

Promoting Sustainability Through Online Platforms

An Interactive Qualifying Project

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By:

Carter McLellan

Colleen Mullins

Daniela Schumacher

Michael Collins

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Sponsor:

Lars Myrthu-Nielsen

Eco-net

Advisors:

Professors Karen Oates and Guillermo Salazar

Worcester Polytechnic Institute

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ABSTRACT

Climate change is a major issue with drastic consequences for the world if nothing is done. Eco-net has created Green Overview, an online platform dedicated to promoting sustainability throughout Denmark. Eco-net is looking for ways to increase its user base by redesigning Green Overview. This project collected the information from individuals in Denmark interested in sustainability through interviews and surveys. A new design for the Green Overview website was developed, along with a design for a mobile application.

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EXECUTIVE SUMMARY

The human population is consuming Earth's resources at an alarming rate. To prevent further depletion of Earth's resources, changes in how people consume must be made. To implement these changes, a stronger focus on environmental sustainability is needed. Sustainability, as defined by the 1987 United Nations Commission on Environment and Development (UNCED), is an activity that "meets the needs of the present without compromising the ability of the future generations to meet their own needs." In order to implement the ideas of sustainability, a variety of organizations dedicated to encouraging individuals and governments to act sustainably have been formed.

Eco-Net is a Danish non-profit organization established in 1994 that promotes sustainability initiatives. It has created Green Overview, an online platform released in 1997, that provides the citizens of Denmark with information pertaining to sustainable events, projects, companies, and initiatives in various regions throughout the country. Despite various improvements implemented over the years, Green Overview is still facing some challenges. Currently there are approximately 2000 users; however, very few actively contribute to the platform, many users have trouble finding the specific information they are looking for, or the users get overwhelmed by the amount of stored data on the platform.

This project was designed to assist Eco-net in identifying ways to advance the use of their Green Overview online platform by enhancing user experience and increasing the growth of the online community. To achieve this, two project objectives were outlined: 1) Assess the current Green Overview platform use and design, and 2) Develop and test mockups for an updated website and new mobile application based on desired design criteria.

Each objective has corresponding methods that were used to achieve the objective. The first objective was achieved by distributing an online survey and also by conducting interviews with members of various green movements in Copenhagen. The information gathered from the survey and interviews was then used to create a list of desired features for the mockups. To attain the second objective, three additional methods were used. First, an interview was conducted with Green Overview's webmaster to determine the technical feasibility for future improvements to Green Overview. Second, two different mockups were created: one for an updated website and one for a new mobile application. Third, interviews with current and potential users were

conducted in order to test the usability of both the updated website and new mobile application mockups.

To evaluate the current state of the platform, a survey was sent to the entire Green Overview user base. By surveying the current users, it was possible to identify website elements that the users find engaging and useful, website elements users would want to see added to the platform, and other platforms similar to Green Overview that people find useful. The users were also asked about their potential interest in using a mobile application, which would give them easier access to the online database.

To solicit input in the redesign of Green Overview, semi-structured interviews were conducted with members of the various green movements in Denmark. The following was identified: how they find information on sustainability, how they share information about their own movements to others, what elements they would like to see in a sustainability platform, and how useful they would consider a mobile application with information pertaining to sustainability. The features that users liked were flagged to be added into the new design of the platform while features that were not liked were flagged to be removed from the the new design of the platform.

To determine how to best design a platform that will fit the technical capabilities of Eco-net, the webmaster, who is in charge of the technical aspects of Green Overview, was interviewed. The webmaster has specific knowledge as to how the website was created and how the features within the website work with one another. This interview identified the content management system Green Overview was using to host and store the information on their current website. In addition, the webmaster gave his input into what he believed would be the ideal Green Overview platform.

As the first step in creating an improved design for the website and a mobile application design, a list of ideas for all of the different features and pages that would be included in the final design was developed. This list of features was determined from what the members of green organizations indicated in their interviews, as well as from the features identified as most used from the surveys of Green Overview users. From here, each member of the project team created a separate basic concept sketch for all of the pages of the website and mobile application. Then, the entire team worked together to combine the ideas into a comprehensive sketch, which was then used as the basic template for the design mockups.

In order to ensure that they fulfilled the needs of the users, the new designs were tested with the potential user base. This was done by showing the mockups to current and potential users, and asking them to interact with the mockups, performing a variety of tasks. The users were then interviewed to discuss their success with the tasks and how easy they found it to access information using the layout. The users' objective performance on each task, such as the time it took to complete each task, was important data to collect and analyze. In addition to this, the subjective experience of the user, including enjoyment and personal difficulty, were the main focus of this method. As such, the tasks primarily serve as background and discussion points of the interviews.

Overall, 40 responses were obtained from the online survey. From the survey, it was verified that the current Green Overview website needs improvement. It currently offers good content, but the layout makes it "confusing" and "difficult to use." Some survey respondents said that they spend too much time trying to find information. Only 28% of users actively visit the website. However, 60% believe the content is relevant. Therefore, it can be seen that if some improvements are made to the platform to increase its organization and usability, the value derived from its use will benefit the people of Denmark. To accomplish this, an updated website mockup was created to improve functionality of Green Overview.

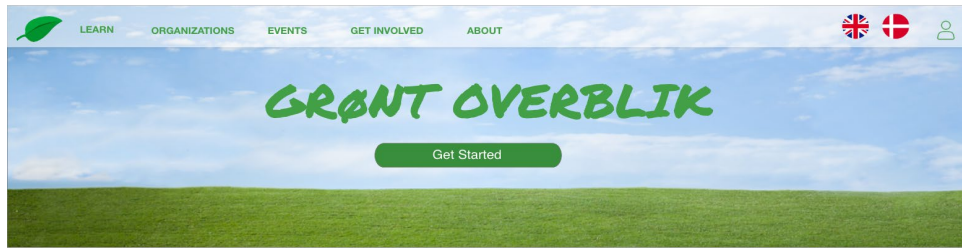
As a result of the interviews conducted with members of various green movement groups, it became evident that many people are not aware that the Green Overview platform exists, with only 3 of the 13 interviewees having prior knowledge of Green Overview. Even though people are not aware of this specific website, most of the people interviewed (8 out of 13) believed that having a platform that provides an overview of sustainability would be very helpful since "so many things are happening, people can't even keep track of it". It was determined that the new mockup of the web platform should highlight green events, green organizations, information on sustainability, and daily news on how to live sustainability. Although having a social media aspect in the website is a good concept, many believed that a social media based web platform would not be successful since 3 out of every 4 Danes are already on other social media platforms (such as Facebook) and do not want to take the time to update yet another site. It was also found that political awareness is a crucial aspect in fighting climate change. Therefore a page featuring current petitions and legislations is featured on the website mockup.

The majority of the people in Denmark, who are users of mobile applications, believe a mobile application would be beneficial, especially for the younger generation. A mobile application mockup was therefore created. It is a “simplified” version of the web platform Green Overview. This is because the interviewees indicated that the best use of the mobile application would be to help the people of Denmark get involved. To get people involved, the application will highlight green events and green organizations in the users local area.

From the interview with the webmaster, important information pertaining to the potential design of the platform was uncovered. The webmaster described an ideal mockup of the Green Overview platform and mobile application with the desired technical and usability characteristics. The webmaster also provided specifications of what an “ideal” platform would entail. He described a design that will engage the users and keep them using the webpage. In addition, he expressed his desire for a website that allows for “customized content for the users.” By this, the webmaster means that users can indicate their interests in specific sustainability topics or organizations and receive notifications or updates pertaining to those topics.

After thoroughly analyzing the data from the interviews and survey, it was possible to identify where Eco-net could improve its Green Overview platform. The data indicated that the best way to help Green Overview was to restructure their current website to increase general usability and to design a mobile application. In order to do this, a mockup of a mobile application and an updated version of their website were created and then tested. From the usability testing, it was determined that both mockups were easy to use. However, a few improvements were still made for the final designs of the mockups as suggested by the testers. See Figures below for the final designs of the Home Pages of the website mockup and mobile application mockup respectively.

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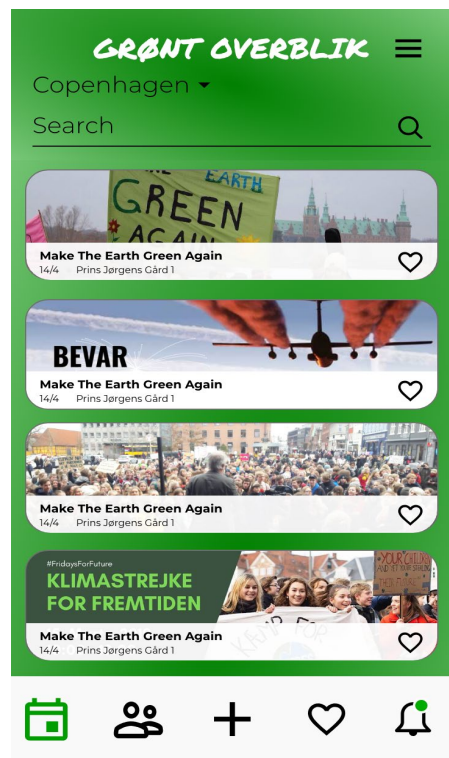


The Power Of Green Overview

Watch the video to the right to learn more about how to find green events in Denmark as well as interact with other users. Click the button below to head to our forums, where you can ask any questions you might have.



Website Mockup



Mobile Application Mockup

Future implementation of the new streamlined web design along with the mockup of a new mobile application aims to enhance the user experience and expand the user base. As a result of these implementations, Eco-net will be one step closer to achieving its goal of

promoting sustainability throughout Denmark by presenting the sustainability information that people need to learn to take action.

Moving forward, once Eco-net has fully implemented the suggested design improvements to the Green Overview website and created the mobile application it is recommended that Eco-net takes the following steps: 1) Create a team of information gatherers to keep a steady stream of new information on Green Overview, 2) Partner with green organizations and corporations to secure funding, and 3) Develop a marketing strategy to further grow the Green Overview user base.

AUTHORSHIP

This research report has been written and edited by the four members of this project team: Carter McLellan, Colleen Mullins, Daniela Schumacher, and Michael Collins. Throughout the 14 week period that this paper was assembled, each team member has contributed to writing, editing, or reorganizing each section of this paper.

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1. INTRODUCTION

The human population is consuming Earth's resources at an alarming rate. In 2018, the global population had consumed the Earth's annual "budget" of resources by August 1st, just seven months into the year. Any resources consumed after this was beyond what Earth's ecosystems can regenerate in one year, therefore depleting Earth's reserves at an unsustainable rate. This means that the human population is currently consuming the amount of resources that needs to be supported by 1.7 Earths (Global Footprint Network, 2018). Based on a Living Planet Report published by the World Wildlife Fund in 2002, by the year 2050, humanity is expected to consume somewhere between 180-220% of all of the Earth's available resources (Loh, 2002). To prevent this, changes in how people consume resources must be made and a focus on environmental sustainability is needed. Sustainability, as defined by the 1987 United Nations Commission on Environment and Development (UNCED), is an activity that "meets the needs of the present without compromising the ability of the future generations to meet their own needs." In a series of meetings, the commission collaborated on three major agreements to promote sustainability. These agreements focused on actions for sustainable development, expectations for each country, and an action plan for the conservation and rehabilitation of forests worldwide.

In order to implement the ideas of sustainability developed by the commission, a variety of organizations dedicated to fulfilling the action plans presented by the UNCED have come into being. The individual steps that these organizations take toward accomplishing these goals are referred to as sustainability initiatives. For these initiatives to have any effect on the world, it is necessary for people incorporate sustainable practices into their daily lives (Cortese, 2003, p.19). The second major aspect of implementing sustainability initiatives is awareness (United States Environmental Protection Agency, 2017). Without general awareness of these initiatives, it is unlikely that these strategies will have any success.

Awareness is an important aspect of sustainability, but awareness alone does not necessarily promote engagement. A study of student engagement in on-campus sustainability initiatives at Monash University in Australia found that the self-perception of "being green" and the use of educational and promotional activities that promote sustainable concern are major players in getting students engaged (Tsarenko & Figueredo, 2013). Social media also plays an important role in aiding the engagement of citizens. Online platforms and mobile applications can be used to spread news effectively by allowing fast and easy access to information.

Denmark has been at the forefront of implementing sustainability initiatives (Beatley, 2012). Various groups throughout the country have implemented different sustainability initiatives and continue to make strides towards achieving complete sustainability (Green Student Movement, 350 Climate Movement, NOAH, 2019). The Danish non-profit organization, Eco-Net, has attempted to engage citizens in sustainability initiatives since 1994. In 1997, Eco-net created Green Overview, an online platform that provides the citizens of Denmark with information pertaining to sustainable events, projects, companies, and initiatives in various regions throughout the country.

Eco-net has taken many steps towards improving Green Overview, so that the company can better achieve its goal of “promoting ecological and sustainable social development across Denmark.” The design of the website has been updated and new functionalities have been added, as recommended by group of students from Worcester Polytechnic Institute in 2018 (Wagner, Plevinsky, & Hagan, 2018). Some of these updated features include the green calendar, green profiles, and an updated layout and organization of the website as a whole. In spite of these efforts, Green Overview is still facing some challenges. Currently there are approximately 2000 users, but very few actively contribute to the platform, making the website’s newsfeed seem empty and slightly dated. In addition, many users have trouble finding the specific information they are looking for on the platform or get overwhelmed by the amount of stored data present, so they do not return to the site and may turn somewhere else to seek information. To achieve the overall goal of growing the user base, Eco-net plans to address these concerns by further developing the web platform by improving its usability and accessibility. Eco-net’s main obstacle lies at the intersection of social media and community engagement. Solutions to the problem exist, but steps need to be taken so that Eco-net can address these challenges.

This project was designed to assist Eco-net in identifying ways to enhance user involvement and expand the online community of their online platform, Green Overview. This was achieved by assessing the current use and design of the Green Overview platform and using this information to design mockups for an updated web platform and a new mobile application to promote user engagement. Mockups of the platforms were developed rather than working prototypes because mockups do not need to be coded, and therefore there are few limitations for the design of a possible web platform for Green Overview. These objectives were used to outline two main deliverables: a design of a new web platform mockup and also a design of a mobile

application mockup. With a usable online platform and mobile application dedicated to spreading sustainability throughout the country, the people of Denmark can collectively reduce their negative environmental impacts.

2. BACKGROUND

This chapter discusses sustainability, community engagement, social media, and website and application design to provide a better understanding of these topics for the development of this project.

2.1. Global Sustainability Initiatives Successfully Implemented in Denmark

As resources become increasingly scarce and the global climate begins to change at a higher rate, the concept of sustainability has come to the forefront of societal growth and development (Portney, 2015). The modern economy is driven by humanity's constant need to acquire more and more physical goods. This consumption is what connects global economic development with global environmental degradation (Portney, 2015). In order to allow for further development of society while preventing excessive rates of resource consumption, a compromise must be made.

The sustainability movement made an official appearance in the 1980s (Beatley, 2012). Many cities in Europe, including Copenhagen, were early adopters of this movement by implementing sustainable strategies as early as the 1930s (Brüel, 2012). In 1939, the First Danish Planning Act was passed by the national government, promoting the prevention of urban sprawl (Cahasan & Clark, n.d.). In 1947 the "Finger Plan" was developed to expand urban growth in a concentrated location by focusing on public transportation, with three main goals, to: 1) minimize dependence on cars for transportation, 2) sustain the highest possible amount of jobs in the urban center, and 3) create a mix of urban areas in an environmentally correct manner (Jensen, 1949).

