar and Mulvihill (2003) also argue that sustainability is best promoted by group of individuals who have shared mental model of the concept and can present it as a 'well-rounded view' by a team.

Anderson and Bateman's study (2000) also revealed that successful environmental champions were the ones who 'built coalition' and had 'inspirational appeal'. Qualitative interviews highlighted that an alliance consisting of knowledgeable, enthusiastic environmentalists means a strong support for the champion and provides the person with more 'credibility' and 'legitimacy.' The findings further on revealed that even having a champion partner draws more attention to the sustainability issue from other members of the organization and makes the championing process more enjoyable. However, interviewees also pointed out, that lack of inspirational appeal prevented them from selling sustainability effectively as they failed to win over the old fashioned anti environmental colleagues for the case. In addition, respondents emphasized the importance of being prepared, familiarize oneself with the concept and how it relates to one organization if the champion wants to be successful. Scanning the business environment and industry, collecting data from conferences, consultants, competitors help champions to promote sustainability more efficiently and as business case. However, when Harris and Crane (2002) point out the pitfalls and challenges of the cultural greening, they found that even in those companies which oppose sustainability, managers bring up champions as positive examples and acknowledge them for campaigning for change. However, Blackburn (2007) highlights that even though champions take up the cause, it is also the responsibility of the leadership to support it and ensure its successful advancement. In fact, according to Smith (2008), it is the responsibility of the whole organization to create a framework that can harness the natural enthusiasm and energy of the employees who are passionate about climate change and sustainability issues. Smith (2008) argues that all organizations have a proportion of people who are motivated to get involved; consequently, organizations have to provide the right opportunity and enable employees to find and deliver solutions meeting the climate and sustainability challenges.

### 3.3.3 Communication

Communication is a further key element of the change process towards sustainability: communicating the priority and value of sustainability, and the expectations for new behavior are essential for a successful change. At the beginning of the change process awareness has to be raised by convincing organizational members of the importance of sustainability and of the need for transformation. Accordingly, framing sustainability from the appropriate perspective is crucial for winning employees for the cause. (Bertels et al., 2010)

Based on their findings from a study of 146 champions Anderson and Bateman (2000) revealed that sustainability was mainly framed as 'financial opportunity' using simple words and as 'urgent concern' without emotions. Successful champions stressed that the commitment to environment would help the company to meet its financial opportunities such as profit, efficiency and cost saving. At the same time unsuccessful champions cited the lack of emphasizing the financial benefits of environmental commitment as a reason for their failure. Secondly, framing sustainability with plain language was also mentioned as a key to success. Champions revealed that using abstract terms or technical jargons did not advance their case, in contrast using simple, familiar business terminology and framing sustainability as congruent with corporate values, 'cutting edge' or 'good publicity' yielded the desired results. Furthermore, framing environmental issues with a sense of urgency and that of significant importance also increased the likelihood of success. Increased media attention of damage to the environment by industrial operations and pressure from society, regulators is widely known by the public, accordingly, framing with urgency is favorable. Unsuccessful champions also pointed to their inability to create sense of urgency around the issue. Finally, Anderson and Bateman (2000) also found that no 'drama' or emotional elements played a role in framing. On the contrary, several interviewees claimed that formal, straight-to-the-point, factual business arguments were used to get the management's attention. The authors conclude that championing environmental issues does not differ considerably from championing other types of organizational issues.

However, Bansal (2003) argues that sustainability should be framed in way that it resonates with the concern of the employees. Based on the author's findings, emotional concerns can evoke more interest for environmental issues especially if those are aligned with organizational values. Laszlo (2003) also found that sustainability should be framed in a way that it reflects organizational values and priorities. However, Smith (2008) points out that talking about climate change on a global scale in a way as, "do your bit and save the planet" might be too farfetched for many people to relate to. (Smith, 2008, p. 13.) The author refers to



research highlighting the dissonance between small actions like 'turning off the light and saving the planet', and revealing that for some hearing the expression 'do your bit' actually raises barriers to action. (Smith, 2008) Cramer et al. (2004) also argue that choosing the right words in specific situations are highly important to mobilize internal support: terms appropriate for the context which are customized to particular situation and audience have to be selected carefully. Jenkins (2006) reveals that some companies choose to define CSR more informally or break down the umbrella term in components such as environmental management, community involvement to avoid using it as a jargon. Interestingly Jenkins (2006) also found that emotive language was often used to define CSR such as 'right thing to do', 'pride', 'caring', 'honesty'. Molnar and Mulvihill (2003), however, point out that without using the term itself or the language of sustainability companies can still be leading-edge sustainable businesses as long as the company's performance clearly and continuously demonstrates the environmental commitment.

Not only framing sustainability in an appropriate way is the key to success but also that the organization constantly reinforces the sustainability message in various ways to embed it in the hearts and minds of employees. Culture change and internalizing new ideas is a time consuming process which indeed needs continuous reinforcement. As every individual learns at different pace, repeating the message is essential to achieve fundamental change. (Bertels et al., 2010) An interviewee in Harris and Crane's (2002) study revealed the continuous effort of communicating the green agenda through numerous memos and other company documents to ensure the transition. Doppelt (2008) further on argues that building awareness is crucial to disrupt the current mindset and establish readiness for change. Talks by managers and acknowledged guest speakers of the field as well as constant stream of memos, bulletins, reports, newsletters and intranet systems, discussions at staff meetings help to build awareness of the importance of the issue and the progress. In his other book Doppelt (2003) argues that when repeating the message it is important to know when to advance to the next level. For this, employee survey and other feedback tools are helpful to reveal how fast the change has been adopted and can give implications on future communication design. Wirtenberg et al. (2008) points out that it is important to allow employees repeat the same questions and concerns regarding sustainability as long as needed for them to learn and fully internalize the elements of the new culture. A manager in Sharma and Vredenburg's (1998) study reveals that it took around five to seven years of consistent actions and behavior to seep the new stakeholder minded thinking into the organizational culture.

A specific, informal way to convey the sustainability concepts and the desired behaviors is through storytelling, examples and anecdotes. For instance, Dunphy et al. (2003) propose that storytelling and developing positive

future images support the implementation of culture change as they open up lines for communication, help the integration and commitment to new values and personal empowerment. Esquer-Peralta et al. (2008) found that employees can be motivated by sharing successful sustainability initiatives with them and the lessons learned from the cases. Hagen's (2008) case company proactively defined and shared the ideal future image of the organization which motivated employees to live up to the desired state. Van Marrewijk and Becker (2004) suggest repeating a simple story by using various communication channels to mobilize every organizational member for the change and telling sustainability stories regularly. Anderson and Bateman (2000) found that using powerful, meaningful metaphors and symbols were efficient ways to promote sustainability and get the message through. Jassawala and Shashittal (2002) argue that story telling can help overcoming skepticism, create 'true believers and followers' and make new ideas eventually accepted by members of the organization.

Smith (2008) suggests using various different and innovative channels to communicate the sustainability message; for instance, via e-mail footers, computer games, 'Green Days'. The author brings the example of Tesco which regularly organizes 'refresher day for all its energy champions' and promotes energy efficiency to employees in a creative way, with animation zoo animals on a series of posters. Another example in Smith's (2008) report is Hewlett Packard (HP) which developed a computer game called 'Watts On' to help engage employees with climate issues in a creative way. Smith (2008) further argues for creative examples for engaging employees: publicizing a picture of the CEO taking the bus might be more powerful than conventional message asking employees to take public transportation; collecting the waste from the office for a day or week and building a 'waste sculpture' to demonstrate the quantity; giving gold balloons to those in the office who turned off their computer the previous work day and red to those who did not. Smith (2008) claims that as a result of such creative initiatives, employee behavior changed. (Smith, 2008, p. 13.)

### **3.3.4 Involvement practices**

Smith (2008) argues that one of the main barriers to employee engagement can often be the cynicism of workforce which can be avoided if employees are engaged and consulted at the beginning of any sustainability program before other stakeholders, and if leadership on the issue is visible, sustained and committed within the company. According to Bertels et al. (2010) with certain practices management can generate interest among the employees, encourage active participation in the sustainability initiatives and motivate employees to act in a way that brings the organization closer to sustainability goals. For instance, it has been argued that providing information on sustainability is essential for raising awareness and increase understanding of the concept. Molnar and Mulvihill (2003) found that several organizations invited noted environmental experts or

renowned industry leaders, academics to talk about sustainability issues to employees. These events often inspire initiatives among organizational members. Some businesses do not restrict this education only to employees but also invite their suppliers to their conferences to learn about sustainability.

Bertels et al. (2010) further argue that bringing sustainability down to individual level makes it more concrete. In addition, connecting employee actions at the workplace to their behavior in their private home or community seems to reinforce such behaviors. For instance, a manager at Scandic hotels in Goodman's (2000) study claims that environmental messages are valuable to all employees as they can not only use them at work but also in their private life. The interviewee further on revealed that involving all employees had outstanding results. Smith (2008) reveals that in frame of HSBC's climate change communications the bank talks about the direct impact of climate change on the local community and at the same time stresses collective action to make a difference. Smith (2008) gives a further example of the MAN Group which provides workshops to its staff and families, a climate change microsite and CO<sub>2</sub> mentor program. The company also offers a 50% subsidy to offset staff's CO<sub>2</sub> emission via the carbon calculator and pilots an optional home eco audit. (Smith, 2008, p. 17.) Bansal's (2003) research also shows that closely aligned organizational and individual agendas, and organizational values that allow individuals to express their concern facilitates change process and organizational adaption. An example for the positive relation would be when the company trains employees on how poverty and unsustainable practices are linked, and thereby raising concern for environmental issues among individuals.

Bertels et al. (2010) also suggest capturing 'quick wins': identifying and completing changes related to sustainability that are less demanding of resources or that are easily identifiable benefits, 'low hanging fruits'. Dunphy et al. (2003) argue that small wins help to overcome resistance and build a momentum for change. Linking small successes also enables the company to create an atmosphere for learning and helps to achieve deep, value change for sustainability. It is further argued that in organizations where small wins are not integrated, existing norms, thought and behavior patterns prevail and opposing forces can more easily undermine the change initiatives. DuBose (2000) describes that Interface also started to take advantage of low hanging fruit first and then developed a more structure plan for embedding sustainability later on. Manley (2000) argues that exhausting quick wins is important to demonstrate that the new approach is efficient and to encourage supporters further. Werre (2003) also highlights that quick wins help to energize people and shows that the commitment to corporate responsibility brings about real change and progress.

Bertels et al. (2010) emphasize that the management has to proactively seek opinions and be attentive to ideas from employees and others outside the organization. Inviting input, showing genuine interest in employees' ideas and opinions and being receptive to their suggestions and recommendations are essential practices of employee involvement. Bertels et al. (2010) further argue that as organizations are changing, employee feedback becomes vital, which can be collected among others through staff meetings or surveys. Employees and other stakeholders should be encouraged to voice their opinion on the strategy, share creative ideas and solutions and participate in open discussions on sustainability initiatives. Accordingly, an atmosphere should be created where employee opinions are valued and encouraged by the management. Smith (2008) reinforces this argument by stating that employees need the opportunity to discuss sustainability and climate change issues face-to-face and explore them from their own perspective. Open discussions, so the argument goes, help employees to engage on a deeper level which is needed for sustained action. For instance, Doppelt (2008) suggests asking employees how they want the organization be perceived by others, whether as an organization with considerable negative environment and social footprint or as a responsible one. In case there is a discrepancy between the current status and the outlined ideal state a change is justified. Bowen's (2004) study revealed that employees' opinion was sought and expected by the management as supervisors strived to create a climate for debating and sharing ideas. Molnar and Mulvihill (2003) found that one of the case companies in their study has quarterly meetings on corporate values where employees are encouraged to share their opinion about the business and its vision. The company believes that this is crucial if a new concept needs to be implemented like sustainability, which must be integrated into corporate culture, mission and vision.

Listening to employee ideas and opinions are equally important as asking for it. Bertels et al. (2010) argue that some of the best corporate responsibility programs are based on input from employees working in operational departments who have hands on suggestions on improving systems and processes. Smith (2008) reinforces this argument by claiming that engaged employees can help to deliver the company's 'low carbon strategy' by identifying and implementing low CO<sub>2</sub> solutions across all business areas. Employees can also work with customers and suppliers or even competitors to find low carbon solutions as well as in their homes and communities. It can be further argued that for some employees management opinion in their ideas may even be more incentivizing than monetary rewards. In addition, listening to employees makes them feel valued and helps to create shared meanings. (Bertels et al., 2010) In Bansal's (2003) study employee responses and the willingness of managers to listen helped advancing sustainability efforts. Clarke and Roome's (1999) study also revealed that stakeholder involvement was essential part of the case company's environmental commitment.

They improved communication with stakeholder groups and emphasized environmental education of employees and the public. This involved listening to the interests and perspective of these key stakeholders which greatly influenced the company's approach to sustainability. Blackburn and Rosen (1993) found that round-table meetings with top managers, 'open door policy', 'suggestion systems' were put in place to allow employees voice their opinion and enhance bottom-up communication in those companies that were successful at major change implementation and organization transformation.

Smith (2008) also emphasizes the value of fun and creativity in employee engagement. The author argues that as climate change poses out of ordinary challenges and opportunities which are most effectively addressed by a 'positive, energetic and creative workforce'. Like for any other change program, inspiring goals and most importantly the resources are needed that support the employees to deliver them. Organizations also need to provide the space and 'creative freedom' to develop innovative solutions. Smith (2008) brings various examples for harnessing employee innovation and creativity as follows. For instance, some HP sites have 'self-organizing Employee Sustainability Networks' which are given an own small budget and are empowered to identify and implement energy saving and other sustainability solutions on their sites. The company wishes to stimulate employees creativity by providing them with freedom and independence. Furthermore, HP's 'Employee Ideas Competition' on how to reduce the company's footprint produced a huge number of ideas of which a panel of departmental and regional representatives already implemented a significant amount. At IKEA a small network of employees closely involved with issues put forward credible and grounded ideas for energy reduction. At the company's 'Proud and Challenge' staff sessions each employee presents a solution to be proud of and a challenge for collective inspiration and identifying potential areas for energy saving. Besides the yearly idea collection event, IKEA also regularly publishes examples of good practice and energy saving manuals. Finally, Interface is instanced which has a network of 85 'Sustainability Ambassadors' develop valuable ideas from the bottom-up. Besides implementing their ideas the company also supports them and provides sustainability training to the group to help them generate new ideas throughout the entire organization. (Smith, 2008, p. 10.)

### 3.3.5 Training

According to Bertels et al. (2010) training has been suggested as an effective way for organizations to communicate the importance of sustainability values and strategy to employees. It also ensures that all employees have the additional skills sets and knowledge to support sustainable development, operate systems, accomplish tasks and carry out procedures related to sustainability. Training further on clarifies expectations and creates consistency in behaviors.

Colbert and Kurucz (2007) suggest adding all the development processes such as mentoring, career development and training a sustainability theme. Maon et al. (2009) argue that training sessions can improve employee skills and competence to achieve sustainability-related business objectives and at the same time raise awareness of its importance and how it affects their job. The authors refer to IKEA's training program as an example which covers the company's global sustainability policies, projects, goals and various aspects of business operation including suppliers, waste handling, CO<sub>2</sub> footprint, product design and packaging. The training also shows employees how they can contribute to IKEA's achieving these goals. According to Smith (2008), Interface is using the following model for training employees. During sessions, staff is asked to share their knowledge on sustainability and climate change; ponder the role of business in handling these issues; learn what Interface is doing about sustainability and contemplate how corporate sustainability strategy is linked to their own job role. (Smith, 2008, p. 12.)

Buyse and Verbeke's (2003) study revealed that environmental training and employee participation is one of the 'five resource domains' which helps organizations to become greener besides investing in green production technologies, organizational competences, management systems and strategic reconfiguration. Holton et al. (2010) also found that training sessions helped to create awareness and develop employee competence regarding sustainability issues, as a result staff could assist the implementation and operation of the environmental management system. Furthermore, next to formal training, sustainability-related coaching and mentoring were also incorporated in the development program and employees were trained to deliver training courses instead of externals to transfer knowledge internally and save cost. Holton et al. (2010) further on revealed that sustainability trainings aimed at changing behavior instead of only improving technical skills. Dunphy et al. (2003) also emphasize that technical training aimed at compliance resembles the add-on approach and unlikely to enable changes in attitude and culture change supporting greening.

Jenkins (2006) claims that employees become more interested in CSR-related training and development if they see a direct connection to their job. The author refers to an example where the company sent employees abroad to train locals in developing nations so that employees come back enriched with experience, broadened horizons and opportunity to 'do good'. Smith and Brown (2003) describe an instance when at the end of a nine-month-long training period the staff was invited to a companywide brainstorm session. The employees were allocated to groups and rotated every fifteen minutes to come up with ideas for improving the given business function. At the end of the session several valuable ideas were generated. Werre (2003) highlights that training has to be connected to company vision and values of sustainability so that employees learn how to relate them to their daily tasks. Jassawalla and Shashittal (2002) found that regular training was a valuable tool to engage all employees, build cohesion, focus, commitment and developing social interaction skills. Training sessions were also signaling management commitment to change process, thereby, helping to reduce resistance to change.

### 3.3.6 Incentives

Linking employee pay to sustainability targets has been subject of discussion for some time. Proponents would argue that adequate remuneration is a precondition to employee engagement. Bertels et al. (2010) claim that responsibility related metrics, as part of the annual appraisal, are incentives for employees to perform against these criteria just like against any other aspects in the job. At the same time, their pay and bonuses are negatively influenced if employees do not deliver. Jones' (2000) study of a case company also highlighted that for most employee extrinsic motivation such as reward, recognition and career development plans are crucial motivators to implement sustainability initiatives. Bertels et al. (2010) further argue that financial incentives help sustainability get incorporated into everyday business much faster and make related targets more attainable. DuBose (2000) also found that when Interface made a strategic commitment to sustainability and elaborated a monetary incentive plan and bonus system, projects were implemented at a faster pace and the company had concrete directions to work towards its sustainability mission. According to DuBose (2000) Interface's example shows how a well-designed incentive plan is one of the key success factors for implementing change and can motivate employees to embrace sustainability.

In Douglas' (2007) study the case company also connected sustainability to the employees' pay. The bonus partly depends on two sustainability metrics: safety incident/lost workday rate and landfill reduction, and a further metric, recycled material is planned to be introduced as well. The more employees collectively meet

the goals the higher is the bonus. The author argues that this not only gives employees a stake in the process but also shows how their actions directly affect the company. Lyon (2004) also suggests to link bonus to sustainability targets to signal its significance. It is further suggested to be open and transparent about the data used for bonus calculations. Assessment should be also cumulative and in case of missed targets, distinction has to be clear between system-, individual- and supervisory-failures.

On the other hand, in Smith's (2008) report no case companies offered financial incentives to employees who engaged in climate change issues. Although rewards and prizes were offered to motivate employees, according to Smith (2008), they have to be used cautiously if the organization expects creative responses. Smith (2008) lists several examples where employees were not motivated by monetary reward. For instance, creativity and fun can have a major motivational value in employee engagement; BT even uses them as criteria to judge new initiatives in its highly successful employee engagement program. According to BT and HSBC, opportunity for personal development is a further key motivation for involvement. For instance, at BT employees have the chance to present their energy saving ideas to a team of senior managers. In frame of the partnership program between HSBC and Earthwatch, volunteering staff had the opportunity to develop their competences in areas like communication, adaptability, team work. However, Smith's (2008) also refers to examples where prizes are offered to stimulate interest and increase the number of participants in climate related competitions. In these cases the best prizes have a green theme, like solar panel chargers for cell phones or climate change field trips with NGOs like Earthwatch or WWF. Concerning rewards, Smith's (2008) argues that carefully used, appropriate rewards can also be offered to motivate 'pro-environmental behavior'. A case company in the report for instance offers additional leave equivalent to the time of travel to employees who hold a teleconference instead of travelling to a meeting. A further example is when the company donates to a charity organization for every air mile with which employees reduce their work related air travel. (Smith, 2008, pp. 8-9.)



Employee Engagement	Chapter Summary – Key thoughts
<b>Leadership</b>	Positive relation between management commitment and implementing sustainability; speak openly about commitment; allocate responsibility on sustainability deliverables to senior managers; prioritize sustainability in decision making, model the desired behavior; signal sustainability's importance; set up sustainability committee.
<b>Championing</b>	Change agents needed to take up, support, advance, defend the cause of sustainability. Appoint respected colleague with credibility and legitimacy to promote sustainability. Set up champion teams in which employees from all parts of the organization can come together during work time to brainstorm and launch green initiatives.
<b>Communication</b>	To communicate value of sustainability, frame as 'financial opportunity', 'urgent concern', 'right thing to do', or operate on emotional level. Constantly and persistently reinforce sustainability message through various traditional and innovative communication channels. Use case studies for motivation and creating a learning atmosphere.
<b>Involvement practices</b>	Enable the link between sustainable workplace behavior and private home, community. Exhaust 'quick wins' to overcome resistance, motivate, energize, and prove value. Invite and listen to employees' input. Use creativity and fun in employee engagement and support, provide space for creative freedom.
<b>Training</b>	Communicates importance, raises awareness, equips employees with necessary skill sets and knowledge. Add to all development processes a sustainability theme. Familiarize employees with company's sustainability actions and goals.
<b>Incentives</b>	Tie sustainability deliverables to monetary reward, performance appraisal, bonus, reward, recognition. Encourage idea sharing and involvement with awards, prizes. Motivate with the opportunity of personal development, chance to present ideas in front of the management.

### 3.3.7. The role of HR in employee engagement and embedding sustainability

Related to the previous section, the following part, on one hand, recaps important points of employee engagement and change, and most importantly points out the key role of Human Resource Management in engaging employees in sustainability, and embedding sustainability into corporate culture.<sup>4</sup>

Strandberg (2009) argues that as sustainability increasingly becomes part of the business agenda, it will become a 'natural agenda' for the HR practitioners as well. Strandberg (2009) further claims that HR professionals have the tools and the opportunity to enhance employee engagement in the corporate sustainability strategy; accordingly, they have a key role to help a company achieve its goals of becoming a socially and environmentally responsible firm. Strandberg (2009) lists the following arguments:

- HR is responsible for many of the key systems and processes (eg. recruitment, training, and communications) on which effective sustainability performance depends.
- HR professionals have relevant knowledge and skills in relation to organizational learning and cultural change as they share the responsibility to communicate and implement ideas, policies, cultural and behavioral change.
- HR can be the key organizational partner to ensure that public communication on sustainability is in line with how people are treated within the organization.
- HR is in a key position for providing the tools and framework for the top management to embed sustainability.

However, Strandberg (2009) also emphasizes that employee engagement is not only the mandate of HR but a shared responsibility. As outlined in the previous chapters, it has to be a top management imperative first while people leadership rests with all departmental managers. However, HR can facilitate the development of processes; moreover, the more HR practitioners understand their key role in implementing sustainability, the greater their ability to pass these insights on to their business partners. (Strandberg, 2009)

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<sup>4</sup> The report on 'HR's role in employee engagement and embedding sustainability' uses the terms CSR and sustainability interchangeably of which the term sustainability will be consistently used in this section.

In the followings, Strandberg's (2009) steps are presented for HR practitioners who seek to contribute to embedding sustainability. Strandberg (2009) argues that it can serve as tool for senior HR leaders to promote and drive the sustainability efforts in the management team; as a guidance or checklist for HR leaders who wish to advance sustainability in the firm; or a starting point for managers who just made commitment to map out their strategic approach.

### **Step 1: Vision, mission, values and sustainability strategy development**

Just like any other business initiative, sustainability also requires a clearly articulated vision, mission and values. HR professionals can initiate or support the development or upgrade of vision, mission and values if the existing does not explicitly address sustainability. Furthermore, HR has to be by all means represented in the development of the sustainability business plan and strategy as the function has an important "people perspective" to contribute and will be involved in implementing key measures. (Strandberg, 2009)

### **Step 2: Employee codes of conduct**

Strandberg (2009) further states that typically the HR function is also responsible for drafting and implementing employee codes of conduct. According to Strandberg (2009), this document is ideal for expressing the organization's commitment to socially and environmentally-based decision-making as it is one of the rare documents which all employees are bound by and come in contact with.

### **Step 3: Workforce planning and recruitment**

For a company striving for sustainability, workforce planning consists of evaluating the need for skill sets and competencies reflecting corporate sustainability commitments and values such as accountability and ownership, time management, practical problem solving, communication and team work. A further HR responsibility is talent management, which also needs to be aligned with the company's sustainability vision and goals to ensure talent is developed with the appropriate focus. Regarding recruitment, job interviews increasingly include questions on ethics and sustainability. (Strandberg, 2009)

#### **Step 4: Orientation and training**

During the orientation process, employees should be given a thorough overview of the direct connection between the company's vision, mission, and core sustainability values and objectives. New employees also need to be provided information about sustainability policies and commitments, as well as the main sustainability challenges the company faces and the key stakeholders with which the firm engages. Further important element of the induction program is to distribute the sustainability or CSR report, provide information on sources of related data and how the corporate sustainability performance is measured. It is also important not to overlook the probationary review as it is a valuable opportunity to assess whether the employee is aligned with and committed to the company's sustainability aspirations (Strandberg, 2009).

Once oriented, employees should be trained on sustainability on an annual or other regular basis. Employees having direct responsibilities (e.g. energy manager) should receive technical and specialized training in sustainability, while those with indirect responsibilities should be given training in top priority sustainability issues on a more general note. In any case, the training should be relevant to the job, such as health and safety training for factory workers, and strategic sustainability issues for executive management. As management plays an important role in understanding and delivering on key sustainability objectives, it is vital to make it an integral part of management training programs (Strandberg, 2009).

#### **Step 5: Compensation and performance management**

As outlined previously in the employee engagement section on incentives, "the reward and recognition program, including base salary, incentive pay, long term incentives and other non-monetary recognition benefits (such as award programs, employee of the month, promotions, career management, etc.), need to be aligned with the company's sustainability values and strategy." (Strandberg, 2009, p.15) HR professionals are the one integrating sustainability elements into job descriptions, individual performance plans, compensation and incentive programs. HR is also involved in setting performance standards and expectations, and monitoring results to performance objectives. Accordingly, the function again plays a crucial role in embedding sustainability. Furthermore, performance reviews should assess how the employee has advanced their personal and the organization's sustainability goals over the period (Strandberg, 2009).

## **Step 6: Change management and corporate culture**

“Human resource practitioners are the keepers of the flame when it comes to corporate culture, team building and change management processes.” (Strandberg, 2009, p.17) In order to adapt to changing conditions it is necessary that companies pursue significant behavioral shifts from time to time. However, this culture shift can only be achieved and sustained if it is driven and maintained effectively internally, in which HR again plays a key role. Mindsets and behavioral change can be achieved through role modeling, building awareness, generating commitment, developing knowledge and ability and reinforcement through incentive programs- for all of which HR has the tools and instruments (Strandberg, 2009).

According to Strandberg (2009), change management experts realize that people have different states of readiness embracing sustainability, or any type of change; consequently, they can be grouped according to state of readiness, and change approach can be tailored appropriately to each group Strandberg (2009). suggests using the following model developed by Lee (2008):

Putting employees according to change readiness into the following groups:

- A) Those that have the value and the behavior
- B) Those that have the value but not the behavior
- C) Those that do not have the value or the behavior

To advance sustainability, change strategy should be appropriately tailored:

- A) Group A should be recognized for their behavior and encouraged to continue it.
- B) Group B should be promoted, incited, rewarded for behavior changes in a way that the benefits are meaningful and the barriers to change are removed for this group.
- C) Group C should not be addressed in a sense that promotions and incentives etc. should not be tailored to their needs. Most likely a large percentage of Group C members will change their behavior once Group B did, so that they do not stay as minority. Some members of Group C will, however, not change and remain in minority or unfit the organization (Lee, 2008, in Strandberg, 2009).

Lee (2008) further argues that if each group is treated with the same strategy, there is a risk that Group A feels alienated as their behavior was not recognized; Group B advances less as promotions, incentives were not tailored to them; and that the time, effort, finances spent on Group C will never see a return (Lee, 2008, in Strandberg, 2009).

