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“Somebody should do something”

A qualitative study to determine challenges that politicians face in
decision-making to mitigate climate change

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Preface

I would like to give a big thanks to all the politicians and the main secretary who took their time to participate in this study, despite their hectic schedules. I have had the opportunity to meet many great individuals and received a lot useful of material for this thesis, thanks to these meetings. I would also like to thank Michelle Rydback, Robert Ljung and Bernice Skytt for engaging in my work with helpful insights. Finally, I would especially like to acknowledge my supervisors Johan Colding and Therese Lindahl for their constant support throughout the thesis and guidance with excellent advice. Thank you!

Abstract

Climate change is known to cause more frequently occurring extreme events which threaten both natural and human systems as we know them. Island nations are particularly vulnerable to these climate-induced changes, and the Åland Islands are no exception to this rule. Åland has already seen a change in typical climate patterns as the temperature has been increasing and precipitation decreasing, which is a cause for concern. Political leaders have a great responsibility to mitigate climate change, through decisions on policy implementation and other legislative action, to strive towards sustainability. However, change is not being made fast enough. Hence, this study aims to determine the challenges that politicians of the Parliament of Åland face when making decisions that promote climate change mitigation, as well as seek why these challenges are present. The study was conducted through qualitative interviews with the seven political group leaders, one for each represented party, that participate in Bärkraft's group leader forum. Bärkraft is a local network on Åland which strive toward sustainability through its Development and Sustainability Agenda. In addition, the main secretary of Bärkraft was interviewed. The interviews demonstrated that a majority of the participants had previous experience with climate change issues although, just under half of the respondents agreed that Åland faces little to no climate-related risks. From the interviews six themes were identified which relate to challenges in decision-making for climate change mitigation. For instance, a clear majority of the participants mentioned different economic aspects as a barrier in decision-making, likewise, the abstractness of climate change mitigation was deemed as challenging to handle, and marketing climate change mitigation to the citizens and other politicians was seen as challenging since proper arguments are essential for success. In addition, twelve sub-challenges were found that explains why the identified challenges are present. These sub-challenges included e.g., electoral popularity, municipal planning, motivation, etc. In conclusion, these challenges, with associated sub-challenges, highlight the complexity and uncertainty of climate change mitigation which sets barriers for the political leaders in making decisions for policy implementation. The study would have benefited from a larger number of participants. It also has limited generalizability, being a specific case and not including the complete decision-making process for policy implementation and viewpoints from other societal actors. However, the mentioned limitations can be subject to further research on the topic.

Keywords: *Decision-making, Challenge, Politicians, Parliament, Åland, Climate change, Mitigation*

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1. Introduction

Humans have been known to induce climate change, causing extreme events that are occurring at a more frequent rate than before. (IPCC, 2022). This has been known to cause immense negative impacts beyond natural variability for the climate, which has ultimately led to irreversible impacts on both natural and human systems (IPCC, 2022). Island nations account for one-tenth of the Earth's population and face a unique set of challenges as our global climate changes (Lazrus, 2012). These changes will, among others, ultimately lead to devastating consequences for the vulnerable nations in the form of sea-level rise, increased sea temperatures as well as, precipitation- and storm pattern changes (Lazrus, 2012), etc. The Åland Islands, located in the Baltic Sea is no exception to this rule and faces specific threats in form of sea-level changes, eutrophication which affects fisheries, and changes in climate that may alter food production among other aspects (IPCC, 2013). A change in climate on the Åland Islands has already been documented, where a trend towards warmer climate conditions is being recorded (ÅSUB, 2022). For instance, year 2020 was documented as the warmest year since 1961, where the average temperature was two degrees Celsius higher than normal. Additionally, during year 2021 a 9,3% decrease in precipitation was observed by the Meteorological Institution (ÅSUB, 2022). These changes are likely to have noticeable effects on the local agriculture and biodiversity of species (IPCC, 2022). The effects of a warming climate in the Baltic Sea have already been confirmed in a study, conducted in the northwestern part of the surrounding archipelago of the Åland Islands which found that climate change and eutrophication already have negative effects on fish populations (Snickars et al., 2015).

The climate struggles urges for actions in sustainable mitigation and adaptation to create resilience, although there is apathy and unwillingness from the general public to act (Clayton et al., 2014). The topic of responsibility for mitigating, adapting and risk assessment of climate change is a widely discussed issue, that finally lands on the responsibility of certain individuals, but also particular nations, industries and even economic systems (Cuomo, 2011). One might think that the power of all these actors would solve the issue of climate change, but it is unfortunately not that simple. A large and widespread scale of change is needed by individuals and will solely be effective in combination with corporate adjustments, which will most likely only change if regulations, laws and tax incentives are there to support change in the right direction, backed up by governmental decision making (Cuomo, 2011). These regulatory changes need to come about from strong political leadership that dares to make the necessary decisions to mitigate climate change. Political leaders are in the position to make tough decisions regularly. However, implementing decisions comes with underlying uncertainty, which could lead to policy paralysis (Heal & Millner, 2014). In addition, considering other pressing and urgent matters, climate change differs from other political matters in aspects of its long time horizon and the broad effects on the humans and the planet's systems (IPCC, 2014), hence adding to the uncertainty (Heal & Millner, 2014). It is also subject to irreversible and

non-marginal outcomes, which further challenges political decision making aspects as opposed to other matters (IPCC, 2014). The complexity of climate change means that the political leader will need an intricate framework to aid them in the decision making process (National Research Control Council, 2010).

1.1. Aim

The aim of this study is to research the challenges that the politicians of Åland face when making decisions that aims to mitigate climate change. To fulfill the aim, I will consequently be addressing the following research question:

1. What are the challenges for the politicians of the Parliament of Åland when facing decision making that promotes climate change mitigation?

To understand the challenges in an appropriate way, an additional research questions was added:

2. What are the reasons behind challenges in decision making regarding climate change?

This study aims to fill a research gap, and addresses personal interest, regarding decision-making difficulties for the political leaders in the Parliament of Åland.

2. Background

2.1. The Åland Islands and its Parliament

The Åland Islands is an archipelago located between Finland and Sweden in the Baltic Sea, it consists of 13,300 km² of land area, distributed over 6,700 small island and is home to 30,117 Swedish speaking inhabitants, as of 2021, with 16 municipalities (Ministry for Foreign Affairs of Finland, n.d.). The Åland Islands has a unique status in Finland, being an autonomous region for 100 years, this implies that Åland has legislative power from its own Parliament, which are elected with a four-year interval. The Parliament of Åland has its own right to pass legislation on the region's internal affairs, this includes but is not limited to, education, medical care, transportation, postal communications, local government, and the environment. Åland is, however, required to operate under a set of Finnish laws, hence the island group does not have the power of legislation regarding foreign affairs, civil- and criminal law, court systems, customs, and state taxation. To ensure that Ålands best interest is kept in place the island has one representative in the Finnish Parliament. The Åland Islands also has its own budgetary power, where the income promptly comes from Åland's own revenue, but a lump sum is also given from the Finnish Government which can be seen as a form of repayment of taxes paid by Åland to the Finnish state (Ministry for Foreign Affairs of Finland, n.d.). The Parliament of Åland consists of eight party groups with a total of thirty mandate positions, the parties different mandate positions are demonstrated in Figure 1. (ÅSUB, 2019).