In 1987, the United Nations Commission on Environment and Development was established (UNCED, 1997), followed by The Earth Summit held in Rio, Brazil in 1992. The Commission discussed the environmental situation at the time and established steps for each country to take in order to prevent the global situation from getting worse. The goals of the Commission were:

“to come to an understanding of development that would support socio-economic development and prevent the continued deterioration of the environment, and to lay a foundation for a global partnership between the developing and the more industrialized countries, based on mutual needs and common interests, that would ensure a healthy future for the planet.” (UNCED, 1997)

To achieve these goals, the Commission outlined three major agreements: *Agenda 21*, *The Rio Declaration on Environment and Development*, and *The Statement of Forest Principles*. *Agenda 21* focuses on outlining actions for sustainable development. It shares how businesses should conserve and manage natural resources so that future generations will not be negatively affected by the change in climate, or the lack of resources available to them. *The Rio Declaration* offers more detail of what is expected from the countries that wish to implement sustainable development. In addition, it outlines each country’s rights and entitlements, and the regulations that they must uphold. *The Statement of Forest Principles* outlines an agreement that each country participating in the summit must make an effort to conserve and rebuild the forested areas in each of their countries and that they develop programs with budgeted funding to support this agenda (UNCED, 1997).

While the agreements presented by the Commission were not written into Denmark’s legislation until 2000, Copenhagen began implementing the sustainability initiatives in 1997 (Brüel, 2012). *Agenda 21* was broken down into five key points that specifically addressed the needs of the city including the involvement of citizens and businesses in environmentally conscious initiatives, cooperation across all sectors, and long-term planning for local action with a global consideration (UNCED, 1997).

Copenhagen has continued to implement sustainability related legislation pertaining to a variety of different ecological areas including energy, CO₂ levels, and water quality. Copenhagen was the first city to declare its intentions of becoming a carbon-neutral capital (Damsø, Kjær, & Christensen, 2017). To help accomplish this goal, the city has implemented a system called Environmental-Economic Accounting, promoted by the European Union’s internationally agreed guidelines about energy consumption, that tracks the city’s annual consumption of energy and greenhouse gas emissions (Pedersen, 2017). The city was also the first in the European Union to implement a CO₂ tax, generate at least 20% of its energy from wind turbines, and lead European

countries in harnessing energy from biomass (Tharan, 2004). Copenhagen has also invested significantly in advancing their bicycling system. The initiative, known as Green Cycle Routes, has increased the prevalence of bicycling paths and lanes throughout the city and has also contributed 2,500 bicycles for public use. This effort decreases dependence on cars, lowering the total CO₂ emission from the city and supporting a collective citizen effort to engage in coordinated sustainability initiatives (Brüel, 2012).

Despite Denmark's, and many other countries, impressive efforts, climate change is still an imminent problem around the world and sustainable action still needs to be taken. Currently in Denmark, there are numerous groups that are dedicated to the promotion of sustainable living. Some of the most prominent of these groups include the Green Student Movement, 350 Climate Movement, and NOAH. The Green Student Movement is a student led climate change initiative that aims to increase awareness of the effects of climate change within the community. Students from various universities within Denmark formed the organization in the spring of 2018 and have continued to advocate for environmental policy change. They have grown to be a large group of over 1,000 members of all ages and hold weekly public gatherings to demonstrate their support for the movement. They hope their continued advocacy for the movement will inspire members of government to enact new laws to help fight the climate crisis (Green Student Movement, 2019). The 350 Climate Movement, similarly to the Green Student Movement, is a grassroots organization looking to make changes from the citizens' level. They aim to enact these changes through public education, local climate initiatives, and other peaceful campaigns (350 Climate Movement in Denmark, 2019). NOAH is an organization whose main focus is environmental conservation and ensuring that current and future generations have equal access to Earth's resources without overloading the planet. They plan to achieve this by altering environmental policy and legislation (NOAH, 2019). All three organizations have the same goal: to build a greener future for Denmark.

2.2. The Role of the Public in Sustainability Initiatives

The public plays a prominent role in helping sustainability initiatives thrive. In 1975, Denmark passed a Planning Act that forced citizen engagement by requiring that any public "physical plans" be sent to a public hearing for discussion for a minimum of eight weeks (Brüel, 2012). Physical plans are any plans that deal with public services, transportation, economic activities, recreation, or environmental protection (Physical Planning, 2018). As a result, the

people of Denmark have been taught to publicly engage. In these public hearings, new legislation regarding environmental sustainability is brought to the community's attention. Together they must discuss how it will affect each part of the community and what current policies need to be changed in order to abide by the new legislation (Brüel, 2012). This in turn gets the entire community engaged and has allowed for the success of many sustainable initiatives.

Community engagement is particularly useful in implementing sustainability initiatives. Community engagement refers to: “the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people” (National Institute of Health, 2011, p. 7). There are different levels at which the community can be engaged. The International Association of Public Participation developed a spectrum of the different levels of public participation (Figure 1) to help clarify the role of the public in planning and decision making (2014). The public participation spectrum is composed of 5 levels: inform, consult, involve, collaborate, and empower. At the inform level, the public is provided with information they need to understand the decision-making process. It usually involves the use of social media platforms, flyers, and community wide public events (United States Environmental Protection Agency, 2017). This distribution of information aims to “increase public knowledge through raising awareness regarding an issue and by fostering an appropriate attitude” (Hamid, Ijab, Sulaiman, Anwar, & Norman, 2017). At the consultation level, feedback on the decision-making process is obtained from the public. This usually involves surveys and interviews to understand the different perspectives of the people in the community. At the involvement level, citizens and communities are more actively involved in planning and decision-making processes (United States Environmental Protection Agency, 2017, p.16). At the collaboration level, the public is directly engaged in decision-making (United States Environmental Protection Agency, 2017). At the empower level, the public is provided with the opportunity to make decisions for themselves. The most common activities at this level are public voting or ballots (United States Environmental Protection Agency, 2017).

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IAP2 Spectrum of Public Participation



IAP2's Spectrum of Public Participation was designed to assist with the selection of the level of participation that defines the public's role in any public participation process. The Spectrum is used internationally, and it is found in public participation plans around the world.

INCREASING IMPACT ON THE DECISION					
	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

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Figure 1. Spectrum of Public Participation, Copyright 2018 by International Association for Public Participation International Federation. Reprinted with permission.

The spectrum of public participation has been used by many organizations and groups who want to implement sustainability initiatives. For example, in 1995 the St. Regis Mohawk Tribe (SRMT) decided that in order to make a difference they needed to educate the community about the problems associated with solid waste management and how their actions directly impacted the problem (SRMT, n.d.). The SMRT engaged the community with the initiative at the inform level shown in the public participation spectrum (Figure 1). They targeted adults by communicating messages through handouts, public service announcements, newspaper articles, and demonstration projects. They targeted youth by creating a cartoon strip, digitalizing it, and having students from Clarkson, a local university, perform a play (SRMT, n.d.). They were able to teach the people by informing them about the problem and educating them on what can be done to help.

It is key to engage the community at one of the levels suggested by the International Association of Public Participation to create change. The more people that are involved, the better the results are. As senior fellow Melody Barnes and advisor Paul Schmitz of *Results of*

America asserted: “community engagement can be beneficial in two ways: it can change people’s lives and it can also extend an optimistic spirit across a community” (2016).

2.3. Using Social Media Platforms to Promote Community Engagement Towards Sustainability

As noted in the example above, the community can be engaged at different levels: through the delivery of information, consultation, involvement, collaboration or empowerment. At all of these levels, the internet, specifically social media, can be used to increase community engagement. Websites can be an extremely useful tool in informing the public about sustainability initiatives. By attracting users to a site, and engaging them with the information presented, users are more likely to engage in the initiatives set forth by the online platform.

As a resource for communicating information to large audiences, the internet has significantly improved the speed in which stories and news are spread throughout the world. Robin Miller, the author of the book, *Online Rules for Successful Companies*, explains how the internet has changed the way people receive new information and how it has empowered people to control the type of content they want to see: “the internet is faster and more flexible than a newspaper or magazine. A story can be added to a website instantly at any time of the day or night” (Miller, 2003). People no longer have to wait for news to be printed, they have access to global information as soon as it is released.

The ability of the internet to disseminate information quickly has paved the way for social media platforms like Facebook and Twitter to promote community engagement. According to eMarketer (2017) almost 2.46 billion people use social media worldwide, and that number is expected grow to over 3 billion by the year 2021. Social media is undeniably popular, and its usage is continuing to grow worldwide. In Denmark, over 3 million people, 67% of the population, have active accounts on Facebook, their most popular social media platform (Statistics Denmark, 2017). Other commonly used social media platforms in Denmark are Snapchat, Instagram, and LinkedIn (Slots- og Kulturstyrelsen, 2017). Social media’s growing popularity has provided new opportunity to promote social movements through its ability to interact with a large user base. Chat forums and message boards have also allowed people to interact with one another as soon as new information is released to the public.

These platforms have further influenced the way social movements are developed because they have made it incredibly easy for people all around the world to contribute by vocalizing their thoughts via online forums. These platforms are a great tool for spreading information to large audiences and act as a medium for healthy collaboration and conversation. Stimulating conversation is an effective strategy to shed light on an important issue and increase awareness (Hamid, Ijab, Sulaiman, Anwar, & Norman, 2017). With increased awareness, members of society will feel more motivated to participate in sustainability efforts. Recognizing the potential for these social media platforms to be utilized as a tool for spreading information about sustainability, organizations are looking for ways they too can reach the 2.6 billion social media users worldwide.

While social media platforms are used by a significant portion of the Danish society, inspiring users to interact and engage in sustainability initiatives promoted by social media sites remains challenging. Brittany Pettineo, author for the magazine, *American Coin-Op*, discusses the importance of creating a brand and how branding helps motivate action. According to Pettineo, “effective use of social media platforms by organizations involves the creation of a brand image that unites followers as a community” (Pettineo, 2017, p.30). Building and maintaining brand loyalty by developing relationships with users allows for organizations to become irresistible and prominent in the minds of citizens (Çiçek & Erdogmus, 2012). The popularity of social media has made it possible to grow a brand very quickly if done effectively (Saravanakumar, 2012). Brand awareness is created by promoting content that users find interesting, relatable, valuable, and inspiring (Çiçek & Erdogmus, 2012). In addition, companies need to “creat[e] more engaging, participative, interesting applications, games, content on social media to draw their customers interest” (Çiçek & Erdogmus, 2012, p.38). As noted by Çiçek and Erdogmus (2012), studies show that social media users are more likely to share and interact with music, funny and extraordinary things, and instructive information. Users are less likely to share content that is sad or is an advertisement (Çiçek & Erdogmus, 2012). This is confirmed by the work of researchers, Luchman, Bergstrom, and Krulikowski (2014) who found that young people in the United States (n=1,686) are motivated to return to a website because it is fun or contains specific content. The “fun-related” dimension was shown to have a strong association with “fun, laughing, entertainment, and providing updates throughout the day” (Luchman, Bergstrom, &

Krulikowski, 2014, p.138). The “content-related” dimension was shown to have strong associations with “getting better at something” (Luchman et al., 2014, p.138).

Recognizing the value of social media platforms to engage the Danish community in sustainability efforts, in 1997, the online platform of Grønt Overblik (Green Overview) was created. Green Overview allows users to access information related to the sustainable initiatives occurring in Denmark. Green Overview was established by the organization Øko-Net (Eco-Net), a non-profit group that relies on the dynamic input and output of user information to spread and promote green initiatives throughout Denmark. Eco-Net was established in 1994 in response to the United Nations Environment and Development Conference held in Rio in 1992. Green Overview allows for the collection and consolidation of a wide variety of information pertaining to everything “green” in Denmark. This information includes, but is not limited to, local and national green events, projects that are in progress or have been completed by green organizations, and even tips and tricks on how to live sustainably. This information, which was once extremely difficult or almost impossible to find, is now accessible to the Green Overview platform users. By increasing the functionality and accessibility of the Green Overview platform, Eco-Net aims to “serve the overall goal of promoting ecological and sustainable social development” throughout the entire country of Denmark (Øko-net, 2018).

2.4. The Importance of Mobile Application and Website Design

The overall design of a website is a major factor in its success, especially if, as is the case with Green Overview, the website is intended to incorporate a significant amount of user engagement. Austrian researchers Elisabeth Platzer and Otto Petrovic report that user generated content, such as reviews of a website or application, are often the best source of feedback and input to be used for determining design. These reviews can be put to use with the Technology Acceptance and Task Technology Fit models of design, which suggest that ease of use and usefulness, especially with respect to the intended function of the website, are the most important qualities in iterative design (Platzer & Petrovic, 2011). A website should therefore be designed from the beginning with these qualities in mind, and when improving the design, it is important to seek user input for these qualities.

In order to further connect individuals within a community, mobile applications are often a great resource. Mobile applications have revolutionized the speeds in which information can be accessed. According to Statista, the expected Danish smartphone penetration rate by the year

2020 will be over 85% of the population (Statista, 2019). This rise in smartphone popularity is rapidly changing the way our society accesses the internet and connects with one another. The usage of desktop computers is trending downward while mobile phone usage is continuing to grow. This is largely due to the improved technological capabilities of the smartphone, as most anything you could want to do on a computer can be accomplished on the device. In order to take advantage of the mobile phone industry, companies have designed downloadable applications that can be tailored to fit needs of the consumer.

Typically, successful applications are simple, satisfy a consumer need, and are polished in design (Gilman, 2016). The most important aspect of the application is its value to a consumer. When designing a mobile application, companies need to consider what would make a smartphone user feel compelled to download an application. Every application takes up storage space on their phone, meaning consumers typically will only download an application if they believe it might provide them with something resourceful. Further, it is imperative that mobile applications function effectively. Applications that crash frequently frustrate users, and make them less likely to continue to use them. Next, quality applications are simple. Many users believe that “more features are not necessarily better” (Gilman, 2016). It is instead important to limit the number of clicks it takes to get users to essential information so that they do not get confused or frustrated (Gilman 2016). Although it seems beneficial to provide users with as much content as possible, it can sometimes overcomplicate the application and make it feel cluttered. Finally, mobile applications should be polished in design, as “visual impact serves not only to make the application look attractive, but also to direct eyes to the right places through the use of images and color” (Gilman 2016). It’s necessary for any company or organization to take these aspects of application design into consideration. Although difficult to perfect, mobile applications can be a great tool for further connecting organizations with their consumers.

The engagement of citizens in sustainability initiatives is imperative. By increasing the use of social media, more people are able to join the sustainability initiative, creating a bigger impact on society. Eco-net’s overall goal of promoting sustainability throughout Denmark would be enhanced if the people in Denmark are engaged with Green Overview.

3. METHODOLOGY

This project is designed to assist Eco-net in identifying ways to advance the use of their Green Overview online platform by enhancing user experience and growing the online community. To achieve this, two project objectives were outlined: 1) Assess the current Green Overview platform use and design, and 2) Develop and test mockups for an updated website and new mobile application based on desired design criteria.