## Step 7: Employee involvement and participation

According to Strandberg (2009), it is common knowledge that employees have to be consulted and engaged in the development of new programs; however, the author argues that engagement fundamentally has to be even more substantive. Strandberg (2009) refers to Melcrum (2006) who conceived the employee engagement pyramid (see figure 2):



**Figure 2:** Source - Melcrum, 2006<sup>5</sup>

According to Strandberg (2009), to achieve basic employee education and awareness, many HR departments become actively engaged in awareness-raising events such as contests. For instance, some best practice sustainability firms sponsor 'champion teams' in which employees throughout the whole company are encouraged to join a group that meets in company time to conceive and launch initiatives 'greening' the company's operations. Further best practice firms have events to support employees and their families to learn and take action about environmental concerns at work, in their private homes and local communities. In frame of a company's 'sustainability fair', for example, community members were informed on environmental footprint reduction and locally available eco products (Strandberg, 2009).

<sup>5</sup> Melcrum, 2006 cited in Strandberg, 2009, p. 19.

### **Step 8: Sustainability policy and program development**

HR is also in a position to drive policy development and program implementation in HR areas that directly support sustainability values such as diversity, work-life balance and flextime policies. In companies committed to reducing their carbon footprint HR practitioners can develop programs enabling employees to use alternative transportation to get to work like providing showers, secure bike lock-ups, parking spots for van pools and co-op or hybrid cars, bus passes (Strandberg, 2009, p. 20).

### **Step 9: Employee communications**

Sustainability strategy also requires the development and implementation of an employee communication program to convey the corporate direction, objectives and performance on its sustainability efforts. “Intranets, websites, blogs, wikis, social networking sites, podcasting, videos, forums, townhall meetings, regular team briefings, webcasts, voicemails, print and electronic newsletters and other forms of social media can be deployed to bring the message to the workforce.” (Strandberg, 2009, p.21) A further way to raise awareness of sustainability on a regular basis and to track perceptions is employee survey. An example cited by Strandberg (2009) is as follows:

- Is your household eco-friendly?
- In the 2 minutes it takes for you to brush your teeth, how much water goes down the drain?
- October 19 – 25 is Waste Reduction Week. What is the top way your family reduces household waste?
- It's EarthDay. What's the biggest sacrifice you're willing to make for the environment?
- Do you expect to see the Arctic ice cap completely melted in your lifetime?
- Do you make a conscious decision to buy Fairtrade products? (Strandberg, 2009, p.21)

Responses can help the organization identify miscommunications and take corrective actions. Staff polls are also important proactive tools to foster and embed the sustainability message. Through employee communications, HR can find success stories of sustainability leadership within departments. HR managers are well positioned to share and ‘bring to life’ organizational stories to energize employees and raise awareness of corporate action (Strandberg, 2009). Both Strandberg (2009) and Smith (2008) argue that it is important to

keep sustainability commitments sustained in corporate communications on a regular basis and publish success stories.

### Step 10: Measurement and reporting

According to Strandberg (2009), it is vital that both sustainability performance and employee engagement in sustainability is actively measured and reported to executive team, the board of directors and to the public. Typically this is done in the form of an annual sustainability or CSR report. Strandberg (2009) points out that an increasing number of such reports disclose employee engagement scores, including employee response to questions like:

“I am aware of and understand our sustainability strategy.”

“I believe the firm acts in alignment with its sustainability values and policy.”

“I believe the firm is making progress towards implementing its sustainability strategy.”

“Our sustainability strategy makes me feel proud to be working at the firm.”

“I feel the firm encourages and supports me to contribute to sustainability in the office/at the workplace.”

“I feel comfortable raising sustainability issues in the workplace.”

“I believe our organization is a champion of sustainability amongst the public.” (Strandberg, 2009, p.22)

To conclude, Strandberg (2009) suggests that HR takes the lead or partners with the management team to integrate sustainability objectives into how business gets conducted. HR practitioners can act as translators of the company’s sustainability commitment vertically and horizontally across departments.

HR’s role in employee engagement and embedding sustainability	Chapter summary – Key thoughts
Step 1. Mission, vision, values and strategy development	Support and take part in process
Step 2. Employee codes of conduct	Include organization’s sust. commitment
Step 3. Workforce planning and recruitment	Ensure sust. related competencies
Step 4. Orientation and training	Integrate sustainability in development
Step 5. Compensation and performance management	Link reward to sustainability
Step 6. Change management a corporate culture	Build awareness, generate commitment
Step 7. Employee involvement and participation	Organize events, contents, campaigns
Step 8. Sustainability policy development	Drive development and implementation
Step 9. Employee communications	Use various channels, conduct surveys
Step 10. Measurement and reporting	Ensure against sustainability criteria



### 3.4 Greenland

This chapter describes the national context of the case company, Greenland. Among others, Greenland's home rule government as the Greenlandic administrative system, current legislation, Greenlandic infrastructure and Greenlandic attitude to nature will be outlined in the following sections:

- Greenland in a nutshell
- Greenlandic history
- Greenlandic economy
- Greenlandic and Scandinavian culture and attitude to environment

#### 3.4.1 Greenland in a nutshell

Greenland is a self governing territory of the Kingdom of Denmark and a micro state ruling on the world's largest island. Out of a population of 56.000, the majority of the Greenlandic population is indigenous people living in Greenlandic cities (Krogh Andersen, 2008). Fishing and to some degree hunting are still the main economic activities and therefore, Greenland could partly be classified as a territory with developing country traits (Hansen and Kørnøv, 2010). In the last 50 years, however, the Greenlandic society has undergone tremendous changes and continues to develop into a modern society with a social welfare system (Krogh Andersen, 2008). This development is supported by an annually subsidiary of the Danish government and implies that the Inuit nomad culture has shifted to a rather modern western lifestyle (Hansen and Kørnøv, 2010). Nonetheless, the territory with developing country traits struggles with social challenges as for instance high rates of suicide, alcoholism, domestic abuse and is dependent on the subsidy of the Danish government (Denmark Country Review, 2011; Krogh Anderson, 2008). Furthermore, Greenland's education system is rather modest with a comparable high student dropout rate of 40% compared to a 13 % dropout rate in Denmark, whereby only 10 % of the Greenlandic high school graduates start a university degree afterwards. (Krogh Andersen, 2008). Even though local Arctic climate change was not caused by the indigenous people, Greenlanders are highly affected by the global climate change. Ice melting, decreasing animal diversity and new gained access to Arctic resources influenced and will further influence their hunting, diet, societal and cultural identity (ACIA, 2004). It is commonly anticipated that Greenland has rich mineral sources (Kliewer, 2010), which is further discussed in the following chapter discussing the Relations of Home Rule Government to Environment. All things considered, it becomes evident that the modern Greenlandic society is culturally, politically, administratively and financially connected to Denmark.

### 3.4.2 Greenlandic history

In the 10th century, Greenland was invaded by Icelandic Vikings and in the 18th century colonized by the Kingdom of Denmark, which it became part of in 1953. It joined the European Community together with Denmark in 1973. However, Greenland left the EU in 1985 due to strict European fishing quotas. The status of a semi autonomous territory was granted in 1979, and greater power of independency transferred in the referendum of 2008. This includes Greenland decision to apply self-rule which not only involves a larger responsibility of its natural resource profit, but also power over its police force and justice structure. It was further decided, that the Greenlandic language became the official language. Although, the Danish government stays further in charge of defense decisions and foreign policy, the international law recognizes the indigenous Inuit as distinct people (Denmark Country Review, 2011).

### 3.4.3 Greenlandic economy

The main industry in Greenland is the fishery industry, which exports mainly to Denmark, Japan and China with a sole share of 63,3 % to Denmark (see Table 3). In fact, Greenland heavily relies on shrimp as a major export product. Half of the Greenlandic government revenues come from the provided Danish subsidy. Despite that, the public sector and public owned enterprises provide the biggest share of the Greenlandic economy; therefore, the Greenlandic government tries to differentiate the structure of its company. Firstly, tourism is seen as a potentially fast developing industry sector; even though the tourism sector developments are limited by a short tourist season and high operational costs. Secondly, mineral and hydrocarbon explorations are currently conducted, however, some years have to pass until a producing industry with a sufficient output will be set up (Denmark Country Review, 2011).

#### Greenlandic Economy Key Facts:

- GDP (purchasing power parity): \$1.1 billion
- GDP - per capita (PPP): \$20,000
- Labor force: 24,500 persons
- Unemployment rate: 10%
- Inflation rate (consumer prices): 1.6%
- Industries: fish processing (mainly shrimp and Greenland halibut); gold, niobium, tantalite, uranium, iron and diamond mining; handicrafts, hides and skins, small shipyards
- Exports - commodities: fish, fish products 94% (prawns 63%)
- Exports - partners: Denmark 63.3%, Japan 12.5%, China 3.9%
- Imports - commodities: machinery and transport equipment, manufactured goods, food, petroleum products

• Imports - partners: Denmark 78.4%, Sweden 11.9%, Norway 2.7%
• Economic aid - recipient: \$380 million subsidy from Denmark
Greenlandic Infrastructure:
• Airports: 14 (2005)
• Airports - with paved runways: total: 9
• Airports - with unpaved runways: 5 (total)
• Roadways: total: NA*
*There are street roads in cities, but none between cities. Normally, transport between cities happens either by sea or air (2005)

**Table 3:** Source: Denmark Country Review, 2011

### 3.4.4. Greenlandic and Scandinavian culture and attitude to environment

Previously the culture of sustainability has been defined by integrating the concepts of organizational culture and sustainability. Organizational culture as a concept providing an identity to its members about ‘who we are’ and ‘what we do’ is also impacted by national cultures which in turn all influence the attitude of the organization’s members towards environment and sustainability. The case company employs all the Scandinavian nationalities including Danes, Swedes and Norwegians besides Greenlanders thereby employing culturally diverse workforce. The unique Greenlandic attitude to nature and that in comparison to Scandinavian attitude is accordingly outlined in the followings.

#### 3.4.4.1 Greenlandic culture as a blending of Inuit and Scandinavian culture

Looking at the history, the current Greenlandic society was shaped by a blending of the Inuit traditions and the Danish state administration. Nevertheless, Inuit are closely linked with their traditional culture and arranged themselves living together in a co-existence with Danes (ICC, 2009a). However, Inuit youth keeps on struggling with the colonial influence on their cultural identity and their Greenlandic path towards self- determination (ICC, 2003). During the process of setting up the home rule government in 1979, the Danish administration system was implemented. In fact, Danes are still present in the administrative body to a high degree. Danes fill half of the most important administrative and economic positions in Greenland, even though, there are only 10-15% of Danes in the whole population of the territory (Krogh Andersen, 2008).

Inuit and Danish culture have a strong appreciation of the collectivist and egalitarian mindset in common even though interpreted in different ways. Both cultures comprise the feeling of being restrained and a tendency to avoid conflicts, but Danish society understands collectivism in a rather liberal way, whilst Inuit tend to include a higher degree of social obedience. Since Norwegians, Swedes and particular Danes are represented in Greenlandic administrative and management positions, the Scandinavian and especially Danish management style is mainly influencing the Greenlandic work culture. Scandinavian management style puts emphasis on processes and consensus agreed by all stakeholders. However among Scandinavians, Danes tend to reconsider decisions if new decisive information is presented with the aim of reaching a democratic consensus. This includes also using cross functional working groups for specific decision responsibilities. There is a strong tendency to prioritize humans in work environment regarding workforce, community and environmental considerations. Therefore it is not surprising that trade union considerations, working conditions and equality are important, which is also one reason why Scandinavians are global leaders regarding social responsibility and values. Scandinavians are often characterized as direct, rather informal communicators and conflict avoidant (Schramm-Nielsen et al., 2004). The Danish perspective on this is also mirrored in the GLOBE study (for further details on the GLOBE study see Appendix 15), in which Denmark scored high on 'future orientation', 'uncertainty avoidance' and comparable low on 'gender differentiation', 'power distance' and 'in-group collectivism' (Huczynski and Buchanan, 2007).

#### **3.4.4.2 Greenlandic attitude to nature**

The Inuit culture is based on hunting traditions and has one of the world's most developed hunting cultures; especially Greenlanders from the rather remote North- and East Greenland are still depending on their hunting success (The Official Tourism Site of Greenland, 2011). Dependence on unchanged hunting methods and traditions since more than 4000 years implies difficulties with a changing environment for Inuit. Even though, the Inuit hunting culture is developing towards a modern city culture since the last 50 years, hunting remains a tradition practiced in leisure time (Krogh Andersen, 2008). For the locals, Greenlandic nature is highly interlinked with the Greenlandic country and their own identity. With its mountains, fjords and clean air, Greenlandic nature is mainly regarded as something that can be taken in with multiple senses, gives calmness, security and underpins generally the well being of its indigenous people (Kjeldgaard and Askegaard, 2006). Governmental rules and laws that put emphasize on a more bureaucratic Western European approach to sustainability are not favored by the Inuit though. In the Inuit perception, the hunting process is already sustainable, because it sustained the Inuit culture over thousands of years (Earth Charter in Action, 2005). This

is also fuelled by the new understanding of being Greenlandic that romanticizes the past Inuit hunting culture to a living with nature in harmony (Askegaard et al, 2005) Therefore, for example the Greenpeace campaign was viewed by the Inuit society as if outsiders blended in their hunting community, impose rules that have a negative impact on them and ignore their cultural values. In the 80s, Greenpeace campaigned worldwide against seal hunting in the arctic which lead to a ban of seal skin imports in 1983 (NCSE, 2000). In 2009, the EU banned additionally all seal products which caused a complete collapse of the market with zero sales for the Inuit and omitted seal hunting completely as a profit source for Indigenous people in the Arctic (ICC, 2009b).

#### **3.4.4.3 Relations of Home Rule Government to Environment**

The Greenlandic government promotes industry developments that could facilitate a financially and economically independent Greenland, as the permissions for explorations for oil-, mineral- and aluminum industries show. The environmental impact of the potential oil-, mineral or aluminum industry on Greenlandic nature is tremendous and stands in contrast to the economic goals of the home rule government. As the Greenlandic Minister of Health and Environment Arkalo Abelson expressed to the European Development Days' audience in his speech in 2007: "Greenland wants to be environmentally conscious and contribute to the reduction of CO<sub>2</sub> emissions at the global level, but at the same time wants to be a country in industrial progress, being able to attract foreign investors to the area of minerals and petrol exploration" (Abelsen, 2007). Furthermore, as Aleqa Hammond, Greenland's minister of Finance and Foreign Affairs stated: "We do not feel ourselves part of Europe - we are an Arctic people - but our way of life is changing and we have to change with it." (Zellen, 2009).

Despite the need of Greenlandic industry development, The Inuit Circumpolar Council (ICC, 2009c) raised the concern that there is a threat for Greenlanders to become front-door environmentalist of beautiful glaciers and back-door developers of the mining industry with unforeseeable environmental and social consequences. Although, Hansen and Kørnøv (2010) noted during their research on an Impact Assessment in Greenland, that there is a lack of environmental information statements and legal guidelines which ensure access to data to this date. Further, the broad concept of environment itself is not incorporated in the Greenlandic legislative system as contrary to developed industrial nations as for instance European countries. However, Greenland is aware of the international signal effect of being environmental conscious and this provides already a motivation to be environmentally aware.

### 3.5 The Airline Industry

After having outlined the political and cultural environment in which the company works, this chapter will provide an insight of the airline industry. This highly competitive industry is known as one of the main world-wide environment polluters, accordingly airlines are under various regulatory and stakeholder pressures to reduce their CO<sub>2</sub> footprint despite the dependency on polluting machinery in their business model. Air Greenland operates in this industry where extraordinary efforts and considerable investments are required to support environmental sustainability. This section gives insights into the industry's characteristics in the following order:

1. Industry and regulations
2. Aviation's impact on the environment

#### 3.5.1 Industry and regulations

Air transportation has been growing continuously during the past decades, particularly in recent years due to the increasing tourism demand and changing leisure patterns (Commission of the European Communities, 1999). At the same time, the emergence of low cost airlines, deregulation and restructuring of the industry contributed to high price sensitivity of the market. Consequently, the industry was moving into a new phase with fierce competition in terms of passenger service with increased market pressure for lower prices (Pilling, 2004).

Adding to the 'multidimensional competition character', the airline industry has always been highly regulated. Airlines have to comply with various government rules, high entry barriers, immense capital costs, and oligopoly buildings (Clancy, 2001). Recently, also market-based mechanisms such as tradable permits for carbon emission and increased landing taxes for highly polluting aircrafts are more and more present on governmental and industry organizational agendas. As aviation is closely associated with globalization, the industry has to cautiously consider its role regarding economic, social and environmental considerations. Airlines are mostly based in one country; but operate cross-nationally. As a result, they are subject to different political structures and rules of every airport on which they land, regardless of the duration of their stay at the airport (Lynes and Andrachuk, 2008). Furthermore, commercial airline operations need to comply with environmental rules of the International Civil Aviation Organization (ICAO) and the Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC) which specifies the international and

national standard for noise and emission limits for aircrafts globally. In Europe, the standards of the European Commission also set regional limits to emissions through the European Union Mission Trading Scheme (EU ETS). The European airline market is especially embracing the use of market based mechanisms and future policies on an obligatory timeframe for the renewal of fleets. (for positioning through identity see App. 16.)

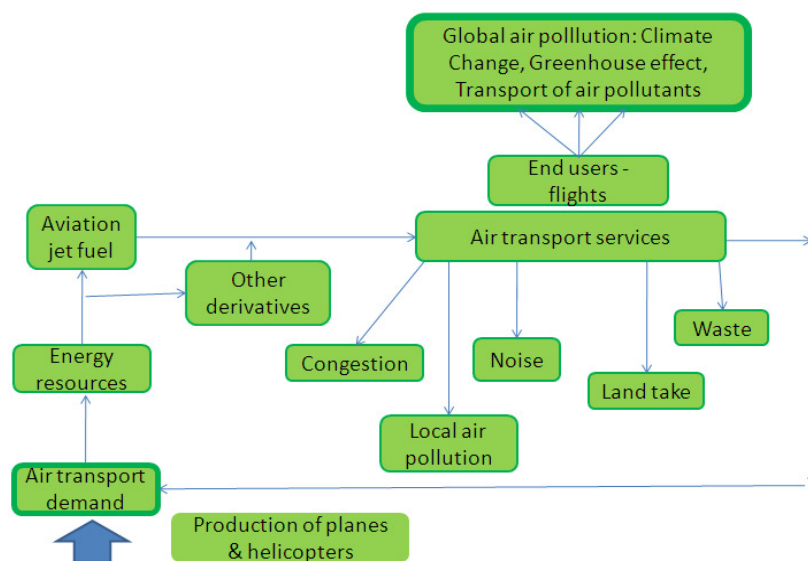
### 3.5.2 Aviation's impact on the environment

The negative consequences of air travel on climate change put pressures on the industry to be cautious in its management of the environmental impact of air transportation (Penner et al., 1999). Due to the negative image associated with air transportation's environmental impacts, there is a considerable pressure on the industry for political and social 'license to operate' and to be a 'good corporate citizen'. This pressure also comes from the airlines themselves but also from industry organizations like the International Air Transportation Association (IATA) and the Air Transport Action Group (ATAG) (Lynes and Andrachuk, 2008). This is supported by Moon and deLeon (2007), who state that companies with historically weak environmental behavior in their industry or in their organization are likely to be monitored by institutions and regulations. Pressured by these controls, airlines are more likely to voluntarily imply actions. The same accounts for companies that are in a close relationship to consumers and dependant on their reputation as it is the case in the airline industry. Nevertheless, airlines are not only as a single organization but as well as a representative of their countries responsible to present a positive image of their original nations (Clancy, 2001). Even though public expectations towards the airlines and environmental goals exist, implementation levels of detailed environmental initiatives are not advanced. As Cowper-Smith and de Grosbois (2011) argued, few airlines implemented measurements of their reported environmental goals and out of fourteen of the largest global airlines none implemented an environmental initiative.

Schipper (2001) argues that environmental damage can be considered as a failure of the airline transportation market (see Figure 3) as for instance, the use of energy resources such as jet fuel as means for energy conversion. At the airport, this energy is transformed not only into a flight for the airline customer, but also leads to congestion, noise, land take, waste and local air pollution. However, Schipper's model does not consider the approach that resources already have to be used in order to build planes and helicopters that will be operated by the airlines. This implies that the airline transportation market model needs to be extended along the value chain and manufacturing line. Therefore, it is questionable if improved CO<sub>2</sub> efficiency of new airplanes and helicopters justify a purchase by an airline, considering that the production of the new airplanes

or helicopters might cause overall more CO<sub>2</sub> output compared to the final improved CO<sub>2</sub> output of the new fleet. In the 90s of the 20<sup>th</sup> century, environmental concerns were taken up particularly by Qantas, Japan Airlines, American Airlines, British Airways and Swissair (Holloway, 1998). From a strategic point of view (see App. 16), ethical behavior serves as a competitive advantage which motivated these airlines to become environmentally aware. Customer expectations were seen as an integral part of value delivery and closely connected to the airline's image and reputation. These airlines included therefore corporate citizenship in their strategic planning, positioning and marketing. Nevertheless, sustainability implementation in corporate strategy and corporate communication strategies run the risk of green washing, if the publicly communicated corporate values and the actual corporate behavior misfit. Green washing can negatively influence corporate culture and increase uncertainty within an organization. Employees might perceive no difference between the previous non environmental strategic direction and the new environmentally conscious strategy. There is a threat, therefore, that employees do not internalize environmental behavior if the company does not adhere to the communicated statements (Lee and Ball, 2003).

### Pollution from energy conversion in the air transport system



**Figure 3:** Source - Janic, 2007<sup>6</sup> with added box of production of planes and helicopters

<sup>6</sup> Janic, M., (2007). *The sustainability of Air transportation - A quantitative analysis and assessment*. Hampshire: Ashgate Publishing Limited, p.106.



## IV. Air Greenland Case Presentation

Just like energy and chemical companies, Air Greenland also operates in an industry in which extraordinary efforts are required to change business activities in order to support environmental sustainability. As it was indicated in the previous chapter, the airline industry is responsible for an output of 2-4 % of all worldwide carbon emissions which makes this industry one of the most polluting ones. Consequently, airlines have to invest considerable resources and apply new technologies to become less unsustainable. At the same time regulatory requirements are immense and competition is increasing (ATAG, 2008; Pels, 2008; Penner et al., 1999). Furthermore, the easily damageable Arctic environment is threatened by nationally and internationally caused pollution which has consequences for Greenland's population and environment. Therefore, local government, society and businesses have to cooperate to protect environment more efficiently (Post and Altman, 1994). As Air Greenland is the largest company in Greenland with a 10% share of the Greenlandic GDP and as a main provider of Greenlandic transportation, the company has a particular responsibility towards the Greenlandic society. In this section, the case company Air Greenland is presented through company figures, competition behavior, CSR and environmental work.

Air Greenland, with its headquarters in Nuuk, served 393 000 passengers and 21 towns in 2010 on domestic and cross-country flights to Denmark and Iceland (Air Greenland, 2010). Operations of the airline are divided into charter, cargo, mail and passenger transportation. Next to its core business of air transportation, Air Greenland owns A/S Hotel Arctic and Greenland Travel as fully owned subsidiaries. Air Greenland is a public limited company owned by 37, 5% by the Government of Greenland and Scandinavian Airlines System Inc. Additionally, the Danish state owns 25% of the company. In September 2010, Air Greenland signed the Global Compact and thereby started to take up social and environmental commitment. (Air Greenland, 2010). Social and environmental considerations will be part of Air Greenland's business decisions which is shown in the organization's work towards compliance with the UN Global Compact conditions, as well as in its strategy building regarding CSR and environment. In their 2010 annual report, it is pointed out that transparency and open discussions towards company's stakeholders are values of the company irrespectively of how critical the dialogue partner could be. The CSR risk assessment revealed that Air Greenland is leading in CSR matters in Greenland, however still needs to improve its CSR in comparison to other airlines. The company also states in its Annual Report 2010 that environment and climate are additional areas that need extra considerations and extraordinary effort. Air Greenland's motto is 'We move Greenland forward' and the company is actively involved in local community projects. Furthermore, Air Greenland is one of the funding members of CSR

Greenland which aims to support CSR development within the country by improving the overall Greenlandic competence level, raising CSR awareness, collaborate with other businesses on CSR projects and setting up a CSR reporting scheme (Air Greenland, 2010).

The Copenhagen flights operated by Air Greenland have to meet the EU ETS international aviation standards, thus the company will need to report their CO<sub>2</sub> measurements from 2012 on. Air Greenland started to work together with the Greenlandic government on an environmental policy in 2008 (Air Greenland, 2008). An environmental strategy is going to be created in 2011 as part of the Qarsoq 2012 strategy. During the implementation process employees are planned to be involved via competitions and campaigns for enhanced environmental work (Air Greenland, 2010). With Qarsoq, Air Greenland created a 5-year-plan that places emphasis on People, Profit and the Planet. It is clearly formulated, that reduction of CO<sub>2</sub> emissions concerns all Air Greenland group operations. Therefore, a range of 'quick wins' were identified in form of an environmental catalogue which includes for instance energy savings through a number decrease in company owned cars, new printing rules, establishment of waste systems, shift to a paper free archive, restoration and renovation of office buildings, hangars and repair of building facades (Air Greenland, 2009).

Further, the company is proactively supporting and requesting long term developments in the Greenlandic infrastructure, which would enable the airline to modernize its fleet (Air Greenland, 2010). Concerning the fleet management strategy of Qarsoq 2012, additional cost reductions are expected. In 2010, the DHC 7 model was replaced with the more modern, lighter and therewith more fuel efficient DHC 8. With this exchange of planes, Air Greenland aims at reducing its CO<sub>2</sub> footprint. In 2010, the Air Greenland Group's CO<sub>2</sub> footprint was calculated by an external consultant and accumulated to a total of 79.782 t of CO<sub>2</sub> emission. This output makes up to 15,3 % (see table 4) based on the total Greenland CO<sub>2</sub> output of 2007 of the total carbon emission output of Greenland. Air Greenland measures CO<sub>2</sub> in available seat kilometer (ASK). The largest part of the CO<sub>2</sub> footprint, 97% is produced by the fleet and as stated in the 2010 Annual Report the airlines outmost aim is to reduce emissions from its aircrafts besides reducing energy consumption from buildings. A successful example is Hotel Arctic's case, the hotel effort's led to a reduced energy consumption by 25 % (Air Greenland, 2010).

#### Carbon Emission Output Greenland, The Faroe Islands, Denmark

Carbon emissions	Greenland	The Faroe Islands	Denmark
1990 Carbon dioxide emissions (CO <sub>2</sub> ), thousand metric tons of CO <sub>2</sub>	557	623	50,403
2007 Carbon dioxide emissions (CO <sub>2</sub> ), thousand metric tons of CO <sub>2</sub>	521	697	49,996
1990 Carbon dioxide emissions (CO <sub>2</sub> ), metric tons of CO <sub>2</sub> per capita	10,0266	13,1518	9,8061
2007 Carbon dioxide emissions (CO <sub>2</sub> ), metric tons of CO <sub>2</sub> per capita	9,0911	14,1227	9,1817

**Table 4:** Source – United Nations Statistic Division, 2010.

Given that there are only around 70 km of paved streets in Greenland, Air Greenland has a special responsibility towards the Greenlandic community. Next to ships, flying with Air Greenland is the main way of transportation between cities within Greenland. Furthermore, Air Greenland has the specific task of serving a wide spanned infrastructure shaped by extreme environmental influences unique for Greenland's landscape and nature. As an example, delays in 2008 and 2009 were mainly attributed to weather conditions, problems with the landing facilities or de-icing equipment (Air Greenland, 2009).

After a successful year of 2008, Air Greenland was confronted with declining numbers in passengers, mail and cargo and charter business transportation in 2009. Additionally, the company faced increasing costs for insurances, taxes and dues as well as expenses for improving their aging fleet. A variety of taxes like start- and landing taxes, overflight taxes, security charges and passenger taxes have a significant impact on customer demand through price changes, especially in relation to the tourism industry (Air Greenland, 2009). For these reasons, Air Greenland reacted with a saving and development plan that includes short- and long term goals. Among these goals are fleet renewal, a change of IT systems, analysis of work processes and changes towards more economical flying behavior (Air Greenland, 2009).