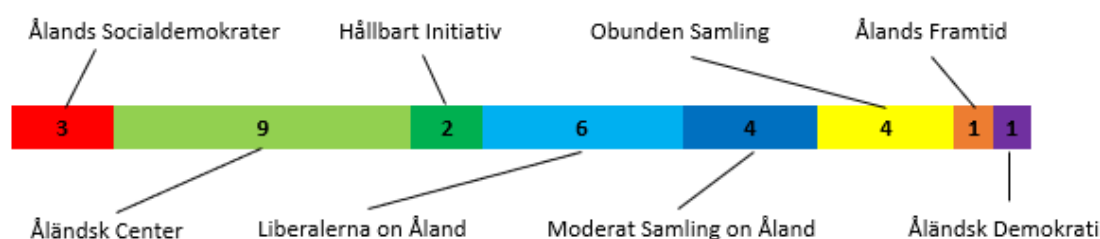


Figure 1. The eight political parties and the number of mandate positions, based on election results 2019. Source: (ÅSUB, 2019)

The role which the Parliament takes in legislative actions is typically based on a proposal from the Government, which raises legislative suggestions that the Parliament can pass or deny. The members of Parliament can also raise their own proposals, called motions, to address legislation, budget or other provisional motions (Ålands Lagting, n.d.). Decisions in the Parliament are commonly based on the application of a majority's opinion, which is over 50% of votes, with an expectation when votes are equal, here the speakers vote gets to determine the

outcome, decisions can also be raffled in this case. In questions regarding the self-governance act, the land acquisition act, the legislative ordinance, the provincial act on the right to vote and stand in municipal elections, as well as the provincial act on Ålands Government are exceptions and require two-thirds of votes cast, otherwise known as a qualified majority (Ålands Lagting, n.d.).

2.2. Bärkraft and the Sustainability Agenda

Bärkraft is a local network on the Åland Islands that was established in 2016. Its purpose is to act as a platform for different types of organizations, ranging from politicians to business- men and women, to jointly strive towards a sustainable island region (Bärkraft, 2022). The network is built upon the Development and Sustainability agenda that has been agreed upon by the Parliament of Åland and its Government (Bärkraft, 2022). The Development and Sustainability Agenda is based on the vision that “Everyone can flourish in a viable society on the Islands of Peace” (Bärkraft, 2022). The statement refers to the definition of sustainability that was presented in the United Nations Agenda for Development in 1997, which stated that sustainable development is reinforced by three dimensions, including economic- social-, and environmental protection (UN. General Assembly, 1997). Bärkraft’s vision has introduced seven strategic development goals that are in line with United Nation’s 17 goals set in Agenda 2030 and aims to be achieved the same year. The Parliaments role is the realization of the agenda as a political responsibility (Bärkraft, 2016), these goals are displayed in table 1.

Out of the presented set of goals, the closest interlinks with climate change are goals three, four and six. To support the seven goals presented by Bärkraft in its Development and Sustainability Agenda the Parliaments eight party group leaders participate in a so called, group leader forum, which was officially established in 2020. This forum is set for the Parliament to actively participate in the long-term political responsibility for the implementation of the Development and Sustainability Agenda. The group leader forum acts as a catalyst and platform for open dialog and exchange of information regarding; progress, challenges and measures within the frame of their goals etc., all of which aim to take place through 3-6 meetings per year (Bärkraft, n.d.a).

Table 1. The Sustainable Development Goals of Åland

Goal number	Goal	Contribution to UN:s 17 development goals
Goal 1.	Happy people whose inherent resources increase	3. Good, health and well-being 4. Quality education for all
Goal 2.	Everyone feels trust and has real possibilities to participate in society	1. No poverty 2. Zero hunger 5. Gender equality 8. Decent work and economic growth 10. Reduced inequalities 16. Peace, justice, and strong institutions
Goal 3.	All water is of good quality	6. Clean water and sanitation 14. Life below water
Goal 4.	Ecosystems in balance and biological diversity	14. Life below water 15. Life on land
Goal 5.	Attractive for residents, visitors, and businesses	8. Decent work and economic growth 9. Industry, innovation, and infrastructure 11. Sustainable cities and communities 13. Climate action
Goal 6.	Significantly higher proportion of energy from renewable sources, plus increased energy efficiency	7. Affordable and clean energy 13. Climate action
Goal 7.	Sustainable and mindful patterns of consumption and production	12. Responsible consumption and production

Source: (Bärkraft, n.d.b)

The role of the Parliament in changing society to strive towards sustainable development and climate change mitigation takes on several aspects, as shown in Figure 2. The figure describes the various actors that are needed to implement change which can benefit the environment. According to Bärkraft, the Parliament plays a role in providing supportive structures and the democratic procedures (Bärkraft, 2022). This proves the Parliaments, and the participants, engagement in the Development and Sustainability Agenda.