Each objective has corresponding methods that were used to achieve the objective, as seen in the project graphic below (see Figure 2). The first objective was achieved by distributing an online survey and also by conducting interviews with members of various green movements in Copenhagen. Together, these two methods provided critical insight into what improvements needed to be made to the Green Overview platform. The information gathered from the survey and interviews was then used to achieve the second objective. In the second objective, three additional methods were used. An interview was conducted with Green Overview's webmaster to determine what would be possible for him to develop. Two mockups were created: one for an updated website and one for a new mobile application. Interviews with potential Green Overview users were conducted in order to test the usability of both the updated website and new mobile application mockups.

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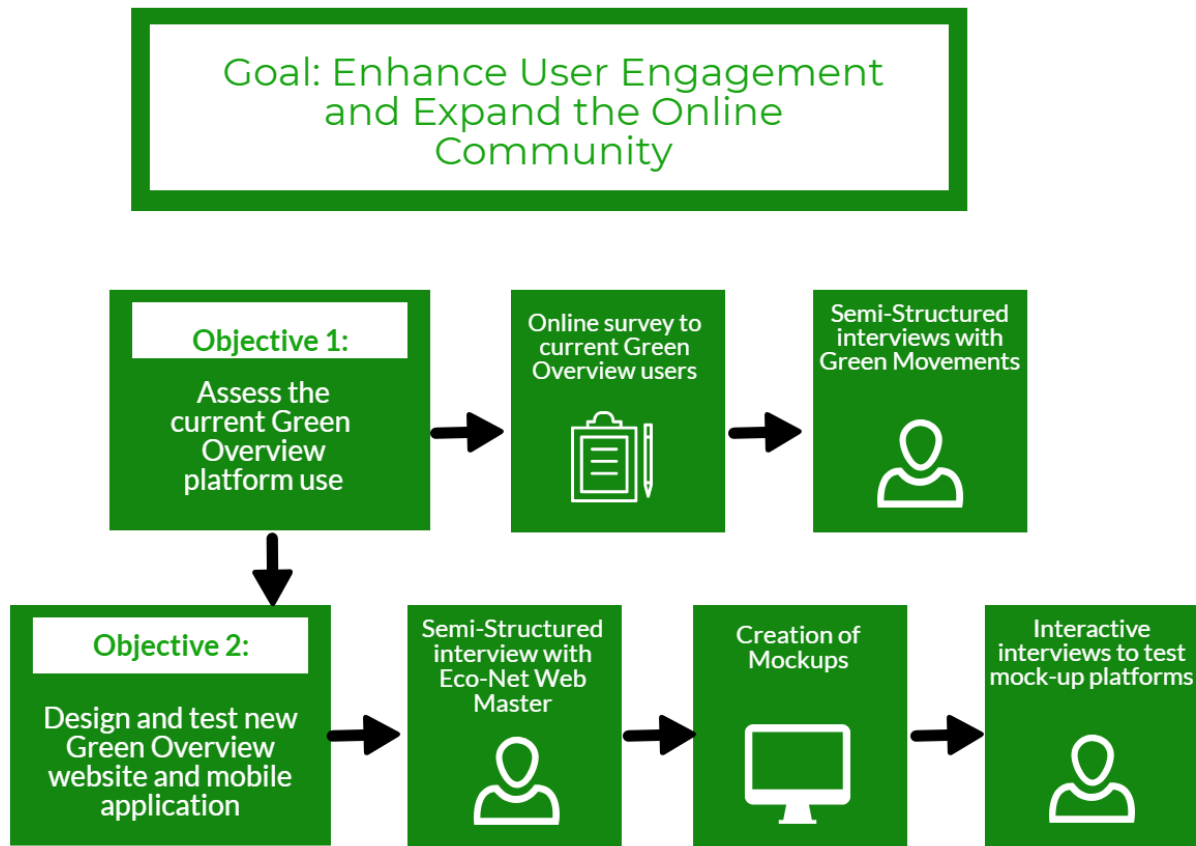


Figure 2: Methodology Flowchart

3.1. Objective 1: Assess current Green Overview platform use and design

To achieve the first objective, two different methods were used. First, an online survey was distributed to Green Overview’s users and then semi-structured interviews were conducted with members of various green movements, the target demographic of Green Overview. Both of these methods gave insight into what improvements needed to be made to the current Green Overview platform.

3.1.1. Online survey of current Green Overview users

The first objective was to assess the current Green Overview platform use and design. To understand the current state of the platform, a survey was sent to the entire Green Overview user base (approximately 2000 users). By surveying the current users, it was possible to identify how the information on the platform is used. In addition, website elements that the users find

engaging/useful, website elements users would want to see added to the platform, and other platforms similar to Green Overview that people find useful were identified. Lastly, the individuals were asked if they would be interested in using a mobile application, which would give them easier access to the online database.

While online survey response rates are lower, 29%, compared to in person response rates, 57%, online surveys are still able to provide a sufficient amount of responses (de Leeuw, 2012). A survey allows for the collection of more data in a shorter amount of time compared to interviews. Due to this, an online survey was determined to be an effective tool to obtain information from the Green Overview platform users. Another way that this information could have been obtained was through semi-structured interviews; however, interviews are much more time consuming. In addition, surveys are convenient because they require no additional work beyond creating and distributing the survey. In order to obtain a higher response rate for the survey, questions must be understandable and easy to answer (de Leeuw, 2012). It was anticipated that the majority of responses would be received within the first 24 hours of posting the survey link and within the first 3 days for email invitations (Andrews, Nonnecke & Preece, 2010, p.200). A second email was sent and the survey link was re-posted five days after the initial posting to obtain as many additional responses as possible.

The survey was created in English and was then translated to Danish by Eco-net's webmaster (see Appendix B for questions and consent statement). Qualtrics, an online survey tool that allows the creator to build surveys, distribute surveys, and also analyze the responses in one place, was used to host the survey (California State University at Long Beach, 2015). Parameters were set to ensure that no IP addresses were collected to maintain confidentiality of the responders. The survey was posted on Eco-net's Facebook page and was also sent to the users in a Green Overview newsletter using the email they have associated with their user profile. The newsletter was sent out by the platform's webmaster, who has access to all of the users' contact information, through the platform's general email alias. In order to assure that the data collected from the survey was valid, at least 20 responses were needed, given that there are approximately 100 active users.

A multivariate analysis was conducted on the 40 survey responses obtained to identify patterns and common themes within the responses. This was accomplished through a simple statistical analysis of the multiple-choice questions, whereas the short answer questions were

analyzed by reading through each response and identifying and highlighting terms, phrases, and ideas that occur throughout multiple different responses. Multivariate analysis was chosen because climate change and website design are multidimensional problems, so the multivariate analysis allowed for the evaluation of several variables simultaneously. The analysis was used to identify interest levels in sustainability, useful elements on the platform, and many other criteria that will be addressed in the analysis section of this report.

3.1.2. Semi-structured interviews with members of various green movements

To assess the current knowledge and awareness of the Green Overview platform, semi-structured interviews with members of the various green movements in Denmark were conducted. They were chosen because they are the individuals who are most likely to contribute to and benefit from a platform like Green Overview. The team was able to interact with the individuals by attending local green movement gatherings. The purpose of the interviews was to gather the opinions of people in Denmark on using a platform that serves as an overview of all green events, organizations, and movements in the country and to understand how familiar people in Denmark are with the Green Overview platform. The first question in the interview was to ask if the interviewee was a member of Green Overview. If they were active users of the Green Overview platform, the following questions were asked: what elements they find engaging/useful, what elements they would like to see added to the Green Overview platform, how they use the information on the platform, what other platforms similar to Green Overview they use and how likely they would be to use a mobile application version of Green Overview. If they were not familiar with the platform, the following questions were asked: how they find information on sustainability, how they share information about their own movements to others, what elements they would like to see in a sustainability platform, and how useful they would consider a mobile application with the information pertaining to sustainability. The detailed interview questions and consent statement can be found in Appendix C.

Semi-structured interviews were chosen since they offer flexibility and allow the interviewee to dive deeper into different areas of the interview while structured interviews do not. In a semi-structured interview, the interviewer asks the interviewee a number of predetermined questions that pertain to a specific topic (Handwerker, 1999). The interviewer can then probe each interviewee differently depending on the interviewee's knowledge and opinions on certain topics (Handwerker, 1999).

The leader of Eco-net identified various, well-recognized green movements that he believed would have great insight into how the platform could be improved. From his recommendations, the members of these groups were selected to be interviewed. The groups that he identified are the Green Student Movement, the Grandparents' Climate Action, and 350 Denmark. Every Thursday the board members of these green movements organize peaceful demonstrations in front of the parliament building in Copenhagen, with the purpose of reminding lawmakers and public officials that climate considerations should be included in all legislation.

In order to ensure the validity of our responses, we interviewed 13 different members of various green movements who attended these weekly demonstrations. Approximately 3-6 interviews were conducted each week for 4 weeks, with each interview lasting 15-30 minutes. The interviews were voice recorded when permission was granted. After conducting the interviews, they were transcribed, coded and recorded in a Microsoft Excel spreadsheet, to identify new and recurring ideas. The features that users liked were flagged to be added into the new design of the platform while features that were not liked were flagged to be removed from the new design of the platform. The new design of the platform would then be created using a graphic user interface so that a simulation of how the updated web platform would function could be created and tested in the next objective.

3.2. Objective 2: Develop and test mockups for an updated website and new mobile application based on desired design criteria

To achieve the second objective, three different methods were conducted. First, a semi-structured interview was conducted with Green Overview's webmaster to identify the design parameters and criteria for the mockups of the platforms. Next, mockups of the platforms were developed. Mockups were created rather than working prototypes because mockups do not need to be coded, and therefore there are few limitations of what can be designed as a possible web platform for Green Overview. Third, several interactive semi-structured interviews were conducted to analyze the effectiveness of the new design of both the mobile application and the Green Overview website.

3.2.1. Semi-structured interview with Eco-net webmaster

In order to determine how to best design a platform that will fit the technical abilities of Eco-net, the webmaster, who is in charge of the creation and development of the website, was

interviewed (see questions and consent statement in Appendix D). Currently, the webmaster is the only person in charge of the technical decisions and implementation of website updates. This is why it was very beneficial to interview him and learn about the techniques and features that Eco-net has implemented over the years. The webmaster has specific knowledge as to how the website was created and how the features within the website work with one another. By conducting this interview, the content management system Green Overview was using to host and store the information on their current website was identified. In addition, the webmaster gave his input into what he believed would be the ideal Green Overview platform.

To better connect the Green Overview users with sustainability efforts, a mobile application could be designed to allow for easier and faster engagement with the tool. Before an application can be designed, however, the webmaster's technical background must be better understood to ensure that the future design would be within his skill set. In addition, financials needed to be discussed so that, again, the completed design of the mobile application would be within the financial scope of Green Overview.

The interview was voice recorded, because permission from the webmaster was granted. Detailed notes were also composed so that key words and terms used by the interviewee could be identified. The interview took place at the Eco-net office, with the webmaster calling in via Zoom, which allows for online video meetings. The interview lasted half an hour, after which the team reviewed notes, transcribed the interview, and analyzed the results to identify recurring themes of the most important features of Green Overview, and any technical limitations to the new design.

3.2.2. Creation of mockups

The first step in creating the new design for the website and mobile application was to create a list of ideas for all of the different features and pages that would be included in the final design. This list of features was determined from what the members of green organizations indicated in their interviews, as well as from the features identified as most used from the surveys of Green Overview users. From here, each member of the project team created a basic concept sketch for all of the pages of the website and mobile application. The entire team then worked together to combine their individual ideas into a comprehensive sketch, which was used as the basic template for the designs of the mockups. This process ensured that the opinions of all of the members of the team were taken into account, while still creating a cohesive design that

fits together as a whole. The mockups were created using Adobe XD, an editing tool that allows for the creation and animation of “mock” website or application pages. Adobe XD was used since it allows for designing and animating in the same software. In addition, it doesn’t require any coding knowledge and is extremely user friendly.

The mockups were created as a series of interconnected pages. Full functionality and interaction is not possible, but it is possible to navigate between the pages by clicking on the appropriate linking elements, the same way one would navigate an actual website or application. This limited functionality was necessary in order to create these mockups in a timely manner and also be able to test the design for usability and intelligibility.

3.2.3. Interactive semi-structured interviews with active and potential Green Overview users

After the mockups of the mobile application and website redesign were created, it was still necessary to test them in order to make sure that they fulfilled the needs of the users. This was done by showing the mockups to 15 potential users, and asking them to interact with the mockups, performing a variety of tasks using the mockups. The users were then interviewed to discuss their success with the tasks, and how easy they found it to access information using the layout. Some of the tasks that the users were asked to complete included finding an event on a specific date, looking for information about a green business, and finding out what events an organization is connected with. The purpose of the interviews was to test the usability of the designs created.

The assessment of the design of the website and of the mobile application was completed along three different scales. Those scales are effectiveness, efficiency, and satisfaction. Effectiveness is the users’ ability to use the website as desired. Efficiency is how easy it was for the users to perform the tasks. Satisfaction is the users’ subjective enjoyment of using the platform and their ability to find desired information easily. The users’ objective performance on each task, such as the time it took to complete each task, was important data to collect and analyze. In addition to this, the subjective experience of the user, including enjoyment and personal difficulty, were the main focus of this method. The tasks primarily served as background and discussion points of the interviews.

Fifteen users were interviewed. The interviewees ranged from being very experienced with the old website design to some who had never interacted with Green Overview before. The interviews were semi-structured, with the questions acting as prompts for discussion. The interview changed based upon the actions of the interviewees while testing the new designs. The starting questions can be found in Appendix E. The interviews and interactions with the website and mobile application were all recorded, with the consent of the interviewees.

4. RESULTS & ANALYSIS FOR OBJECTIVE 1

This chapter presents the results obtained from an online survey of current Green Overview users and the results of the semi-structured interviews conducted with various green movement groups. Opinions on the current state of the Green Overview website were collected to address the first objective.

4.1. Results from online survey of current Green Overview users

Overall, there were 40 responses out of a potential user community of 100 users and organizations active on the platform. Eighty-eight percent were above the age of 48 years old and 46% were between 58-67 years old. Figure 3, below, displays the age distribution of the responders.

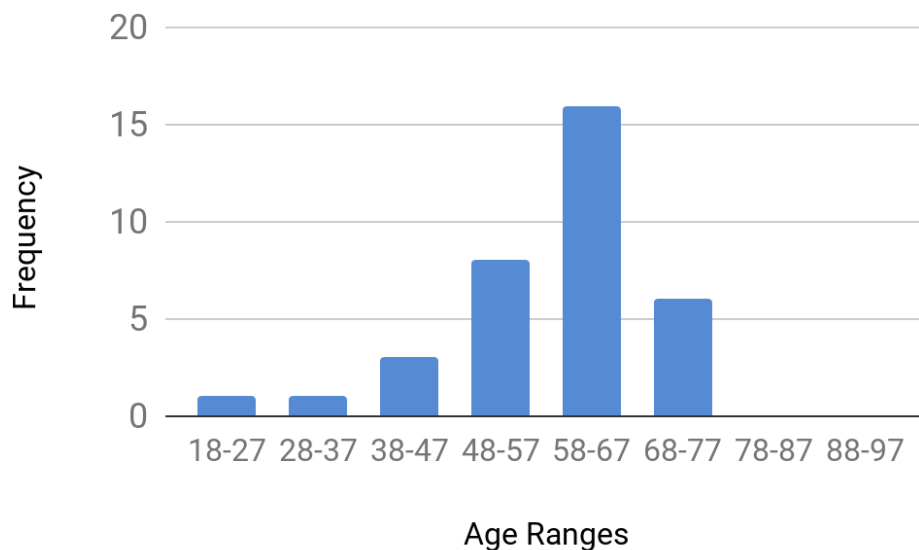


Figure 3: Ages of Green Overview Survey Respondents

Users rated their overall interest in the topic of sustainability, with the average value of their responses being 9.5 out of 10, with a majority of respondents (29 out of 40) rating their interest level as a 10. This indicates that the respondents are highly interested in sustainability.