Since the Greenlandic Home Rule Government focused on mineral and oil industry development, foreign businesses and customers started to demand increased CSR efforts and requested an active CSR strategy and initiatives. In 2010, offshore mineral exploration activities of Cairn energy increased and both Air Greenland

and the society expects further business from this in the future. Based on an increased customer's demand, Canadian helicopter company Cougar was hired as sub-supplier for additional needed helicopter operations (Air Greenland, 2009; Air Greenland, 2010).

In the changing business environment, serious competition revived noticeably from Air Iceland and Iceland Air, which flies to and from Greenland during the busy summer months and starting from April 2011 all year round. This competition has a direct negative influence on Air Greenland's revenue and yearly turnaround as it also has the highest number of passengers in that period of time. Furthermore, competitors might be able to fulfill customers' demand for price differentiation of flight tickets and transport travelers to other destinations (Air Greenland, 2009; Air Greenland, 2010). Air Greenland met the competition with new flight schedules and a different pricing strategy (Air Greenland, 2010). Further, Air Greenland chose to react to the changing circumstances in competition by placing CSR in their strategic focus, which is expected to generate a competitive advantages originating from an environmental consciousness (Air Greenland, 2009). From an increased environmental commitment, not only strategic repositioning but also cost reductions are expected.

Next to competition and environmental considerations, future challenges include, for instance, an increased demand for current and future offshore oil explorations. Another example would be likely rescues in Air Greenland's immediate commuting area as a result of the increasing cruise tourism and. This demands further resources from the company in form of placing pilots on call duty and emergency rescues or additional risk assessments. The offshore oil explorations particularly represent an increase in specific services which demand extra resources from the company (Air Greenland, 2009; Air Greenland 2010). All in all, Air Greenland faces various challenges not only related to enhanced environmental commitment but as a result of further current and emerging responsibilities, competition, industry regulations and various stakeholder pressures.

## V. Data Analysis

To set the context, findings on Greenland and airline industry will be presented and analyzed first to have an overview and gain a deeper understanding of the supportive and challenging influences on Air Greenland's current and future environmental work deriving from the national and industry context and their implications on the change of organizational culture towards environmental sustainability. After summarizing the context findings, further aligned with the research questions, potential ways of engaging employees will be analyzed and presented. Finally, based on employee input from quantitative data combined with management perspective from qualitative findings<sup>7</sup>, recommendations will be given on employee engagement similarly to an action plan. The order of the chapters is as follows:

1. Air Greenland in national context
2. Air Greenland in industry context
3. Chapter summary table on Air Greenland's current environmental work
4. Assessing further potential barriers to 'green change'
5. Potential ways of engaging employees
6. Chapter summary table on employee engagement
7. Action plan

### 5.1. Air Greenland in national context

Firstly, the characteristics of the Greenlandic administrative system, existing legislative and infrastructural conditions, general understanding and attitude to nature of native community will be presented which have an influence on Air Greenland's current and future environmental work in a positive or negative way.

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Throughout chapter 5, following listed qualitative primary data will serve as references:

1. Christian Keldsen, current CSR Manager, Air Greenland (28 March, 2011) (1 April, 2011)
2. Anne Mette Christiansen, Internal Consultant, Air Greenland ( 1 April, 2011)
3. Pia Christensen Bang, former Communication Officer and since 01.April 2011 Manager, CSR & Communication, Air Greenland (6 April, 2011)
4. Mette Steenholdt, HR employee, Air Greenland, (3 May, 2011)

According to the literature, during the process of setting up the home rule government, the Danish administration system was implemented and the Danes are in fact still present in the administrative body to a high degree. The advisor reinforced that Greenland has a democratic political system just like Denmark's, however, with a fairly weak bureaucracy. There are only 56.000 citizens to maintain the system, perform state tasks and a very few educated locals who stayed in Greenland, those who stayed are mainly employed in private enterprises and public institutions. Half of the employees in the public sphere are Danes with an average stay of slightly more than a year; accordingly the state has low organizational memory of and weak structures as a result of the frequent fluctuation in workforce. The advisor further revealed that regulations are less strict in Greenland than in Denmark. For instance, while in Denmark strict rules are in place on where the de-icing liquid has to be disposed, in Greenland the liquid is discharged with the water; for example same applies to fuel usage and waste.

According to the statistics presented in the literature, Greenland has only 70 km of paved streets and no roads connecting the cities, accordingly Air Greenland has specific responsibilities towards the Greenlandic society to provide transportation in air next to sea transport and serve wide spanned transportation distances under specific weather and landscape conditions unique to Greenland. The 2010 Annual Report states that for several years Air Greenland has called for a long-term plan for expansion and adaptation of the infrastructure system in the country which would enable the company to undertake the necessary investments in new aircraft and helicopters. Air Greenland, therefore, expects concrete political decisions and inevitably aims to contribute to building a well-functioning infrastructure. The advisor confirmed this argument by claiming that for company initiatives like environmental projects the organizations would need the state to cooperate and provide the necessary infrastructure. For instance, even though companies aim to sort waste, the infrastructure is still not in place to store and recycle the selected discharge. According to a previous example, even though the company is collecting de-icing liquid, it will end up in the pipeline running into the water as the state has not developed the necessary infrastructure yet. A characteristic to Greenland is that the companies are ahead of the state in terms of environmental awareness and have the willingness to build it. Accordingly, businesses are putting pressure on the state to establish legislation for eg. environmental friendly waste handling, however, at the same time are severely limited due to the lack of infrastructure.

Besides the lack of necessary legislation and infrastructure, both the advisor and future CSR manager pointed out that climate change and environmental pollution is much less in the discussion in Greenland than in Denmark. The interviewees would assume that Greenland is 10-15 years behind compared to the Danish

mindset on environmental considerations and 'green thinking' even though the country is greatly affected by global warming. According to the future CSR manager, one of the reasons can be that Greenlandic society has several social, political, economic problems which is in line with the arguments in the literature review: the society struggles with social challenges as for instance high rates of suicide, alcoholism, domestic abuse.

According to the future CSR manager, a further reason for not embracing a westernized environmental thinking by Greenlanders could be the traditional negative attitude to Greenpeace as a result of its worldwide campaign against seal hunting. The literature also states that the Greenpeace campaign was perceived extremely negatively by the Inuit as it led to the ban of seal skin trading and completely destroyed the source of living for many Greenlanders. The future CSR manager further revealed that the campaign evoked a general negative attitude to Greenpeace and organizations alike as well as towards 'Western elite' who are not familiar with life in Greenland and with the local understanding of the term 'sustainability'. Westerners criticize Greenlanders for hunting seals, whales, polar bears while beef, pork and poultry meat is mass produced in more developed countries often under ill circumstances. Greenlanders perceive it as contradiction and reject being criticized for hunting wild animals that 'had a good life'. Thirdly, related to the latter argument, the literature states that government rules and laws putting emphasis on a more bureaucratic Western European approach to sustainability are not favored by the Inuit. In the perception of the Inuit, the hunting process is already sustainable as it sustained the Inuit culture over thousands of years. This argument has been also confirmed by the future CSR manager who revealed that environmental consciousness/protection is perceived as concept introduced by Westerners. However, as the interviewee claims, the effects of global warming are greatly present in the daily living of locals as for instance hunters in Northern Greenland cannot practice their tradition any longer in the drastically changing Arctic environment. Accordingly, Greenlanders begin to understand slowly that their contribution to environmental protection is also needed.

To conclude, the lack of strictly enforced national legislation and infrastructure facilitating Air Greenland's current and future environmental work considerably limits the company's options to implement environmental initiatives, however, provides opportunity to contribute developing legislation and infrastructure. The extra challenges are inevitably the required efforts on the top of the basic challenges for a company operating in an industry where the core business model does not support sustainability and being environmental friendly. On the other hand, in line with the fact that companies are ahead of government, which is assumingly general in territories with developing country traits like Greenland, companies can use their capacity to 'move Greenland forward'. In line with its motto, this can confirm Air Greenland's position as flagship company in the country. Furthermore, even though national legislation does not press the companies for more environmental focus, Air

Greenland has the opportunity to rely on its corporate drive and peer pressure from other Greenlandic business to advance in environmental work and keep its position as a frontrunner in Greenland in this respect. Similarly, the fact that environment is not a mature discussion topic among locals, the negative attitude and different understanding of sustainability and perception of environment can pose challenges and opportunities for Air Greenland. In exchange of extra efforts, the company has the opportunity to raise awareness, educate, inform, and change attitude in a wider community which in turn would also confirm its status as frontrunner in Greenland.

## **5.2. Air Greenland in industry context**

In the followings, the competition, regulatory, cost and stakeholder pressures on Air Greenland are presented to have a deeper understanding of the limitations and opportunities Air Greenland is faced with in its environmental work due to industry characteristics, and to have an overview on the company's existing and upcoming environment related steps.

### **5.2.1. Industry characteristics and regulations**

As the highly competitive airline industry is one of the main environment polluters, aviation companies are indeed under various regulatory and stakeholder pressures to reduce their CO<sub>2</sub> footprint despite the dependency on polluting machinery in their business model. Air Greenland operates in this industry where extraordinary efforts and considerable investments are required to support environmental sustainability. As the current CSR manager confirmed, environmental considerations are a rather challenging area for the company since the airline industry has a large negative impact as a result of CO<sub>2</sub> emissions. In fact, Air Greenland is responsible for 10% of the total Greenlandic CO<sub>2</sub> output. However, despite of the business model depending on polluting machinery, both the manager and the advisor pointed out that Air Greenland has always been environment conscious and aims to work towards increased environmental consciousness by implementing environmental initiatives and make commitments even though the business model greatly limits airlines to be environmental friendly. Besides these aims, as the advisor further revealed, Air Greenland has always had strong focus on compliance with national legislation for domestic flights, international aviation legislation applying to international flights and industry standards. The Copenhagen flights of the airline meet the EU ETS international aviation standards since the flights to Copenhagen and Iceland have been verified. Although Air Greenland might have had the chance to exclude itself from this European regulation, it chose to



put pressure on the organization to comply, and thereby work towards increased environmental consciousness.

### 5.2.2. Competition and need for cost reduction

A further characteristic of the industry is the highly competitive, price sensitive, high cost structure market with increased pressure on airlines to lower charges for plane tickets and reduce costs. According to the two latest Annual Reports Air Greenland is no exception from these conditions as a result of the fierce competition with Air Iceland and Icelandair which has direct negative influence on Air Greenland's yearly revenue and turnaround, and the increased expenses from taxes and an aging fleet. To meet the competition and targets for cost reductions, Air Greenland decided among others to place a strategic focus on CSR, involving increased focus for environmental consciousness; furthermore, developed saving plans related to fleet renewal and change towards more economic flying behavior. The company expects considerable savings from an extensive fleet replacement. The Annual Report further states that in 2009, a range of 'quick wins' were identified in form of an environmental catalogue which includes for instance energy savings through a decrease in company owned cars, new printing rules, establishment of waste systems, shift to a paper free archive, restoration and renovation of office buildings, hangars and repair of building facades.

As the current CSR manager revealed the environmental catalogue can be considered the first environmental initiative of the company by listing existing smaller initiatives to reduce energy consumption and thereby save costs. As the interviewee further argued, from operational point of view there has always been a focus on 'fuel economy'. However, certain limitations are present, as the advisor pointed out, on how much pilots can control descents in eg. snowstorms which are quite regular phenomena in Greenland.

Both the advisor and the future CSR manager revealed that Air Greenland has had to focus mainly on the increased competition from Air Iceland, adjusting the pricing strategy and cutting costs. The current CSR manager added that until now also the social aspect of the CSR strategy has been prioritized, however, all three interviewees stated that increasing focus will be given to environment already this and especially the coming year. At the same time, as the advisor pointed out, increasing focus on the environment will require costly investments even though Air Greenland is under extreme pressure to reduce costs due to the competition of Air Iceland. The advisor further argued that a strong business case is needed for the company to take long term environmental investments with a typical three year payback period and further investments for a successful change of existing behavior patterns. However, the advisor agreed that one of the added values of increased environmental consciousness can be actual savings and direct monetary value. The current CSR manager also

reinforced that even though more focus on the environment requires investments, in the long run it will contribute to cost reduction due to decreased energy consumption.

### 5.2.3. Meeting increasing stakeholder requirements

As outlined in the literature review, growing stakeholder demand for enhanced environment focus is also increasingly apparent in the industry. Due to the negative image associated with air transportation's environmental impact, there is a considerable pressure on airlines to be cautious in environmental management, continuously monitored by institutions, regulators, business partners, investors, customers and the public. For environmentally conscious customers airlines offer voluntary carbon offsetting (VCO) programs to soften their environmental impact, however, the program is often criticized for measurement uncertainties and general low awareness. Nevertheless 2-9 % of all the airline customers chose to use VCO. As stated in the 2010 Annual Report, last year the offshore exploration industry provided new field of business for Air Greenland. The year was characterized by high activity in mineral exploration including subcontracting the Scottish oil company, Cairn, which carries out test drilling and Air Greenland's partnering with Canadian Cougar Helicopters, a further subcontractor to the energy company. Air Greenland has high expectations for potential offshore business in the long term. The 2009 Annual Report further revealed that since the Greenlandic Home rule government focused on mineral and oil industry development, foreign businesses and customers demanded increased CSR efforts. In line with these expectations, the CSR risk assessment of Air Greenland revealed that the main risks referred among others to growing demands from international customers in the mineral resource sector and increased expectations for reduction of CO<sub>2</sub> emissions. In 2010, Air Greenland signed the Global Compact and thereby committed itself to incorporate social and environmental considerations into its business decisions. With the adoption of UN's Global Compact and preparation of a strategy for corporate social responsibility, Air Greenland is working towards compliance with the ten principles of the UN's Global Compact regarding human rights, employee rights, the environment and anti-corruption as stated in the 2010 Annual Report.

Both the advisor as well as the current and future CSR manager argued that required standards for compliance, increasing CSR requirements from business partners as part of service contracts, government concession, commercial routes, domestic and international charter businesses with promising growth potential and growing customer demand especially from energy industry were the key drivers for Air Greenland to engage in its first real environmental commitment and to sign the Global Compact in 2010. The advisor further revealed details on partnering the Scottish oil company. Cairn had requirements for working in a structured way towards

reducing impact on the environment, in case it was to partner Air Greenland. Having gone through the Global Compact gap analysis and the requirements further raised awareness for environmental considerations in the case company, consequently, Air Greenland decided to conduct a similar audit to check of Cougar Helicopters before entering in business partnership. The future CSR manager also added the increasing environmental consciousness of tourists and passengers as driver for increasing focus on the environment, however, as the advisor revealed, the number of customers choosing carbon offsetting is still very low, around less than 1% each year. Nevertheless, the travel agency informs clients about the opportunity and gives details on the gold standard program with WWF. Based on a drafted policy the travel agency also communicates how Air Greenland is working on reducing its negative environmental impact and CO<sub>2</sub> emission.

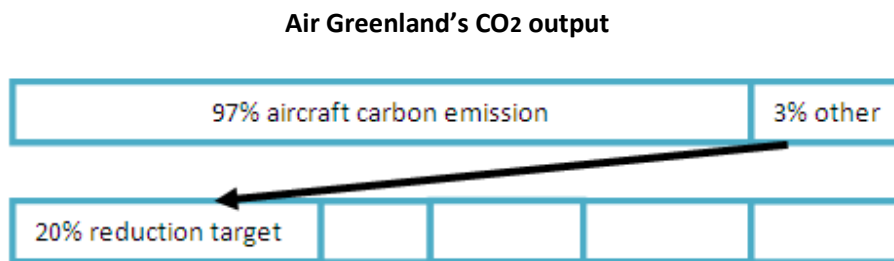
#### **5.2.4. Preparing to build an environmental strategy**

According to the 2010 Annual Report, Air Greenland calculated the group's carbon emissions as a total CO<sub>2</sub> footprint. Emissions from aircraft constituted 97 % of the total carbon emissions, causing by far the most significant impact. The Annual Report further states that for Air Greenland, climate and environment are first and foremost about reducing Air Greenland's CO<sub>2</sub> emissions from aircraft operations measured per 'available seat kilometer' as aircraft operations are the major cause of the company's impact on the environment. In addition, the Annual Report claims that environmental efforts have been focused on reducing resource consumption like electricity, water, heating, paper etc. in office facilities, in the company's housings and reducing the impact on the environment e.g. regarding waste.

Both the advisor as well as the current and future CSR managers reinforced that the group's CO<sub>2</sub> footprint was measured last year to set targets for reduction and reporting. However, all three informants emphasized that even though 97% of the CO<sub>2</sub> footprint comes from the emission of planes, aircraft carbon reduction is severely limited. In fact, the fleet represents the key challenge as only specific aircrafts can be operated under Greenlandic conditions. As the current CSR manager revealed, Air Greenland operates 30 –years-old aircrafts which cannot be considered environmental friendly, however, these are the models that are suitable for Greenlandic weather conditions and the short runways. The advisor reinforced that under the weather, flying and landing conditions existing in Greenland, the company is forced to operate aircrafts from the 60s and 70s with an older technology. Nevertheless, the company plans to replace part of its fleet with more recent and more environmental friendly models in years to come. According to the 2010 Annual Report, Air Greenland helped to reduce its emission by replacing two DHC 7 aircraft with the newer DHC 8 model in 2010, however,

the advisor and the future CSR manager revealed that it has been heavily discussed internally whether the DHC 8 model is actually more environmental friendly since although it uses less fuel, it is due to its smaller size and accordingly able to carry less number of passengers and load.

According to the current CSR manager, as the CO<sub>2</sub> emission of the airplanes is relatively fixed due to limitations, goals have to be set for reduction mainly in other areas and goal setting will focus on the remaining 3% of the emission. In order to put this abstract number in practical relations, 3 % accumulate to a total amount of 2.393 t of CO<sub>2</sub>. Consequently, as the advisor explained, the remaining 3% is extrapolated to 100% and goals for emission reduction will be based on these figures (see Figure 4). The advisor further on revealed that this might represent a slight reduction in the overall emission level, however, in such an early phase it serves as a key motivational factor for environmental consciousness in the organization. To make the potential reductions visible in line with the extrapolation, a goal for reduction will likely to be set around 20% on housings, living quarters, hangars. The current CSR manager confirmed that the strategy will be focusing on energy saving in buildings, offices, cars, living quarters, housing and two hangars. As the CSR manager further revealed, considerable savings are expected on buildings as they are quite old, for instance by better isolating offices, replacing older water appliances in the housings, replacing light bulbs to more energy saving types, building in automated, center activated sensors and reducing waste in the canteen.



**Figure 4:** 3% extrapolated into 100%: emission from housings, living quarters, offices, hangars, cars

All in all, the fleet appropriate to be managed under Greenlandic conditions severely limits the opportunities of Air Greenland to be environmental friendly. However, even though fleet options are rather limited, the company is trying its best to opt for the newer, more environmental models which can be operated under such circumstances when replacing an aircraft. Accordingly, the fleet and the buildings form the two main building blocks of the strategy as the current CSR manager revealed.

#### 5.2.5. Next steps in environmental work: build environmental strategy and involving employees

According to the Annual Report (2010) this year Air Greenland works on:

- Charting the company's impact on the environment to a broader extent than CO<sub>2</sub>
- Preparing a strategy for the environment and the climate
- Involving the employees in work with the environment and the climate through campaigns and competitions

As the advisor and the current CSR manager explained, a risk assessment process will be conducted to reveal how the environment is affected by the company operations. During the environmental mapping, the external consultant will assess work processes on how inputs eg. different materials, fluids, water, paper and output eg. waste, chemicals are handled to spot where there is a potential for environment pollution. The assessment serves as a preparatory work for environmental strategy building, among others, goals will be formulated based on the findings. According to the latest information, the assessment has recently been carried out by the external supervisor; however it is only for internal use.

As the advisor revealed, the next step will be to work on the environmental strategy. The plan is to finalize it during summertime and have it accepted by the Board during the fall. It was explained that the current CSR manager, the head of communications, further two managers in charge of office buildings and hangars, living quarters and housings, HR representative, the CFO, and potentially the head of the technical department will take part in the strategy building process. The current CSR manager added that besides the internal managers the advisor and the external consultant will also be involved.

The future CSR manager revealed that following the high season in summer, during fall, the aim is to plan a campaign or competition with representatives from the HR and marketing departments to mobilize employees around energy saving and start implementing quick wins to motivate participation. The employee involvement will be designed based on what staff is interested in and to what extent they are motivated to participate. In fact, employee engagement is one of the focuses of the strategy besides the practical goals on emission reduction.

### 5.3. Chapter summary on Air Greenland's current environmental work

The table summarizes the key existing and upcoming steps related to environmental work, the motivation behind them, challenges, opportunities based on combined findings from qualitative and secondary data.

Action	Motivation	Challenges	Opportunities
Increased environmental consciousness (further initiatives and commitment) // reduced negative environmental impact by reducing emissions and energy consumption	Regulatory requirements, competition and cost saving pressure, stakeholder pressure for increased environmental consciousness	<p>Achieving targeted reduction to comply with international regulations</p> <p>Business model depending on polluting machinery responsible for significant CO<sub>2</sub> emission</p> <p>High cost, long-term investments required</p> <p>Lack of strictly enforced national legislation on environment and lack of necessary infrastructure</p> <p>Negative attitude, different understanding of environment of locals</p>	<p>Verification and reporting</p> <p>Strategic repositioning</p> <p>Cost savings</p> <p>Employee engagement</p> <p>Government and business co-operation to improve conditions</p> <p>Motivation by internal corporate drive, international standards and peer pressure</p> <p>Education, raising awareness of environment (protection) in Greenlandic society, changing attitude of locals</p> <p>Confirming Air Greenland's position as a flagship company to 'move Greenland forward'</p>
Fleet renewal – replacing older DCH7 aircraft with newer DCH 8 model	Competition and cost saving pressure	<p>High cost, long-term investments required</p> <p>Aircraft carbon reduction severely limited due to Greenlandic conditions</p>	Slight potential for reduced CO <sub>2</sub> emission and savings on fleet maintenance
Environmental catalogue	Cost reduction	Small scale, short term results	Quick win savings and initial motivation for further initiatives

<b>Action</b>	<b>Motivation</b>	<b>Challenges</b>	<b>Opportunities</b>
Signing the Global Compact	Increased CSR and environment related demand from business partners, customers	Mobilizing employees around it	<p>Potential business partnerships upon compliance</p> <p>Working in structured way towards CSR and environment related goals</p> <p>Identifying potential development areas by gap analysis</p> <p>Increased awareness on CSR requirements – audit for potential partners</p> <p>Demonstrating management commitment</p> <p>Confirming Air Greenland's position as first mover among Greenlandic businesses in terms of environmental considerations</p>
CO2 footprint measurement	Required for reporting and target setting for environmental strategy	Conducted regularly	Set targets for strategy and reporting on potential success in reduction
Upcoming environmental strategy with two building blocks	Global Compact requirement	<p>Aircraft carbon reduction severely limited due to Greenlandic conditions (97% emissions)</p> <p>Implementation process, engagement of employees</p>	<p>Quick win, visible savings on reduced energy consumption (3% emissions)</p> <p>Structured way of working towards reducing negative impact on the environment</p>
Risk assessment	Classic environmental mapping needed to set targets for environmental strategy	Availability of internal information and support	Status quo, set target for strategy, new process descriptions, processes, initial engagement, potential environmental projects

To conclude, based on the reasons behind the taken steps and the challenges and opportunities they imply the following main concerns can be raised. Firstly, as the advisor pointed out, it depends whether the company is willing to make the necessary long-term investments for its future environmental work under the significant pressure from competition and increasing expenses. Even though savings from reduced energy consumption are expected, it can be questioned whether they balance out the long term investments. Furthermore, as not only savings but reduced carbon emission is expected from the future fleet renewal, it can be questioned whether the limitations on the aircraft prevent Air Greenland to achieve that goal. As the interviewees revealed, it was already subject of discussion whether the recently purchase DHC 8 model helped to reduce emissions at all. However, most importantly, it has been stated as goal in the Annual Report that Air Greenland's foremost aim is to reduce emissions from aircrafts which contradicts the findings that the 97% plane emission is currently relatively fixed. This again basically prevents Air Greenland to achieve its goal and can be considered as overstatement. It can be assumed that this huge amount of reduction cannot or can only be very slightly reduced. However, the company at least aims to reduce its environmental impact and to work towards reducing the remaining 3% of its emissions which also represents a large amount of CO<sub>2</sub>. Indeed, the core business model depending on polluting machinery as characteristic of the airline industry, and in Air Greenland's case the special responsibility to provide transportation under challenging Greenlandic conditions only enables the company to be slightly less unsustainable.

#### **5.4. Assessing further potential barriers to 'green change'**

Besides the challenges arising from national and industry context, literature describes certain further factors that can act as barriers to 'green change'. In turns Air Greenland will be assessed against some of these factors to gain an overview of the potential barriers or facilitators in order to give valuable recommendations on successful attempt to change organizational culture towards environmental sustainability.

According to academic papers, certain macro cultures present more 'green values' than others. In this respect the airline industry is way behind with its reputation as one of the biggest polluters, macroculture therefore works more against than for greening.

The high degree of diversity in terms of cultural background and professional subcultures can also negatively influence the spread of green initiatives. Air Greenland employs a diverse workforce of Greenlanders, Danes, other Scandinavian and American, Canadian employees as the HR representative revealed. In the following chapters it will be outlined in more details that cultural differences in terms of eg. understanding of the



concepts 'environment' and environment protection' greatly differs between Greenlanders and Scandinavians which has important implications among others on communication, involvement, training and can pose both challenges and opportunities to Air Greenland in terms of environmental work.

As organizational culture can also be a potential barrier, interviewees in the qualitative analysis were asked to describe Air Greenland's organizational culture and also share their ideas whether it is supporting 'greening'. According to the advisor, some of the culture characteristics are strong self-perception of being a frontrunner, first mover and strong sense of pride. Most Greenlanders would choose to work for Air Greenland. The company transformed from a monopolistic, stiff, state owned to a more efficient, progressive, commercial organization. The current CSR manager reinforced that although the organization is still hierarchical to some extent, management levels have been reduced and the flattening will continue in the future. According to the native Greenlandic HR representative, Air Greenland has developed to one of the most open organizations in Greenland and the interviewee considers as one of the greatest values that everyone is 'allowed to say what they want to say'. The HR representative agreed that Air Greenland has changed tremendously from a traditional, patriarchic organization to an open company. In line with these arguments the 2010 Annual Report states that the main purpose still is to move on from being a 'protected monopoly' to become an 'investment ready, competitive and commercially-oriented airline'.

The current CSR manager argues that organizational culture supports greening for instance based on the extent environmental considerations have been part of thinking in recent years and the increasing tendency among employees to consider different ways of energy reduction, and further considerations like using spare parts more efficiently and sorting waste. The future CSR manger cannot see any reasons either why organizational culture would not support greening. To reinforce these opinions the advisor gave an example of a large conference in March 2011 where it clearly showed that Air Greenland is ahead of other Greenlandic business also in terms of environmental considerations and this perception of being frontrunner and first mover fits the organizational culture and management team. The current CSR manager added that Air Greenland contributed greatly to raising awareness of CSR and environmental issues in the local community and Greenlandic society. The advisor further revealed that as a result, several Greenlandic companies started to take steps to become more environmental conscious. This trend also puts peer pressure on Air Greenland as a further motivation to be first mover and ahead of other local companies.