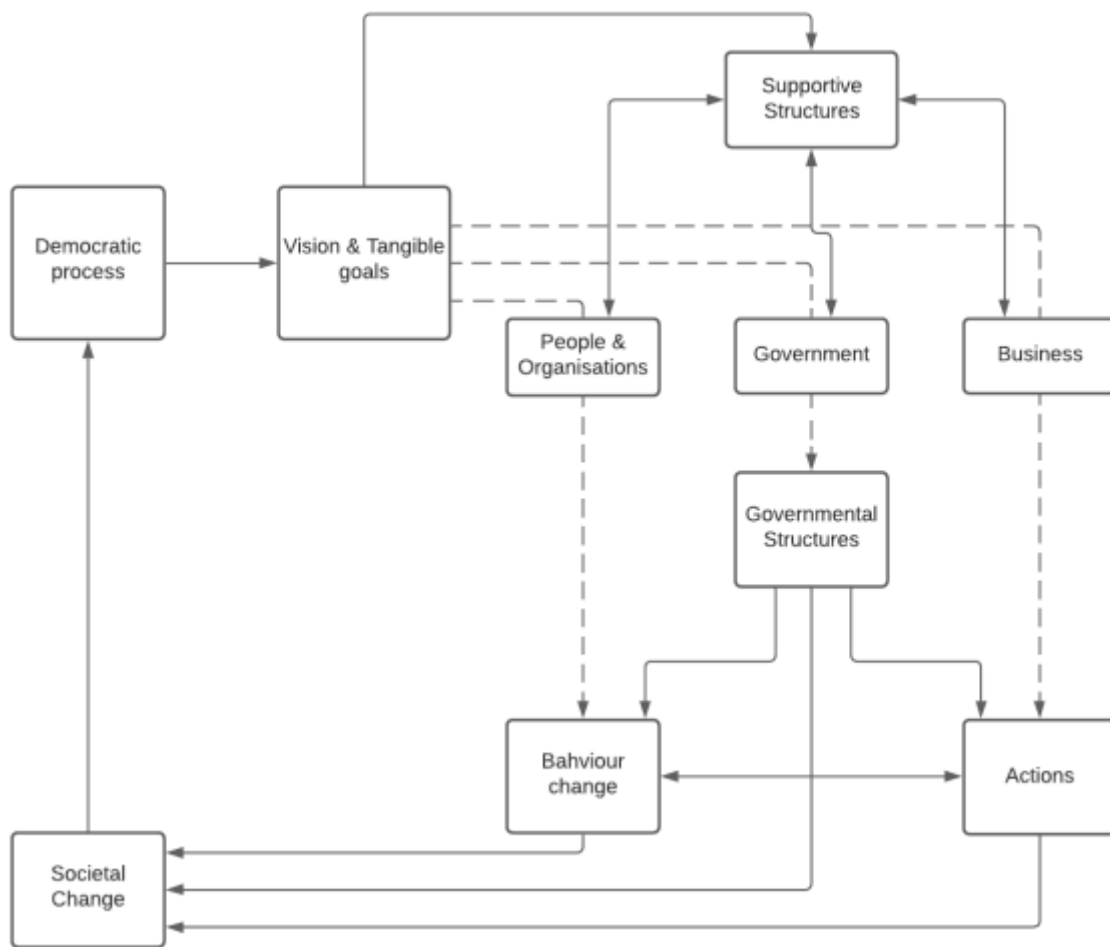


Figure 2. The Åland Framework Theory of Change. Source: (Bärkraft.Ax, 2022)

3. Theoretical approach

This study uses inductive strategies to analyze the empirical data, therefore making it consistent with the grounded theory approach (Charmaz, 1995). Grounded theory aims to develop theory from analytical procedures of the data set. This ultimately means that the starting point is the studied cases, i.e. the interviews, of which abstract and conceptual categories are slowly developed to identify patterns in the data set, finally, theoretical analysis can be discovered (Charmaz, 1995). In other words, the findings are inductively extracted with an open mindset to the knowledge provided from the interviews, hence without being biased by previous selected theories (Glaser & Strauss, 2010). A key concept of grounded theory is theoretical sensitivity, which is an essential aspect of open coding, to ensure that theories are developed inductively from the empirical data (Glaser & Holton, 2004). Additionally, an essential aspect of theoretical sensitivity is to have as few predetermined ideas, such as logical deduction and prior hypothesis, of the case study as possible (Glaser, 1978). Charmaz distinguished six characteristics of the grounded theory approach which are consistent with the theoretical approach used in this study. The categories include: (1) simultaneous involvement in collecting data and the phase of analysis; (2) analytic codes and categories developed from the data; (3) explaining behaviors or processes through middle-range theories; (4) conducting analytical notes as a step between data coding and conducting the first paper draft; (5) theoretical sampling; and (6) delay of a literature review (Charmaz, 1995). These characteristics of grounded theory enables handling of qualitative research effectively through its systematic procedures. The theory is specifically appropriate to use when researching reciprocal effects among individuals with wide-ranging social processes. Likewise, grounded theory is also a good tool for studying socio-psychological topics, this includes motivation, personal experience and conflicts (Charmaz, 1995), which is exceptional in the case of studying political challenges in decision-making.

In addition, Eisenhardt introduces eight steps which describe the process of building theory from case study research which are in line with the grounded theory approach and exemplifies how theory is built from a case study. These steps include; getting started, selecting cases, crafting instruments and protocols, entering the field, analyzing data, shaping hypotheses, enfolding literature and finally, reaching closure (Eisenhardt, 1989). The order of these steps demonstrate that theory and hypothesis are not formed from the start but rather resulting from the analysis, which also means that flexible and opportunistic methods are used for the collection of data (Eisenhardt, 1989).

To conclude, no theories regarding political decision-making aspects will be presented prior to the results. On the contrary, theoretic connections will be included and discussed as a part of section 6.

4. Method

4.1. Research design

This study was conducted using qualitative methods to understand which struggles the local political leaders face when making decisions that promote climate change mitigation. A qualitative method is exceptionally suitable for studying individuals' experiences, behaviors and perceptions of particular problems or issues (Hedin, 2011). Further, to understand what governs the individuals motives for action, qualitative interviews were performed (Ahrne & Svensson, 2015). The Åland Islands are a particularly suitable area to perform this study due to its autonomy and legislative aspects. The small nature and unique status of the islands also makes it a great location, due to the ability to connect with the local politicians and the smaller scale of the Parliament. The study is based on grounded theory approach as described in part 3.

4.2. Selection of participants

The choice of participants, political leader from the Parliament of Åland, was based on their legislative power, hence they have an ability to make decisions on policy implementation, which is an essential aspect of this study. Since the research question aims to determine challenges in decision making aspect to mitigate climate change, the participants were required to have some environmental or sustainability knowledge and preferably be engaged in the Development and Sustainability Agenda in some aspect. These requirements fit well with Bärkraft's group leader forum, and although its relatively recent establishment, it gives an indication of environmental influences to the participating group leaders of Parliament. Out of eight active group leaders in Bärkraft the author was able to achieve interviews with seven of the participants (see Table. 1), giving a reasonably high representation of the group. The representation of group leaders and criteria of the chosen participants aims to increase the external validity of the study (Brink, 1993). The seven participants in the study all belong to different political parties, hence they all have a wide range of political agendas, however the purpose was not to look for extensive connection to their political views but rather focus on their role as a political leader of the Parliament. In addition, an interview with the main secretary of the group leader forum was conducted. The aim for this interview was to give insights to the meetings beyond the politician's views; hence, possibly strengthening the findings of the conducted interviews with the politicians. The interview with the main secretary is thus not used to determine the challenges in decision-making but rather to strengthen the politicians' arguments.