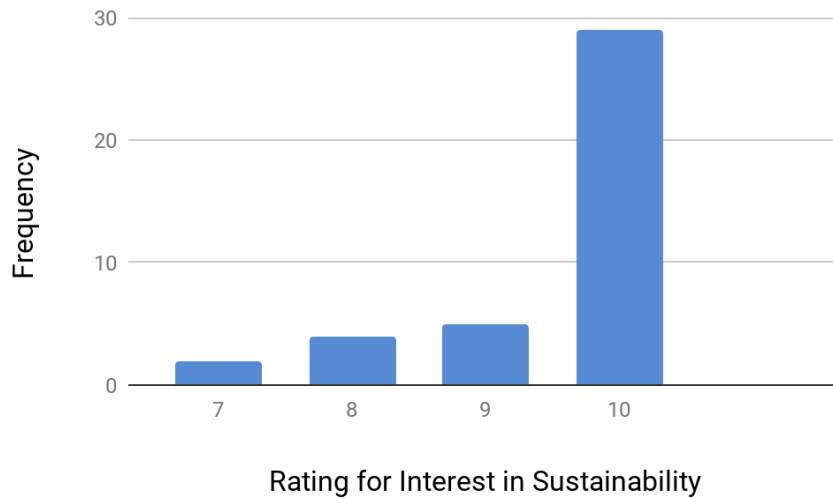


Figure 4: Users Interest Levels in Sustainability

The users then identified their main purpose for using the web platform. Their responses included: knowledge and inspiration on how to be more sustainable (35.0%), to find green organizations (25.0%), connect with other users (5.0%), share ideas (5.0%), look for events (2.5%), other (7.5%), and does not use the page (20.0%). Figure 5 represents the various reasons respondents indicated they use the website.

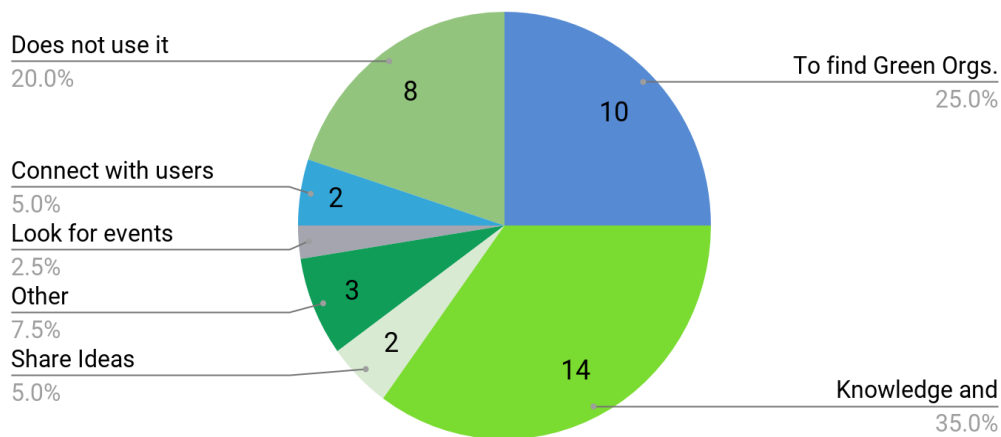


Figure 5: Users' Purpose for Using Green Overview

Relevance of the content posted or stored on Green Overview was then assessed to determine its relevance to the current users. A majority of the respondents (57.5%) agreed that the content was relevant, while only one user indicated that the content was not relevant. This left 40.0% of users unsure if the content was relevant or not. A visualization of this data can be seen in Figure 6. From those that said they use the platform to look for knowledge and

inspiration, 12 out of the 14 said the content is relevant. From this it is inferred that the reason Green Overview is unable to maintain users is not due to outdated, or insufficient information, but another reason, that needed to be identified.

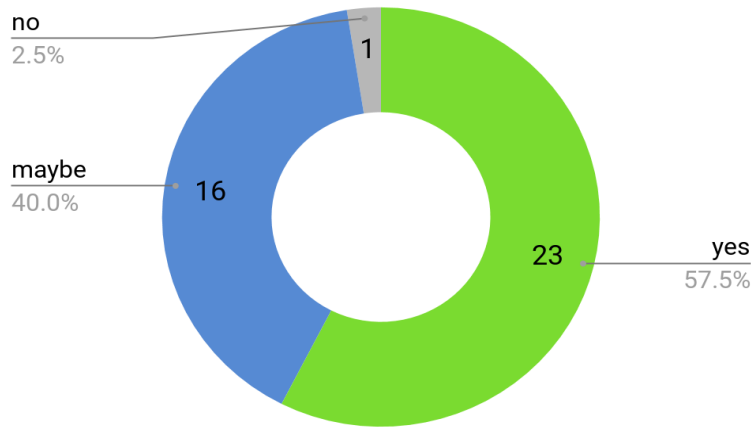


Figure 6: Users' Opinions on the Relevance of the Content Posted on Green Overview

Next, users' satisfaction was identified. On a 10 point scale, with 10 being the highest score (completely satisfied) and 1 being the lowest score (completely unsatisfied), all users rated their satisfaction with Green Overview as a 5 or lower (22% rated it as a 5, 50% rated it as a 4, and 28% rated it as a 3), showing that no users are fully satisfied with the current website. This can be seen in Figure 7. Again, this reinforces the idea that changes need to be made to the website in order to ensure increased usage of Green Overview.

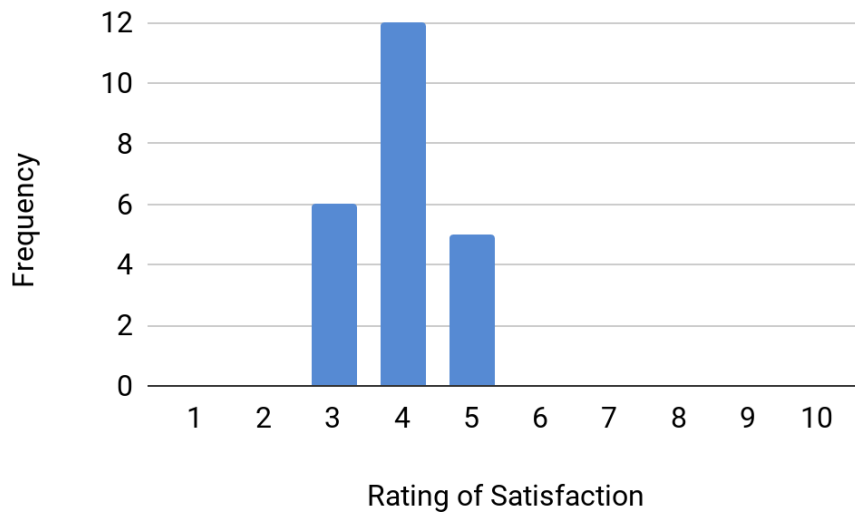


Figure 7: User Satisfaction with Green Overview

The frequency at which responders visited the web platform was identified. As shown in Figure 8, 70.0% of users rarely visit the website, followed by 17.5% of users visiting once a week, then 10.0% of users visiting once a month, and leaving only 2.5% of users to visit daily. This shows that the web platform is not being used with much frequency.

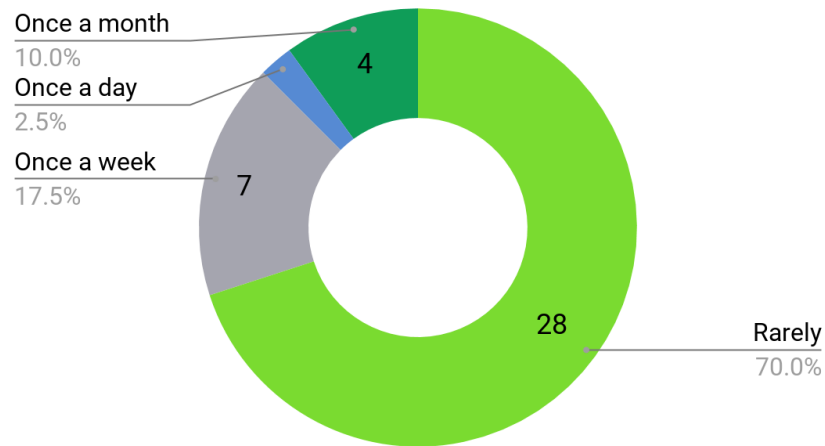


Figure 8: Frequency of User Visits

The users also provided feedback on what can be done to improve the functionality of Green Overview. There was a total of 17 comments submitted through the survey. Five of these were negative comments, and 12 of these were suggestions to improve the website. Some examples of negative comments about the website include: “seems confusing with many divisions”, “some of the information is obsolete”, “the page appears messy” and “the green color is not screen friendly”. Some improvements mentioned were: “there is a need for simplification and less boring layout”, “maybe add some pictures”, “the design and search features”, and “have the option to subscribe to news about things I care about”. A full list of these comments can be seen in Appendix F.

Users were also asked if they use other platforms similar to Green Overview where they can find information on sustainability, green events, and green organizations. Forty-three-point six percent of the users said they use another platform and 56.4% said they don't use any other platform. A list of other platforms used can be found in Figure 9.

1. Facebook
2. Green Difference
3. Organic, organic today
4. Wikipedia
5. Organic National Association
6. LinkedIn
7. Permaculture Denmark
8. NOAH
9. Ikonet
10. fairtrade.dk
11. Extinction Rebellion
12. Bolius, idea

Figure 9: List of Other Platforms Used

Finally, the users were asked to express their interest in using a mobile application version of Green Overview. Thirty-seven-point five percent of the users said quite unlikely, 27.5% said it was very unlikely, 12.5% were indifferent, 12.5% said quite likely, and 10.0% said very likely. This indicates that the majority of the users that responded to the survey would not be interested in using a mobile application. This data can be seen in Figure 10.

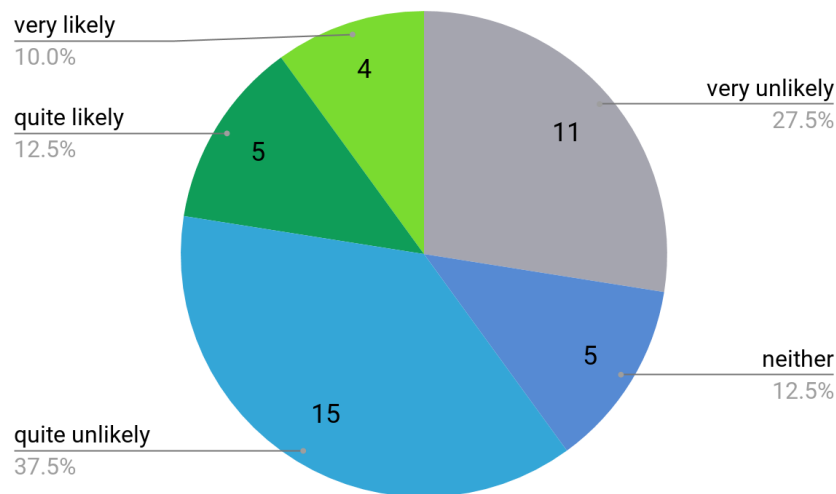


Figure 10: Interest in Mobile Application (Survey)

From the survey, it has been determined that the current Green Overview website needs improvement. It currently offers good content, but the layout makes it “confusing” and “difficult to use.” Some users have even indicated that they spend too much time trying to find information. Only 28% of users actively visit the website. However, approximately 60% of the

users believe the content is relevant. Therefore, it can be seen that if some improvements are made to the platform to increase its organization and usability, the platform will likely increase significantly in usage amongst the people in Denmark. To accomplish this, an updated website mockup was created. A toolbar was added to the new mockup of the platform to help users quickly access the specific information they are looking for. This toolbar aids in the navigation and organization of the website. The toolbar has 5 tabs, each pertaining to specific content or features that Green Overview will offer its users. For complete results of the collected survey, please see the Supplementary Materials located in Appendix O.

4.2. Results from semi-structured interviews with various green movements

Overall, 13 individuals were interviewed who represented a variety of green movements in Denmark (see Appendix G for transcriptions). Twelve out of the thirteen people interviewed fell within the age range of 20-40 years old, with one interviewee being 40+ years old. From the 13 interviews, 9 recurring themes were able to be identified. These were uncovered by going through the transcribed interviews, coding them, and identifying recurring ideas. The amount of occurrences throughout all of the interviews were then tallied in order to determine the major trends across the entirety of the interviews. The recurring themes were split into two categories: ideas on “How to Fight Climate Change” and ideas about “Website Improvements”. Under “How to Fight Climate Change”, the recurring themes identified were: taking action through grass root organizations (7 out of the 13 interviews), increase community engagement (12 out of the 13 interviews), through politics (12 out of the 13 interviews), by communicating events via word of mouth (12 out of the 13 interviews), and also by communicating through social media (11 out of the 13 interviews). In Figure 11, the frequency of each individual theme can be seen.

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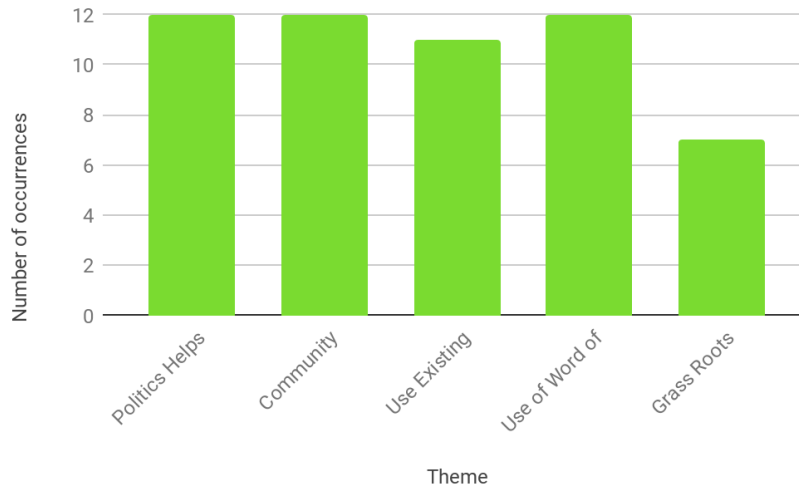


Figure 11: Recurring Themes on How to Fight Climate Change

The themes identified under “Website Improvements” include: an events calendar (8 out of the 13 interviews), interactive discussion (4 out of the 13 interviews), updated news/daily information (7 out of the 13 interviews), and no social media aspect (6 out of the 13 interviews). In Figure 12 the frequency of each theme can be seen. In addition, the 8 out of the 13 interviews indicated that they would be interested in a mobile application centered around a simplified version of Green Overview.