However, as a criticism, the advisor also pointed out a contradiction which hinders the aims for greening. The advisor gave the example that a 16- pages- long publication which has been prepared for stakeholders outlining the Global Compact, why Air Greenland decided to sign it and what points does it place on the environmental

agenda of the company. The aim was to invite stakeholders for a dialogue. However, the publication has never been printed as the HR department was concerned it would take up too much of their time once stakeholders commented or raised questions. On the long run the dialogue might generate valuable input, however, in short run it would increase the workload of the HR department. As the advisor revealed, the HR department's concern is based on past experience related to the CSR strategy when several irrelevant comments were raised which had to be handled. The time needed for CSR related work for reporting, projects and implementation have been calculated by the advisor, however, processing the unexpected 2000 sponsorship applications has not been added. Accordingly, as a result of a concern about a similar workload increase, the publication on the Global Compact has been rejected. Even though, as the advisor revealed, not many critical questions would be expected as environment protection is not yet a mature topic of discussion in the Greenlandic society. There are not many environmental NGOs either and the international ones are more focused on the oil companies' test drilling in the Arctic. This example indeed contradicts one of Air Greenland's value statement of 'Access and Availability' outlined in the Annual Report as below:

"Access is about ensuring that stakeholders experience Air Greenland as a fair company that carries out an important, social task in a proper manner. This means that Air Greenland must be open and transparent with regard to the stakeholders and be willing to enter into a dialogue with the stakeholders – even those who are critical. Access is closely connected with Air Greenland's target to be a responsive company." (Air Greenland, 2010, p. 17).

The incident also raises issues of capacity and commitment, which however is perceived to be strong from the management's side.

As the HR representative revealed, management commitment to CSR is highly visible both internally and externally, in press, media, education, community work and development. The interviewee further revealed that socially responsible thinking is integrated in organizational culture, values and clearly modeled by management. According to the advisor, signing the Global Compact, being funding member of CSR Greenland, raising awareness of CSR among Greenlandic businesses clearly shows the management's public commitment. The advisor added that since the discussions started around the Global Compact, there is increasing interest in being more environmental conscious in the management team and the Board. The current CSR manager reinforced that taking environmental work to a strategic level means involving not only the top management but also the Board of Directors, shareholders and stakeholders which shows commitment. The CSR manager further revealed that the management likes to place the organization in 'top spot' and thereby putting pressure

on it to perform higher also in environmental respect. Signing the Global Compact, appearing in the media and press related to it is also considered to be a driver to meet public expectations. It is further argued in the academic literature that the CEO has a key role in setting environment on the corporate agenda and show interest in the work of the sustainability team. The interviewees confirmed that there is a strong commitment and interest from the CEO's side, and as the advisor added, also from the CFO's and from the CSR manager's side. The literature further argues that the sustainability responsables should report directly to the Board and the CEO which signals the importance to organizational members. The current CSR manager confirmed that the future responsible will continue to work closely with the top management, reporting directly to the CEO. As the advisor revealed, the CSR manager will be supported by a team to implement the strategy consisting of a consultant, marketing and HR representative. Literature also suggests that stating commitments in the sustainability report can serve as a driver for internal performance and making departments publicly responsible to meeting the goals. The number of pages devoted to CSR and environmental initiatives have been increasing in the last two issues of the Annual Report, reaching 7 pages in 2010 which is quite impressive for a Greenlandic company as the advisor revealed. It was further argued, that the company gave an honest, concise account and considers creating a separate CSR report in the future.

All in all, Air Greenland's management is visibly committed to CSR and the increasing focus on environmental work. The company is taking the environmental work to a strategic level and the management puts pressure on the organization to meet external expectations. Furthermore, the responsables work closely with the top management and report directly to the CEO who is committed to promoting environmental work. However, a concern can be raised regarding capacity. As the current CSR manager revealed, no separate environmental manager will be appointed to overlook the implementation of the strategy. Even though the main responsibility is coordinating and team will support the manager, it can be questioned whether enough time can be allocated to focus on environment besides the ongoing social work. Furthermore, in line with the best practices outlined in the literature, the future CSR manager should be involved in the strategy building process for a more successful implementation. In addition, in line with Air Greenland's statement in the 2010 Annual Report, management will have to prioritize sustainability in the decision making and also encourage and recognize employees for prioritizing sustainability in order to maintain consistent commitment. Furthermore, company presentations, leadership speeches and press releases can serve as ways for continued signal of commitment; therefore environmental initiatives should be the priority topics at staff meetings to stress its importance as suggested in literature.

Interviewees have been also asked about their personal opinions to have a picture of the commitment of those directly responsible for the implementation of the planned environmental strategy. When asking the question on how they want Air Greenland to be perceived the current CSR manager revealed that as a serious, transparent organization that adds value to Greenlandic society and access to sustainability. The future CSR manager held the followings important: open, frontrunner in all aspects including CSR and environmental consciousness. Interviewees were also asked about whether they believe that caring about the environment is as important as making profit. As the current CSR argued: 'making profit while caring for the environment is important'. Progress needs to sacrifice environment but no company can be environmentally friendly without making profit, balance is needed. As a private person the future CSR manager thinks that caring for the environment is more important than making profit; pure pursuit of profit is short-term thinking. Finally, the questions were raised if they personally agree that Air Greenland starts to care about the environment. The current CSR manager believes that Air Greenland already cares about the environment while the future CSR manager thinks 'there is no way not to do it' and even though the core business model is unsupportive it's the obligation of Air Greenland, 'there is no way back'.

To conclude, even though the macro environment does not support greening, the organizational culture does. The leadership is also visibly committed as well as the direct responsables. It can be a criticism though that the company does not plan to integrate sustainability in its corporate mission, vision; however, as the current CSR manager explained, given the industry in which Air Greenland operates and the limitations on the fleet, it would be perceived as an overstatement. Besides ensuring capacity and that all the key people are involved in the strategy building process, a further key concern is to ensure that Air Greenland's actions are aligned with its value statement: it has to engage in dialogue with stakeholders also in reality if it publicly commits itself to availability, accessibility and stakeholder dialogue. To overcome the barriers potentially arising from a culturally and professionally diverse workforce, literature suggests value as a target of change as value statements have universal message, whereas, prescribing behaviors across diverse national groups within the same organization would clash with behavioral norms within groups of same nationality. Value change is also more appropriate in case of diverse professional and occupational identities to recognize the freedom and authority professionals have in their job. Literature further argues that a professional representative should be involved in the change team to increase acceptability of the change among peers.

## 5.5. Potential ways of engaging employees

Having gained an overview and deeper understanding of the challenges and opportunities Air Greenland is facing in its environmental work as result of industry and national context, and further potential barriers and facilitators of greening, in line with the research question and subquestions, potential ways of engaging employees are presented and analyzed based on combined primary and secondary data: the employee input from quantitative data and completed by the management perspective from qualitative findings to be able to give valuable recommendations in form of an action plan in the end.

### 5.5.1. Employee attitude

The aim of the first two survey questions was to assess employees' attitude to Air Greenland's intent to take up more environmental commitment. Assessing current employee attitude potentially embracing or resisting environmental considerations greatly influence the next steps, particularly for organizations in the early phase.

#### 1. Do you agree or disagree that Air Greenland starts to care about the environment?

Supporting environment commitment	Frequency	Percent	Valid Percent
<b>Valid</b> 1 Strongly disagree	4	3,6 %	3,6 %
2 Disagree	0	0 %	0 %
3 Neither agree nor disagree	17	15,2 %	15,2 %
4 Agree	35	31,3 %	31,3 %
5 Strongly agree	56	50 %	50 %
<b>Total</b>	<b>112</b>	<b>100 %</b>	<b>100 %</b>

In the first question respondents indicated their opinion on a likert scale which aims to reveal a tendency of attitude or belief. The survey results showed that the great majority of respondents agree with Air Greenland's aim to take up environmental commitment. Accordingly, there seems to be highly positive attitude among those who filled in the survey with half of the respondents strongly agreeing. Nevertheless, on the negative scale there are only employees who strongly disagree, implying that some might fundamentally oppose enhanced environment focus while neutral employees are also represented. Still, it can be assumed that the sample mainly represents employees, who are already interested in environmental work including some enthusiasts; accordingly the finding implies that there is base of employees who are supportive to

environmental initiatives and can be potentially engaged. Whether this assumption is correct will be revealed and analyzed in the followings, mainly related to questions 3 and 6.

### 5.5.2. Reasons behind current attitude and implications on framing

The aim of the next question was, on one hand, to reveal the reasons behind employees' current attitude and indirectly their understanding of the company's motivation for enhanced environmental work; on the other hand, to identify the potentially compelling arguments to win over disinterested or skeptical employees.

#### 2. Why or why not should Air Greenland start to care about the environment?

Reasons and arguments		Responses N	Percent	Percent of Cases
	Cost saving	40	23,50%	35,70%
	Polluting airline industry	3	1,80%	2,70%
	Environmental protection is urgent issues	41	24,10%	36,60%
	Global pollution impact	2	1,20%	1,80%
	Right thing to do	79	46,50%	70,50%
	Management fad	1	0,60%	0,90%
	Don't know	4	2,40%	3,60%
<b>Total</b>		<b>170</b>	<b>100,00%</b>	<b>151,80%</b>

The second was a multiple choice question, accordingly respondents could indicate more preferences resulting in a total of 170 choices representing a 151,80% of total cases compared to the original number of 112 respondents representing 100%. According to the results, nearly half of the respondents agree that engaging in environmental work is the 'right thing to do', the moral obligation of Air Greenland as a role model company in the country. The finding is in line with Air Greenland's actual status and employee perception as a flagship company in Greenland with special responsibilities towards and influence on Greenlandic society. The following two arguments had relatively equal support. Respondents either agreed that environment protection is an urgent issue and Air Greenland has to act on it, or opted for the 'business case argument' stating that environmental initiatives contribute to cost reduction as they potentially reduce energy consumption and increase efficiency. As nationally and internationally caused pollution has visible negative effects on Greenlandic nature 'environment conscious' respondents were likely to identify with the 'urgency' argument. Furthermore, as Air Greenland has expectations on cost savings, the business case argument can be also justified. At the same time, the likely reasons for being skeptical and unsupportive with initiatives can be due to

the fact that airlines depend on polluting machinery core business model, the unavoidable negative influences of global pollution on local environment, or the assumed hype around the environment concept in the business world.

It can be assumed that respondents with positive attitude to Air Greenland's environmental commitment and potential for engagement support the aim as it is 'the right thing', it is important and timely or as it saves costs for the business. Accordingly, the message should be mainly framed along these arguments to potentially win over disengaged employees and generate more commitment and support from enthusiastic staff when communicating to employees on the environmental work.

However, as the advisor pointed out, when addressing locals, the Greenlandic understanding of environment as concrete, physical nature has to be taken into consideration, and more abstract terms like CO<sub>2</sub> emission reduction should be avoided. This argument has been reinforced by the native Greenlandic HR representative who revealed that locals understand 'nature, mountains, clean air' under the term environment and 'preserving the beauty of the land' under the term environment protection. The interviewee further explained that in case Greenlandic employees are to be engaged and mobilized for environmental projects, the winning argument would be that 'people need to take care of the land and preserve it for children and future generations' and not eg. potential cost savings on energy reduction. It was further emphasized that the language choice of English, Danish or Greenlandic already implies which group of staff is targeted with the message. The interviewee gave a negative example that CSR was a very new term for Greenlanders and the initial talks on the concept were in English, consequently, Greenlandic employees were not effectively reached by the message. Related to this example, the advisor further explained that Greenlandic language does not contain a word encompassing an abstract term like CSR, being a high context culture, several words are needed to describe what the term denotes. On the contrary, as Scandinavians are a low context culture with direct communication, they are faster to grasp abstract terms which are more difficult to comprehend for Greenlanders. Furthermore, while a word like 'commitment' has positive connotation in European setting, it is not necessarily a valued way of communicating to Greenlanders in the company. As the advisor added, even though Greenland has been greatly influenced by Danish culture, Greenlanders still communicate very differently from Danes and this significant difference between the communication styles cannot be neglected.

To conclude, although the survey results highlighted the 'right thing to do', 'urgency' and 'business case' arguments these are most likely often heard in management talks and in media, and are likely to work more for Scandinavian employees. However, in case Greenlanders are also to be mobilized for environmental work, the followings have to be taken into consideration. As opposed to survey findings, Greenlanders are likely to value

arguments working more on an emotional level, such as 'preserving the beauty of the land for children'. Furthermore, native language is to be used for communication and abstract terms like 'reducing CO2 emission', should be avoided. Instead simple words should be used to back up emotional arguments like 'preserving clean air'. Lastly, instead of terms like 'commitment' assumingly eg. 'responsibility' would work better.

### 5.5.3. Form of potential engagement requiring employee effort

Further questions in the survey meant to reveal whether employees actually have the interest in and the potential to be engaged, and in what form. In this question, involvement practices were listed which require employees to actively contribute with their time, skills, knowledge and effort to the environmental work.

#### 3. Would you be interested in

		Responses N	Percent	Percent of Cases
	Environmental projects	37	27,60%	33,60%
	Team launch of project idea	19	14,20%	17,30%
	Team up to be environmental representative	11	8,20%	10,00%
	No interest	37	27,60%	33,60%
	Don't know	30	22,40%	27,30%
<b>Total</b>		<b>134</b>	<b>100,00%</b>	<b>121,80%</b>

The third question was also a multiple choice question; consequently respondents could indicate more preferences resulting in a total of 134 choices representing a 121,80% of total cases compared to the original number of 112 respondents representing 100%. According to the results, the initial enthusiasm somewhat decreased or might have been somewhat superficial as nearly 30% of the respondents expressed no interest in participating any of the listed options or were undecided. However, at the same time, nearly 30% of the respondents showed interest in participating in environmental projects and some in joining a team to work with the environment. The least percentage was given to pairing up with another colleague to be representatives.

To reveal the reasons behind these survey responses, examples from the qualitative data analysis are outlined as follows. As the current CSR manager pointed out, the initial positive attitude and enthusiasm is likely to decrease when employees are required to work differently or to spend extra time on an additional projects



besides their daily routines. The interviewee gave an example of the control of flight descents where the chief pilot has to calculate the most economic use of fuel; however, pilots also have their comfortable routines for descents that are slow to change. The interviewee further on revealed that it was hard to get people think and work in new ways related to the Qarsoq strategy. The interviewee added that the key challenge related to the environmental strategy will be to engage employees and in a way that it is not perceived solely as a top down initiative.

On the other hand, the advisor shared a positive example of involving employees in preparing the CO<sub>2</sub> footprint. Employees first insisted that they cannot allocate time for the project on top of the daily tasks. Their routine has been interrupted and they had to answer questions on the amount of fuel and energy use for different issues. However, towards the end of the process all employees got on board and presented new, more correct and extensive calculations. The advisor would anticipate similar attitude change regarding other environmental issues as well, once employees get involved they start to see the value in it and the fun aspect. According to the advisor's perception the group of employees working with the CO<sub>2</sub> baseline is already more committed and have a positive attitude to upcoming environmental initiatives, interest in looking into energy saving opportunities.

Regarding future employee engagement plans, the current CSR manager revealed that employees are planned to be involved via workshops and working groups early on as they have the competencies to contribute with valuable ideas. As the advisor added, the risk assessment will identify potential CO<sub>2</sub> emission or energy reduction related projects which employees will be encouraged to join, as well as to formulate and own projects.

To conclude, as the survey results revealed, Air Greenland should mainly aim to engage employees for active contribution in environmental projects defined by the risk assessment, however, these might become inevitably part of some employees' jobs as the company takes up environmental work. Brainstorming ideas and launching projects by the staff themselves might not be that popular as in this early phase as employees might rather expect concrete engagement 'offers' according to the future CSR manager. However, the advisor's positive example showed well that initial resistance originating from time constraint and stepping out of comfort zone was gradually overcome and in the end employees had increased commitment, more positive attitude and interest in being involved. The literature reinforces that collaboration can help to reduce opposition and generate commitment. Involvement not only helps to reduce fear of the individuals but also gives opportunity to use their knowledge and skills. Furthermore, involving employees already in planning in forms of task forces, working parties, focus groups or consultative process, also helps to overcome the

challenge that process is perceived solely as a top down by employees. For this, literature suggests encouraging employees to voice their opinion also about the strategy and goals during meetings. Accordingly, Air Greenland should use involvement and collaboration practices, workshops from early on already during the strategy building process. For instance, Air Greenland should consider placing the formulating strategy on the Intranet and invite employee opinion and input, or organize meetings for idea sharing on the strategy. Although the process is more time consuming and the management can retain less control, the collaboration can convince employees that bottom up initiatives are encouraged, their knowledge and skills are used which can result in increased commitment, more supportive attitude and most importantly increased potential for employee engagement for the implementation. However, it is important that management follows up and integrates valuable ideas so that the process is not perceived only as lip service, as the literature argues.

#### 5.5.4. Identifying potential change agents

The next survey question asked respondents to name colleagues who are enthusiastic about environment protection. The aim was thereby to reveal potential ambassadors, change agents, champions who could take up, support, defend, advance the cause and credibly promote environmental work, inspire others.

#### 4. Can you name a colleague who is enthusiastic about environment protection?

Enthusiastic staff		Frequency	Percent	Valid Percent
Valid	1 Yes, without name	7	6,3	6,4
	2 Michael Binzer	6	5,4	5,5
	3 Christian Keldsen	10	8,9	9,1
	4 Michael Binzer and Christian Keldsen	2	1,8	1,8
	5 Yes, other	32	28,6	29,1
	6 No	40	35,7	36,4
	7 Don't know	13	11,6	11,8
	Total	110	98,2	100
Missing		2	1,8	
Total		112	100	

As this was one of the two open questions in the survey, respondents were asked to name colleagues. Two respondents left the page blank and as a funfact some employees answered 'yes' without specifying the name which can have implications on how seriously this survey was taken by some, unless the reason is negligence.

However, nearly half of the respondents suggested individuals of which the majority is employees from different departments. Accordingly, the results returned valuable findings as the advisor also emphasized the need to identify motivated employees who find environmental issues important from personal perspective across the whole organization, ranging from pilots and cabin crew to ground workers and canteen workers. The current CSR manager has also pointed out that in-house ambassadors are needed to advance the case of environment.

Unsurprisingly, the current CSR manager and the CEO were recommended by several respondents, on one hand, likely due to their visibility in the organization through their position and extent of communication. On the other hand, interviewees reinforced that both of them are clearly highly committed to environmental work; furthermore the CEO has also been described by the interviewees as an energetic, inspirational, transparent person with high integrity. When asking the future CSR manager about enthusiastic colleagues, the managing director of Hotel Arctic was identified as highly committed person who could also serve as a role model. Further inspiring, enthusiastic employee named by the interviewee is the current CSR manager and the manager of the housing department and hangars who could promote environmental consciousness. However, as the current CSR manager is taking over a new position and these managers have many responsibilities anyway the focus has to be on engaging employees in different departments and thereby also encouraging staff involvement. It can be assumed that those employees who were suggested already display interest, commitment, support for environmental work and could credibly promote the cause.

To conclude, employees suggested (please see Appendix 5) could be potentially approached and already motivated by the fact that they were specifically recommended by colleagues in the survey. They could be asked whether they would be interested in being environmental ambassadors in their department or the entire organization, a leader of team suggesting energy saving ideas or even a leader of an environmental project. On the analogue communication agents in Air Greenland, suggested employees could also be asked if they would be interested in being in-house trainers on environmental issues for the staff, or lead workshops, promote environment at events and be involved in organizing eg. 'energy days', 'green contests', brainstorm and design creative and fun posters, displays, pictures that could raise attention to environmental issues – the range of opportunities is endless. Literature suggests enthusiastic environmentalists to join in a team where members can support each other and make the involvement even more enjoyable, work together across departments. Alliances also attract more attention to the cause and lend credibility, legitimacy to the ambassadors. Furthermore, literature suggests organizations to provide the space and 'creative freedom' to employees in their engagement. As described previously, some best practice companies have self-organizing networks with

a given budget to implement energy saving ideas in their work environments and promote ideas in the entire organization. Although in the previous question the preference for teaming up for conceiving ideas on energy savings and launching projects was somewhat lower, enthusiasts might have been among them and the attitude can change after the first few staff members joined together. Nevertheless employees can choose to be representatives on their own as well, either way Air Greenland should make sure that these individuals are supported and recognized for their efforts by the CSR management team or even by the top management.

#### **5.5.5. Communication**

The aim of the next question was to reveal which communications forms and channels are preferred by employees to receive information on Air Greenland's environmental work and commitments. Prior to the survey results, the qualitative findings are presented as follows.

As the future CSR manager revealed, the Intranet and e-mails are the main channels of communication, some departments like the technical or sales also have their own newsletters posted on the department's Intranet page. The interviewee further shared that several news stories were published on the Intranet last year on Hotel Artic's success and its acquiring the green key trademark as a motivating story. Furthermore news on signing the Global Compact and purchase of the more environmental friendly DHC 8 aircraft were also published internally and externally as press release. The advisor added that the need for more environmental consciousness was also communicated on the Intranet in detail as part of the CSR strategy. It was also ensured that the message reaches all employees at staff meetings in all departments where staff has the opportunity to raise questions. The future CSR manager also revealed that for a long time no top management talks or speeches have been given since the employee satisfaction survey showed that staff prefers their direct supervisor as source of information. Nevertheless, the CEO walks around and informally talks to various employees ranging from mechanics to sales personnel about CSR, environmental and Global Compact issues. However, no news has yet been published on the Intranet on the plan to build an environmental strategy. Once prepared, the future CSR manager plans to place it on the Intranet in its full length and link at least one news story to it. In turns the survey results are presented.

## 5. How would you like to get informed on Air Greenland's environmental commitment in the future?

Communication	Responses N	Percent	Percent of Cases
E-mail	22	13,30%	19,60%
Newsletter	2	1,20%	1,80%
Intranet	100	60,20%	89,30%
Management talks	17	10,20%	15,20%
Staff meetings	17	10,20%	15,20%
No information needed	5	3,00%	4,50%
Don't know	3	1,80%	2,70%
<b>Total</b>	<b>166</b>	<b>100,00%</b>	<b>148,20%</b>

This again was a multiple choice question, thereby giving a total of 166 choices. More than half of the respondents indicated the company's Intranet which is aligned with the fact that the site serves the key communication channel to employees in Air Greenland. Relatively equal, however, much less preference was given to e-mails, management talks and presentations, staff meetings as management talks are not common as explained earlier. A fairly low number of employees indicated that they would not want to receive any information or stayed neutral, which might imply that there is overall an interest among employees to hear about Air Greenland's environment related actions, however in written format like the Intranet or in e-mails employees can easily choose not to read it. Accordingly, it is justified that the message is communicated at staff meetings where employees are present. In that case though, the manager has the responsibility to share the information. In that way potential employee resistance can be reduced originating from misunderstanding, lack of accurate information. Employee surveys can reveal whether the information has been communicated and it also shows to what extent the message was understood and internalized.

To conclude, the company should continue to communicate its environment related messages via the Intranet; however, employees should indeed be updated at staff meetings to ensure the message reaches them and where they have a chance to ask questions and get informed by their direct supervisor face to face. Furthermore, as previously recommended, if the company chooses to collaborate more with employees during strategy formulation, staff opinion could be invited over the Intranet or in group discussions. In addition, as literature points out, environmental message has to be consistently reinforced as it takes time to embed it in the hearts and minds of employees. For instance, best practice companies apply talks by managers and acknowledged guest speakers of the field as well as constant stream of memos, bulletins, reports, newsletters and intranet systems, discussions at staff meetings for several years to build awareness and update staff on the

progress. It has been also emphasized that environmental message should be communicated via various innovative channels like e-mail footers, 'green days' and in unconventional ways like 'waste sculptures' to raise awareness effectively. All in all, Air Greenland should not make the mistake either to underestimate the amount of communication embed the environmental message over several years and ensure the persistent, continuous information via various channels and innovative ways. Compared to the current situation, the future communication should be more extensive and through more channels. Literature further highlights that it is important to allow employees to repeat the same questions and concerns as long as needed for them to learn and fully internalize environmental considerations. A valuable way to create a learning atmosphere, convince and motivate employees, is sharing successful environmental initiatives with them and the lessons learned from cases. As the advisor revealed, the case of Hotel Arctic is already used for these purposes at least among management. As the interviewee explained, the hotel successfully carried out an ambitious energy saving program proving the rest of the organization the business case. With a moderate investment the hotel saved significant amount of energy with a high rate of return, accordingly, could promote CO<sub>2</sub> reduction and at the same time was awarded the 'green key trademark'. This internal success serves as an even more powerful case study for the organization as the advisor pointed out, and it has been also revealed that it is used as a convincing argument for skeptical members of the management team. Accordingly, Hotel Arctic's case study should be also used at staff training and workshops to enable employees to learn from a highly motivating internal success.

### 5.5.6 Environmental education

The previous question investigated the way employees prefer to be informed, however, the following question aims to further reveal how they prefer to be educated on environment and Air Greenland's related work?

#### 6. Would you be interested in participating in any of the followings on environment protection?

Environmental Protection		Responses N	Percent	Percent of Cases
	Training and workshops	46	28,60%	41,10%
	Events and conferences	31	19,30%	27,70%
	Presentations	40	24,80%	35,70%
	No interest	22	13,70%	19,60%
	Don't know	22	13,70%	19,60%
<b>Total</b>		<b>161</b>	<b>100,00%</b>	<b>143,80%</b>

This multiple choice question resulted in 161 responses totally. The enthusiasm has slightly decreased also related to this question on involvement; however, those interested ranked training and workshop as first, presentations as second, and events and conferences as third according to their preferences to learn more on environment.

As outlined in the literature, training is indeed an effective way for organizations to communicate the importance of sustainability values and strategy to employees. It also ensures that all employees have the additional skills and knowledge to achieve sustainability-related business objectives and at the same helps to create awareness and develop employee competence regarding sustainability. As the HR representative revealed, short programs with different CSR related themes are offered by CSR Greenland for employees for some inspiration, however, trainings with focus on environment are not planned yet. In case trainings will be offered in the future, the different understanding of environment and environment protection has to be taken into consideration as the advisor emphasized. The difference between Greenlandic and Scandinavian understanding of the environment concept is well presented by an example shared by the advisor. When discussing potential projects with the Greenlandic HR manager, the manager had very practical suggestion such as actually going out to nature and cleaning up trash from hiking routes, fjords. As it was outlined previously related to communication, for Greenlanders the concept of environment refers in general to the concrete, physical nature surrounding them and not abstract relations like CO<sub>2</sub> emission, reducing pollution, preventing chemical to be disposed in freshwater, as the advisor pointed out. There is definitely a potential, however, the starting point for environmental education is highly different. The advisor further argued that employees could even be trained on basic environment protection practices such as driving less, not throwing away trash in the nature, not leaving the window open when the heating is on. The advisor further explained that training should also focus on raising awareness of the responsibility to change the current general attitude of the locals. As the advisor added on Greenlanders' general attitude, the main reaction to environment pollution is that 'it is our problem but not our fault'. Greenlandic glaciers are melting, polar bears and seals lose their natural habitat because 'everybody else is polluting'.

On a more general note, according to the literature, with certain involvement practices management can generate interest among employees, encourage active participation in the sustainability initiatives and motivate staff to act in a way that brings the organization closer to sustainability goals. It has been argued that providing information on sustainability is essential for raising awareness and increase understanding of the concept. In line with this argument the advisor revealed, that besides the practical aims on CO<sub>2</sub> and energy use reduction, the main focus of the strategy should be raising employee awareness of the importance and

relevance of environmental issues. By educating employees, people could also share with family members and in their local communities how they can reduce their own impact on the environment. According to the advisor, if the company communicated the environmental message effectively and performed well, even school classes could be invited to hear about the company's environmental program.

A further opportunity is community involvement with a potential to mobilize employees as the advisor added. In fact, the future CSR manager revealed that Air Greenland regularly organizes or hosts events on different social themes and according to the interviewee, voluntary employee participation in events shows that there are already several engaged employees in the organization and overall the staff has potential for getting involved. For instance, at the culture night organized annually at Air Greenland headquarters, every year around 60-70 employees volunteer out of the local 300 to help out at the event. This reveals, so the argument goes, that people are willing to spend their free time at the company and support it for a good cause. A further example shared by the interviewee was a charity event last year when again a large number of employees volunteered to help at the gala show organized at Air Greenland's premises. Similarly, at the "Make May Healthy" initiative Air Greenland employees were given the opportunity to do voluntary work during working hours, e.g. arranging a school race.