Table 2. Descriptive statistics

Code of respondent	Age & Gender	Years in politics	Previous education	Interview details
<i>Participants of Bärkraft's group leader forum</i>				
Respondent 1 1:0	Male, 61 years	28 years	Agriculture	Date: April 5 th , 2022 Duration: 30 minutes 38 seconds
Respondent 2 2:0	Male, 57 years	10 years	Journalism	Date: April 5 th , 2022 Duration: 37 minutes 13 seconds
Respondent 3 3:0	Male, 48 years	2 years	Law	Date: April 6 th , 2022 Duration: 24 minutes 35 seconds
Respondent 4 4:1	Female, 40 years	7 years	Community planning	Date: April 7 th , 2022 Duration: 39 minutes 1 second
Respondent 5 5:0	Male, 28 years	2 years	Master of Environmental Psychology	Date: April 8 th , 2022 Duration: 30 minutes 38 seconds
Respondent 6 6:0	Male, 66 years	7 years	Economics	Date: April 8 th , 2022 Duration: 28 minutes 32 seconds
Respondent 7 7:1	Female, 51 years	19 years	Master of Philosophy	Date: April 13 th , 2022 Duration: 29 minutes 14 seconds
<i>Main secretary at Bärkraft's group leader forum</i>				
Respondent 8 8:0	Male, 45 years	-	Entrepreneur	Date: April 19 th , 2022 Duration: 26 minutes 57 seconds

The table presents an overview of the participants, the code of respondent refers to the order of the interview and gender is represented by 0 for men and 1 for women.

4.3. Interviews

The study was conducted through semi-structured interviews via the software program Zoom, which is commonly used for teleconferencing world-wide (Archibald et al., 2019). The reason for using Zoom is partly due to the accessibility and simplicity to participate in the study, but also due to the ongoing COVID-19 pandemic and the changing local restriction to prevent further spread of the virus. Zoom made the interviews safe for all participants, but also eliminated the possibility of some interviews being held in person and some online due to possible changes in restrictions imposed by the Government of Åland or possible contraction of the virus, which would cause inconsistency and threaten the reliability of the study (Brink, 1993). Prior to the interviews the participants were informed about the purpose of the study, the expected length of the interview, aspects regarding their anonymity and gave consent to the

interview being recorded. The language on Åland is Swedish, and therefore the interviews were held in the participants mother tongue. This decision was taken due to the possibility of present language barriers that might have interfered with the interviews if they were conducted in English. In such case, essential information could have been left out or lost during the interviews, hence delivering insufficient results. Since both the interviewer, and the interviewees speak Swedish it is more natural for the meetings to be in Swedish, hence creating a pleasant and relaxed atmosphere for the interviews to take place in.

The semi-structured interviews were conducted based on an interview guide (see appendix A). The questions were set with the goal and intention of answering the research questions. To create initial trust between the participants and the interviewer, the interview started with simple questions, such as age, years of experience in politics and educational level. Trustworthiness between interviewer and respondent aims to increase truthful and open-hearted answer which ultimately can increase the studies validity (Brink, 1993). The interview then continued with questions addressing views on climate change, potential risks associated with changes in climate and the participants roll in mitigative decision actions, these questions aimed to address the participants engagement in climate and sustainability matters. Subsequently, the collaboration with Bärkraft and its Development and Sustainability Agenda was addressed to establish the influence that the network has on decision making and to distinguish any potential challenges in the group leader forum. The interview then proceeded with questions regarding challenges that are met when decision making for climate change mitigation. These questions were initially open to interpretation and were later narrowed in on specific topics if the participant had not discussed the issues before or denied its presence, these topics included economic aspects, popularity, cooperation, etc. The questions were likewise asked in an open and non-intuitive manor. A total of 4 hours 6 minutes and 48 seconds of interview material from the eight respondents was gathered.

All the recorded interviews where later transcribed in Swedish in a simple, readable language to enable easier analysis of the material. The transcript process also reduces threat to the internal reliability by ensuring accurate information collection (Brink, 1993). Citations used in text are translated and presented in English. The participants were given an opportunity to read and approve the translated quotes, prior to the submission of the thesis. The transcripts were analyzed using thematic analysis and where later coded by distinguishing general themes as a part of phase one of analysis. Open coding is a central aspect of the grounded theory, where keywords are distinguished to describe and explain the data, thus connections and sub-categories can alternatively be found (Kvale & Brinkmann, 2009). During the second phase an identification of the most common themes emerged from the interviews, thus the core theoretical concepts from the interview data appeared. In addition, the open coding allows different codes to appear from the empirical data, thus not disregarding any important findings (Strauss & Corbin, 1997). Since the themes where not determined prior to the thematic

review, higher validity of the study can be ensured since the respondents guided the direction of the interviews.

4.4. Ethical considerations

Qualitative research requires concern about moral and ethics of the research design, due to their personal views and information being exploited (Aluwihare-Samaranayake, 2012). This was conducted by informing the participants, prior to the interview, of the purpose of the research, the types of questions that will be asked, that their interviews would be recorded for transcription purposes and that their anonymity could not be guaranteed. As a result of informing the participants about the nature of the research the study, increase validity can be expected (Brink, 1993). The main reason for non-anonymity is due to the politicians of Parliaments acting as public figures therefore, it is possible that their identity can be exploited, particularly amongst each other and others on the Åland Island. The participants were informed about this aspect prior to the interview. Thematic analysis will also minimize personal aspects since specific themes will be discussed as opposed to personal opinions. Citations from the participants will also be chosen with consideration of minimization exploitation of the participant and other members of the Parliament. The ethical considerations of this study were also discussed with guidance from Dr. Robert Ljung and Bernice Skytt at Högskolan i Gävle to ensure proper handling of information. The participation of the interviews was voluntary.

5. Result

The results presented in this section reflect the relevant findings which aims to determine challenges that the politicians in the Parliament of Åland faces when making decisions to mitigate climate change. A total of seven individuals with ties to the sustainability network in Bärkraft and with decision making possibilities, including five men and two women, were interviewed. A total of six themes were identified from the coding of interview transcripts, these findings were strengthened by additional meeting protocols and an interview with the respondent's main secretary. The identified themes are economic aspects, abstract processes, responsibility, marketing, conflicts of interest, and cultural aspects. To increase the internal validity, i.e. to ensure that the findings are an accurate representation and reflection of reality (Brink, 1993), a requirement for the identified themes is that the challenge was mentioned more than once during the interview, either via direct or indirect communication, but also that the theme had to occur at a minimum for three participants for a theme to be identified. Other challenges were mentioned, but not with the requirements to be determined as a common difficulty. In addition, some of the themes have certain overlapping aspects, and therefore some findings that are presented under one theme may also occur under another theme.

The interviews concluded a variety of previous sustainability and climate change knowledge. A total of 57% of the respondents had previous experience with climate change issues in form of education or previous work-related experiences. When asked about which climate related risk they think the Åland Island faces, 47% of the respondents agreed that Åland would stand before little to no risks of climate threats, mainly due to its geographical position. The rest of the respondents agreed that risks associated with the changes in the Baltic Sea, mainly a rise in sea level, was the predominant risk. All the respondents had previous education of various degrees.