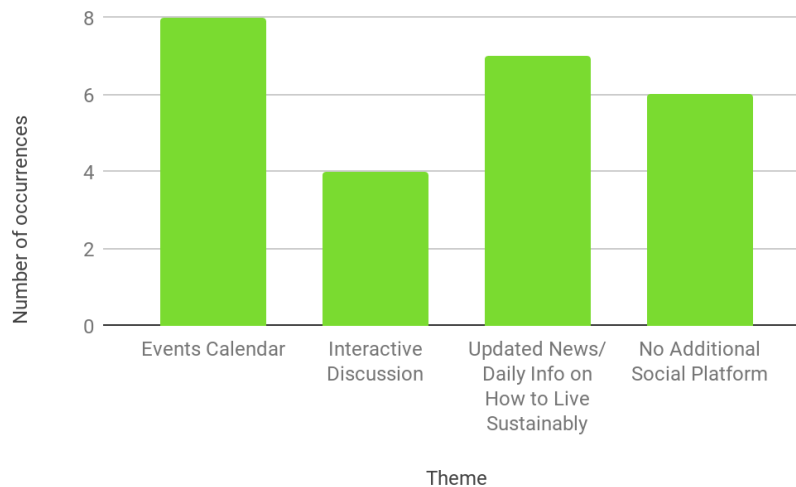


Figure 12: Recurring Themes on How to Improve the Website

It became evident that many people are not aware that the Green Overview platform exists, with only 4 of the 13 interviewees having prior knowledge of Green Overview. Even though people are not aware of the website, most of the people interviewed (8 out of 13) believed

that having a platform that provides an overview of sustainability would be very helpful since “so many things are happening, people can’t even keep track of it”. The interviewees indicated that when using a website based on sustainability, they would look for a platform that is “organized” making it easier to use. From the interviews with the various members of green movement groups, it has been determined that the Green Overview website can be a useful tool for the people in Denmark, however it needs to be redesigned to improve functionality. It was determined that the new mockup of the web platform should highlight green events, green organizations, information on sustainability, and daily news on how to live sustainability.

From the interviews, 92% of people find information on sustainability related events through their friends, neighbors, co-workers, etc. It was also found that almost every person holds a Facebook, or other social media account, that they use to get information about specific events or green movement groups. Six of the interviewees indicated that they would not be interested in having a separate social media platform dedicated to sustainability. Although a good concept, many believed that the web platform would not be successful since 3 out of every 4 Danes are already on other social media platforms and do not want to take the time to update yet another site. This has led to the conclusion that the social media aspect of Green Overview is not helpful or necessary, because it distracts from providing an overview on sustainability. Therefore, in the new website mockup, the social media aspect of the current Green Overview platform has been mostly removed. The users still have the ability to create an account where they can save content that they find on Green Overview and also comment on news articles, videos, etc. to have interactive discussions with other users. They no longer need to create a “profile” where they upload a profile picture and description of themselves for the sole purpose of meeting and connecting with other users. Green Overview users, or potential users, want a platform that lays out information about sustainability, and stays true to the initial “database” nature of the website.

In 11 of the 13 interviews conducted, the interviewees indicated that laws and legislations need to reflect a more sustainable future for Denmark through governmental policies. This is because there is a limit to what can be accomplished through public promotion alone. It is for this reason that the members of green movements who were interviewed are focusing their efforts on organizing large groups of people to get involved at meetings and events and creating visible demonstrations of their desire to change Denmark’s climate politics. Since political

awareness is a crucial aspect in fighting climate change, a page featuring current petitions and legislation is featured on the new mockup. This is in line with Green Overview's primary goal of providing an overview of sustainability information.

One of the goals of the interview and survey was to determine the potential value of a mobile application that could connect Danes with green movements in their area. From the survey, 19% of the people said they would be interested in using a mobile application similar to the current Green Overview platform, whereas 66% of the surveyors said they would likely not use it. However, one of the aspects to consider when making conclusions from this data is the age range of the users who participated. Of the users that provided their age, 87% were 48 years or older. Research shows that mobile applications are most utilized by those in the age range of 18-24 (Dogtiev, 2019). Because these two age groups do not align (those that responded to the survey and those who are most frequent mobile application users) a clear conclusion of the effectiveness of the application cannot be drawn from the surveys. In addition, because the survey was not held in person, a description of how the mobile application would be designed and the kind of content it would have could not be properly explained to surveyors. This could have made it confusing for participants to determine how effective the application would be. In the interviews with the members of the local green movements, they were asked whether or not a mobile application could be a beneficial way to promote their sustainability efforts, explaining how the application could be used to highlight local green movement gatherings and be used as a database for local organizations fighting climate change in Denmark. The majority of the participants interviewed (8 out of the 13 interviewees) thought that an application would be a great resource for finding information about the various green movements in Denmark, especially for the younger generation (those ranging from ages 10-24).

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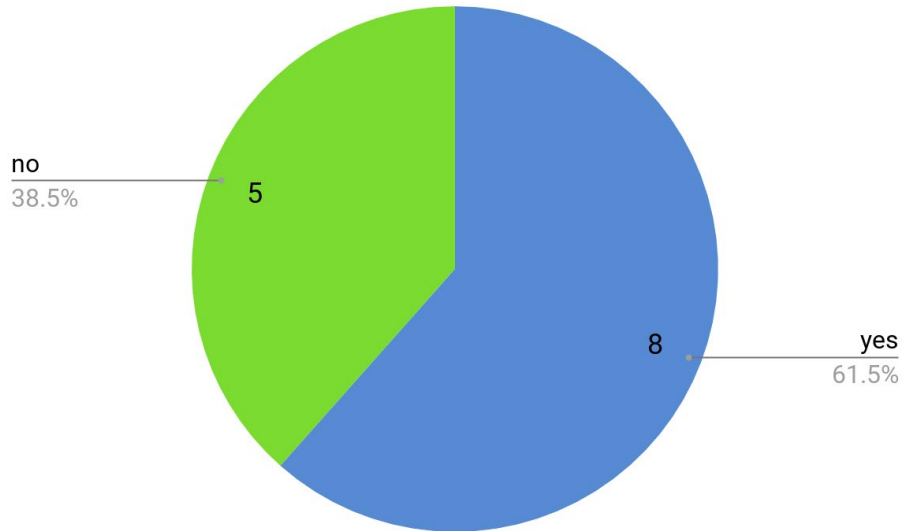


Figure 13: Interest in a Mobile Application (Interviews)

One of the difficulties many of the participants faced when trying to get involved in fighting climate change was not knowing what organizations existed that they could engage with or become a part of. This is where interviewees thought a mobile application could be very useful for finding details about local organizations and how they could connect with them. Many of the interviewed participants (8 out of the 13 interviewees) agreed that there was a lack of unity among the green movements in Denmark. They also agreed that the goals of the different green organizations were very similar so finding a way that groups could better connect with each other would be beneficial to their fight against climate change. The majority of the people interviewed believe a mobile application would be beneficial, especially for the younger generation. The mobile application is a “simplified” version of the web platform Green Overview. This is because the interviewees indicated that the best use of the mobile application would be to help the people of Denmark get involved. To get people involved, the application highlights green events and green organizations in the user’s local area. For complete results of the interviews conducted, please see the Supplementary Materials located in Appendix O.

Taking into consideration the results of the survey from the current Green Overview users and the interviews with the members of various green movements, a list of features for both the updated website design and new mobile application design was created (Appendix H). For a complete list of website and mobile application content and features, see Figures 14 and 15, respectively. These features were determined to be included in the mockups based off of the

survey and interview data. The goal was to include suggestions from current and potential users in order to create ideal designs that will satisfy any Green Overview visitor. These designs are intended to be clean, clear, and easy to navigate to increase usability and enhance the overall user experience.

- ### Website

 - Green events
 - Green organizations
 - i. Green businesses
 - ii. Green movements
 - Green information
 - i. News
 - ii. Articles
 - iii. Books and Journals
 - iv. Podcasts
 - v. Videos
 - Petitions
 - Ability to search for information
 - Ability to sort by location
 - Ability to have an interactive discussion

Figure 14: Included Content and Features in Website Mockup

- ### Mobile Application

 - Green events
 - Green movements
 - Ability to save events and groups
 - Ability to search for events and groups
 - Ability to sort events and groups by location
 - Notifications pertaining to favorited groups or events

Figure 15: Included Content and Features in Application Mockup

5. RESULTS & ANALYSIS FOR OBJECTIVE 2

This chapter presents the results obtained from an interview with the webmaster of Green Overview. It also presents the subsequent analysis and processing of this information, conducted to attain the second objective of this study. It presents the material produced in the form of a web platform and mobile application mockups and of their corresponding usability testing for an improved version of Green Overview.

5.1. Results from semi-structured interview with Eco-net webmaster

From the interview with the webmaster (see transcribed interview in Appendix I), important information pertaining to the potential design of the platform was uncovered. It was previously known that Eco-net had very limited funding, meaning that paying for certain features or using specific programs for the web platform and the mobile application may be out of the scope of the project. After interviewing the webmaster, the following information was determined. The webmaster wanted a mockup of the ideal Green Overview platform and mobile application. Although he knows that certain functionalities may not be supported by the current web platform that was created through WordPress, an ideal website design would be the most useful for the organization.

The webmaster also gave specifics of what an “ideal” platform would entail. He indicated that the new platform should be clean and simple in design. From web analytics, the webmaster can see that many people will visit the website and then leave within the first few minutes of visiting the site. Because of this, he wants a design that will engage the users and encourage them to contribute to the webpage. In addition, he would like to see a website that allows for “customized content for the users.” By this, the webmaster means that users can indicate their interests in specific sustainability topics or organizations and receive notifications or updates pertaining to those things. Since a mobile application is completely new to Green Overview, the webmaster would like to see the application reflect the wishes of the users that were surveyed and the people that were interviewed. It is evident that the redesigned web platform and new mobile application should be designed without technical or financial limitations.

5.2. Results from creation of web platform mockup

After thoroughly analyzing the data from the interviews and survey, it was possible to identify where Eco-net could improve its Green Overview platform. The data indicated that the

best way to help Green Overview was to restructure their current website to increase general usability and to design a mobile application. To accomplish this, a mockup of a mobile application and an updated version of their website were created. The mockups that were created had limited functionality, as the primary focus of the redesign was on improving the layout and the user experience of the platforms. Limited functionality means that the mockups do not have any data loaded onto them, and functionalities such as typing, searching, and filtering may not be possible. A guide with additional details of the mockup functionality can be found in the Supplementary Materials located in Appendix O. The mockups do, however, allow the users to click through the various pages, to show the users what content each page will hold and what the layout looks like. All of the interviewees that were familiar with the Green Overview platform (4 out of 4) expressed that the current website is confusing and difficult to use. They explained that the format of the website made it hard to find the specific content they were looking for. As a result, the main focus of the website redesign was to make it so that the information could be easily accessed and understood by the users. More specifically, comments such as “improvements to the search features (possibly selected categories on the front)” and “better clarity, simplification, more coherence so the whole [website] feels more like a unified package” led to the creation of a new toolbar which is made up of five different tabs that users can click on to take them to different areas of the web page. This toolbar helps with simplification and organization. Each tab holds content specific to a certain area. These five areas are centered around education about sustainability, green organizations, green events, how to get involved with the sustainability movement, and lastly, general information about Green Overview. In Figure 16, the layout of the webpage can be seen.

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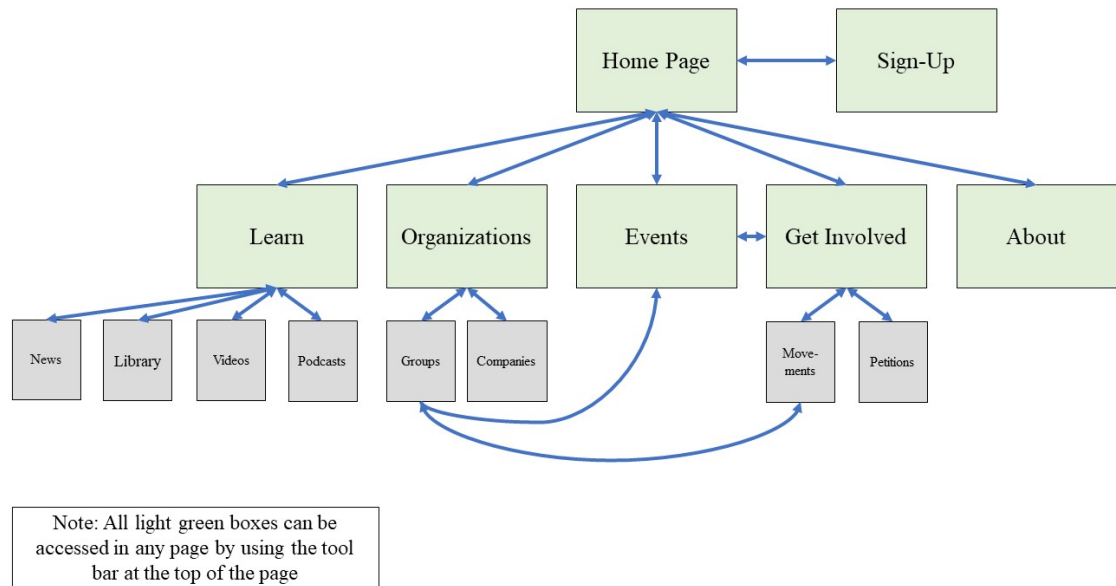


Figure 16: Webpage Schematic

The "Learn" tab holds news, articles, books, journals, podcasts, and videos pertaining to sustainability. The "Organizations" tab brings the users to a page where they will be able to find and search for green groups and companies in various areas of Denmark. The green "Events" tab holds a calendar filled with local events, gatherings, and meetings that users can attend. The "Get Involved" tab brings users to a page completely dedicated to getting the people of Denmark engaged with the sustainability movement. The users are shown green movements they can join, petitions related to climate change and sustainability they can sign, and a link back to the green events calendar to show them events they can participate in. Lastly, the "About" tab gives users an insight into what Green Overview is, its overarching goals, and information about Eco-net, its parent platform. The Home Page of the website (see Figure 17) has been designed to be simple and uncluttered.

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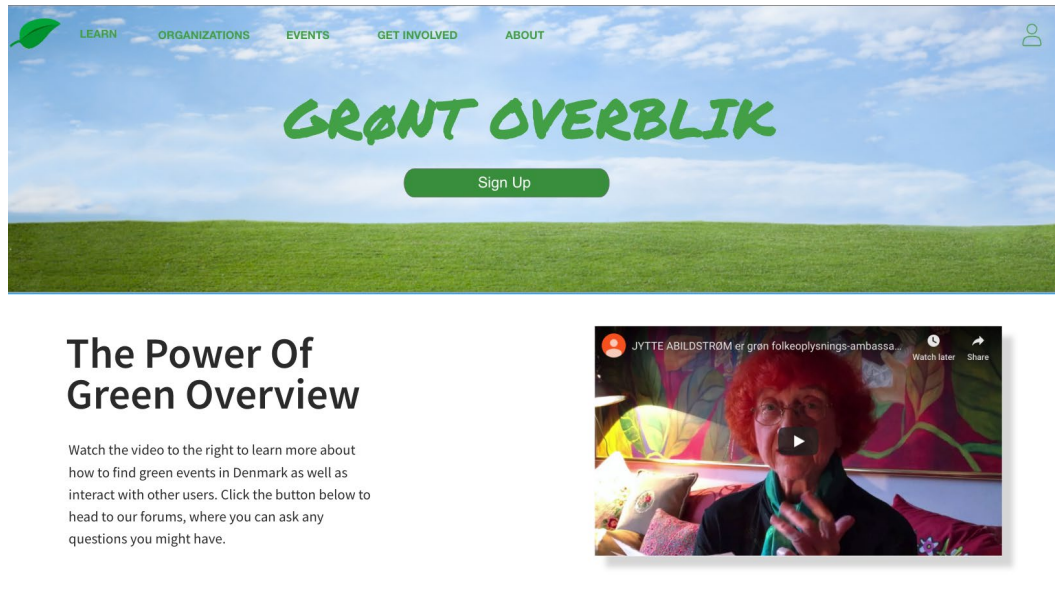


Figure 17: Home Page of Green Overview Mockup

The focus of the user should be drawn to the “Power of Green Overview” video, where the user can learn about how to navigate Green Overview, the content it holds, and specific feature that the website has to offer. As discussed in previous sections, the current Green Overview website has been described as cluttered and confusing. With this introduction video, the user has help learning how to navigate the web page, preventing potential confusion and frustration. The video should be translated to Danish (see Supplementary Materials of the report for video and script located in Appendix O) for the best learning experience. Also presented on the front page, after the user scrolls down the page, is a list of upcoming events in the user’s local area. This is to help promote the engagement in community events focused on sustainability. In addition, this feature provides the users with custom content, satisfying one of the webmaster’s criteria for the mockup. The “Learn” tab is the first listed on the toolbar. From the online survey, 35.0% indicated that they use the Green Overview website to find knowledge and inspiration on how to live sustainably. Since it is so important for the current users, as indicated by survey data, it is placed first. As seen in Figure 18, this page presents the user with a variety of ways to “learn” about sustainability. The user can choose between current news, a library filled with sustainability focused books and journals, videos, or podcasts.