The literature also suggests capturing 'quick wins' or 'low hanging fruits' as it helps to overcome resistance, energize people, build momentum for change, create an atmosphere for learning and show that commitment to sustainability brings about real change and progress. As outlined previously, already two years ago a range of 'small wins' were identified in form of an environmental catalogue which includes for instance energy savings through a decrease in company owned cars, new printing rules, establishing of waste systems, shift to a paper free archive, restoration and renovation of office buildings, hangars and repair of building facades. Furthermore, as the reduction on emission from aircrafts is highly limited, targets will be set on 20% on housings, living quarters, hangars. It was also revealed previously that this might represent a slight reduction in the overall emission level, however, in such early phase it serves as a key motivational factor for environmental consciousness in the organization. Furthermore, considerable savings are expected on buildings for instance by better isolating offices, replacing older water appliances in the housings, replacing light bulbs to energy saving types, applying automated, center activated sensors, reducing waste in the canteen. The future CSR manager also instanced a smaller initiative to reduce waste in aircraft by using smaller plates and preparing the carbon neutral webpage.

To conclude, in line with employee preferences Air Greenland should offer first and foremost training and workshops to educate employees on environmental considerations. This is also aligned with the Scandinavian



and Greenlandic culture in particular to work in a group like during trainings and workshops, and offers employees potential to interact according their cultural values and attitudes. As the current CSR manager revealed previously, the company plans to involve employees via workshops and working groups early on which is well matched by survey findings. However, Air Greenland has to ensure that also training is provided for employees not only because it is a priority preference of respondents but also as it is one of the most efficient ways to educate employees according to the literature. Via training employees should also be familiarized with the results of the risk assessment, the company's environment related objectives, challenges and with the upcoming strategy and implementation. Later on employees should be trained on a regular basis so that staff with direct responsibility gains the technical and specialized skills and competences, while those with indirect responsibilities should be given training on a more general note. As CSR programs are already offered, Air Greenland should also provide training with focus on the environment. The HR department should also consider adding an environment theme to the existing training offer such as the leadership development and line communication course so that managers communicate also on the company's environmental initiatives better. As the company regularly uses trained in-house employees to hold courses for the staff, this method could be applied to environment themed trainings as well. Furthermore, as the advisor pointed out, it is highly important to consider the differences between Greenlandic and Scandinavian understanding of the environment and design the training accordingly: environmental education should first start with basic environment protection practices and upgraded consecutively with more abstract initiatives such as carbon reduction from reduced energy consumption to raise awareness and understanding of environmental issues among native Greenlandic employees.

Besides practical goals on reduction, the planned focus on education is well justified and in line with Air Greenland's status and role in the society, as well as its potential to have significant positive influence on the community by raising awareness and understanding of environment protection. Indeed, by educating employees their actions at the workplace can be connected to their behavior in their private homes and community as the advisor rightly explained. Best practice companies in the literature do not restrict education to staff either but communicate the direct impact of climate change on the local community, stress collective action and provide workshops to the staff's families as well.

Respondents indicated presentations as the second most preferred way of education. The literature suggests inviting renowned experts and industry leaders, academics to hold presentations and speeches on environment as these often inspire initiatives among employees. Air Greenland has already organized and hosted events and conferences, and involved employees as eg. voluntary workers with success. Accordingly, environment

themed events could be organized as well targeted to staff or at the local community where employees could participate as volunteers. On the analogue of 'kaffemik', Air Greenland could organize 'green events' where audience could hear about environment protection in an informal, creative way with organic refreshments, contests, quizzes. Later when the environmental work is more advanced, Air Greenland could also organize events to show its recognition to 'environmental ambassadors' and hand out awards, prizes to employees who won idea competition in order to appreciate, motivate enthusiasts and engage couch potatoes. Finally, for engaging employees, exhausting quick wins in the early phase of environmental work is also highly supported by the literature. Most companies with advanced sustainability work have also started to take advantage of low hanging fruit first and then developed a more structure plan for embedding sustainability. Small wins are indeed important to demonstrate that the new approach is efficient and to encourage supporters further.

### 5.5.7. Idea exchange on reducing CO<sub>2</sub> footprint

The aim of following survey question was to reveal how should Air Greenland collect the ideas for energy and cost reduction in practice. As the advisor and the current CSR manager revealed, so far employees approached them with ideas in person or directly to their own supervisor. The future CSR manager also shared that during the time of financial crisis when employees were asked to suggest ideas on cost reduction, a designated e-mail address was created for the purpose. However, as environmental work is long-term and has to be ongoing until sustainability gets truly embedded in the organizational culture, idea exchange should be facilitated in a more organized, long-term way.

## 7. How should the company organize the idea exchange for energy and cost reduction?

Idea Exchange		Responses N	Percent	Percent of Cases
	Suggestion box	54	21,20%	48,20%
	Intranet	77	30,20%	68,80%
	Blog	22	8,60%	19,60%
	Contact person	16	6,30%	14,30%
	Group discussion	29	11,40%	25,90%
	Face to face talk	12	4,70%	10,70%
	Internal competition	38	14,90%	33,90%
	No interest	3	1,20%	2,70%
	Don't know	4	1,60%	3,60%
<b>Total</b>		<b>255</b>	<b>100,00%</b>	<b>227,70%</b>

In this multiple choice question respondents were active clicking, resulting in a total of 255 choices. The main preferences were indicated in the following order: Intranet platform, suggestion box, internal competition and group discussions. Respondents are likely to have opted for a platform on the company's internal webpage as 'Insite' is the key communication channel in Air Greenland. Furthermore, as the future CSR manager revealed, the Intranet already has a popular platform for idea exchange among employees. In the section for the CEO's blog, staff is encouraged to comment and share opinion, and employees ranging from office workers to mechanics participate in the debate. Another widely used section on the Intranet is the 'Backside' where employees themselves can start a discussion on any chosen topic eg. uniforms, length of runways and managers take up the ideas. According to the preference and the general popularity of such Intranet sections, Air Greenland could consider creating a platform on 'Insite' dedicated to environment and related idea exchange. On the platform employees could share ideas which could be grouped according to reduction on energy consumption, emission from aircrafts, work environment or suggestions on changed behavior. Information should be also outlined on the site about how to use it, what is its aim, who is editing it, who are the contact people and responsible for environmental issues and potentially environmental ambassadors who could be approached in different departments. It is also highly important that ideas are followed up on and eventually implemented. Success stories should be published if an idea turned into reality, how, and how much reduction was achieved. As respondents indicated their interest for competition like games, awards, prizes, the site could also feature contest and offer prizes for the most interesting and valuable ideas. Literature also emphasizes the value of fun and creativity in employee engagement. Best practice companies organize employee idea competitions on how to reduce CO<sub>2</sub> footprint.

Nevertheless, creating a separate Intranet platform and maintaining it takes time and resources, accordingly at first, suggestion boxes could be used as the employees also indicated it as the second most preferred option. However, as it is a less organized way to collect ideas, special attention should be paid to follow up on all and implement the ones with good reduction potential. The respondents also chose group discussion which is also suggested by literature. It is argued that discussing environmental issues face-to-face in groups helps employees to explore them from their own perspective and engage in a deeper level. For instance, best practice companies ask employees during staff sessions to identifying potential areas for energy saving, identify challenges and find solutions together with colleagues. This idea collection method could be also applied in Air Greenland.

### 5.5.8. Supervisors' attitude

It is argued in the literature that in order to get sustainability successfully embedded in organizational culture, direct supervisors have to be approachable, open for and encouraging with new ideas, sharing information and trusting employees' decisions. Accordingly, the next survey question aims to 'test' if supervisors' attitude from employee perspective supports 'organizational greening' in this respect.

#### 8. Please tick what applies to your direct supervisor :

Supervisor	Responses N	Percent	Percent of Cases
Open for new ideas	63	32,50%	56,30%
Trusting my decisions	53	27,30%	47,30%
Difficult to approach	19	9,80%	17,00%
Encouraging me to share ideas	29	14,90%	25,90%
Keeps information	16	8,20%	14,30%
Don't know	14	7,20%	12,50%
<b>Total</b>	<b>194</b>	<b>100,00%</b>	<b>173,20%</b>

For this multiple choice question a total of 194 choices were indicated. The results confirm that supervisors are in general open for new ideas, trust their subordinates' decisions and encourage them to give suggestions. The current CSR manager agrees that idea sharing is encouraged 100% as part of the corporate culture thanks to the current CEO mainly. The future CSR manager reinforced that Air Greenland has an open culture where dialogue, debate is encouraged. Everyone can ask question, even criticize and employees live with the opportunity. According to the interviewee the employee satisfaction survey also revealed that employees perceive the organizational culture as open where idea sharing is encouraged and where employees can be engaged for a cause. Coming back to the findings, lower percentages were given to negative statements such as the supervisor is difficult to approach and keeps information to him or herself which can also imply that in general supervisors are approachable and share information. However, it also depends greatly on time pressure and personality of the supervisor if the opposite is true. All in all, Air Greenland supervisors'passed the test' and their general attitude based on survey findings would not imply that they hindered the organizational greening in these matters to a large degree.

### 5.5.9. Incentives

Linking employee pay to sustainability targets has been subject of discussion in the academic literature. Proponents would argue that adequate remuneration is a precondition to employee engagement, accordingly environment related targets should be part of appraisals and incentives, and connected to compensation. On the other hand literature also reveals that best practices companies do not offer financial incentives to employees who engaged in environmental issues. Although rewards and prizes may be offered to motivate employees, they have to be used cautiously if the organization expects creative responses. To come to clear terms with what incentives would motivate Air Greenland employees regarding environmental commitment, the next question asked respondents to state their preferences in this respect.

#### 9. What would motivate you to behave environmentally responsible in your work?

Motivation Environmental Work	Responses N	Percent	Percent Of Cases
Compensation	6	2,90%	5,40%
Time-off	21	10,20%	18,90%
Bonus	18	8,70%	16,20%
Social benefits	11	5,30%	9,90%
Recognition	43	20,90%	38,70%
Job flexibility	31	15,00%	27,90%
Performance appraisal	30	14,60%	27,00%
None of these	20	9,70%	18,00%
Don't Know	26	12,60%	23,40%
<b>Total</b>	<b>206</b>	<b>100,00%</b>	<b>185,60%</b>

Altogether 206 preferences were indicated for this multiple choice question. The results show that recognition, job flexibility and integrating environment related targets in the performance appraisal received the most preferences; accordingly, Air Greenland should focus on these incentives to motivate environmentally responsible behavior and thinking. The literature also argues that recognition can be a powerful motivator as some employees eg. highly value the opportunity to present their ideas on energy saving for the management. Indeed, for some employees management opinion in their ideas may even be more incentivizing than monetary rewards. As outlined previously, offering prizes and awards as recognition of employees' contribution for sharing ideas, promoting environmental issues, participating or being in charge of an environmental project can be also motivating. Regarding job flexibility, Air Greenland should ensure that enthusiastic employees can devote some of their work time to do not just social but also environmental work

besides their daily tasks. As the advisor revealed, Air Greenland provides the time and the space for employees to work with issues they are committed to, the lack of organizational support should therefore pose no problems. Furthermore, working with environment, which is different from the daily routine can motivate employees and at the same time advance Air Greenland's goals.

Regarding the third preference of the respondents, the HR department should consider integrating environment related targets in the performance appraisal so that employees get measured against environmental criteria as well. The advisor pointed out the HR department's responsibility in enabling behavior and mindset change via training, persistent communication and measurement just to name a few. As the interviewee further explained the HR department has the power and a key role to contribute for instance by designing half-day mandatory training on environment for all employees and provide education on basic environment protection practices as well as sustainability themes such as energy reduction.

The arguments are aligned with the literature emphasizing HR's key role in engaging employees and thereby embedding sustainability into organizational culture. HR professionals have the tools and the opportunity to enhance employee engagement as the function responsible for many of the key systems and processes eg. recruitment, training, and communications, on which effective sustainability performance depends. HR representatives also have relevant knowledge and skills in relation to organizational learning and cultural change. In fact, this survey asks respondents' preferences on several matters which would be partly the HR function's responsibility to implement and advise on. Facilitating environmental projects, coordinating events, providing training, integrating environment related targets in appraisal, adding related tasks to job descriptions and environmental considerations eventually to competency development, recruitment and orientation all need HR's contribution. However, the advisor voiced her concern that due to time and resource constraints HR will not be able to take part adequately to carry out these tasks, bring about the necessary behavioral change and follow up on achieving the goals. As the advisor explained, the HR department has inevitably several issues to handle as for instance labor agreements with pilots, mechanics, cabin crew on the top of the daily tasks. Moreover, they also have several strategic projects to manage which puts constraints and pressure on the function. Their limitations have already emerged related to the CSR strategy. The HR representative argued though that the HR department will allocate the necessary time and resources to contribute to implementing the environmental strategy. Furthermore, employee engagement is not solely the mandate of HR but a shared responsibility between top management and departmental managers as well.

Besides ensuring the capacity of the HR department, the current CSR manager argued that managers and employees also have to be allocated the necessary time and resources so that managers and employees can be involved in the strategy building and implementation on top of their daily tasks. In addition, it also has to be ensured that expectations on energy reduction and employee involvement are clear for middle managers. The advisor further revealed that resistance to environment related work is expected from the middle managers based on the general time constraints, however, not to greater extent or in different form than to any other strategic change process.

To conclude, not just employees but as literature argues, senior managers should also be allocated responsibility for delivering on sustainability goals, accordingly all departmental managers, including HR, partaking in the environmental strategy building and implementation should be measured on it. In terms of capability, literature suggests that middle managers should be followed through consistently on implementation initiatives, furthermore, assessed and held accountable for managing change and finally rewarded for their efforts. However, it is the organization's responsibility to ensure the capacity: money, time and human resources to make strategy building and implementation successful. As the interviewees pointed out previously, to overcome resistance due to increased workload related to environmental work, time and resources have to be allocated so that employees and especially middle managers can get properly involved. The constraints of the HR department also show that ensuring capacity is crucial. Air Greenland's top management has to ensure that the HR department is able to assign a person to environmental strategy building and implementation work. The HR also has to have the capability for strategic contribution. Senior management has to also ensure that the future CSR manager implementing the strategy receives enough support by getting adequate number of representatives from the key departments on the team. Middle managers often feel highly pressed by the new demands on the top of their basic required tasks. In line with literature suggestions, Air Greenland could consider removing managers' responsibility for routine tasks temporarily so that they can meet the increased workload as a result of environmental work. Employee engagement and changing values, behavior also require investment in communication, education, training, personal development both in terms of time and managerial work. If the organization lacks capacity in any ways: time, money and human resources, it risks the success of the initiatives, accordingly Air Greenland has to ensure the necessary capacity.

### 5.5.10. Ideas on energy reduction

The last open-ended survey question asked employees to share practical ideas on energy reduction and cost saving in their work environment.

#### 10. Do you have any ideas for energy reduction or cost saving in your work environment?

Ideas Energy Saving		Frequency	Percent	Valid Percent
<b>Valid</b>	1 Yes, without specifics	3	2,7	2,7
	2 Closing of doors/ports	3	2,7	2,7
	3 Shift to energy saving material	1	0,9	0,9
	4 Reduction of paper/heating/electricity use	4	3,6	3,6
	5 Automatic sensor use/ automatic climate control	2	1,8	1,8
	6 Turn off electricity lights/tools/vehicles if not used	13	11,6	11,8
	7 Change of flight behavior	2	1,8	1,8
	8 Replacement of old planes/helicopters	5	4,5	4,5
	9 Improvement of flight schedule	2	1,8	1,8
	10 Environmental aspect of management systems	3	2,7	2,7
	11 Alternative energy production	2	1,8	1,8
	12 Leveraging components usage	2	1,8	1,8
	13 Other	13	11,6	11,8
	14 Combination of more than one above mentioned energy saving suggestions	15	13,4	13,6
	15 No	33	29,5	30
	16 Don't know	5	4,5	4,5
	17 Yes, idea taken up already	2	1,8	1,8
	Total	110	98,2	100
<b>Missing</b>		2	1,8	
<b>Total</b>		<b>112</b>	<b>100</b>	

The idea proposals were grouped according to similar content and frequency. (see App. 5 and 17) Among the basic practices like turning off the light when leaving the room some practical suggestion were clearly related to the specific work environment. For instance, IT personnel proposed saving potential with combined printers and more energy efficient IT equipment. Unsurprisingly, office workers were mainly suggesting reduction of paper use; however, saving on energy/heating/paper was spread out equally throughout the whole survey sample among departments. Technical workers named a longer list of grouped ideas than expected, and understandably were the only department to suggest improving of component's lifetime aligned with their specific departmental knowledge. Employees working closely together with top management were mainly



concerned about the fleet management and the use of newer airplane models. Employees in the flight department and stationary service mentioned the change of flight behavior as an option of energy reduction. Employees in departments depending highly on software use like the traffic, finance and logistics department suggested different management programs in order to work more efficiently and with reduced material or energy consumption. These findings (see App. 18) are aligned with the current CSR manager's argument that differences can be seen between department's attitude as for instance the technical department has more stake in it and is more captive to environmental issues as plane management is part of their daily work, whereas, other functional departments in the office with eg. administrative responsibilities suggest basic practices like switching off the lights. Both the advisor and the CSR manager further revealed that white collar, more highly educated employees are considered to be more receptive to environmental initiatives than unionized blue collar workers handling luggage or working in the hangars. However, unique ideas mentioned only once were spread out among half of the responding departments, which shows that there is a potential for valuable ideas on energy use reduction and cost efficiency in the entire organization.

Indeed, literature suggests proactively seeking employee opinions and being attentive to their ideas. Inviting input, showing genuine interest in their ideas and opinions, being receptive to their suggestions and recommendations are essential practices of employee involvement. Some of the best corporate responsibility programs are based on input from employees working in operational departments who have hands on suggestions on improving systems and processes. Engaged employees can help to deliver the company's 'low carbon strategy' by identifying and implementing low CO<sub>2</sub> solutions across all business areas.

The current CSR manager revealed that Air Greenland has already engaged employees by asking for their opinion. Two years ago employees were mobilized successfully to share ideas on cost reduction during the time of financial crisis so that Air Greenland could avoid reducing workforce. As a result, management received 130 suggestions, which was more than expected, some were even related to environment and energy reduction. The interviewee further added that contrary to most of CSR initiatives, environmental work can be more concrete and practical with direct return on investment. CSR projects like assessing compliance to human rights legislation or corruption risk assessment are more difficult to communicate to employees and making it relevant to their everyday worklife. However, energy saving for instance has good potential for employee involvement in terms of generating ideas and suggestions. Related to the upcoming strategy building work, the plan is to ask for employee ideas already during the risk assessment. As the current CSR manager further revealed the external consultant will conduct a series of interviews with employees in the hangars, technical

department, ground workers and maintenance team to understand different work processes and go through various data among others on the use of energy, storage of airplane spare parts, de-icing fluids and fuel. Employees are interviewed not only on the current practices but also on suggestions of how to use less input more efficiently.

To conclude, survey responses the findings from interviews revealed that employees indeed have valuable ideas throughout the whole organization and Air Greenland rightly harvests these. Furthermore, some of the ideas shared in the survey are valuable for energy reduction and the management should make sure to follow up on these and implement some further quick wins early to motivate employees. Two sided printing can always be set as a printing standard and printers can be loaded with recycled paper or sheets where one side is already used. In order to reduce electricity consumption, the upgrading with the facilities with movement sensors has already started as well as replacing better isolation to save on heating costs. To realize some ideas like the change of flight schedules is resource demanding, many studies are needed as the current CSR manager revealed. Nevertheless, the flight schedule is already on the agenda of the company. Some of the respondents indicated that their ideas have already been taken up by the direct supervisors, which was reinforced by the interviewee as employees have the freedom to directly implement ideas in their work areas, however, some larger scale initiatives have to be presented to the management first. Either way following up on ideas and turning them into reality can engage employees with potential, showing that the organization is genuinely interested in staff ideas and opinion, and contribute to Air Greenland's goals on energy use reduction in a highly valuable way.

## 5.6 Chapter Summary

The table below summarizes the researched topic answered by quantitative survey results combined with qualitative interview findings and their implications on the case company's future environmental work; as well as a list of recommendations similarly to an action plan for a successful future engagement of employees for changing the culture towards environmental sustainability.

Q	Researched topic	Survey results	Interview findings	Implication/Recomm.
1	Initial employee attitude to company's aim on increased environmental commitment	Overall supportive initial attitude with some resistors	See later related to questions 3&6	Positive attitude including enthusiasts, potential to be engaged, mobilized
2	Reasons behind attitude, implications on compelling argument to mobilize supportive employees and win over resistors	Reasons and winning arguments: 'right thing to do' 'urgent issue' 'business case'	To win over Greenlandic employees use: 'emotive argument' 'simple words instead of abstract terms' Greenlandic language	Consider important differences between Scandinavian and Greenlandic way of communication when addressing employees to be mobilized and engaged
3	Preferred form of employee engagement requiring employee effort	Decreased interest compared to initial 'enthusiasm'; interest in participation in environmental projects, lesser extent in teamwork to brainstorm on initiatives and launching projects	Reason for decreased interest is resistance, due to time constraints and change in familiar work routines; however, via collaboration increased commitment, potential for engagement and improved attitude can be achieved	Allocate employees to potential projects defined by risk assessment, use collaboration and involvement practices from early on to generate more commitment and increase interest in environmental work
4	Potential change agents, ambassadors, champions to support and promote environmental work	Besides the CEO and the CSR manager, enthusiastic employees were identified in various departments	There is a need for enthusiasts to advance the cause of environment, further committed managers identified, choices explained	There are enthusiasts among staff who could be approached individually for taking up various involvement opportunities; teamwork could be suggested, the organization should support and recognize engaged staff

5	Preferred channels of communication to receive information on the company's environmental initiatives	Preferred channels of communication: mainly Intranet, to a lesser extent e-mails, management talks, presentations	Intranet is the key channel of communication; news stories have already been published on environmental topics on 'Insite' and externally; management talks uncommon; the need for more environmental consciousness was shared at staff meetings	Continue communication over the Intranet and in staff meetings, communicate more extensively and through more channels in a creative way; use Hotel Arctic's success as a case study among employees in trainings, workshops
6	Preferred form of environmental education	Enthusiasm decreased again; however, preferred forms of education in rank: training & workshop presentations events and conferences	No training planned yet; differences of Greenlandic understanding of terms environment (protection); education needed on basic environment protection practices; train to change attitude and raise awareness; community involvement with potential to mobilize; utilizing 'quick wins'	Offer training and workshops with focus on environment and add environmental theme to existing training for managers; consider differences of understanding and provide education on basic practices; offer presentations by experts in the field; organize 'green events' for staff, family and community
7	Idea exchange on energy and cost efficiency in organized, long-term way	Preferences in order: Intranet platform, suggestion box, internal competition and group discussions	So far employees approached the CSR manager and advisor in person or directly their supervisor; e-mail address for cost reduction ideas related to financial crisis	Create a separate Intranet platform dedicate to environment and related idea exchange featuring competition and prizes; can start with suggestions box first; facilitate group discussions to engage staff on a deeper level
8	Supervisors' attitude from employee perspective to test whether it supports 'organizational greening'	Supervisors are in general open for new ideas, trust their subordinates' decisions and encourage them to give suggestions	Open culture where dialogue, debate is and idea sharing is encouraged reinforced by employee satisfaction survey	Supervisors' general attitude does not hinder overall potential for 'organizational greening'

9	Preferred incentives for environmentally responsible behavior (and thinking) in work	Preferences in rank: recognition, job flexibility, integrating environment related targets in the performance appraisal	HR's key role and responsibility in enabling change of mindset and behavior via training, education, communication, appraisal etc. and at the same time their limitations due to time and resource constraints to contribute adequately with the above listed; capacity has to be ensured also for management and employees, clear expectations set to middle management	Focus on employee preferences to motivate environmentally responsible behavior and thinking; recognize idea sharing and involvement with prizes and awards; measure managers on delivering goals related to environmental strategy building and implementation; however, most importantly the organization has to ensure that the HR department, management and employees have the capacity and capability to contribute appropriately
10	Existing practical ideas on energy reduction	Several proposal grouped by researchers based on content and frequency: basic practices like saving on electricity/paper/heating spread out equally among sample; further specialized suggestions according to work environment; unique ideas spread out in whole organization	Differences between departments attitude based on their stake, captivity to environmental issues, to some extent on level of education ; employees were already engaged to share ideas on cost savings of which some were already environment related; plan to ask for suggestions during risk assessment	Potential for valuable ideas in whole company, follow up on these and implement some quick wins first to motivate and engage employees; later move on to more structured long-term plans and investments to work towards sustainability

## 5.7 Action Plan

1. **FRAME** with compelling arguments to engage employees and win over disinterested or skeptical staff:
  - Use 'right thing', 'urgent issue', 'business case' arguments for readily supportive and Scandinavian staff
  - Use 'emotive argument', simple words and native language to address Greenlandic employees
2. **ENGAGE** employees for environmental work requiring employee effort:
  - Invite employee opinion and input on environmental strategy
  - Offer environmental projects defined by risk assessment and management at first
  - Encourage employees later to launch projects themselves
3. **ENGAGE** potential change agents, ambassadors to promote and participate in environmental work:
  - Approach employees suggested in the survey and encourage them to get involved among others as
    - ✓ ambassadors in their department and/or the entire organization
    - ✓ leader of team brainstorming and implementing energy saving ideas
    - ✓ leader of an environmental project
    - ✓ in-house trainers on environmental issues for the staff
    - ✓ leader of workshops
    - ✓ promoter of environment at events
    - ✓ organizer of eg. 'energy days', 'green contests'
    - ✓ designer of creative and fun posters, displays, pictures
    - ✓ general supporter of the CSR manager's and her teams work
  - Encourage them to team up, set up networks, support and recognize them for their efforts
4. **COMMUNICATE** the environmental commitment and initiatives through
  - Intranet
  - Staff meetings where environmental issues should get priority
  - More persistently and continuously via various channels and innovative ways for several years
  - Powerful internal success stories like Hotel Arctic's case

5. **EDUCATE** employees by bearing in mind the differences between understanding of environment via:

- Training and workshops
  - ✓ on basic environment protection practices upgraded later to more advanced impact reduction methods to raise awareness, increase understanding, change attitude and behavior mainly the of Greenlandic staff
  - ✓ to familiarize employees with the results of the risk assessment, the company's environment related objectives, challenges and with the upcoming strategy and implementation
  - ✓ to equip staff having direct responsibility with technical and specialized skills and competences
  - ✓ with added environmental theme to existing leadership and communication training for managers
  - ✓ lead by trained in-house employees to hold courses for the staff
- Presentation and speeches to inspire initiatives held by
  - ✓ renowned experts of the field
  - ✓ industry leaders
  - ✓ academics
- 'Green events' for staff and their families, local community
  - ✓ to educate participants in an informal setting with eg. contest, quizzes
  - ✓ to raise awareness in a creative way with posters, displays
  - ✓ recognize engaged employees and those who won idea competition with awards, prizes
  - ✓ to motivate enthusiasts and engage disinterested
  - ✓ with help of volunteer staff

6. **FACILITATE** idea exchange on energy efficiency in organized, long-term way:

- Start with suggestion box
- Create Intranet platform devoted to environment and related idea exchange
  - ✓ group ideas according to reduction on energy consumption, emission from aircrafts, work environment or suggestions on changed behavior
  - ✓ provide information on the site about how to use it, what is its aim, who is editing it, who are the contact people and responsible for environmental issues, and potentially environmental ambassadors who could be approached in different departments
  - ✓ publish eventually success stories how an idea turned into reality and how much reduction was achieved
  - ✓ feature contest and offer prizes for the most interesting and valuable ideas
  - ✓ stimulate lively discussion in forums
- Organize group discussions for deeper engagement
- Ensure that all ideas are followed up on and the valuable ones get implemented

7. **INCENTIVIZE** environmentally responsible behavior (and thinking) in work through:

- Recognition
  - ✓ appreciate employees' contribution for sharing ideas, promoting environmental issues, participating or being leader of environmental projects with prizes and awards, eg. winning a free flight, 'greeny of the month'
- Job flexibility
  - ✓ ensure that enthusiastic employees can devote some of their work time to do not just social but also environmental work
- Integrating environment related targets in the performance appraisal

8. **IMPLEMENT** valuable employee ideas from the survey responses in the whole company

- Follow up on and implement some small wins first to motivate and engage employees
  - ✓ eg. ensure two sided printing as default setting, load printers with recycled paper or sheets where one side is already used
- Later move on to more structured long-term investments to work towards sustainability

Besides the above listed, to overcome challenges of implementing the strategy, manage resistance and successfully engage employees, qualitative findings revealed that Air Greenland has to ensure the followings as well:

- Always bear in mind the important differences between Scandinavian and Greenlandic way of communication and understanding of the concepts of environment (protection).
- Manage resistance resulting from time pressure and change in work routines, encourage bottom up initiatives by using collaboration and involvement practices from early on to generate more commitment, improved attitude and increase interest in environmental work.
- Measure managers on delivering goals related to environmental strategy building and implementation; however, most importantly, ensure that the HR department, middle management and employees have the capacity and capability to contribute and be involved appropriately. Allocate the necessary time, money and number of people to environmental work and ensure capability on individual, departmental, organizational level. Pay special attention enabling HR department to be able to contribute with a devoted HR representative to the environmental work and implementation of the requirements revealed by the survey.
- It is a positive aim to implement some quick wins first to motivate and engage employees; however, later move on to more structured long-term plans and investments to work towards sustainability.