5.1. Economic aspects

A clear majority of the respondents, six out of seven participants, mentioned that challenges in decision making for climate change mitigation were related to economic aspects. Several participants commonly mentioned specific economic aspects such as interference with business practice and employment. This concern was mainly addressed in the form of interfering with operating business with new legislative implementations that can mitigate climate change, which would ultimately decrease companies' short-term profits and potential employment rates which also interferes with the island nations unemployment rates and revenue.

(1) The existing important businesses that create jobs and that creates economies, there will be a clash between that and Bärkraft's goals (3:0)

And

(2) You must have time for adaptation, the biggest challenge here is to make sure that you do not ruin the employment of businesses (1:0)

And

(3) There is a stereotype around the process to prevent climate change and that it will threaten the businesses and threaten the economy (5:0)

Three participants, two women and one man, specifically mentioned economic struggles connected to budget planning. The challenges were mainly due to the Åland Islands unique status in Finland, hence operating on its own seemingly smaller budget, but also how climate change mitigation is prioritized in comparison to other urgent matter. This is demonstrated in the respondents quotes below.

(4) It is always easier to take tough economic decisions and to use money offensively.... every year there is a struggle over the budget. (6:0)

And

(5) It (new investments) is actually not a lot of money, but in relation to the budget of Åland then it is considered a lot. (4:1)

And

(6) The government has a budget, how should this money be distributed and to what? This is where the governments politics play a roll, what they choose to put the money on. (7:1)

The prioritization on monetary assets to mitigate climate change were questioned in terms of uncertainty of positive results in form of feedback from potential implemented investment decisions in the long run. Hence, there is a fear that leaving budgetary room for sustainability investments will decrease short term profits that might not produce long term economic benefits.

5.2. Abstract concepts

Another frequently occurring topic, consistent with five out of seven participants, agreed that to work towards the Sustainability Agenda to mitigate climate change is an abstract issue. This was often expressed in relation to the group leader forum in Bärkraft's meetings where the respondents experienced that a lot of discussions have taken place, but little productive work and change has come out of the meetings. Hence, creating an abstract work process towards the rather well-defined sustainability goals. The group leaders mentioned that, although they discuss a lot of potential room for implementation, it is a long way from becoming concrete actions

towards legislative implementation. These assumptions can be related to the following citations, which refer to the collaboration with Bärkraft.

(7) The conversations that take place in the group leader forum is exactly that, conversations, and they do not result in anything concrete. (7:1)

And

(8) It works well, but it is on a very abstract level, and there are many times when it is hard to see what we get out of it concretely. (1:0)

And

(9) There is a lot of talk, but to concretely do something is very far away. (3:0)

And

(10) The problem I think, if I am being honest about Bärkraft, is that you want to make it as abstract as possible, because then you want to keep things as abstract as possible to create unity. (7:1)

There are also responses which relate to the role politicians have in the Parliament of Åland. In particular, how implementing laws in acquaintance with the Sustainability Agenda is often not as concrete as it could be, mainly due to various political processes. This is demonstrated in the following quotes.

(11) The task of a legislator is seldom concrete. (2:0)

And

(12) In concrete politics these sustainability goals are forgotten, they become written on a paper, but nothing happens in reality. (3:0)

Although the abstract level of work seems to create a conformity amongst the group leaders as emphasized in quote 10. The Bärkraft meetings have worked well for the group leaders to share their thoughts on the sustainability topic in an open manner, hence creating unity. On the contrary, the undertone of the abstract work process also raises questions about responsibility as demonstrated by the following quotes.

(13) That could be the problem with the Sustainability Goals, what are we actually supposed to do? (3:0)

And

(14) Now we are painting a picture using the big brush and have a wide set of goals, but I would like to start seeing that this is the actual problem and now we will make sure that this and this person will become responsible for it. (1:0)

5.3. Responsibility

The interviews with the respondents indicated that one difficulty in decision-making processes was linked to responsibility, which was portrayed in six out of the seven interviews.

Responsibility can be linked to various aspects, in this context ties could be drawn to uncertainties about who holds the role of being responsible to mitigate climate change, this is demonstrated by the following quote, which was portrayed by two of the male respondents.

(15) Somebody should do something. (2:0) (3:0)

This emphasizes the role of who is responsible for acting against climate change, which ultimately means that the politicians do not consider themselves to bear the full responsibility for acting on the sustainability goals, although they in fact declare that something should be done. The responsibility aspect of decision-making difficulties also played a part in attitudes towards taking responsibility for change. This was mainly portrayed in terms of motivation, both from the politicians but also from citizens which ultimately affects the decisions that politicians are willing to take. The lack of motivation to take responsibility for the climate was mainly due to the presumably small scale of Åland, hence uncertainty about the amount of total impact on the global climate situation was expressed as a concern. Thus, the politicians and the citizens question why they are held responsible for a global matter where most of the damage is being conducted elsewhere.

(16) What difference does it make? This is something we often hear on the Åland Islands (4:1)

And

(17) What is the difference (if we do something)? (6:0)

And

(18) People will think, why would you make us pay the price with this (climate legislation) when it does not have any effect? (6:0)

These quotes prove that the motivation to take responsibility due to uncertainties can affect the decision-makers priorities to mitigate climate change. This motivation is mainly based on the citizens support of decision-making for legislative implementation and their attitudes towards change, which ultimately affects the politicians decision-making strategies.

5.4. Marketing

One aspect that was mentioned as a difficulty for decision making towards a more sustainable climate was marketing aspects, which four out of seven participants mentioned in their interviews. This included to sell in the concept of sustainability and promoting adaptation to

mitigate climate change. It was portrayed as important to change the attitudes and routines of the citizens of Åland but also of other politicians. Along with marketing and promoting climate change mitigation among citizens and other politicians, the respondents agreed that proper and educated argumentation, for policy implementation, is essential for the decision-making process as a form of persuasion. These aspects of marketing can be seen in the following quote.

(19) If there are tough decisions that are to be taken, then you can package it in a nice way, that is marketing and having the right arguments to be able to explain the decision in a good way. (6:0)

The following quotes represent the importance of proper arguments when making decisions related to climate change mitigation. Argumentation for the case of mitigating climate change was essential in getting the citizens support in making the necessary transitions.

(20) It is about the rhetoric that we use. (4:1)

And

(21) Everything is about collecting arguments and making them as clear and comprehensible as possible. (2:0)

And

(22) A risk, if you have bad arguments, is that you cannot present a good case. (6:0)

Marketing climate change mitigation seems to aim towards easing the attitudes towards change that is required to meet the sustainability goals and provide incentives to prevent further climate change damage. Another important aspect of prompting marketing for sustainability was to gain support from the public opinion legislative action of policy implementations to take place.