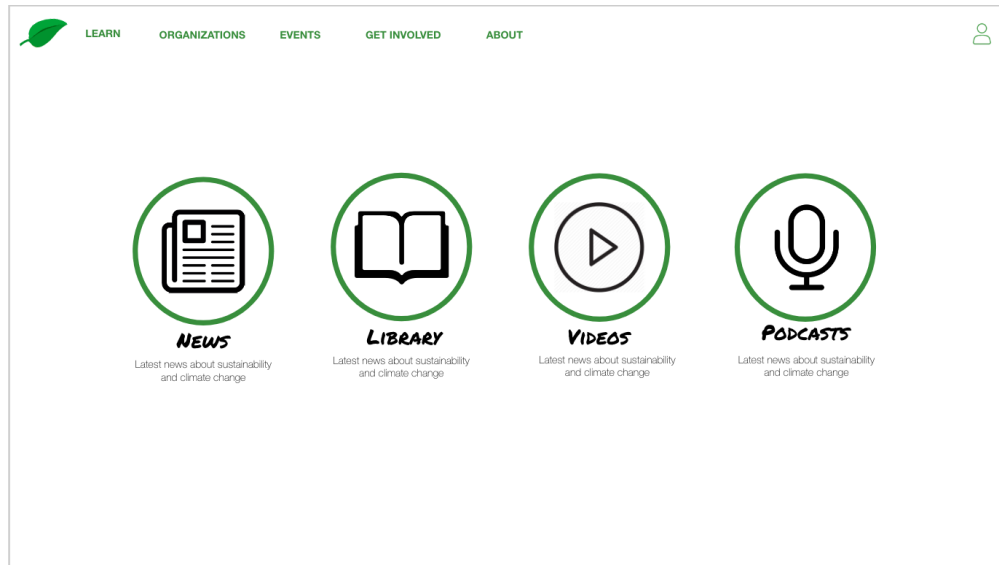


Figure 18: Learn Page of Green Overview Mockup

Due to the recurring theme of community engagement as a means to fight climate change, the second tab of the website is titled “Organizations”. This tab brings users to a page that lists all of the local environmental groups and companies that they could get involved with and learn more about, shown in Figure 19. Organizations were listed on the page with a logo and description, so users can easily search through and find the ones they are most interested in. Further, users can search for organizations by name as well as filter the organizations by type (i.e. green movement, non-governmental organization, business, corporation) name, and location.

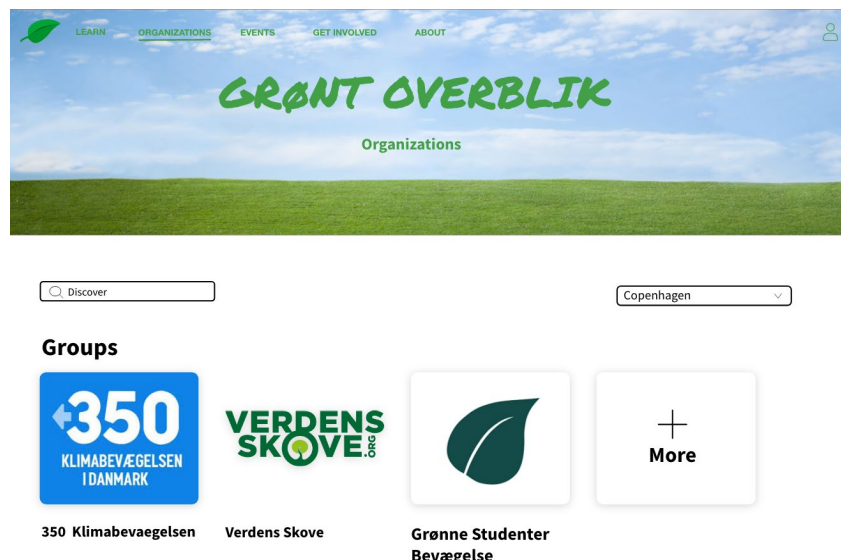


Figure 19: Organizations Page of the Green Overview Mockup

The third main tab, titled “Events”, highlights all the local events that users can get involved in (see Figure 20). Similar to the “Organizations” page, the “Events” page is aimed to help get the people of Denmark engaged in the community to add to the climate change movement.

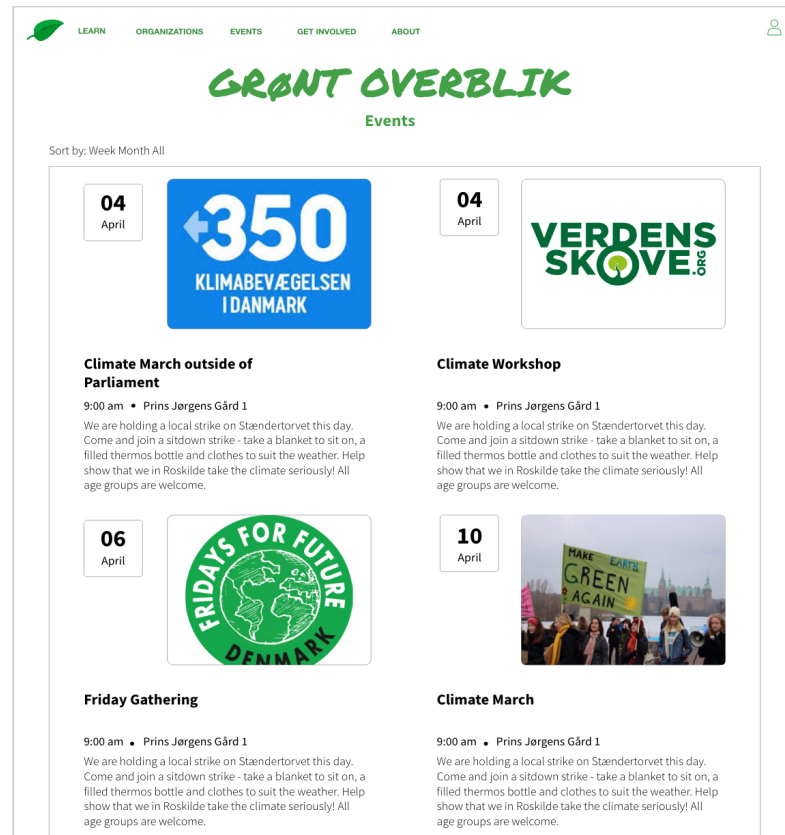


Figure 20: Events Page of Green Overview Mockup

The user is able to filter this calendar in a variety of different ways. The events can be displayed in a weekly or monthly format, and the general location of the events can also be changed. Each event posting has a picture of the event, description, time, location, and contact information to provide the user with all the necessary information they need to attend the event. An example event posting is shown in Figure 21.

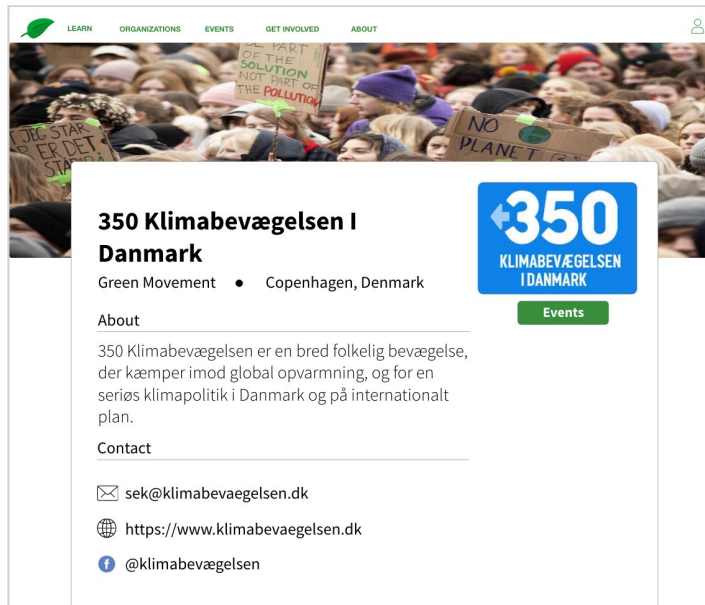


Figure 21: 350 Movement Page on Green Overview Mockup

The “Get Involved” section of the website shows users ways they can get involved in sustainability initiatives. This tab presents the user with three distinct ways to make an impact in their community. The three options are joining a green movement, signing a petition, and attending a green event (Figure 22).

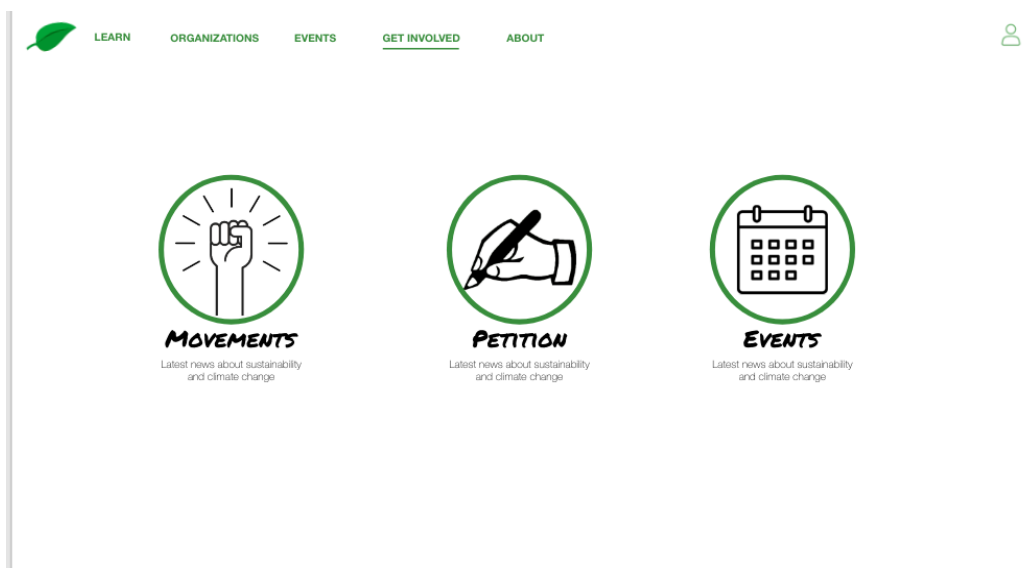


Figure 22: Get Involved Page on Green Overview Mockup

The ability for users to access petitions that they can sign and support is a new functionality that is not on the current Green Overview website. This was an idea from a interviewee that is part of the 350 Movement. The potential success of this idea was supported by 12 out of 13 interviewees that indicated that politics plays a vital role in promoting sustainable living. This section gives the user the ability to see all the available petitions that they can sign to help encourage politicians to enact new climate policy.

The “About” section gives an overview of Eco-net and their goals for Green Overview. It allows users to familiarize themselves with the website, its purpose, and the organization as a whole (Figure 23). In addition, the contact information of the creators is provided so that users can ask questions or give feedback and recommendations to further improve the website.

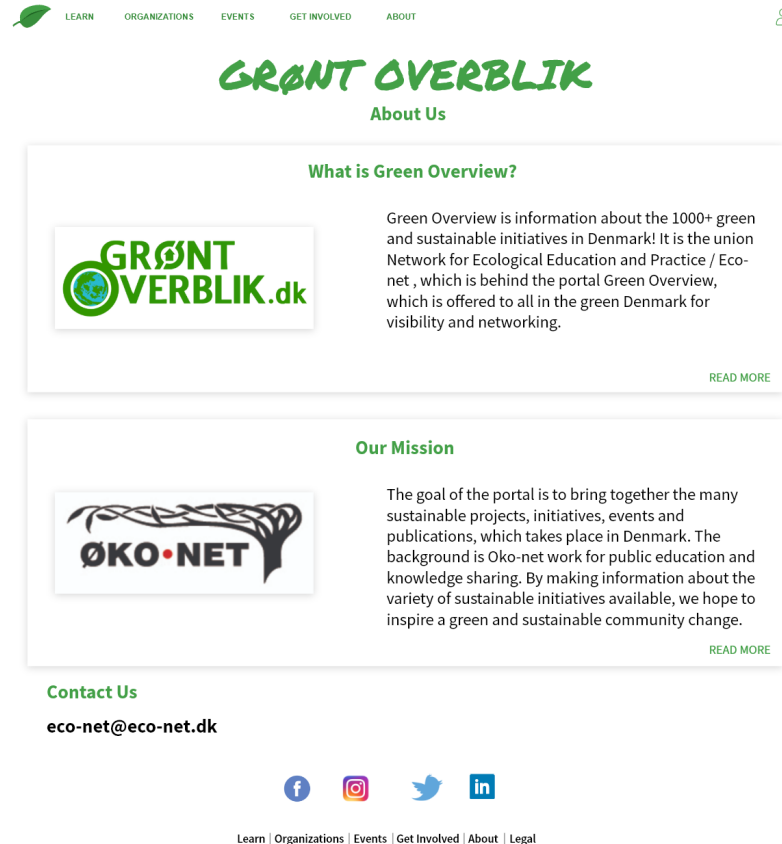


Figure 23: About page on Green Overview Mockup

It was also important to make sure there is still a level of social interaction on the web page, although the results from the interviews and survey showed that the website should not be

social media focused. In our interviews and survey, it became apparent that users preferred using the preexisting social media platforms, like Facebook and Instagram, over Green Overview. As such, the best way to find the balance between an information database and social media platform was to allow for the engagement with the content on the website. In the new design users can comment on discussion forums on articles and other media. They can also favorite content that interests them. Users are allowed to favorite and save events, organizations, and all other informational media. These favorites would then be linked to their account so that they can view the content they are most interested in. Lastly, the users will also be able to share the media found on Green Overview to their other social media accounts, such as Facebook or Instagram.

This updated layout is simple and polished in design, and if implemented would significantly declutter the Green Overview platform. Making the website more simple to use will encourage users to return to the platform more often and contribute to sustainability efforts.