Based on the context analysis in the first chapters Air Greenland has to ensure the followings for successful environmental work:

- Undertake the necessary long-term investments.
- Ensure capacity and that all the key people responsible are involved in the strategy building process.
- Ensure that company actions are aligned with its value statement: Air Greenland has to engage in dialogue with stakeholders also in reality if it publicly commits itself to availability, accessibility and stakeholder dialogue.

All in all, the survey revealed overall positive attitude among respondents, including enthusiast and an employee potential to get engaged. Survey responses also revealed respondents' preferences on which the plan for employee engagement can be built. Furthermore, the intent to change organizational culture towards environmental sustainability is also supported by the findings that the organizational culture supports 'greening', the management is committed and the direct supervisors' necessary attitude has also positive employee perception. Literature suggests using survey to assess employee attitude and preferences to engage staff early on at the company's environmental work. Hopefully this survey served well as a start of more to come and signal to employees that their ideas and preferences are valued by Air Greenland also for environmental work. For this the action plan offers steps that enable employee engagement and the change of organizational culture towards embedding sustainability overtime.

## VI. Summary, conclusion, discussion

In recent years sustainability has become increasingly an integral part of the business conduct in every industry; however, literature argues that those companies who aim to balance economic, social and environmental concerns in their operation have to engrain sustainability in the core of their values instead of treating it just as an add-on. As organizations are on the path of becoming sustainable, it is more and more apparent that organizational culture change is essential for the shift towards sustainability. Yet, despite the significant amount of academic and practitioner source on the topic, the question remains still open on how to engage employees in organizational culture change towards sustainability. Accordingly, this paper aimed to investigate how the case company could engage its employees in changing its organizational culture towards environmental sustainability.

It has been argued that the case study of Air Greenland is considered to be relevant and contributes to filling the research gap based on the following facts. The air transportation industry is viewed as one of the main environmental polluters; consequently, aviation companies are under various stakeholder pressures to reduce their CO<sub>2</sub> footprint despite their dependency on polluting machinery in their business model. This fact presents a paradox or extreme situation which is a necessary justification for a case study research. A further fact which makes this case study relevant is that Air Greenland is based in a self governing territory with developing country traits, and academic research gap on sustainability in such territories is apparent. Even though most Greenlanders adopted westernized modern lifestyle, the country needs to elaborate and more strictly enforce national legislation, develop infrastructure and further main industries next to fishery in order to become economically independent from Denmark in the future. Additionally, most of the research papers on sustainability and environment investigated management perspectives with less focus on employee perspectives. However, this paper aimed to give a more holistic view of the organization by adding employee perspectives to those of management. Finally, it has been also argued in literature that there is a lack of researched examples on companies in the initial phase of implementing sustainability. Air Greenland was indeed at an early phase of environmental commitment when the research was conducted: after signing the Global Compact and before the process of building environmental strategy. Accordingly, research was focused on proactively investigating the possible ways of employee engagement related to changing organizational culture towards sustainability. Accordingly, in line with the aim of the thesis and the specific case study context, the main research question has been formulated as 'How could Air Greenland engage its employees in changing its organizational culture towards environmental sustainability?'

A mixture of explorative, quantitative and qualitative methods served as primary data collection in form of a survey targeted Air Greenland employees to investigate potential ways of employee engagement, while the secondary data and interviews revealed further findings on national and industry context, the supportive and challenging influences on Air Greenland's current and future environmental work, as well as on the potential barriers and facilitators to change organizational culture towards sustainability. During the analysis, references were also made to the literature review which served as a basis for survey and interview questions as well as outlined academic and practitioner best practices. Finally, recommendations were presented based on the primary and secondary data analysis.

The analysis of the national context revealed that Air Greenland has to face challenges as a result of the lack of sufficient national legislation and infrastructure in Greenland which would support the company's environment related pursuit. Similarly, the fact that environment is not a mature discussion topic among locals, the negative attitude and different understanding of sustainability and perception of environment can also pose challenges. On the other hand, in the Greenlandic territory with developing country traits, this provides an opportunity for businesses and government to cooperate and the case company can contribute to developing legislation and infrastructure. Furthermore Air Greenland also has the chance to raise awareness, educate on and change attitude to environment (protection) thereby confirming the company's status as a frontrunner in the country, in line with its motto: 'We move Greenland forward'.

Besides the opportunities of government - business co-operation and community involvement, development; the analysis on the industry context and Air Greenland's current and existing environmental aspirations revealed the followings. The airline has opportunities for cost savings and slight reduction on its CO<sub>2</sub> footprint as a result of fleet renewal and reduced energy consumption in housings, offices, hangars. Exhausting the 'quick wins' shows visible savings reduced CO<sub>2</sub> and serves as motivation for employees to be engaged in further initiatives; implementing the strategy which enables to work for reduced environmental impact in a structured way. However, Air Greenland is facing some key challenges. Firstly, the company has to make the necessary long-term investments for its future environmental work under the significant pressure from competition and increasing expenses. Furthermore, the severe limitation on the fleet that can be operated under Greenlandic conditions, consequently, the relatively 'fixed' emission from the aircraft significantly challenges the company to achieve its goal to 'first and foremost reduce aircraft carbon emission' as it stated. However, Air Greenland at least aims to reduce its environmental impact and to work towards reducing the emissions from housing which also represents a large amount of CO<sub>2</sub>. Indeed, the core business model depending on polluting machinery as characteristic of the airline industry, and in Air Greenland's case the special responsibility to

provide transportation under challenging Greenlandic conditions only enables the airline to become less unsustainable. Still, the environment and the society will win with Air Greenland's effort.

The further analysis on the potential barriers and facilitators on 'organizational greening' revealed that industry macro culture indeed does not support 'greening efforts', however, the organizational culture assumingly supports it, or at least does not oppose or hinder. Management commitment also from those directly responsible for environmental endeavors is confirmed. However, Air Greenland has to ensure that its actions are aligned with its value statement on accessibility and availability and engage in stakeholder dialogue also in real life as committed, not just on paper.

Having gained an overview of the challenges and opportunities Air Greenland is facing in its environmental work as result of industry and national context, as well as further potential barriers and facilitators of greening,; in line with the research question and subquestions, potential ways of engaging employees were presented and analyzed based on employee input from the survey responses and interview findings.

The survey revealed overall positive attitude among respondents, including enthusiast and an employee potential to get engaged. However, to overcome the challenges of resistance, using collaboration and involvement practices from early on to generate more commitment, improved attitude and increase interest in environmental work is suggested. Furthermore for successful implementation of the strategy and engagement of the entire workforce the important differences between Scandinavian and Greenlandic way of communication and understanding of the concepts of environment (protection) have to be kept in mind. The findings also revealed that Air Greenland has to focus on ensuring capacity, capability and follow-up for a successful environmental work. In line with the subquestions, survey responses also revealed respondents' preferences on which the plan for employee engagement can be built. Accordingly, a list of recommendations were given on framing Air Greenland's environmental pursuit as a compelling argument which mobilizes supportive employees and potentially wins over resistors; on the forms of engaging employees requiring staff's active contribution; on engaging potential change agents, ambassador to promote and participate in environmental work; channels and forms of communication to inform employees on the Air Greenland's environmental efforts; educating on environment (protection) bearing in mind the cultural diversity of the workforce; facilitating the idea exchange on energy efficiency and environment in an organized, long-term way; incentivizing environmentally responsible behavior (and thinking) and idea sharing and implementing existing employee ideas on energy efficiency and footprint reduction.

All in all, it can be concluded that in line with the main and the subquestions, the thesis achieved its aim to analyze and make recommendations on how Air Greenland could engage its employees in changing its organizational culture towards environmental sustainability. Focus on involving employees is justified for organizational culture change, however, analysis and recommendations could have been more elaborate on the 'organizational culture change' itself. For instance, related to the specific factors of diversity, capacity and capability, more focus was placed on the recommendations to ensure them than on elaborating in more details how these factors influence the change process. For example, as a culturally and professionally diverse workforce would imply rather values than behavior as change target, accordingly, the paper could have outlined further how value change can be achieved. Changing organizational values also has implications on capacity and capability which were not outlined in detail either, neither their implications on change design. The airline could have also been assessed against further factors acting as barriers or facilitators of 'organizational greening' such as performance believes, cultural fragmentation or alternative business philosophies, however, the data collection produced rather limited findings on these, as the main focus was kept on employee engagement. More aspects of employee engagement and more customized recommendations could have been given on these if not for time pressure, thesis space and cost limitations.

As outlined in the research methodology section, if the survey would have been pretested among Greenlandic employees and posted in Greenlandic language, response rate would have been assumingly higher, thereby, better reflecting the overall attitude potential for engagement, involvement preferences and energy reduction ideas of the entire Air Greenland workforce. The qualitative findings have also revealed that explorative interviews with Greenlandic natives on the understanding of environment (protection) and attitude to such issues would have been very valuable to adjust research and be able to provide more customized recommendations. Such explorative interviews could have also helped to treat literature more objectively. Furthermore, on site observations could have also lead to a better perception of attitude and organizational culture to reveal how supportive it is for 'greening' if not for cost limitations. Last but not least, as previously described, more interviews with key managers such as HR and those taking part in the strategy building process could have enabled more understanding on the implementation feasibility. Interviews with further Air Greenland employees would have also broadened the employee perspective of the research and provide more extensive and deeper data if not for time constraints and space limitations of the thesis paper. Although these would have improved the research, the aim of thesis to analyze and give recommendations on how could Air Greenland engage its employees in changing organizational culture towards sustainability, has been achieved.

Finally, the contribution of the thesis paper to academic literature is discussed. It has been argued that the main limitation of the case study method is that findings cannot be generalized since the case example stays unique to the organizational context. In fact this argument is true this case study to large extent, nevertheless this research method combined with the abduction approached enabled the researchers gain a deeper understanding of the specific research topic and be able to give more customized recommendations. However, irrespective from the case study context, the results for two survey questions confirmed the currently prevailing assumption of academic research. Regarding the first case, literature argues that 'business case', 'urgency', 'right thing to do' and emotional arguments can be considered as the most convincing for an organizational pursuit of sustainability, which was reinforced by the findings of this research. Furthermore, it has been subject of discussion in literature for quite some time whether the motivation of employees for more environmentally responsible behavior and thinking should be linked to monetary or non-monetary rewards. Aligned with literature arguments, this research results confirm that integrating environmental related targets in performance appraisal incentivizes such behavior on the work, however, for sharing creative, innovative ideas on energy and carbon footprint reduction employees are best motivated by recognition.

Further findings relevant for the academic literature could have been revealed by classifying survey responses according to age, gender, nationality, years of work experience in line with the original intent of the survey, however, these were considered to be irrelevant for the specific case analysis not presented due to time and space limitations either. However, touching on the aim to contribute filling the academic research gap as outlined in the introduction, all four assumptions proved to be relevant. In fact, Air Greenland operating in the airline industry did serve as an extreme case relevant for case study. It has been revealed indeed that the aim for increased environmental consciousness among airlines is a very complex challenge as such companies depend on polluting machinery in their core business model and are responsible for a significant negative impact on the environment. The fact that the Air Greenland is based in a territory with developing country traits also added to literature as it revealed that in such territories extra efforts are needed for environmental work on the top of industry limitations. Lack of strictly enforced rules on environment protection, lack of infrastructure and the fact that (environment) protection is immature discussion topic in the society poses further challenges for Air Greenland's environmental work, however, at the same time offers opportunities for business -government co-operation and community involvement, development. By conducting a survey among employees besides management interviews, this paper also added to those where a more holistic approach is applied for research. Finally, research has been carried out at a case company in the early stage of its environmental work which adds new perspectives to literature and offers the opportunity to conduct future, comparative research at the case compact investigating how Air Greenland progressed with changing its

organizational culture towards sustainability and implemented the suggestions on employees engagement listed in the paper.

In addition, it could be also a future subject of research how initial 'quick wins' on reduced energy consumption and long-term organizational change towards sustainability can lead to cost savings which could be used in the organization as compelling arguments for further long-term environmental investments. A further interesting topic of investigation could be whether fleet renewal actually contributes to reducing the overall negative impact on the environment. As argued in the literature, manufacturing aircrafts involves significant amount of CO<sub>2</sub> emission, therefore, fleet replacement might not be the perfect solution for decreased carbon footprint and hence airlines are forced to find new ways of improving their environmental impact.

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## Interviews

1. Christian Keldsen, current CSR Manager, Air Greenland (28 March, 2011) (1 April, 2011)<sup>8</sup>
2. Anne Mette Christiansen, Internal Consultant, Air Greenland ( 1 April, 2011)<sup>9</sup>
3. Pia Christensen Bang, former Communication Officer and since 01.April 2011 Manager, CSR & Communication, Air Greenland (6 April, 2011)<sup>10</sup>
4. Mette Steenholdt, HR employee, Air Greenland, (3 May, 2011)<sup>11</sup>

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<sup>8</sup> Interview transcripts and recordings are available upon request.

<sup>9</sup> Interview transcripts and recordings are available upon request.

<sup>10</sup> Interview transcripts and recordings are available upon request.

<sup>11</sup> Interview transcripts and recordings are available upon request.



## VIII. Appendices

### Appendix 1

#### Resource Based View (RBV)

This paper applied RBV theory which treats the external environment as given and helps to understand the relations in the case company's internal resources. According to the RBV theory, the sustainable competitive advantage of a company is based on how its resources and capabilities are managed. Instead of focusing on external environment, RBV puts emphasize on the internal organizational processes which influence the company's environment (Barney, 1991). Itami (1987) explained in detail that invisible assets as for instance corporate culture, trustworthy relationships to customers and management skills are crucial for a company's success. As these invisible assets are complicated and time consuming to acquire, they provide the company with a competitive advantage (Itami, 1987). The main limitation of the RBV is, however, its focus on internal resources which implies that the company's changing and influencing environment is not considered. Accordingly, in this paper Air Greenland's employees and corporate culture were taken as internal resources and the organization's invisible assets. Employee engagement and organizational culture are researched as potential capabilities to achieve the company's goal to embed environmental sustainability and create therewith a competitive advantage.

## **Appendix 2**

### **Interview guide: Employee Engagement in Sustainability – European Airlines**

Position:

Department:

Responsibility:

1. Why do you engage employees in supporting and executing the environmental strategy?
2. In what form did the company engage the employees?
3. What kind of ideas have the employees come up with and what do these new ideas concern?
4. How does the company facilitate idea exchange? (intranet platform, face-to-face groups)
5. How do you motivate, reward employees to get engaged?
6. How do you overcome criticism/cynism/resistance?
7. How were the passionate, committed employees mobilized?
8. Are there any contact persons in different departments?
9. How do you ensure that all ideas are given feedback?
10. Has any idea become a reality? How is it published?
11. How was the engagement opportunity communicated?
12. How was the change process managed?
13. What is the role of the leaders and has any vision been built?
14. Is the organization's culture supportive for greening?
15. Does the company cooperate with any NGOs or do you work with advisors?

## Appendix 3

- 1) Survey announcement on Air Greenland's Intranet
- 2) Survey questions in English
- 3) Survey questions in Danish
- 4) Survey layout posted on Air Greenland's Intranet

### 1) Survey announcement on Air Greenland's Intranet

Miljø – og hvad så?

Hvorfor skal Air Greenland lave særlige miljø-indsatser? Betyder det noget for dig som medarbejder, hvordan selskabet agerer i miljøspørgsmål? Hvad gør du selv for at være grønnere på dit arbejde? Det er nogle af de emner, der spørges til i det spørgeskema, som vil ligge her på Insite de næste par uger. Det er to studerende fra Copenhagen Business School, der er i gang med at skrive en større opgave om Air Greenlands arbejde på miljø-området. De hedder Edit og Eve og vil sætte meget stor pris på, at så mange medarbejdere som muligt vil ofre de 5-8 minutter, det tager at udfylde spørgeskemaet. Og som det fremgår af selve undersøgelsen, så kan du vinde to biografbilletter eller to dvd'er ved at deltage.





## 2) Survey questions in English

It is possible to tick several answers to the multiple choice questions.

### 3. Do you agree or disagree that Air Greenland starts to care about the environment?

- A. Strongly Agree
- B. Agree
- C. Neither agree nor disagree
- D. Disagree
- E. Strongly disagree

### 4. Why or why not should Air Greenland start to care about the environment?

- A. It saves costs for the company, reduces energy use and increases efficiency
- B. There is no point in it because the airline industry is environment polluting anyway
- C. Environment protection is an urgent issue and Air Greenland should do something
- D. It is useless as long as our natural environment is ruined by the effects of world wide industry
- E. It is the 'right thing to do', the moral obligation of Air Greenland as a role model company in the country
- F. Caring about the environment is just another management term that will disappear eventually
- G. I don't know

### 5. Would you be interested in

- A. Participating in environmental projects
- B. Joining a team to come up with ideas for environment protection and launch environmental projects
- C. Team up with another colleague to be environmental representatives
- D. No, I'm not interested in any of these
- E. I don't know

### 6. Can you name a colleague who is enthusiastic about environment protection?

### 7. How would you like to get informed on Air Greenland's environmental commitment in the future?

- A. E-mail
- B. Newsletters
- C. Intranet 'Insite '
- D. Management talks and presentations
- E. Staff meetings
- F. I would not like to be informed
- G. I don't know
- H.

**8. Would you be interested in participating in any of the followings on environment protection?**

- A. Training and workshops
- B. Events and conferences
- C. Presentations
- D. No, I'm not interested
- E. I don't know

**9. How should the company organize the idea exchange for energy and cost reduction?**

- A. Suggestion box
- B. Intranet platform on Insite
- C. Blog
- D. Appoint a contact person who I could mail, phone directly
- E. Group discussion
- F. Face-to-face talks
- G. Internal competition like games, awards, prizes
- H. I'm not interested
- I. I don't know

**10. Please tick what applies to your direct supervisor :**

- A. Open for new ideas
- B. Trusting my decisions
- C. Difficult to approach
- D. Encouraging me to share ideas
- E. Keeps information to him- or herself
- F. I don't know

**11. What would motivate you to behave environmentally responsible in your work?**

- A. Compensation
- B. Time-off
- C. Bonus
- D. Social Benefits
- E. Recognition
- F. Job flexibility
- G. To have environment related targets in the performance appraisal
- H. None of these
- I. I don't know

**12. Do you have any ideas for energy reduction or cost saving in your work environment?**

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Now, to help us to classify your answers and to make our statistical comparisons, please tell us the followings.

Age:

Male / Female:

Department:

Nationality:

How long have you been working for Air Greenland? range: x above 20 yrs x 10-20 yrs x 5-10 yrs x 5-2 yrs x less than 2 yrs "

Please leave your e-mail contact below in case you agree to be interviewed on this topic in English. Thank you!

### 3) Survey questions in Danish

Det er muligt at vælge mere end ét svar til multiple choice spørgsmålene.

**1. Er du enig eller uenig i, at Air Greenland begynder at tage hensyn til klima og miljøet?**

- A. Helt enig
- B. Enig
- C. Hverken eller
- D. Uenig
- E. Helt uenig

**2. Hvorfor burde Air Greenland (ikke) starte at tage hensyn til miljøet? (flere svar er mulig)**

- A. Det sparer omkostninger for virksomheden, reducerer energiforbruget og øger effektiviteten
- B. Det giver ikke mening, fordi luftfartsindustrien forurener miljøet alligevel
- C. Miljøbeskyttelse er et presserende problem, og Air Grønland bør gøre noget
- D. Det er forgæves, så længe vores naturlige miljø bliver ødelagt på grund af den globale industri
- E. Det er den rette ting at gøre. Det er "Air Greenland"s moralske forpligtelse, som et forbillede for andre virksomheder i landet.
- F. Omtanken for miljøet er bare en smart modeord, der vil forsvinde med tiden
- G. Ved ikke

**3. Ville du være interesseret i at (flere svar er mulig)**

- A. Deltage i miljømæssige projekter
- B. Deltage i en gruppe, der kommer med ideer til miljøbeskyttelse og starter miljøprojekter op
- C. Blive miljørepræsentant sammen med en kollega
- D. Nej, jeg er ikke interesseret i nogle af ovenstående
- E. Ved ikke

**4. Kan du nævne en kollega, der er begejstret for miljøbeskyttelse?**

**5. Hvordan ønsker du at modtage informationer omkring "Air Greenland"s miljømæssige engagement i fremtiden? (flere svar er mulig)**

- A. E-mail
- B. Nyhedsbrev
- C. Intranettet 'Insite'
- D. Ledelses foredrag og præsentationer



- E. Medarbejdermøder
- F. Jeg ønsker ikke at blive informeret
- G. Ved ikke

**6. Ville du være interesseret i at deltage i nogen aktiviteter af de følgende aktiviteter vedrørende miljøbeskyttelse? (flere svar er mulig)**

- A. Uddannelse og workshops
- B. Arrangementer og konferencer
- C. Præsentationer
- D. Nej, jeg er ikke interesseret
- E. Ved ikke

**7. Hvordan kan virksomheden bedst indhente information og idéer omkring reducing af omkostninger og energi fra deres medarbejdere? (flere svar er mulig)**

- A. En "forslags-box"
- B. Via Intranettet Insite
- C. På en blog
- D. Ved at udvælge en kontaktperson, man kunne ringe eller maile til direkte
- E. Gruppediskussioner
- F. Personlige samtaler
- G. Intern konkurrence med præmier
- H. Jeg er ikke interesseret
- I. Ved ikke

**8. Markér de udsagn, der passer på din leder: (flere svar er mulig)**

- A. Åben overfor nye idéer
- B. Har tillid til de beslutninger, jeg træffer
- C. Svær at henvende sig til
- D. Opmuntre mig til at dele idéer
- E. Holder informationer for sig selv
- F. Ved ikke

**9. Hvad ville motivere dig til at arbejde med omtanke til miljøet? (flere svar er mulig)**

- A. Erstatning
- B. Fritid
- C. Bonus
- D. Sociale ydelser
- E. Anerkendelse
- F. Job fleksibilitet

- G. At have miljørelaterede mål i bedømmelsesrapporten
- H. Ingen af disse
- I. Ved ikke

**10. Har du nogen ideer til reduktion af energiforbruget eller omkostningsbesparelser i dit arbejdsområde?**

For at hjælpe os med at systematisere jeres besvarelser og gøre det muligt at foretage statistiske sammenligninger, beder vi dig afslutningsvis at udfylde nedenstående informationer.

Alder::

Køn:

Afdeling:

Nationalitet:

Hvor længe har du været ansat hos Air Greenland? (Over 20 år, 10-20 år, 5-10 år, 5-2 år, mindre end 2 år)

Det ville glæde os, hvis du kunne have interesse i at deltage i et interview ang. ovenstående emnet. Interviewet vil foregå på engelsk. Skulle dette have interesse, notér da venligst din e-mail nedenfor.

For at deltage i konkurrencen, notér da venligst dit telefonnummer.

Tak for besvarelsen!

#### 4) Survey layout posted on Air Greenland's Intranet

Administration af systemindstillinger  
Her ve...

FORSTI...  
27-04-2...

Menu


- Generel
- Dashboard
- Brugers...
- Infobas...
- Module...
- Billed...
- Intelli...
- Metad...
- Test a...
- J-mai...
- Poll...
- Poll...
- Sva...
- Igar...
- Arkiv...
- Poll...
- IntraNo...
- System...
- Exchan...
- Kalend...
- Helpde...
- Helpde...
- APV Po...