5.5. Conflicts of interests

Conflicts of interest are common in politics and one can even assume that it is an essential aspect of a democracy and the utter reason for the existence of political parties. Confirming this assumption, conflicts of interests were mentioned by five out of seven respondents. As one can assume, decision-making for climate change mitigation by legislation has challenges in gaining a political majority for the decision to win its case. To receive a political majority the politicians, need to see eye to eye on climate change, which was expressed as challenging in certain cases.

(23) If you want to talk about concrete environmental- and climate politics, then we have very different opinions (7:1)

The reason for a spread in interest and opinions in climate change matters was due to a variety of reasons such as ideological difference and knowledge gaps. This was expressed in the quotes below.

(24) Low crisis awareness...which lead is due to ideological blinders... an ignorance and unwillingness to learn more. (5:0)

And

(25) Of course, there are also ideological obstacles (5:0)

This indicates that differences in ideologies are also portrayed in the politician's willingness to engage in climate change matters. Hence the conflict of interests stems from the respondents' ideologies. This difference ultimately makes decision making challenging since reaching a majority becomes increasingly difficult if the spectrum of political ideologies is too broad. Another portal of conflicting interests is the politicians' personal interests.

(26) Politicians tend to make decisions that benefit themselves and avoid decisions that do not benefit them personally. (3:0)

Climate change mitigation requires tough decision-making, this will require a structural change in living habits and attitudes. As politicians are also citizen of the society, this recollection might occur to them, hence keeping their own interest's inferior to Åland's future well fare. These conflicts are portrayed by the respondents to interfere with decision-making process.

For instance, one specific conflict of interest was tightly connected to popularity before coming elections. Hence, politicians struggle to make tough decisions that will be considered unpopular by the public opinion, out of fear for not being reelected for office. This is portrayed as a conflicting interest in the politician's agenda as decisions are strongly based on personal gain rather than long term societal welfare.

(27) Next year there is an election again and then people (politicians) go to the election with those questions that they think are of high value and important. (7:1)

And

(28) You should not mess with people's weekdays ... especially not if you want to be reelected. (2:0)

And

(29) Maybe you feel more pressured (to be reelected) ... I want to be reelected. (3:0)

And

(30) This is something that politicians fear, that the debate (about climate change) will lead to and that they then will decrease their number of votes in the coming election. (5:0)

The mentioned citations from the respondent indicate that there is a conflict regarding taking tough decision in climate mitigations purposes and the politicians' personal interests. This can be seen as a challenge in the decisions making process since incitement to flight climate is altered for personal popularity in reelections.

5.6. Cultural aspects

The final recognized theme is unique to the Åland Islands and was expressed as the cultural aspects of its citizens and municipalities which make decision making for political leaders challenging. This cultural aspect was mainly associated with ownership rights such as, rights of personal land use, with attitudes that stem from Ålands domicile rights and proprietorship where three out of seven politicians mentioned this theme, two of which are women. This finding is demonstrated in the following quotations.

(31) *The other thing that will be challenging on Åland is the view of the proprietorship and autonomy. (4:1)*

And

(32) *I am convinced that without cohesive and sensible community planning it will be extremely difficult to accomplish our (sustainability) goals on Åland. (7:1)*

And

(33) *I mean, I experience that the discussion is harder here since we have such high status on the proprietorship. (4:1)*

The total of sixteen municipalities, which all obtain its own monopoly in its community planning, make decisions related to changes in land use, for example wind turbines, difficult for the politicians. This specific challenge to the Åland Islands can be viewed in the quotes below.

(34) *There is a strong commitment that the municipalities should have the right to have the entire planning monopoly (4:1)*

And

(35) *The government has the attitude towards the municipalities that they are untouchable and cannot be controlled (7:1)*

These cultural aspects also related to the citizens strong desire of obtaining their individual freedom, especially in decisions that regard their everyday life. The domicile rights seem to give citizens a superior attitude towards rights to land use. The politicians expressed that citizens would prefer to minimize interference with climate legislation, hence making decision-making more complicated due to the lack of the citizens support to enable the tougher decisions to take room. This was particularly expressed in the following quotes.

(36) *It goes so far into the personal sphere, and many may experience it as a violation of their freedom. (5:0)*

And

(37) *Here the issue arises that we want to have our municipality. This is my land, here I do whatever I want. (7:1)*

This is seemingly unique to the Åland Islands, due to its large number of municipalities and lack of municipal planning and displays the citizens attitudes towards change that regards their land area or everyday life, despite potential implementations benefiting the island nation and its environment in the long term.

6. Discussion

A total of six themes, which describes the challenges that political leaders face during decision-making processes to mitigate climate change, were found. The identified challenges are economic aspects, abstract concepts, conflicts of interest, marketing, responsibility, and cultural aspects. These six challenges directly answer research question one, concerning the challenges that the parliamentary politicians of Åland face in decision making that promotes climate change mitigation. Every identified challenge also had sub-challenges that describe why the challenge was perceived as difficult for decision-making, as addressed in research question number two. A total of twelve sub-challenges were extracted from the interviews. These include ideologies, personal interests, popularity, employment, budget, citizen attitudes, municipal planning, motivation, roles, argumentation, political processes, and few resulting actions. Figure 3 is a visual summary of the six themes and the belonging twelve sub-categories regarding the challenges in decision-making that are presented in part 5.



Figure 3. Challenges and sub-challenges in decision-making

6.1. Strengthening of results

The findings were strengthened, to some degree, by meeting protocols from the group leader meetings on the 11th of January 2022 respectively the 3rd of March 2022, these meeting protocols are available in Swedish upon request. The meeting protocols emphasizes the Development- and Sustainability Councils request that the Parliament should regularly communicate its role in the vision behind the Development and Sustainability Agenda to the

society. Actively communicating the goals to the citizens is an essential part of marketing aspects, where the politicians mentioned that finding the appropriate arguments to promote mitigative actions was necessary for successful outcomes, however also difficult. The communication of the Parliaments role in the Sustainability Agenda also strengthens challenges in responsibility, where politicians' expressed challenges in defining their role and responsibility in climate change matters. The protocols explicitly stated that the meetings held discussions, where questions regarding the Parliaments roles was mentioned. The meeting protocol also stated that discussions had taken place regarding implementing procedures for the Parliament to take initiatives towards the goals. This request would directly strive towards improving challenges around the abstract processes stated by the respondents.

In addition, the interview with the main secretary of the group leader forum, respondent eight, also claimed that he could observed challenges specifically in different economic interests and political ideologies which strengthens the findings of struggles regarding economic aspects and conflicts of interest. These challenges were observed by respondent eight during the group leader meetings. As mentioned by respondent eight, the group leader forum for Bärkraft aims to exchange information around sustainability and to educate the political leader to ultimately make the decision-making process for new climate legislation easier by decreasing conflicts and increasing motives between parties.