5.3. Results from creation of mobile application mockup

The next step for Green Overview is to create a mobile application that would allow members to access information about sustainability much faster and more frequently than the current website. In the interviews, it was determined that many people would find a mobile application that displayed events and groups to be a very effective tool in getting involved in green initiatives. The design for an application mockup highlights all the upcoming local events and groups that people could get involved with. In addition, the users are able to save their favorite events and group, search through all events and groups, and filter the events and groups by location. Lastly, the application has a notification feature to alert the user that a favorited group has added a new event, or that the date of an upcoming event will be happening soon.

In Figure 24, the “Events” tab of the mobile application can be seen. One of the challenges many of the interviewees described was not knowing how to find events or green movements in their local community. In the top left corner, users are able to specify their location. The users then see a feed of all upcoming events in that area. The black heart, located in the bottom right corner of each event image, can be clicked on to select it as a favorite.



Figure 24: Events Page of Mobile Application

Each event listing contains the time, location, and description of the event, providing the users with all necessary information needed to attend the event (see Figure 25).

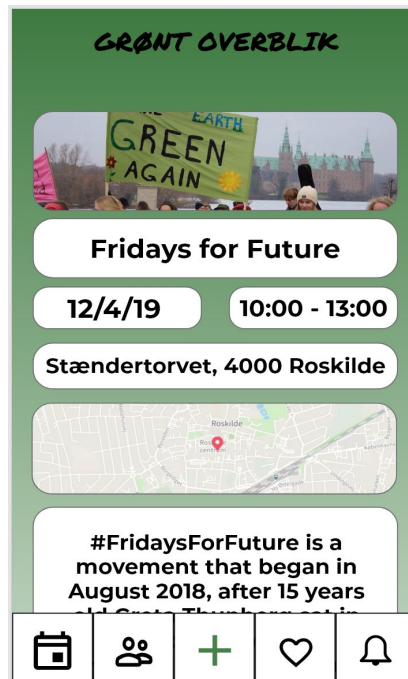


Figure 25: Example of an Upcoming Event

The application also highlights what groups are located in the user’s area and how to contact them (Figure 26). This tab, called the “Groups” tab, includes the same location and favoriting features as the events tab.



Figure 26: Groups Page of Mobile Application

The application allows the user to contribute to the community by uploading personal events or group for others to find and engage with (Figure 27). The application should be used as a tool for promoting new movements and initiatives as well as connecting pre-existing groups and citizens in the fight against climate change.

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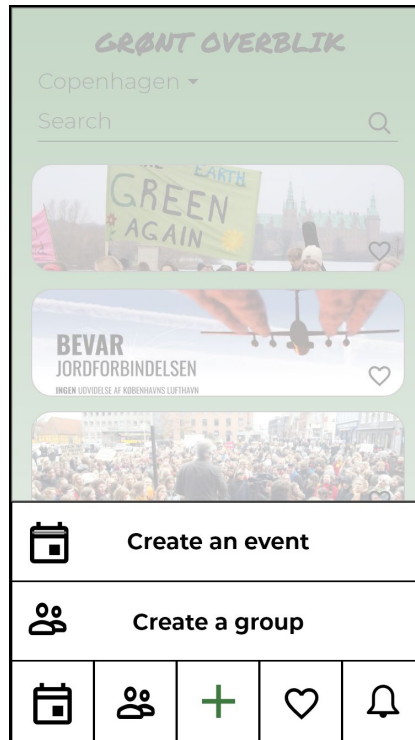


Figure 27: Add an Event or Group Feature in Mobile Application Mockup

The “Favorites” tab of this application gives users easy access to groups and events that they are interested in getting engaged with. When the users click on the “Heart” tab, the users favorite events are displayed. To switch to their favorite groups, all the user has to do is click on the groups tab located at the top of the screen. Lastly, the application has a “Notifications” tab. In this tab, the user is able to see the current activity of groups they have favorited and get updates on events that they have indicated that they want to attend. This gives users easy access to the latest news related to the content that they are interested in. The goal of this application is to help to open the door to Green Overview’s online web platform as users who enjoy using the application will want to discover the full power of the website.

5.4. Results from interactive semi-structured interviews for usability testing of mockup designs

Overall, 15 people tested the website mockup and 16 people tested the mobile application mockup. 3 of the 15 interviewees had experience with the current Green Overview platform, while the remaining 13 had little to no experience with the current platform. A diverse data pool is important for the testing of the platform so that feedback with and without comparisons to the

current platform can be made. Overall, from the testing it was determined that the mockups were both intuitive and easy to use. There are, however, some improvements that can still be made.

For each test, the tester was observed to determine their success with each task. After the tester completed each task, the process that the user took to complete the task was given a ranking of either “easy”, “difficult”, or “neither”. The term “easy”, for the purpose of the testing, was determined to mean that the user completed the task on their first try within a timely manner. Tasks that did not fit this description (i.e. the user navigated to the wrong section of the web platform, the user had to stop and think for more than 15 seconds before completing the task, or the user had to be told how to complete the task) were categorized as difficult. The term “neither” was determined to mean that the user completed the task on the first try but took 5 to 10 seconds to think before completing the task. For the website specifically, the testers found the tasks of creating an account, finding books on sustainability, locating the contact information of a specific movement, finding the date of a certain event, and accessing petitions easy. Almost all users, besides 1 or 2 for each task were able to easily navigate to the correct section of the website and complete the task. The exact data for task 2 and task 4.a can be seen in Figures 28 and 29, respectively.

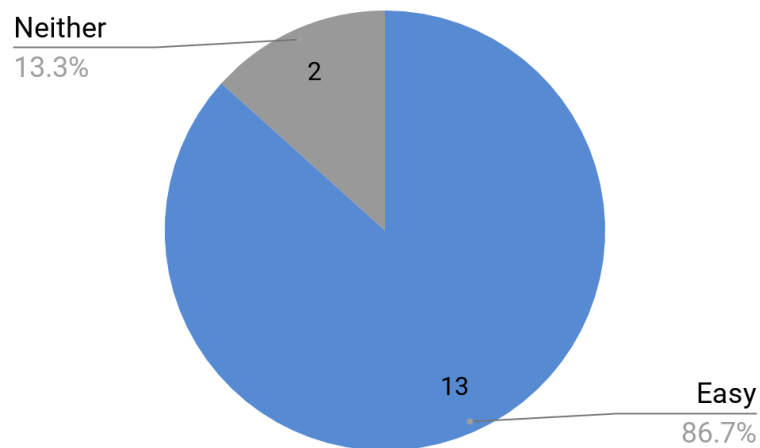


Figure 28: Task 2, Looking for a Book About Sustainability

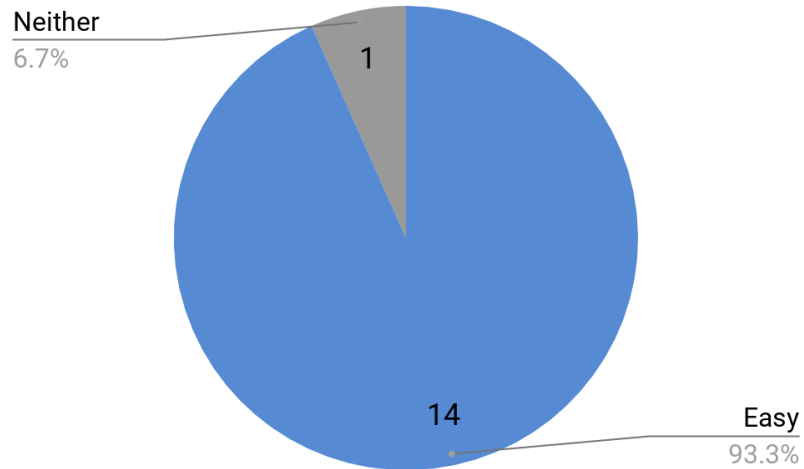


Figure 29: Task 4.a, Finding the Date of a 350 Movement Event

Despite these promising results, some testers seemed to struggle with the task of finding the green organizations and finding the podcasts. When asked to “List two green organizations”, 11 testers easily completed this task, while 2 testers completed the task neither easily nor with difficulty, and 2 testers completed the task with difficulty (Figure 30).

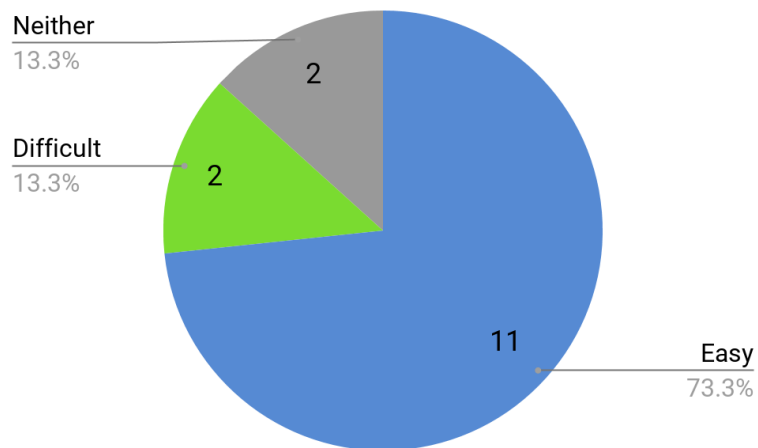


Figure 30: Listing Two Green Organizations

In addition, 4 testers also experienced some form of difficulty accessing the podcasts on the website mockup (See Figure 31).

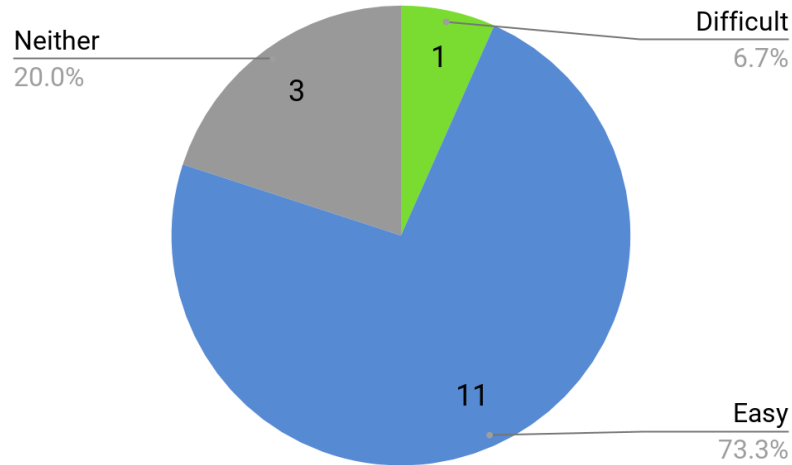


Figure 31: Finding a Podcast

After the interviewees completed the testing, they were asked questions to get a better understanding of their personal experience with the website. When asked to “describe [their] experience with the website”, all interviewees responded with positive comments such as, “easy to navigate” or “intuitive in design”. In addition to these positive comments, the interviewees also gave suggestions and feedback on improvements that could be made to the website that would have allowed them to better complete tasks. Some of these comments include adding a search function to the toolbar, the possibility of translating between English and Danish, and maintaining a more prominent focus on the localization of the organizations and events (being able to sort by municipality versus region). All comments were recorded (see Appendix J) and beneficial suggestions were implemented in the final iteration of the mockups (see Appendix K).

Sixteen interviewees also tested the mobile application mockup. Similar to the website mockup, the mobile application mockup had a positive response from the testers. There were, however, a few tasks that users found difficult. The first task of “finding events in Central Jutland” was difficult for 6 of the 14 testers, while 4 found it neither easy nor difficult (Figure 32).

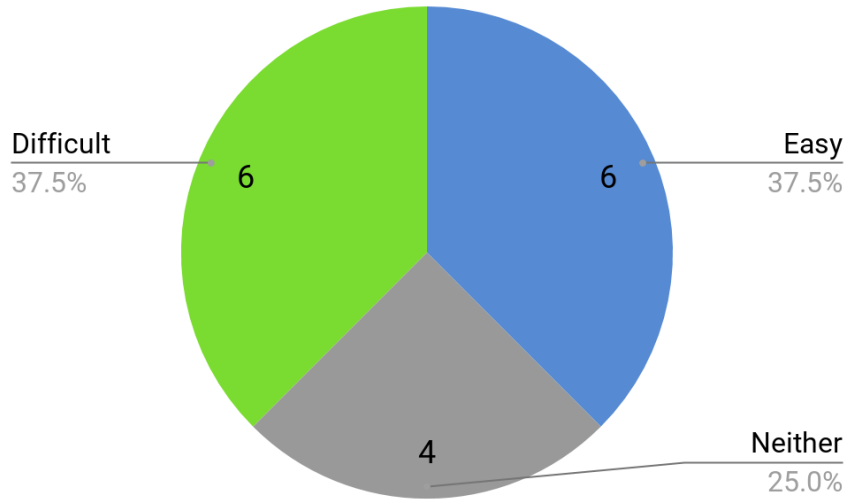


Figure 32: Finding Events in Central Jutland

In addition, 6 out of the 16 testers struggled to “favorite” the Green Student Movement group (Figure 33).

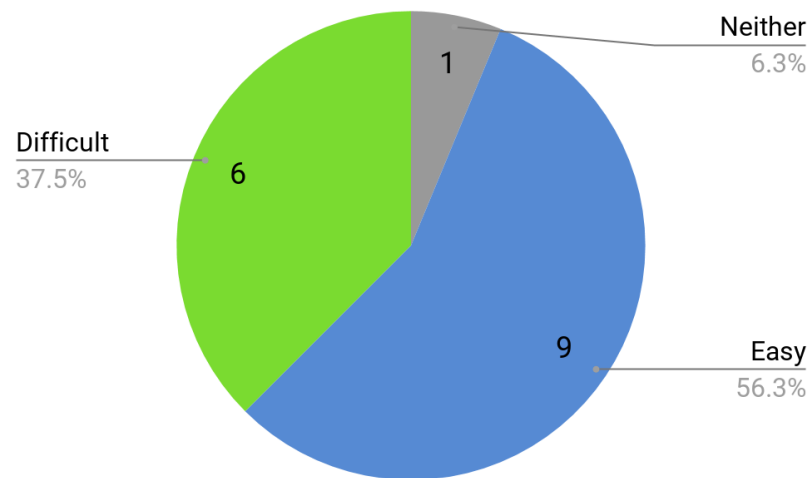


Figure 33: Favoriting the Green Student Movement

Lastly, 5 testers found the task of “Finding the event that is happening soonest” difficult, while 3 testers found it neither easy nor difficult, and only half of the users found it easy to find (Figure 34).