Webpage Dialog

Undersøgelse : Air Greenland og miljøet

← Forrige spørgsmål   Afbryd og vend tilbage senere   Generel vejledning   → Næste spørgsmål

Spørgsmål 5 af 11

0%  5 (45%) 100%

Hvordan ønsker du at modtage informationer omkring Air Greenlands miljømæssige engagement i fremtiden? (flere svar er mulig)

☐ E-mail

☐ Intranettet Insite

☐ Ledelsesforedrag og præsentationer

☐ Medarbejdermøder

☐ Jeg ønsker ikke at blive informeret

☐ Ved ikke

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## Appendix 4

### Survey Codebook

Full variable English	SPSS variable	SPSS variable label	Coding instructions
<b>ID</b>	ID	id	Identification number
<b>Do you agree or disagree that Air Greenland starts to care about the environment?</b>	AGREE	caring about environment	5 = Strongly Agree, 4 = Agree, 3 = Neither agree nor disagree, 2 = Disagree, 1 = Strongly disagree
<b>Why or why not should Air Greenland start to care about the environment? - It saves costs for the company, reduces energy use and increases efficiency</b>	WHY 1	why environmental commitment	1= yes, 2 = no
<b>Why or why not should Air Greenland start to care about the environment? - There is no point in it because the airline industry is environment polluting anyway</b>	WHY 2	why environmental commitment	1= yes, 2 = no
<b>Why or why not should Air Greenland start to care about the environment? - Environment protection is an urgent issue and Air Greenland should do something</b>	WHY 3	why environmental commitment	1= yes, 2 = no
<b>Why or why not should Air Greenland start to care about the environment? - It is useless as long as our natural environment is ruined by the effects of world wide industry</b>	WHY 4	why environmental commitment	1= yes, 2 = no
<b>Why or why not should Air Greenland start to care about the</b>	WHY 5	why environmental commitment	1= yes, 2 = no

<b>environment? - It is the 'right thing to do', the moral obligation of Air Greenland as a role model company in the country</b>			
<b>Why or why not should Air Greenland start to care about the environment? - Caring about the environment is just another management term that will disappear eventually</b>	WHY 6	why environmental commitment	1= yes, 2 = no
<b>Why or why not should Air Greenland start to care about the environment? - Don't know</b>	WHY 7	why environmental commitment	1= yes, 2 = no
<b>Would you be interested in - Participating in environmental projects</b>	INTE R1	interest in environmental projects	1= yes, 2 = no
<b>Would you be interested in- Joining a team to come up with ideas for environment protection and launch environmental projects</b>	INTE R2	interest in environmental projects	1= yes, 2 = no
<b>Would you be interested in - Team up with another colleague to be environmental representatives</b>	INTE R3	interest in environmental projects	1= yes, 2 = no
<b>Would you be interested in - No, I'm not interested in any of these</b>	INTE R4	interest in environmental projects	1= yes, 2 = no
<b>Would you be interested in - Don't know</b>	INTE R5	interest in environmental projects	1= yes, 2 = no
<b>Can you name a colleague who is enthusiastic about environmental protection?</b>	COLL	enthusiastic colleague	1 = Yes (without name), 2 = Michael Binzer, 3 = Christian Keldsen, 4 = Michael Binzer and Christian Keldsen, 5 = Yes, other, 6 = No, 7 = Don't know
<b>How would you like to get informed on Air Greenland's</b>	COM M1	preferred type of communicatio	1= yes, 2 = no

<b>environmental commitment in the future? - E-mail</b>		n	
<b>How would you like to get informed on Air Greenland's environmental commitment in the future? - Newsletters</b>	COM M2	preferred type of communication	1= yes, 2 = no
<b>How would you like to get informed on Air Greenland's environmental commitment in the future? - Intranet Insite</b>	COM M3	preferred type of communication	1= yes, 2 = no
<b>How would you like to get informed on Air Greenland's environmental commitment in the future? - Management talks and presentations</b>	COM M4	preferred type of communication	1= yes, 2 = no
<b>How would you like to get informed on Air Greenland's environmental commitment in the future? - Staff meetings</b>	COM M5	preferred type of communication	1= yes, 2 = no
<b>How would you like to get informed on Air Greenland's environmental commitment in the future?- I would not like to get informed</b>	COM M6	preferred type of communication	1= yes, 2 = no
<b>How would you like to get informed on Air Greenland's environmental commitment in the future? - Don't know</b>	COM M7	preferred type of communication	1= yes, 2 = no
<b>Would you be interested in participating in any of the followings on environmental protection? - Trainings and workshops</b>	ENVP RO1	preferred type of environmental projects	1= yes, 2 = no
<b>Would you be interested</b>	ENVP	preferred type	1= yes, 2 = no

<b>in participating in any of the followings on environmental protection? - Events and conferences</b>	RO2	of environmental projects	
<b>Would you be interested in participating in any of the followings on environmental protection? - Presentations</b>	ENVP RO3	preferred type of environmental projects	1= yes, 2 = no
<b>Would you be interested in participating in any of the followings on environmental protection? - No, I am not interested</b>	ENVP RO4	preferred type of environmental projects	1= yes, 2 = no
<b>Would you be interested in participating in any of the followings on environmental protection? - Don't know</b>	ENVP RO5	preferred type of environmental projects	1= yes, 2 = no
<b>How should the company organize the idea exchange for energy and cost reduction? - Suggestion box</b>	EXCH 1	ideas exchange	1= yes, 2 = no
<b>How should the company organize the idea exchange for energy and cost reduction? - Intranet platform Insite</b>	EXCH 2	ideas exchange	1= yes, 2 = no
<b>How should the company organize the idea exchange for energy and cost reduction? - Blog</b>	EXCH 3	ideas exchange	1= yes, 2 = no
<b>How should the company organize the idea exchange for energy and cost reduction? - Appoint a contact person who I could mail, phone directly</b>	EXCH 4	ideas exchange	1= yes, 2 = no
<b>How should the company organize the idea exchange for energy and cost reduction? -</b>	EXCH 5	ideas exchange	1= yes, 2 = no

<b>Group discussion</b>			
<b>How should the company organize the idea exchange for energy and cost reduction? - Face to Face talks</b>	EXCH 6	ideas exchange	1= yes, 2 = no
<b>How should the company organize the idea exchange for energy and cost reduction? - Internal competition like games, awards, prizes</b>	EXCH 7	ideas exchange	1= yes, 2 = no
<b>How should the company organize the idea exchange for energy and cost reduction? - I am not interested</b>	EXCH 8	ideas exchange	1= yes, 2 = no
<b>How should the company organize the idea exchange for energy and cost reduction? - Don't know</b>	EXCH 9	ideas exchange	1= yes, 2 = no
<b>Please tick what applies to your direct supervisor - Open for new ideas</b>	SUPE R1	supervisor	1= yes, 2 = no
<b>Please tick what applies to your direct supervisor - Trusting my decisions</b>	SUPE R2	supervisor	1= yes, 2 = no
<b>Please tick what applies to your direct supervisor - Difficult to approach</b>	SUPE R3	supervisor	1= yes, 2 = no
<b>Please tick what applies to your direct supervisor - Encouraging me to share ideas</b>	SUPE R4	supervisor	1= yes, 2 = no
<b>Please tick what applies to your direct supervisor - Keeps information to him- or herself</b>	SUPE R5	supervisor	1= yes, 2 = no
<b>Please tick what applies to your direct supervisor - Don't know</b>	SUPE R6	supervisor	1= yes, 2 = no
<b>What would motivate you to behave environmentally responsible in your work? - Compensation</b>	MOT IV1	motivation work	1= yes, 2 = no
<b>What would motivate</b>	MOT	motivation	1= yes, 2 = no



<b>you to behave environmentally responsible in your work? - Time-off</b>	IV2	work	
<b>What would motivate you to behave environmentally responsible in your work? - Bonus</b>	MOT IV3	motivation work	1= yes, 2 = no
<b>What would motivate you to behave environmentally responsible in your work? - Social Benefits</b>	MOT IV4	motivation work	1= yes, 2 = no
<b>What would motivate you to behave environmentally responsible in your work? - Recognition</b>	MOT IV5	motivation work	1= yes, 2 = no
<b>What would motivate you to behave environmentally responsible in your work? - Job flexibility</b>	MOT IV6	motivation work	1= yes, 2 = no
<b>What would motivate you to behave environmentally responsible in your work? - To have environment related targets in the performance appraisal</b>	MOT IV7	motivation work	1= yes, 2 = no
<b>What would motivate you to behave environmentally responsible in your work? - None of these</b>	MOT IV8	motivation work	1= yes, 2 = no
<b>What would motivate you to behave environmentally responsible in your work? - Don't know</b>	MOT IV9	motivation work	1= yes, 2 = no
<b>Do you have any ideas for energy reduction or cost saving in your work environment?</b>	IDEA S	ideas energy saving	1 = Yes, without specifics, 2 = Closing of doors/ports, 3 = Shift to energy saving material, 4 = Reduce of paper usage/heating/electricity, 5 = Automatic Sensor Usage/ Automatic climate control, 6 = Turn off electricity lights/tools/vehicles if not used, 7 = Change of

			flight behavior, 8 = Exchange of old planes/helicopters, 9 = Improvement of Flight schedule, 10 = Environmental considering Management systems, 11 = Alternative Energy production e.g. solar cells, 12 = Leveraging Components Usage, 13 = Other, 14 = Combination of more than one above mentioned energy saving suggestions, 15 = No, 16 = Don't know, 17 = Yes, idea taken up already
<b>Age</b>	AGE	age	In years
<b>Gender</b>	SEX	sex	1= males, 2= females
<b>Department</b>	DEP	type of department	1 = HR, 2 = Flight, 3 = Traffic, 4 = Economy, 5 = Quality, 6 = Station service, 7 = Sales , 8 = Charter , 9 = Loading , 10 = Technical , 11 = Engineering , 12 = Finance , 13 = IT , 14 = Logistic , 15 = Housing/Building, 16 = Commercial, 17 = Greenland travel Subsidiary, 18 = Kindergarten, 19 = Others
<b>How long have you been working for Air Greenland?</b>	TIME	working time AG	In years

## Appendix 5

### Selected survey responses on open questions 4 and 10

Bold highlighted names are specifically named persons who named as an enthusiastic colleague about environment and could not be grouped. Bold highlighted ideas are only one time mentioned energy saving ideas that could not be grouped.

ID	Enthusiastic Colleague	Ideas Energy Saving
2	Christian Keldsen	Alle kontorer skal have lampe følere
4	Christian Keldsen og mange andre	<b>Bruge sparepærer bruge autotænd/sluk lys i alle lokaler lukke porte og døre for at holde varmen inde ingen unødvendig prints</b>
5	<b>Michael</b>	Køre maskinerne ind om vinteren, i stedet for at lade dem kære
7	<b>Krister Jansson Mek</b>	Nej
8	Nej	Altid at slukke hjælpemidlerne, hvis de ikke er i brug. Sluk lyset, hvis værelset er tomt.
9	GOHDZ/ Michael Binzer	Benytte energibesparende pærer i hele organisationen, lys der automatisk slukker ved brug af sensor.
10	<b>Staff uak</b>	Stoppe arbejdsrelaterede køretøjer
11	Nej	<b>Flere store multifunktionamaskiner istedet for næste en printer til hvert kontor. Tynde klientere istedet for fulde pc'ere.</b>
12	Nej	Mindre varme i lokalerne og opmuntre medarbejderne til at tage en varmere trøje på. være bevidste om lysforbruget, nogle gange eller måske FOR mange
14	<b>Lab</b>	<b>Lab</b>
15	<b>Johan</b>	Nej
16	<b>Klaus</b>	Spare på el
20	Christian Keldsen	Forsøge at holde fragt porten lukket når den ikke bruges.
22	Nej	Slukke alt der ikke bruges (edb,etc). Spar på papirer, skift lysene ud med lys der kan bruge energisparepærer, undgå unødvendig bilkørsel.
23	<b>Flemming Bisgaard, Lona Thorsen</b>	Nej
24	<b>ICT</b>	Nej
25	Nej	To 7Dasher starter på sammen tid på forpladsen. men kan ikke afsted på sammen tid! Så den anden kan vente at starte om 5 minutter senere. Så sparer vi 5 minutter brændstof. allerede.
26	Ja	<b>Afskaffe crewbussen og i stedet lade folk efter flyvning.. lille "miljøbesparelse" men vi skal vel også starte i det små</b>
27	Michael Binzer	Bedre systemer ( Navitaire ) Hvor vi kan regne antal pax tal . Mænd /kvinder /børn/inf . På den måde kan vi altid regne det ekstante tal så vi kan påfylde den rette brændstof. Systemet

		regner forkert af x-antal mænd/kvinder/børn /inf hvor vi selv fordele dem ved at kigge på pax-liste .
28	Christian Keldsen	Solceller i bygningen eks.
29	Nej	Hvis alle begyndte at bruge "genbrugspapir" dvs. bruge den anden side af klade papiret. hvis den man udskriver ikke er vigtig.
30	Christian Keldsen	Nej
31	Nej	Ja - forslag er taget op med nærmeste leder.
32	Nej det kan jeg ikke, da vi er en lille gruppe i vores afd.	Sluk skærm efter arbejdstid slut. sluk alle lysene efter en arbejdsdag, da vi også vil spare nogle penge i det. sluk unødvendige lys.
33	Nej.	* Elspare pære * Genbrugspapir * Energi venligt udstyr OSV
34	<b>Anne Mette Christiansen</b>	NEj, men altid og slutte lyset efter sig ved lukketid.
35	En kollega, som også tager på fangst i sin fritid. Ja, det er der mange af os, som tager på fangst i deres fritidm hvilke betyder, at, vi selv tager hensyn til miljøet fra barnsben.	Sluk lysene når der er klar belysning fra solen ind hos samtlige kontor.
36	<b>Lars</b>	Nej
37	Er lidt "ny" så kender ikke så mange, der ligefrem har talt om det.	At vi kun udskriver det absolut nødvendige, der er mange mails hvor der er ekstra sider, man alligevel aldrig bruger til noget. Man bruger jo ofte kun 1 side At vi kunne nøjes med at fremsende fragt-faktura direkte pr. mail (ligesom vi gør med faktura fra AX), så vi undgår at printe dem ud (de kommer altid i 2 eksemplarer en faktura samt fakturakopi) vi kan ikke vælge det fra. For derefter at scanne dem, og sende dem. Der er meget spild, lige der.
38	<b>Peter Sethsen</b>	Flere ting
40	Nej	Ja. Flyve mere økonomisk, d.v.s. flyve langsommere. Vi kunne spare flere tusinde kr. OM DAGEN!
41	Nej	Klar definition af hvad der begrebet "minimum cost" eller "direct cost" hentyder til på flyveplaner
44	Nej	Nyere flyflåde med mere moderne teknologi
45	Forhåbentlig os alle sammen...	<b>Efterisolering af samtlige firmaets huse. Selv nye huse i Grønland, bygges efter dansk standard fra 1985 (eller deromkring), med dertil hørende ringe isolering og følgende stort energiforbrug. Flere af husene har f. eks. ikke sne på taget, selvom det er -25 grader, pga et enormt varmetab. Sammenligner man med nye huse i DK, vil der være sne på taget, bare det er -1, simpelthen fordi at de moderne krav til isolering er så meget højere. Når man er igang, så udskiftning af vinduer / døre, så de bliver tætte og til moderne energi ruder. Mange vinduer er utætte og det trækker koldt ind i husene - igen noget der koster energi at varme op. Problemet heroppe er lidt, at olieprisen er så tilpas lav, så det ikke har</b>

		<b>kunnet betale sig at isolere mere, rent økonomisk.</b>
47	Isak Lynge Rasmussen	Bedre planlægning af fuel og hvordan vi skal flyve for at kunne spare lidt mere fuel.
49	Mig selv -sagde hunden	Lære folk at slukke pc'ere og lyset efter sig når de forlader et rum !
51	Vittus Jerimiassen	Ved ikke
52	Nej	<b>Det er lidt svært, f.eks kunne man spare på varmen(energi) i hangaren men så bliver medarb. snottede og fraværet stiger og det er ingen besparelse. et forslag kunne være el-køretøjer, det vil spare lidt på brændstof udgifterne og på miljøet og forureningen på forpladsen falde. For info er forureningen ( fine diesel partikler)i kastrup lufthavn ca. 4 gange højere end H.C. Andersen Bullv. i Kbh som er det mest forurenede sted i Dk.</b>
53	Pele Broberg	Åbne hangarportene mindst muligt
55	Ole Tindalid	<b>Consumabels som dato udløber og koster firmaet en formue og mange af disse comsumeables kan testes om de er gode nok til at bruges efter udløbs datoen. det er jo et stort ressource spild.</b>
58	Nick	Nye materiel "Fly/helikoptere der svarer til tiden
61	Nej	Automatisk styring af klima (varme og ventilation) evt. med natsænkning
62	Ja	Ja og der arbejdes på dette
63	Nej	Solfangere, genanvendelsesanlæg, bedre koordinering ved udkørsel af fly fra hangarene om vinteren (opvarmning af hangarer efter åbning af porte). En form for jordvarme fra klipper/undergrundsvand.
65	Nej	<b>Lyssensorer i kontoret, så lyset slukker når man ikke er der. USB skinner, som slukker alle ting som er tilsluttet computeren, når denne er slukket.</b>
66	Ja	Eks. tilrettelægge åbning af porte når man skal køre maskineri ud eller ind så de bliver åbnet færrest gange, da man bruger meget energi til opvarmning af af hangare, og mister mandetid!
67	Nej.	Påbud om at alle firmabiler IKKE skal stå i tomgang, når der ikke bliver kørt i dem...! fx
68	Klaus Steenholt	Bedre udnyttelse af komponternes tid mellem insp. / vedligehold. f.eks. skiftes flere dele allerede efter 200 timer trods interval på 300 timer
69	Thomas D	Skift varmeblæsere i hangaren ud(de kører døgndrift vintertid. med noget mere avanceret.
70	Ujuaannaat	Hvad med Air Greenland invisterer på det der sol-paneler der kan sættes på taget. det kunne da afhjælpe oliefyret i hovedbygninger i nuuk
71	Jan og Hoppe SFJTS-G	Spare på strøm og varme
72	Nej.	<b>Bedre hangare</b>
74	Næsten alle inkl. mig selv.	Arkiv på server (sparer papir). Ellers synes jeg der er meget

		fokus på omkostningsbesparelser, har den opfattelse alle tænker meget over det. Energiforbruget kan heller ikke sættes ned (vi har intet overforbrug...)
75	Binzer	Prøver at sørge for ikke at overdrive med service på udstyr/biler, men selvfølgelig holde det kørende i god stand
76	Michael Binzer	Udskiftning af alle gamle lysstofsrør i hangar 1 + 2 og bagværkstederne. Supplere energiforbruget med solenergi.
78	Jeg er ny. Så, nej.	Nej. Hvis der skulle gøres mere, så tror jeg, at det ville gå ud over arbejdsindsatsen.
80	Christian Keldsen	Ja, spare på prints mv.
81	Nej	Slukke regnemaskiner, printer(dvale), kaffemaskiner, skærm og PC'er m.m. når vi får fri. Sluk lyset efter sig, alle steder, evt følsomme lys, der slukker når der ingen er. Alle lamper får energisparepære, evt. skifte lysstofrør ud med mere energivenlige pære. Print og scan via PC, så man sparer på papirkopier.
83	Jeg synes flest af os er begyndt at være mere beviste med det der sviner miljøet til.	Lukke og slukke når man forlader lokalet, samt spare på vandet, alt hvad man foretager sig kan man gøre med omtanke.
85	Mig selv	Husk at sluk din PC -spar på papir
86	Michael Binzer	Ændring af ordresystemet som gør at vi kan sende filer fremfor at printe ud og scanne ind.
88	Nej	Modernisering af helikopterflåden (S61, Bell212 er gamle og brændstof forbrugende maskiner i forhold til nye helikoptere af i dag)
89	<b>Pele Broberg.</b>	Ingen pt
91	<b>DZ</b>	Alt med omtanke. Især belysning på kontorer, mobilopladere og andre "nære ting", hvor vi ikke altid tænker på at slukke, når der ikke er behov
92	Michael Binzer, Christian Keldsen	KLart bedre indeklima, med den rette belysning er et skridt på vejen.
93	Flere	Genbrug af mange papir der smides ud.....
94	Nini ville være mit bedste bud, men ved det ikke...	<b>Den er svær, da jeg arbejder med et mere virtuelt miljø. Så grøn IT er vel svaret.</b>
96	<b>GOHDZ</b>	Nej
97	0	<b>Concerning cost saving, I strongly feel that productivity and efficiency of each department and employee make a huge difference. HR costs are very large. More productively here means that we should be able to get 20%, 30%, 50% more work done with the same workforce. So much time is lost to inefficient administration/systems and following up on work that could have been done better. "Time" that the employees use is big "money" ! Some key factors to better productivity are: - IT and administrative infrastructure in the company. . Are there easy-to-understand manuals for key systems that many employees use ? . Do we have good tools to share, and</b>

		does everyone know how to use them ? - Motivation of each employee . Including a service-minded attitude towards your colleagues and business partners. - Understanding towards company strategy and each employee's position towards that strategy. We have much to improve in each of the above factors. (I think motivation is better than in many companies in Greenland. It would be nice if improvement for administration and strategy could go much faster.)
98	Christian Keldsen	Grønne indflyvninger Nye og mere miljørigtige flytyper
99	Christian Keldsen, Michael Binzer	Færre firmabiler. Samt faste rammer for firmabiler. Hvilken kan kommet til besparelse på brændstofforbrug. Mindre flytyper. (flere Dash-8, Færre Daxh-7) bruger mindre fuel. = mindre omkostninger
100	Lars Peter Danielsen	Skift alle pærer til energisparepærer - Sluk lyset, når det ikke er nødvendigt - Genbrug, hvor det er muligt - Print ikke papir unødendigt - brug det med omtanke - Betragt din arbejdsplads som dit "hjem" (så sparer man automatisk)
101	Nej	Ikke i det daglige arbejde, men i hele fartplanlægningen er der masser af muligheder.
102	Christian Keldsen	Man kan jo altid snakke el-sparepærer Slukke fuldstændig (hive stikket ud af kontakten) for de computere der ikke bliver brugt
104	Nej	<b>Drop fax til OP og SA når dagens flyvninger er overstået. Hvad har vi en PDA til? Det sparer papir, telefonbrug samt el i store mængder.</b>
106	0	Slukke lys mere i dagligdagen og anvende sparepærer, spare på vand
107	Anja	Nej
108	Alt personalet i Sulunnguit. Der bliver også gjort meget for at lære børnene at passe på naturen.	<b>I mit arbejde er det vigtigste at være et godt forbillede for børnene. Lære dem at genbruge at man ikke bare lever i et brug og smid væk samfund. og passe på naturen.</b>
109	?	Minde hinanden om at slukke det ting man ikke bruger, såsom toiletter, gange, lamper, kaffemaskiner osv. Man kunne evt. sætte nogle lys som først tændes når der er personer i visse lokaler.
110	Nej	Mindre brug af kopi papir + maskine, brug e-mail istedet. Spar på strømmen i sommerperioden, når der er lyst døgnet rundt. Afskaf flere firmabiler.
111	Espen Andersen WOG	Helt basalt - sluk lyset efter dig, sluk din computer og lign. små daglige ting.

## Appendix 6

### Survey Participation of departments – Table and Graph

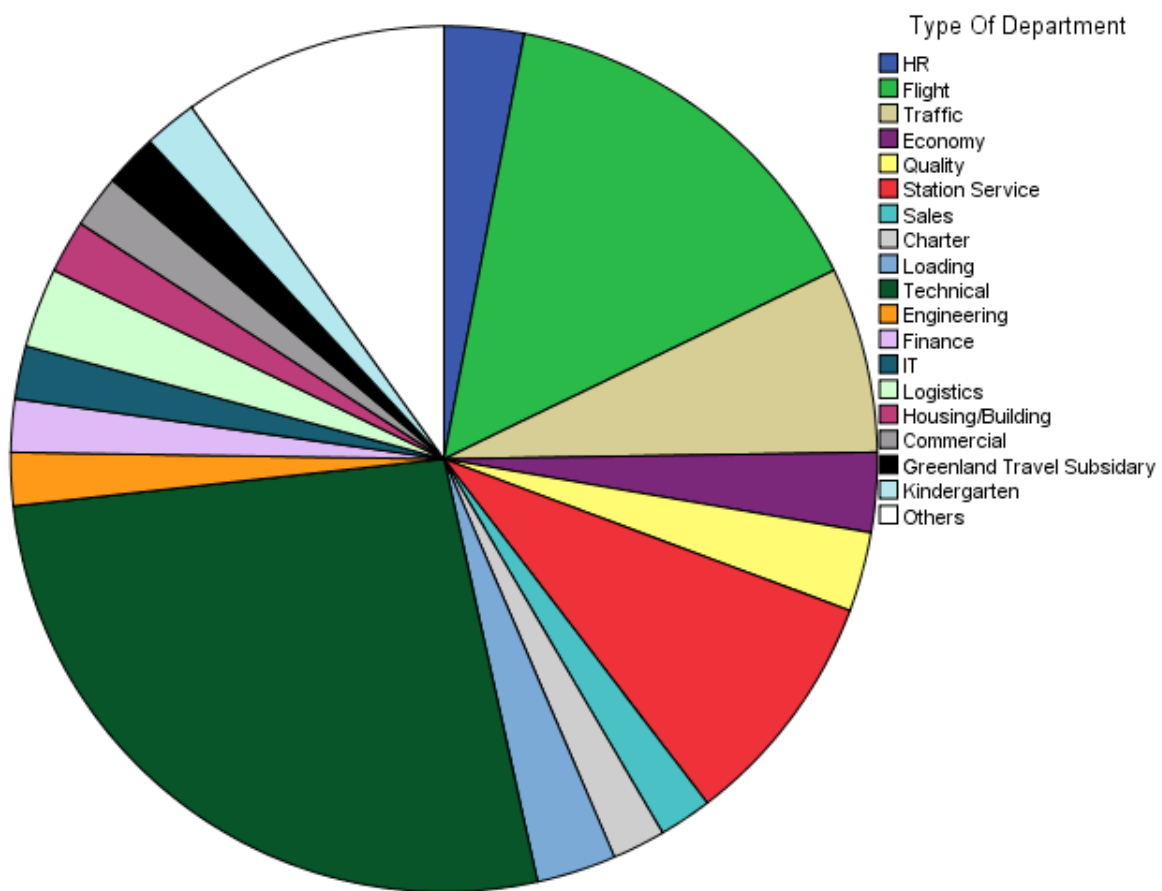
#### 1) Type of Department Table

Statistics		
Type Of Department		
N	Valid	101
	Missing	11

Type Of Department	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	1 HR	3	2,7	3,0	3,0
	2 Flight	15	13,4	14,9	17,8
	3 Traffic	7	6,3	6,9	24,8
	4 Economy	3	2,7	3,0	27,7
	5 Quality	3	2,7	3,0	30,7
	6 Station Service	9	8,0	8,9	39,6
	7 Sales	2	1,8	2,0	41,6
	8 Charter	2	1,8	2,0	43,6
	9 Loading	3	2,7	3,0	46,5
	10 Technical	27	24,1	26,7	73,3
	11 Engineering	2	1,8	2,0	75,2
	12 Finance	2	1,8	2,0	77,2
	13 IT	2	1,8	2,0	79,2
	14 Logistics	3	2,7	3,0	82,2
	15 Housing/Building	2	1,8	2,0	84,2
	16 Commercial	2	1,8	2,0	86,1
	17 Greenland Travel Subsidiary	2	1,8	2,0	88,1
	18 Kindergarten	2	1,8	2,0	90,1
	19 Others	10	8,9	9,9	100,0
	Total	101	90,2	100,0	
Missing	0	11	9,8		
Total	112	100,0			



## 2) Type of Department Graph



## **Appendix 7**

### **Interview guide Christian Keldsen**

**Position: CSR Manager in Air Greenland**

**Interview details: 28.03.2011 and 01.04.2011, via skype**

**28.03.2011:**

Please tell us about your role and your tasks as environmental manager in the company.

#### **Sustainability/ Environmental commitment**

1. Please tell us briefly what Air Greenland has done so far regarding environmental commitment.
2. What were the reasons for these initiatives?
3. Since when did Air Greenland start to be environmentally committed?
4. Has anything changed since the Global Compact was signed?
5. What could be the challenges and opportunities of taking this commitment to a strategic level? (efforts, resources put in and value gained)
6. What are the next steps in the environmental work?
7. In which way will the CO2 footprint baseline be used in the future? (publication, integration in strategy, reports, regular measurements ahead)

#### **Environmental strategy**

8. Please tell us about the current stage of environmental strategy and action plan development.
9. What should be the main focus of the environmental strategy? What else should be part of it?
10. How is it developed and who is mainly involved in strategy and the action plan building?
11. To what extent have the employees been involved in the strategy development? (past, present, future)
12. What will be the main challenges of implementing the environmental strategy?

#### **Personal**

13. What does caring about the environment mean personally to you?
14. Do you believe that caring about the environment is as important as making profit? (Why?)
15. Do you agree personally that Air Greenland starts to care about the environment? (Why?)

\*\*\*\*\*

**01.04.2011**

#### **Management commitment**

16. Is there a plan to include environmental commitment in the company mission and vision?

17. Has the management already made public commitment to environment? Both internally and externally?
18. (press, presentations, speech, official company documents )
19. Is environmental commitment often a topic among managers?
20. Is environmental commitment a priority for the management?
21. Do you see any differences between departments regarding managers' attitude to environmental commitment?
22. Are there many enthusiastic or skeptical managers in the management team?

### **Communication**

23. How has it been communicated in the company that more environmental commitment is needed?
24. What information has been shared and how? (newsletter, bulletin boards, talks, Intranet)
25. Are there any plans for further communication on environmental commitment in general?
26. How will the environmental strategy be communicated to the management and to the employees?

### **Employee engagement**

27. Why and how do you plan to engage employees into environmental work of the company? (developing and implementing strategy, future, environmental projects, idea exchange in energy reduction, teams/comm.. etc.)
28. Have employees been mobilized before? Were they reluctant or willing?
29. Have they been asked previously to share ideas regarding other change initiative? With what result?
30. How do you expect the employees to react on the engagement initiatives? Do you expect resistance?
31. Can you think of situation when colleagues talked about environment protection in the positively or negatively?
32. Do you see any differences between departments regarding employee attitude to environmental commitment? (cabin crew, ground workers, pilots, service employees)
33. Can you think of any colleague who is enthusiastic about environment protection and could inspire others?
34. Are there any colleagues in the company who would credibly promote environment protection?
35. Do many employees already have good ideas for energy reduction?
36. How and with whom did they share their ideas? (any process yet?)

### **Org culture/National culture**

37. What are the key characteristics to describe Air Greenland's culture? (open, controlled , learning// value driven-target driven etc.)
38. Is it a culture where opinion from co-workers is valued and idea sharing encouraged?
39. What are the values of Air Greenland? Do you think that they are connected to environment or employee engagement in any way?
40. How do you want Air Greenland to be perceived by others in the future?
41. Do you think that Air Greenland's organizational culture supports caring about the environment?
42. Please tell us if there are any differences between Greenlandic and Scandinavian culture?