6.2. Connection to theories

Certain connections to theories can be made, which have emerged from the identified themes. For instance, conflicts of interest proved several intriguing subcategories such as ideologies, personal interest, and electoral popularity. The conflict of ideological differences can be connected to belief systems which consists of interrelated structures of norms that vary in degree of systemics (Usó-Doménech & Nescolarde-Selva, 2016). Political belief systems help individuals to navigate through the vastness of politics (Sartori, 1969), and belongs under the theory of motivated reasoning. Difference in political ideologies may be essential for a functioning democracy, however conflicts between political parties disables effective decision-making towards a sustainable climate. It, can also be seen as contra intuitive that politicians tend to make decisions that ultimately benefits themselves and their personal agenda, hence supporting the rational actor model (De Mesquita, 2010). This phenomenon is proven in quote 26, where maximizing personal interests is explicitly stated. In addition, electoral popularity also proves that the rational actor is present as gaining voter popularity can be prioritized over decisions that mitigate climate change.

Ambiguity is also present in conflicts of interest among the politicians. Ambiguity refers to several ways of viewing the same phenomena (Zahariadis, 2003), which is common in climate

change issues. Viewing matters differently can be beneficial for optimal outcome, however it can also increase the conflicts of interest, since all politicians will view climate change slightly differently due to differences in knowledge and beliefs, hence making decision-making increasingly difficult. Ambiguity also highlights the abstract processes since certain problems and goals may lack clear definitions (Sabatier, 2007). With undefined problems and goals, the process towards achieving the set of goals becomes unclear, this can explain why the politicians view climate change as difficult, due to abstract concepts. These abstract concepts have shown to cause uncertainty regarding the politician's responsibility and role in mitigating climate change as seen in quote 13 and 14.

In addition, responsibility was connected to motives for change, as presented in quotes 16 to 18. In this aspect, certain politicians found difficulties in motivating themselves and citizens, to implement policy changes for mitigative action. The lack of motivation to take responsibility for the global issue, when the island nation ultimately has little impact on climate change, was perceived as a barrier in motivation. Hence, the theory of motivated reasoning where the directional goals describe how attitudes are affected (Leeper & Slothuus, 2014) can explain how negative attitudes impact decision-making motives. On the contrary, accuracy goals which strive to reach the most accurate outcome (Leeper & Slothuus, 2014) help to describe the economic challenges.

The economic aspects referred to challenges in budget priorities and interrupting functioning businesses as demonstrated in quote 2 and 6. The essential aspect under these considerations is that political leaders strive towards making decisions where the outcome can be predicted to a high degree, which is not always certain in mitigative actions. In the case of climate change mitigation, underlying uncertainty over results from policy implementation and increased sustainability investments are described as challenging in decision-making aspects since it ultimately affects many citizens. The theory of rational choice somewhat explains this as it strives to guide our decisions to achieve our goals as well as possible (Elster, 1986). However, to achieve the goals, it is important to take stand on factual matters, which under the assumption of uncertainty can be challenging. In addition, rational choice is based on rational belief which is dependent on obtaining accurate information (Elster, 1986). Different sources of information can lead to various beliefs which according to the participants enhances conflicts of interests as demonstrated in quote 24.

The multiple streams theory lies under the assumption of manipulating and persuading (Zahariadis, 2003) the public opinion and other politicians, hence highlighting the importance of effective argumentation (Sabatier, 2007). The importance of argumentation properties was indicated by several political leaders, were they emphasized challenges in marketing aspects towards climate related decision-making, as demonstrated in quote 19 and 21. Proper argumentation aims to persuade citizens and other political parties that change is necessary for

societies long-term wellbeing. This aspect is also a part of the electoral popularity aspect, where persuasion and marketing are used to gain votes, this often highlights personal interests rather than societal interests.

Finally, the unique cultural aspects of Åland and its high number of municipalities, lack of communal planning and citizens attitudes towards ownership rights is the essence of the effect that culture and ethics have in rational decision-making (Oliveira, 2007). The culture on Åland, regarding citizen attitudes on ownership rights of land and the political view of maintaining the vast number of municipalities which lack joint planning was deemed a challenge in decision-making purposes. It was commonly expressed as difficult to alter the municipal structure to gain control over planning rights as demonstrated in quotes 32 and 35. Without control over land, it is impossible to implement certain changes that are necessary for mitigative policies, such as wind turbine installation, protect landscapes and creating opportunities for collective traffic or sidewalks etc.

The stated challenges illustrate the complexity of mitigating climate change through political decision-making for policy change and implementation. The likelihood of combining the three streams in a so called “window of opportunity”, as mentioned in the multiple streams theory, grows increasingly rare, hence making policy changes difficult (Sabatier, 2007).

6.3. Previous research

Although there is no previous research specifically for challenges in decision-making for of the Parliament of Åland, there are several studies on the related themes and concepts of this study.

For instance, a longitudinal study conducted in Canada explored climate innovation in the municipalities of Canada through a two-stage study via a tri-university research collaboration (Dale et al., 2020). Phase one aimed to study the local responses to the coordinated governmental legislation and financial incentives etc. The second phase, a revisit of the original case studies, was performed to seek transformative change in development as well as other indicators of change. This study provided several findings that are in line with the findings in this thesis. For instance, it found barriers in policy coherence across different governmental levels (Dale et al., 2020). These barriers are in line with the conflicts of interest identified from the interviews. Without mutual reinforcement towards policy action, it is near impossible to reach implementation and legislative action in decision-making aspects, hence this challenge for policy change seems to reoccur globally. In addition, the study found that a lack of coordination acts as a barrier in transformational change (Dale et al., 2020). Although not exactly in line with the presented findings, the confusion regarding the abstractness of roles illustrates that a lack of

coordination among the responsibility for climate change mitigation sets barriers for decision-making purposes as demonstrated in quote 13.

A paper by Meadowcroft, highlighted five distinct challenges in governance for climate change. One of these challenges was societal reach (Meadowcroft, 2009). Societal reach incorporates drastically transforming present production and consumption pattern to mitigate climate change. This will require large scale changes that guide societal adjustments (Meadowcroft, 2009). Changing society's function was mentioned as difficult for the political leader as deeply rooted cultural aspects, such as citizen attitudes towards proprietorship and conflicts of interest regarding municipal planning, make changes difficult. For this drastic transformation to occur, persuasion and argumentation need to be used to convince citizens and other politicians to implement policy change. In addition, uncertainty highlights that we are unaware of the full economic and social impacts that can occur when reducing climate change (Heal & Millner, 2014). This uncertainty was expressed by the difficulty in distributing budgetary means and how their potential decision could affect employment.

In addition, one study researched psychological distance which can be referred to as the perception of climate change matters being distant, hence an abstract phenomenon (Wang et al., 2019). A comparison of 3 studies, two surveys and one experiment, was conducted to investigate the relationship between pro-environmental behavior and psychological distance. The study proved that there was certain evidence that psychological closeness was common for pro-environmental behavior however, the construal level was deemed as unrelated to psychological closeness in all three studies. It was also stated that a variance in policy choice can be explained by both abstract and concrete construal's. To conclude, the study identified climate change as a matter of which construal level and psychological distance are independent of each other (Wang et al., 2019). The abstract concepts mentioned by the politicians were interlinked with viewing few results from sustainability work and the abstractness of the political processes surrounding mitigation. Differences in construal level and psychological distance could explain the abstract concepts and describe ideological barriers among the politicians.

Finally, a study which conducts a systematic analysis of challenges in political sustainability for the United Kingdom's Climate Change Act (Lockwood, 2013) sought several challenge that are similarly identified in this study. For instance, Lockwood mentions that transforming economic interests and political identities to induce low carbon investments is stalling due to uncertainty (Lockwood, 2013). This illustrates similar concerns regarding the uncertainty of leaving budgetary room for sustainable investments and meeting ideological barrier that makes policy implementation increasingly difficult. In addition, the study mentions that addressing public interest is challenging since potential benefits from policy change is distant intime and defuse (Lockwood, 2013). These challenges are likewise interlaced with citizen attitudes towards

change and the abstractness of climate change issues which means that adequate argumentation through marketing is essential for success. These aspects are also demonstrated in Bernauer's paper, where he expresses that public opinion plays an important part in climate politics (Bernauer, 2013). The public opinion is crucial as politicians rely on the public for implementing policy change. This effects marketing aspects to gain public popularity and alter citizen attitudes. Likewise, the public opinion ultimately affects the politician's electoral popularity, which is identified as a barrier in mitigative actions. Finally, an analysis on the National Adaption Strategies in Europe indicated that challenges are present in effective co-ordination throughout Governments (Biesbroek et al., 2010). The lack of defined roles might enhance ineffective co-ordination and uncertainty of who the ultimate responsibility of mitigation lands on.

7. Conclusion

Climate change is an urgent matter which needs to be addressed on a political level to enhance mitigative action. So why aren't politicians making decisions on policy implementation and legislation to address this important aspect of sustainability? This study specifies six distinct challenges in decision-making aspects, and twelve belonging sub-challenges. It can be concluded that these challenges all stem from one aspect, complexity. Climate change is well-known as a complex system since it contains multiple interactions among several different actors and components (Rind, 1999). This complexity was found in the many identified challenges and its widespread aspects, which ranges from municipal planning to electoral popularity, marketing, and motivation etc. In addition, the complexity goes beyond the political arena and reflects upon culture and citizen attitudes towards change, which ultimately sets further challenges for the politicians to mitigate climate change. Likewise, the complexity of mitigating climate change through political incentives highlights aspects of uncertainty which was a common factor among the political leaders. Uncertainty was expressed in terms of economic aspects of budget distribution and employment, but also in the politicians' roles in climate change mitigation. In addition, the democratic society enlightens the importance of the public opinion and communication between policy makers and the citizens to enable an effective decision-making process. The demonstrated findings are subject for the politicians' review, hence given them an opportunity to review the challenges and handle them in an appropriate manner.

8. Limitations

The presented findings are subject to certain limitations. To begin with, the study is based on a unique case of the Åland Islands autonomous region, hence generalizability to other locations is limited. The empirical data was collected from the viewpoint of the political leaders; thus, the perspectives of other societal actors were excluded. In addition, the number of respondents, although a high representation of the leaders in Parliament, was a seemingly small sample size for data collection which makes statistical analysis obsolete. It can also be stated that the Parliament does not represent full decision-making aspects. The Åland Islands operates under Finnish and EU law, hence they cannot make decisions on all matters, the Government of Åland is also involved in the decision-making process. This gives certain limitation to the complete picture of the full decision-making process, which could not be a part of this study due to time constraints. The mentioned limitations are all subject to further research.

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Appendix A

Interview guide

This interview guide has been translated from its original language, Swedish, therefore some questions may not be identical to the formulation of the questions asked during the interview. The questions stated are used as a guide to the interviews, hence the questions were modified depending on the participants answers and the order of the questions depended on the flow of the interview, the goal and scope of the interview was held constant for all the participants.

General questions

- Tell me a little bit about yourself.
 - How long have you been in politics?
 - Do you have any previous education?
 - If yes, what type of education do you have?
 - Do you have any previous experience/knowledge/interest within sustainability and/or climate change?
 - If yes, can you tell me a little about this experience/knowledge/interest?
 - How long have you been a part of Bärkraft's group leader forum?
 - What is your age?

Climate change

- Do you consider work to mitigate climate change is important?
 - Why/Why not?
- Do you consider the Åland Islands to face any climate change related risks in the future?
 - If yes, which risks do you think the Åland Islands may face?
- Can you talk about your roll in decision making for mitigating climate change?

Bärkraft

- Can you talk about the collaboration with Bärkraft?

- Bärkraft as set 7 goals for 2030, where goals 4 and 6 are focused on climate issues, these goals are ambitious and will require a lot of change to be realized. How do you work in Bärkraft to achieve these goals?
- Does the collaboration with Bärkraft influence any decisions that are taken?
 - If yes, what kind of influence does Bärkraft have?
- Have any decisions been made due to the collaboration with Bärkraft?
 - If yes, what kind of decisions have been made/ are being made?
- Do you think that the collaboration with Bärkraft works well?
 - Why/Why not?
- If you had the opportunity to change something with Bärkraft's collaboration, what would it be?
- Can you talk about how different interests within the forum are handled?

Challenges

- Can you talk about potential challenges that you face within decision making for climate change mitigation?
 - What would you say is the main challenge?
 - Why is this a challenge?
 - What do the challenges depend on?
 - How are these challenges handled?
- Are there any economic challenges?
 - Budget?
 - Interference with operative businesses?
- What do you think the set time horizon of 2030 for the goals?
 - If there to little/ not enough pressure regarding the timespan?
 - How is the timespan for the goals working in relation to your term of office?
- Can different interest about climate change be challenging regarding mitigative decision making?
 - If yes, can you talk a little about these challenges?

- How is climate change mitigation put in priority compared to other matters?
 - Is this order of priority accurate?
 - Why/Why not?
- Are your decisions, regarding climate change mitigation, in any way dependent on popularity before coming elections?
 - Can you talk a little about this?
- Would you say that there is enough interest from the citizens to implement measure that mitigate climate change?
 - Is there enough trust between citizens and politicians to enable you to make tough decisions that mitigate climate change?
 - Why/ Why not?
- Can you talk a little about the level of knowledge present when it comes to climate change matters?
- How is the collaboration with other politicians regarding the climate change agenda?

End of interview.