## **Appendix 8**

### **Interview guide Anne Mette Christiansen**

**Position: External advisor to Air Greenland**

**Interview details: 01.04.2011., Copenhagen**

#### **Sustainability/ Environmental commitment**

1. Please tell us briefly what Air Greenland has done so far regarding environmental commitment.
2. What were the reasons for these initiatives?
3. Since when did Air Greenland start to be environmentally committed?
4. Has anything changed since the Global Compact was signed?
5. What could be the challenges and opportunities of taking this commitment to a strategic level? (efforts, resources put in and value gained)
6. What are the next steps in the environmental work?
7. In which way will the CO2 footprint baseline be used in the future? (publication, integration in strategy, reports, regular measurements ahead)
8. Carbon offsetting

#### **Environmental strategy**

9. Please tell us about the current stage of environmental strategy and action plan development.
10. What should be the main focus of the environmental strategy? What else should be part of it?
11. How is it developed and who is mainly involved in strategy and the action plan building?
12. To what extent have the employees been involved in the strategy development? (past, present, future)
13. What will be the main challenges of implementing the environmental strategy?

#### **Management commitment**

14. Is there a plan to include environmental commitment in the company mission and vision?
15. Has the management already made public commitment to environment? Both internally and externally? (press, presentations, speech, official company documents )
16. Is environmental commitment often a topic among managers?
17. Is environmental commitment a priority for the management?
18. Do you see any differences between departments regarding managers' attitude to environmental commitment?
19. Are there many enthusiastic or skeptical managers in the management team?

#### **Communication**

20. How has it been communicated in the company that more environmental commitment is needed?
21. What information has been shared and how? (newsletter, bulletin boards, talks, Intranet)

- 22. Are there any plans for further communication on environmental commitment in general?
- 23. How will the environmental strategy be communicated to the management and to the employees?

#### **Employee engagement**

- 24. Why and how do you plan to engage employees into environmental work of the company? (developing and implementing strategy, future, environmental projects, idea exchange in energy reduction, teams/comm. etc.) /workshop with Anette, ideas from cabin crew, pilots flying by saving fuel/
- 25. How do you expect the employees to react on the engagement initiatives? Do you expect resistance?
- 26. Can you think of situation when colleagues talked about environment protection in the positively or negatively?
- 27. Do you see any differences between departments regarding employee attitude to environmental commitment? (cabin crew, ground workers, pilots, service employees)
- 28. Do many employees already have good ideas for energy reduction?

#### **Org culture/National culture**

- 29. What are the key characteristics to describe Air Greenland's culture? (open, controlled , learning// value driven-target driven etc.)
- 30. Is it a culture where opinion from co-workers is valued and idea sharing encouraged?
- 31. Do you think that Air Greenland's organizational culture supports caring about the environment?
- 32. Please tell us if about the differences between Greenlandic and Scandinavian culture?

## **Appendix 9**

### **Interview guide for Pia Christensen Bang**

**Position: Former Communication officer and since 01.04.2011 Manager, CSR & Communication in Air Greenland**

**Interview details: 06.04.2011., Frederiksberg, face-to-face**

Please tell us about your current role and your tasks in the company and also about the upcoming role as 'environmental coordinator'

#### **Environment and Strategy**

1. Can you tell us briefly what Air Greenland has done so far regarding environment?
2. What were the reasons for these initiatives?
3. Has anything changed since the Global Compact was signed?
4. Can you tell us about the current stage of environmental strategy and action plan development?
5. How is it developed and who is mainly involved in strategy and the action plan building?

#### **Personal**

6. What does caring about the environment mean personally to you?
7. Do you believe that caring about the environment is as important as making profit? (Why?)
8. Do you agree personally that Air Greenland starts to care about the environment? (Why?)

#### **Management commitment**

9. Do you perceive that the management is committed to environmental consciousness? How? (topic, priority)
10. Do you see any differences between departments regarding managers' attitude to environmental commitment?
11. Are there many enthusiastic or skeptical managers in the management team?

#### **Communication**

12. How has it been communicated in the company that more environmental consciousness is needed?
13. What information has been shared and how? (newsletter, bulletin boards, talks, Intranet)
14. Are there any plans for further communication on environmental commitment in general?
15. How will the environmental strategy be communicated to the management and to the employees?

### **Employee engagement**

16. Why and how do you plan to engage employees into environmental work of the company? (developing and implementing strategy, future, environmental projects, idea exchange in energy reduction, teams/comm.. etc.)
17. Have employees been mobilized before? Were they reluctant or willing?
18. Have they been asked previously to share ideas regarding other change initiative? With what result?
19. How do you expect the employees to react on the engagement initiatives? Do you expect resistance?
20. Can you think of situation when colleagues talked about environment protection in the positively or negatively?
21. Do you see any differences between departments regarding employee attitude to environmental commitment? (cabin crew, ground workers, pilots, service employees)
22. Can you think of any colleague who is enthusiastic about environment protection and could inspire others?
23. Are there any colleagues in the company who would credibly promote environment protection?
24. Do many employees already have good ideas for energy reduction?
25. How and with whom did they share their ideas? (any process yet?)

### **Org culture/National culture**

26. What are the key characteristics to describe Air Greenland's culture? (open, controlled , learning// value driven-target driven etc.)
27. Is it a culture where opinion from co-workers is valued and idea sharing encouraged?
28. What are the values of Air Greenland? Do you think that they are connected to environment or employee engagement in any way?
29. How do you want Air Greenland to be perceived by others in the future?
30. Do you think that Air Greenland's organizational culture supports caring about the environment?
31. Please tell us if there are any differences between Greenlandic and Scandinavian culture?

## **Appendix 10**

### **Interview guide Mette Steenholdt**

**Position: HR employee in Air Greenland**

**Interview details: 03.05.2011. via Skype**

Please tell us about your current role and your tasks in the company

#### **Environment and Strategy**

1. Could you please tell us briefly what you know so far about Air Greenland's environmental commitment and the environmental strategy?
2. Do you know the expectations HR regarding the strategy building?
3. Has already someone from the HR function been appointed to take part in the strategy building?
4. Do you think that the department has the resources to contribute to the environmental strategy and the project, meaning will you have the time or the people who you can allocate to this?

#### **Management commitment**

5. Do you think that the management is committed to this environmental consciousness and if you think it is a topic or priority among them?

#### **Employee engagement**

6. Have Air Greenland employees been mobilized before for some other change initiative?
7. Do you think that Air Greenland employees in general will have some resistance towards this engagement of environmental issues?
8. Where there any training to the employees related to the CSR when the CSR strategy was built and implemented? Where there trainings for employees about that?

#### **Org culture/National culture**

9. What are the key characteristics for Air Greenland's culture? For the organizational culture of Air Greenland.
10. Do you see there is a difference between the departments?
11. Do you see any cultural differences between the departments?
12. Do you see any advantages or disadvantages in this diversity mix for the Air Greenland's culture, corporate culture?

**Interruption of the call due to technical problems.**



## Appendix 11

Reliability is in academic research a matter of consistency and trustworthiness towards the process of research and its discussed findings (Kvale, 2007). Concurrently, reliability is not only a matter of method, but as well involves the researcher's moral understanding who conducts the research (Kvale and Brinkmann, 2009). Furthermore is it a matter of replication of the conducted research, which implies that it could be repeated in the exact same way by another researcher to another point of time. (Kvale and Brinkmann, 2009). As well as reliability contributes to research objectivity, validity serves research correctness and checks the strength of arguments in the final research findings (Kvale, 2007). As a condition of validity, it is crucial that the researcher is aware of the questions that are asked and their alignment with the method of research. Additionally, research details have to be clear in order to evaluate, if the study actually measures the phenomena that it is assumed to examine. Validity can only be strengthened through verifications like mixed data collection, an extreme case choice, arguing for alternative explanations of the findings, or as well checking, questioning and theorizing of its final results. Hence, coherence and consistency throughout the research process and within the arguments built the fundamentals of validity (Kvale and Brinkmann, 2009). An example of communicative validation is an interview, which is seen as a negotiation process of signification between interviewer and interviewee. For instance, a change of opinion in an interview could be interpreted that a topic consists of various complexity levels and cannot simply be answered. Last but not least, it is the personality and the attitude of the researcher's moral understanding which is crucial for the outcome of validity in research (Kvale, 2007).

Additionally, researchers are organizational outsiders who entering existing social constructs through their research. They need to be aware that respondents could influence the research project through information withholding or following their own political agenda.

The data quality cannot only be discussed in terms of reliability and validity, but also with a range of different measures, for example the construct bias in which incomplete overlap of definitions could occur and therewith threads the overall objectivity. Another bias is method bias which refers to all procedural methods during the research process, starting from biases in the survey or interview conductions. Furthermore, item bias refers to possible translation discrepancies, thus poor translation could lead to altered meaning of data (Kvale, 1996). Regarding dependability of data, the number of interviews, comprehensibility of the survey coding book and the completeness of research needs also be considered in order to gain transparency for the reader. Concerning the data collection process, the researcher should be aware of gatekeepers and informants roles.

According to Soulsby (2004), these gatekeepers, who give access to a company's insight, could use researches for their own agenda within the company. Especially, this is the case if the researchers are originating from a different background as the researched organizational environment, which possibly leads to dependency on the researchers' site. As present researchers coming from different parts of Europe, another set of preconceptions and opinions are underlying the research process. However, this comprehension distance from the researched background leads to different valuable viewpoints on the object of research. Internal validity was secured with the presence of both researchers during each interview and hence, one researcher could ask the questions and the other one was able to focus on observations and check on the progress of the interview.

## Appendix 12

### Change target

Several authors on the topic argue that organizational shifting towards sustainability requires transformational change, breaking down the current organizational paradigm, changing the existing cognitive and behavioral patterns of employees.

In the strategic change management literature Balogun and Hailey (1999) outline three different change targets:

- Values
- Behavior
- Output

It has been argued that by prescribing shared values appropriate employee behavior will be driven by it and less managerial control is needed. Opponents to targeting values would question the legitimacy of organizations to alter something as personal as individual set of values. Furthermore, value statements can easily get devalued in employees' eyes if it is not reflected in managers' behaviors. Staff might also perceive managing values as manipulation of brainwashing leading to cynicism. Furthermore, the existing diversity in organizations can easily undermine the attempt to create a common set of values. It can be indeed questioned is common values can be established among different professional groups and national cultures across departments and business divisions. Yet, if an organization wants to achieve fundamental, transformational change this by its very nature requires change in the assumptions and beliefs shared by the employees. Accordingly, targeting value change is likely to be appropriate (Balogun and Hailey, 1999).

Some argue that organizations should focus primarily on enforcing new behaviors as individuals can only change if organization in which individuals operate is changed. Programmatic change is targeted at the individual attitude change, however, individual behavior is constrained by the organizational system in which they work. Roles and responsibilities, existing work patterns force particular behavior on employees if they want to work effectively in the organization. If organizational members learn new attitudes but are then returned to the old organization system they will not be able to practice their new behavior and attitude. However, if the organizational system is changed, as proposed by task alignment, and employees are placed in different job roles with different responsibilities and different relationships to their peers, subordinates and

superiors then it forces them to behave and think differently. Altering work-based behaviors can therefore affect behavioral, attitude change and likely value change as well (Balogun and Hailey, 1999).

Balogun and Hailey (1999) further on reveal that targeting behavior change can be justified if:

- Change involves reconstruction or realignment which requires some degree of behavioral change but no fundamental change in shared organizational values or beliefs
- When change is task related so intervention in work is justified: less intrusive than prescribing personal value system
- In crisis situation when there is little time, enforcement of behavioral change might be more appropriate
- Homogeneous groups with similar values and motivation

Changing outputs and performance objectives like profit margin, hourly sales which would trigger a change in behaviors. Usually this involves redesign of performance measures such as rewards and control systems. However, it has to be taken care of that requiring higher output, paying greater commission on sales and further on does not lead to decreased service quality and customer satisfaction (Balogun and Hailey, 1999).

## Appendix 13

### Attitude

McKenna (1994) cites Krech et al. (1962) who define attitudes as “enduring systems of negative or positive evaluations, emotional feelings, and action tendencies with respect to an individual’s social world.” A further definition quoted by McKenna (1994) comes from Allport (1935) who states that “attitudes are mental states developed through experience, which are always ready to exert an active influence on an individual’s response to any conditions and circumstances that the attitudes are directed towards.” (McKenna, 1994, p. 251.) All in all most researchers agree that an attitude is a passive set state of mind that is triggered by stimuli and causes a certain behavior (Oppenheim, 1992). The process of the initial activation or the attitude object that causes a certain behavior has also not been known to the individual (Krosnick, Judd and Wittenbrink; 2005)

McKenna (1994) describes the three components of an attitude like intensification of attitude by belief (cognitive), attraction of feeling (emotional), and cause of certain behavioral intentions (action tendency) of which each component can be either positive or negative.

An attitude is likely to be positive when the decision makers deem the information to be useful, they welcome it, have confidence in it, and place value on it when compared to other types of information about the business. Respectively, the decision maker can develop a negative attitude towards certain type of information if they are considered irrelevant, even though the information could be crucial for decision making. (McKenna, 1994)

An attitude is not only about the content, but about its intensity as well. Understanding the intensity of an attitude gives the possibility of an individual’s reasoning. Attitudes are placed on different levels of deepness and can be persistent or rather superficial. These different levels of attitude are described on a superficial level as opinion, a bit deeper as an attitude, on a deeper level as values and at the most basic level known as personality. Differences are mainly obvious by various levels of endurance, changeability, deepness and generality. Furthermore, attitudes are not standing alone, but are rather interconnected and build relationships between each other. (Oppenheim, 1992)

McKenna (1994) refers to Kelman (1969) who states that attitudes help people to adopt a stable view of the world in which they live as individuals can cope with the environment if it is reasonably orderly and predictable

so that the individual, group or society may know where to stand or what to do. Attitudes organize diverse thoughts into coherent patterns which help to reduce uncertainty. When forming attitudes, personality and socialization are two important variables, furthermore, group membership can also be highly influential on developing attitudes.

Kelman (1961) suggested three sources of attitude change: compliance, identification and internalization. 'Compliance' is the source of attitude change when for instance an employee adopts an attitude to make favorable impression on his or her superior or client. In case of 'identification' the individual adopts an attitude to establish or maintain a satisfactory relationship with others. Internalization occurs when the individual embraces an attitude he or she feels comfortable with.

Several factors can influence the change of attitudes: group membership, exposure to mass media, forced contact, rewards, communication, and persuasion. Several studies found evidence for attitude shift as a result of group membership. The mass media, messages presented in the press, radio, television and the Internet are also often held responsible for attitude change. Attitude change can also be triggered by offering rewards. Communication and persuasion with further influencing factors of the opinion leader and credibility of the source are also tools for changing attitudes.

## **Appendix 14**

### **Sources of resistance to change**

Both Dunphy et al. (2003) and Doppelt (2003) emphasize the need for effectively managing resistance to change. Dunphy et al. (2003) highlight the importance of consulting all stakeholders about the change program to ensure that the interest of all key players is addressed. Change agents indeed have to be on clear terms with potential sources of resistance and possible ways to deal with it. Accordingly, relevant parts of the change management literature are presented as follows.

Huczynski and Buchanan (2007) argue that it is often possible to anticipate responses to change and use it as knowledge to generate support and address resistance at an early phase. Besides the positive aspects of change like creating something new, the negative aspects involve the discontinuity and destruction of familiar relationships and arrangements, confrontation of the unknown. It is indeed widely assumed that resistance to change is natural as for some change is highly frustrating. This argument is reinforced by Balogun and Hailey (1999) who further claim that for many people change is an emotional and difficult process, accordingly resistance should always be expected and not necessarily perceived as negative. The initial resistance is the likely natural response for most individuals which has to be worked through. Resistance to change can be defined as “an inability, or an unwillingness, to discuss or to accept changes that are perceived to be damaging or threatening to the individual.” (Huczynski and Buchanan, 2007, p. 598.)

Huczynski and Buchanan (2007) cite Bederian (1980) who identifies four common causes of resistance to change:

- Self-interest
- Misunderstanding and lack of trust
- Contradictory assessment
- Low tolerance for change

People tend to protect the status quo they are content with and perceive change as threat that makes them move out of their comfort zone. Organizational members develop vested interest in the stabilization of organizational structures and technologies. Change can lead to loss of power, prestige, respect, approval, status, promotional prospects, security and can also be personally inconvenient. It may disturb relationships and arrangements that have been developed over time and alter social opportunities. Some employees may

also identify themselves more closely with the specific function or role they play than with the organization as a whole. In case these individuals might have personal stake in their specified knowledge or skills they would not be willing to see become obsolete. (Bederian, 1998 in Huczynski and Buchanan, 2007)

Resistance can also arise if people do not clearly see the reasoning behind the change or its consequences. Accordingly resistance can be addressed by improving understanding among employees. However, if management does not have trust in employees, the information can be withheld or distorted, or the other way around employees may not believe the information if they distrust the management. Either way the incomplete and incorrect information creates uncertainty and rumors which leads to increasing defensiveness, feeling of threat and reduces further effective communication about change. In this case resistance might be more a response to the way change is introduced rather than to change itself. (Bederian, 1998 in Huczynski and Buchanan, 2007)

People also differ in a way they evaluate the cost and benefits of change: for some it might be source of frustration and threat, whereas, for others the same change process might mean a motivating challenge. Individuals' personal values determine which changes are welcomed and promoted and which will fail. Contradictory assessments can mainly occur when there is lack of adequate and relevant information, however, Bederian (1980) points out that it can also lead to constructive criticism and improved proposals resulting in more effective change implementation. (Bederian, 1998 in Huczynski and Buchanan, 2007)

People also differ in a way they tolerate uncertainty and ambiguity. Change requires also changing the existing thinking and behavior patterns which challenges the individual's self-concept. Even if people are aware of their own strengths and abilities, self-doubt of how to cope with the change may lead to anxiety and even opposing the beneficial aspects of change. (Bederian, 1998 in Huczynski and Buchanan, 2007)

Balogun and Hailey (1999) describe four further possible sources of resistance:

- Emotional reasons: the lack of energy and motivation, denial of need for change, demoralization as well as uncertainty about job security and pay.
- Change approach: lack of participation, involvement, communication.
- Cultural bias: entrenched ways of thinking and 'we have always done this way' attitudes and habits. Conflict between the proposed changes and existing values and beliefs.
- Historical organizational factors: traditional relationships between managers and the workforce or traditions of rivalry between functions or departments.



## Appendix 15

### National Culture

According to Huczynski and Buchanan (2007) the nature and impact of organizational culture on individual employee behavior and company performance is still subject of discussion just like the effect of national (societal) cultures on organizational ones. However, researchers have investigated how national cultures might influence organizational cultures in specific country settings and studied whether the strengths of national cultures can undermine attempts to build common organizational cultures in multinational firms. Huczynski and Buchanan (2007) cite Fombrun (1984) and Brooks (2003) who found that organizational cultures are partly the outcome of national cultures, whereas, Laurent (1989) is also cited who claimed that national cultures are more stable and powerful than organizational cultures. Huczynski and Buchanan (2007) describe that Hofstede and Bond (1988) established five dimensions of differences labeled as 'power distance' ("extent to which an unequal distribution of power is accepted by the members of the society"), 'uncertainty avoidance' ("extent to which members of a society feel threatened by ambiguous situations and have created beliefs and institutions that try to avoid these") 'individualism-collectivism' (tendency to take care of ourselves and our family versus working together for the collective good"), 'masculinity-femininity' ("extent to which highly assertive masculine values predominate versus showing sensitivity and concern for other's welfare and the quality of life") and 'long-term – short-term orientation' ("the ability to pursue long-term and general goals versus short-term gain and advantage") (Huczynski and Buchanan, 2007, pp. 644-645). These dimensions represent continuums on which different cultures can be rated high or low just like in case of personality assessments.

The Global Leadership and Organizational Behavior Effectiveness (GLOBE) research program has integrated, updated and extended Hofstede's pioneering work since 1993. Furthermore, opposed to Hofstede's 'snapshot survey' the GLOBE study is longitudinal, monitoring changes of leadership and organizational culture of 825 organizations located in 62 countries. It distinguishes national cultures on nine dimension incorporating, as well as extending those of Hofstede: 'assertiveness', future orientation', gender differentiation', 'uncertainty avoidance', 'power-distance', 'individualism-collectivism', 'in-group collectivism', 'performance-orientation' and 'humane orientation'.

A further study called the 'World Values Survey' focuses on countries' value and their worldview in an attempt to highlight differences between national cultures. The poll has been run in the past 25 years covering 78

countries and 78 percent of the world's population by now. Based on replies it places countries along two value dimensions: secular-rational/ traditional values and self-expression/ survival values. Traditional values relate to religion, family and country meaning that religion is important part of people's life, they feel national pride and teach their children to obey and make parents proud. According to people with traditionalist view abortion, euthanasia, divorce and suicide can never be justified. Secular-rational values emphasize opposite qualities. On the other dimension, the 'quality of life' attributes refer either to values held by people struggling for survival meaning that economic and physical security are more important, or to self-expression values. Scandinavian countries like Norway, Sweden and Denmark are in the cluster of countries where values related to self-expression and secular-rational values dominate. (Huczynski and Buchanan, 2007)

### **Corporate culture versus national culture**

When discussing the relation of organizational culture to national culture (Huczynski and Buchanan, 2007) refer to Lubatkin et al. (1998) who found that organizational culture does not diminish national culture as both managers and employees are greatly influenced by their cultural background and ethnicity in their work. According to Huczynski and Buchanan (2007), Laurent (1983) also found more apparent cultural differences among employees from around the world working for the same multinational company than among those working for companies in their home countries. Accordingly, organizational culture does not replace or erase national differences. Huczynski and Buchanan (2007) further cite Adler's (2002) findings according to which pressure on employees to conform to a foreign company's culture resulted in increased staff resistance and even more adherence to national identities. Finally, Tinsley's (1998) findings also reveal that different cultures have different kind of conflict resolution methods which can pose problems for multicultural teams working at international companies. According to the 'status' model, followed by the Japanese for example, the person with the highest status has the power to create and enforce solutions on others which will be respected and accepted. However, for instance Germans prefer the method of 'applying regulations' when pre-existing, independent rules and policies shape the resolution of the conflict. The 'integrating interest' model favored by the Americans for example, involves listening to the concerns of all parties and solving the conflict by an outcome accepted by all members (Huczynski and Buchanan, 2007).

## **Appendix 16**

### **Positioning through service and airline's identity**

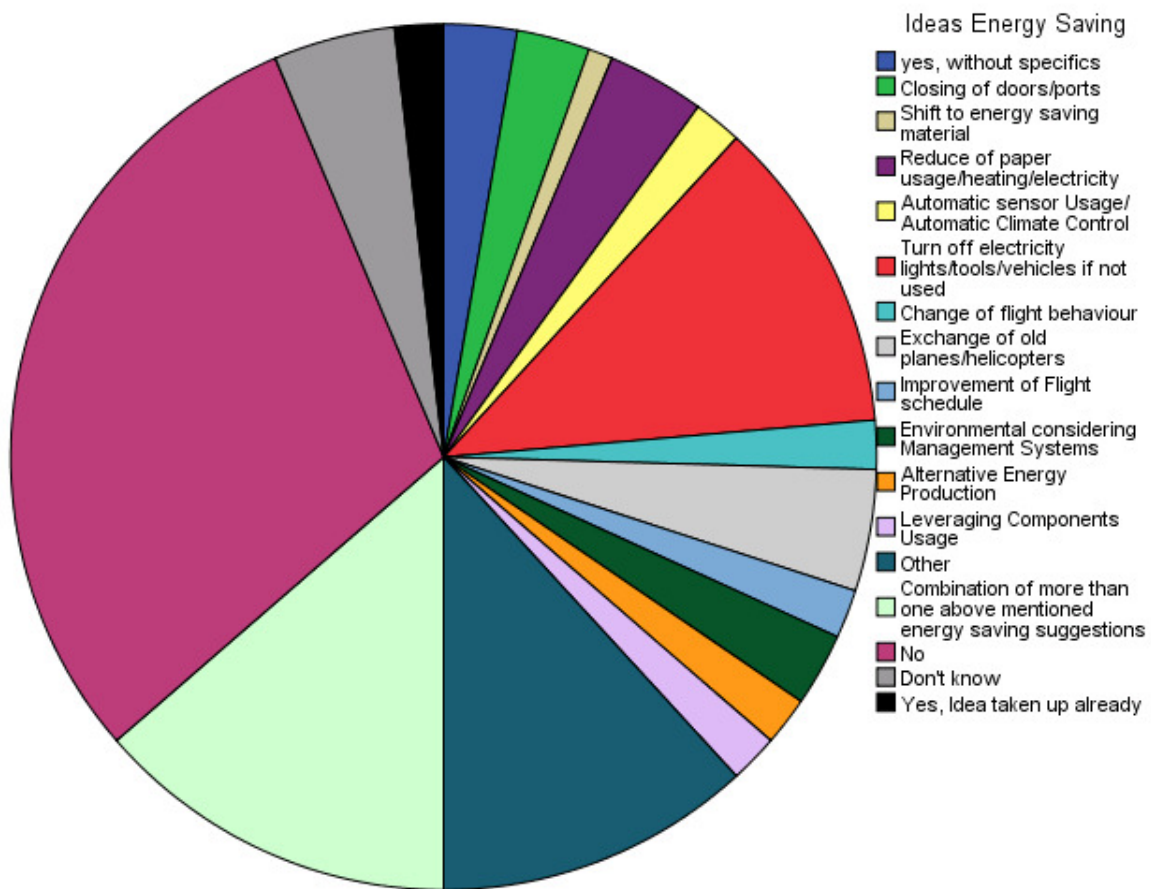
The airline industry uniquely combines features of a highly developed service industry with characteristics of a heavy utility- and manufacturing industry. Airlines are to some extent bound by the available technology offered by aircraft and engine manufacturer (Lynes and Andrachuk, 2008). Nevertheless, technology improvement does not build up to a strategic advantage of one firm, as it is accessible by each company that has the financial resources. In contrast, soft facts like corporate culture and values are truly distinguishing factors in a service providing industry Holloway (1998) claims that both CSR and revenue management systems differentiate airlines. From a strategic point of view airlines aim at the alignment of identity, image, service strategies and meeting customer expectations. In fact, there is a strong affiliation of the national identity and the airline as each has its own national flavor used for further corporate cultural differentiation Holloway (1998). Airlines create their image especially through their employees, as a result the attitude and behavior of the staff is decisive for customer perception. Employees form the airline identity through which the company can appeal to different customer segments and which influences its strategic positioning on the market Holloway (1998). Service quality is a further factor for differentiation in case of airlines. Customers with high purchasing power choose their airline tickets based on service standard and convenience, as well as safety measures (Jou et al., 2008). Next to additional features like in-flight entertainment, more and more consumers are aware of the environmental impact of air travel (Datamonitor, 2010). Consequently, conscious travelers soften the environmental impact of their air travel through voluntary carbon offsetting (VCO) programs offered by airlines.

With the concept of VCO customers can purchase carbon credits to offset harmful emissions thereby supporting sustainability projects or a further good cause (Mair, 2011; Stubbs and Cocklin, 2008). However, VCO is criticized due to its lack of transparency, its complex structure, the variety between carbon offsetting schemes and its shifting of environmental responsibility from airlines towards customers (Broderick, 2008; Mair & Wong, 2010). Measurement uncertainties and a general low awareness of the concept result in confusion and lack of transparency for customers. However, in spite of confusion and objections, 2-9 % of the airline customers chose to use VCO (Brouwer et al., 2008; Gossling et al., 2009). Brouwer et al., 2008 argue that VCO is the customers' decision to soften their impact on the environment and a way to take over responsibility for their own CO<sub>2</sub> footprint. These customers represent a group of slightly younger and slightly more male

flyers with ecocentric attitudes in comparison to non-purchasers of VCO. Mair (2011) also contends that there are national differences on the probability of VCO purchases. In her comparison, 16% of the Australians and 5 % of the United Kingdom airline customers bought VCO. It could be argued that Australians purchase more VCO as they have fewer alternatives to cover large distances in the country, in contrast to the many domestic and international transport alternatives within the comparably smaller United Kingdom. Nevertheless, only seven out of fourteen world's largest airlines offer VCO to their customers, whereby only two provide further information about their VCO (Cowper-Smith and de Grosbois, 2011). This further limits the possibility of acting responsible from the customer's point of view.

## Appendix 17

### Survey result - Ideas Energy Saving Graph



Appendix 18

Survey results – Proposed Ideas Energy Saving sorted by Departments