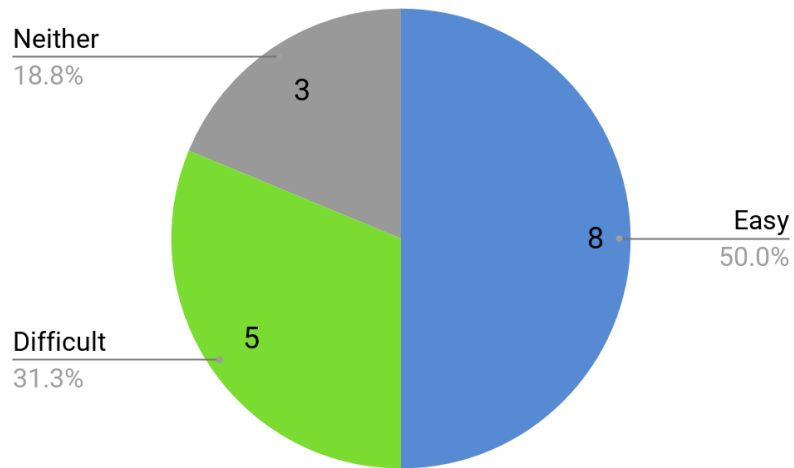


Figure 34: Finding the Event that is Happening Soonest

After completing the series of tasks, the interviewees were asked a series of questions, similar to those asked after the web platform testing, to get a better understanding of the tester’s opinions on the mobile application. Some positive comments from users include that the app is “super easy to use”, “the icons make sense”, “sorting by location is a great idea” and “I could see myself using this app on a regular basis”. However, the testers also shared many comments on how the application can be improved. As seen in Figure 32, many users seemed to have difficulty implementing the “favoriting” functionality. This was supported by users’ feedback, such as 5 testers commenting that “the hearts were hard to see”. In addition, 4 testers suggested that the drop-down location feature be made more clear since they struggled with the first task of changing the location of the events (see Figure 31). Some other user feedback included labeling the events and groups images to get a better initial understanding of what the event was about and potentially changing the “notifications” icon to make its use more clear. All comments were recorded (Appendix L) and were reviewed to be implemented in the final iteration of the mobile application mockup (see Appendix M).

6. CONCLUSIONS AND FUTURE RECOMMENDATIONS

The overarching goal of this projects was to help Eco-net improve their online platform, Green Overview, by enhancing user involvement and also growing the online community. The biggest obstacles that Green Overview is currently facing are the organization and usability of the platform. To improve both of these areas, the team designed mockups of an updated web platform and mobile application.

Overall, five total methods were conducted to create the final products of this project. First, two methods were conducted to collect data that would identify the areas where Green Overview required improvements. By surveying the current Green Overview user base, improvements that users believed needed to be made to the platform were identified. Members and coordinators of green movements were then interviewed to identify features and content that potential users would want to see on a sustainability website.

From the survey feedback from Green Overview users and data from the interviews with members of various Green Movements, specific features to include in the mockups were identified. For the web platform, the features that were kept from the current Green Overview site and implemented in the mockup include a library of knowledge and media about sustainability, an events calendar, a listing of green companies and organizations, and an “About Page” explaining the mission of Green Overview. Some features that were added as a result of the interviews include a page where users can go to find out ways to easily sign petitions and show support of various legislative documents and a page dedicated to green movements to help users get involved with the community. From the results of both the survey and the interview, there were also features that were not included from the current Green Overview website. First, the social media aspect of the website was removed. Although users are still able to make profiles to save groups, articles, etc. to their account, there is no longer a “chat forum” to direct message other users, or a user-based news feed that displays users posts or recent activities. These features were identified as unused by current Green Overview users and identified as something users would not be interested in by members of green movements.

The mobile application portion of the project focused on the engagement aspect of sustainability. From the interviews with members of green movements, the concept of engagement was identified as a key player in promoting sustainability and fighting climate change. As a result, the mobile application was designed to highlight the engagement aspects of

the Green Overview website. The two main ways for people to get engaged is to attend an event or join a sustainability movement. With only two main functionalities on the application, the application remains simple and straightforward in use.

In order to take steps towards revamping and improving the organization and usability of the website, three additional methods were conducted. First, the Green Overview webmaster was interviewed to identify any technical limitations in the designs of the mockup that the team needed to be aware of. With all of this information gathered and analyzed, the interactive mockups of the web platform and the mobile application were created. The project was concluded by testing the mockups and implementing user feedback in the final designs of the products as discussed in section 5.4.

By implementing the design of the mockup into the actual Green Overview web platform and also creating the mobile application, Green Overview will enhance its users' experiences and grow its user base by having two easy to use, accessible, and engaging interfaces. Eco-net is therefore one step closer to achieving its goal of promoting sustainability throughout Denmark by presenting the information that people need to learn about sustainability and take action in a clear and easy way.

In order to implement the website design, Green Overview should continue to use Wordpress. Wordpress has all of the functionalities required for the new design, including the ability to upload media to the website and the ability to share content from Green Overview to social media websites such as Facebook and Twitter. To implement the mobile application design, it would be best to use AppyPie. AppyPie allows users to create a mobile app based on a Wordpress site, keeping the same database from behind the scenes. The app will work on Android and iPhones, and is relatively inexpensive, costing approximately 200 DKK per month to keep running.

After implementing the changes to the website and creating the mobile application, the team recommends that Eco-net takes the following steps: 1) Create a team of information gatherers to keep a steady stream of new information on Green Overview, 2) Partner with green organizations and corporations to secure funding, and 3) Develop a marketing strategy to further grow the Green Overview user base. The new design of Green Overview requires a steady stream of current information about organizations and events in order to maintain its usefulness. This is a large task for just one person to maintain. To avoid putting this burden on the leader of

Green Overview, a team of information gatherers should be formed to upload content to the Green Overview database. This team could be created in two ways. The team could consist of residents in each municipality across the country of Denmark, who would upload content specific to what is going on in their community. Conversely, the team could consist of an anchor person from each green movement, company, or organization. These anchor people would have the ability to upload information to Green Overview that is specific to the organization that they are a part of. In both cases, the team members would join on a volunteer basis, so people who show special interest and dedication to the sustainability movement should be targeted. By creating this team, Eco-net will ensure that their web platform will be filled with recent and relevant information.

To create the ideal Green Overview website and mobile application, Eco-net needs additional funding. This funding can be used in a variety of ways. It can be used to further enhance the Green Overview website, develop the Green Overview mobile application, potentially provide some form of compensation to the information gatherers mentioned in the first recommendation, or even be put towards launching a marketing campaign. Funding can be acquired by partnering with green organizations and corporations in Denmark. Creating this type of partnership requires Eco-net's leadership to approach companies and pitch Green Overview to them, explaining its potential value. One way of doing this is to create a prospectus, a document that sums up what Green Overview does, why it would be beneficial to partner with Green Overview, and how any funds generated from the partnership would be used. Before doing this, Eco-net would need to formally decide who the target audience of their business model is, as that decision will have effects on the content of the prospectus. An outline of the prospectus can be seen in Appendix N.

With a strong product and corporate funding, the next step is for Eco-net to develop and launch a marketing strategy to further expand its' online community. Eco-net needs to develop a systematic plan of community outreach for Green Overview, in order to bring knowledge of the platform to as many people as possible. There are a few different possible methods for accomplishing this. The survey and interviews showed that people spread information about sustainability initiatives and platforms primarily through word of mouth and social media. Eco-net can leverage this by using a social media campaign for Green Overview. Users of Green Overview could be encouraged to share links from Green Overview through social media, or

post them to the social media pages of green movements they are members of. This campaign would be very useful to increase the usage of Green Overview through the social circles of its current members. Eco-net can also maintain a presence at events run by green movements. This can be done by making announcements about Green Overview's website or mobile application, or creating signs or banners encouraging people to visit the website or download the application to learn about more events near them. This kind of outreach helps ensure the message is heard by those more casually interested in sustainability, the main target of the mobile applications.

In the last century, the country of Denmark has taken great strides in implementing sustainability initiatives throughout the country. With the help of Green Overview, the people of Denmark will be able to continue this legacy and progress in their fight against climate change. By enhancing the website and creating an accessible mobile application, Green Overview will present the people of Denmark with easy ways to get engaged and join the sustainability movement. By completing this project, Green Overview is now one step closer to its goal of making Denmark a truly green place to live.

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APPENDICES

Appendix A - Project Timeline

Below is the Gantt Chart used to outline the team’s timeline. This was used to keep the team on track so that it was ensured that the project would be completed on time. Each task outlined by the project is listed on the left of the chart. The columns to the right of the task column indicate the various weeks that that task will be completed during. In addition, two colors are used to differentiate between actually doing the task and analyzing the data collected from the task, to give further structure to the project.

Task	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8		
Online Survey	Active	Active	Active	Analysis of Data	Analysis of Data					
Interviews with Various Green Movements	Active	Active	Active	Analysis of Data						
Interview with Eco-net Web Master		Active	Active	Analysis of Data						
Develop Mock-ups for the Website and Mobile App		Active	Active	Active	Active	Active				
Test Mock-ups and Implement Changes					Active	Active	Active	Active		
Compilation of Deliverables								Active	Active	
Final Presentation									Active	
	3/11-3/17	3/18-3/24	3/25- 3/31	4/1-4/7	4/8-4/14	4/15-4/21	4/22-4/28	4/29-5/1		

Appendix B - Online Survey Questions, Consent Form and Final Copy in Danish

I. Online Survey Consent Form

We are a group of students from Worcester Polytechnic Institute (WPI) in Worcester, Massachusetts. We are conducting a research project on behalf of Eco-net, a non-profit organization focused on promoting sustainability throughout Denmark, to help identify ways to enhance user involvement and expand the online community of their online platform, Green Overview. By conducting this survey, we hope to better understand how Green Overview is being used, and how it can be improved to better suit the needs of the users. We strongly believe this kind of research will help us enhance the platform and therefore achieve the goals of promoting sustainability throughout Denmark.

Your participation in this survey is completely voluntary and you may withdraw at any time. Please remember that your answers will remain anonymous. No names or identifying information will appear on the questionnaires or in any of the project reports or publications.

This is a collaborative project between Eco-net and WPI, and your participation is greatly appreciated. If interested, a copy of our results can be provided at the conclusion of the study.

If you have any questions or wish to find out the results of the survey, you can contact the team by email at gr-teameconet@wpi.edu.

II. Online Survey Questions

1. What is your age?
2. What is your gender?
3. Where are you from?
4. Is sustainability interesting to you? On a scale of 0 to 10. 0 being not interesting at all and 10 being extremely interesting.
5. How often do you visit the Green Overview website?
6. What is your primary use of Green Overview?
7. What additional information, or content would you like to see added to the website?
8. Rate your overall satisfaction with the website.
9. Rate how easy the website is to use.
10. Do you find the content on the website relevant?
11. What is your favorite aspect, or feature, of the website?
12. Are there any aspects, or features, that you think need to be improved? If yes, please explain:
13. Do you use any other platform similar to Green Overview? If yes, please list them:
14. Would you like to receive updates about green organization, events, projects, etc. via mail?
15. If yes, how often would you like to receive these updates?
16. How likely would you be to use a mobile application version of Green Overview?
17. Do you have any additional suggestions?

III. Online Survey Final Copy in Danish



Vi har brug for din hjælp til at fremme bæredygtighed i Danmark!

Ved at besvare denne anonyme spørgeundersøgelse, er du med til at identificere måder at forbedre Øko-nets grønne, gratis online platform, Grønt Overblik, så den bedre afspejler brugernes behov.

Vi er stærkt overbevist om, at denne form for undersøgelse vil hjælpe os med at styrke platformen og dermed nå målet om at fremme bæredygtighed i hele Danmark.

Din deltagelse i denne undersøgelse er frivillig, men dine svar vil have stor betydning for udviklingen af Danmarks Grønne Netværksportal, Grønt Overblik. Vi vil være mere end taknemmelig for din besvarelse!

Læs mere om Grønt Overblik: <https://grøntoverblik.dk/>

Vi er en gruppe studerende fra Worcester Polytechnic Institute (WPI) i Worcester, Massachusetts som står bag denne spørgeundersøgelse, der er et samarbejdsprojekt mellem Øko-net og WPI.

Hvis du er interesseret, kan du få en kopi af dine svar eller vores resultater ved afslutningen af undersøgelsen.

Hvis du har yderligere spørgsmål eller ønsker at vide mere, kan du kontakte os via e-mail på marketing@eco-net.dk



Hvad er din alder?

0 10 20 30 40 50 60 70 80 90 100

Alder

Hvad er dit køn?

Mand

Kvinde

Foretrækker ikke at sige

Hvor er du fra?

Midtjylland

Nordjylland

Sjælland

Syddanmark

Hovedstaden (København)

Andet

Interesser du dig for bæredygtighed?

Slet ikke interesseret

Meget interesseret

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

Hvor ofte besøger du Grønt Overblik's hjemmeside?

Mindst en gang om dagen

Mindst en gang om ugen

Mindst en gang om måneden

Sjældent

Hvad bruger du primært Grønt Overblik til?

Til at finde viden og inspiration

Finde grønne begivenheder

Finde grønne organisationer

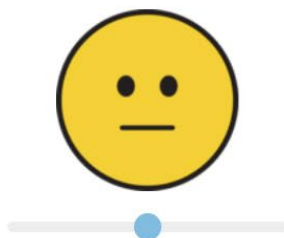
Forbinder med andre brugere

Dele ideer

Andet

Hvilke yderligere oplysninger eller indhold vil du gerne have tilføjet til hjemmesiden?

Hvad er din generelle tilfredshed med hjemmesiden?



Hvor nemt er hjemmesiden generelt at bruge?

Meget nemt

Lidt nemt

Hverken svært eller nemt

Lidt svært

Meget svært

Finder du indholdet på hjemmesiden relevant?

Ja

Måske

Nej

Hvad er det bedste/den bedste funktion ved Grønt Overblik?

Er der noget, som du mener kan gøres endnu bedre? Hvis ja, bedes du forklare:

Nej

Ja

Bruger du andre platforme der minder om Grønt Overblik? Hvis ja, hvilke:

Nej

Ja

Ønsker du at modtage nyheder om grønne organisationer, arrangementer, projekter m.m. via e-mail?

Nej

Ja

Hvis ja, hvor ofte ønsker du at modtage disse nyheder?

Dagligt

Ugentligt

Månedligt

Årligt

Hvor sandsynligt er det, at du ville bruge en mobil app-version af Grønt Overblik?

Meget sandsynligt

Ret sandsynligt

Hverken sandsynligt eller usandsynligt

Ret usandsynligt

Meget usandsynligt

Har du yderligere forslag?



Appendix C - Green Movement Interview Questions and Consent Form

I. Green Movements Interview Consent Form

We are a group of students from Worcester Polytechnic Institute (WPI) located in Worcester, Massachusetts. We are conducting a research project on behalf of Eco-net, a non-profit organization focused on promoting sustainability throughout Denmark, to help identify ways to enhance user involvement and expand the online community of their online platform, Green Overview. As part of this project we are conducting a series of interviews with key individuals to better understand how Green Overview is being used, and how it can be improved to better suit the needs of the users. We have asked you to participate because we believe you have unique knowledge of these issues that will be valuable to the project.

Before we begin, we would like to thank you for taking the time to participate in the interview which will last about 30 minutes. Your participation is entirely voluntary. You may refuse to discuss any question or terminate the interview at any time. With your permission we would like to record the interview. The tapes, notes, and subsequent transcripts of the interview will be kept confidential, and will be accessible by only the members of the team and our immediate faculty advisors. Your name will not be used in any subsequent report or publication without your permission. If you have any questions or wish to find out the results of the survey, you can contact the team by email at gr-teameconet@wpi.edu.

If you consent to be interviewed at this time, we would ask that you indicate your agreement below.

I agree to participate in the interview

Interviewee Signature	Date
-----------------------	------

Interviewee Name

Please initial for permission to record

Interviewee Initials

Interviewer signature	Date
-----------------------	------

II. Green Movements Interview Questions

1. What is your movement about?
2. In your opinion, how do we fight climate change?
3. What is more of an issue, awareness or societal action?
4. In your opinion, is the government doing enough to fight climate change?
5. In your opinion, can climate change be fought using social media?
 1. Would you be interested in a platform that's strictly dedicated to providing a space for people to post about their sustainable efforts?
6. Do we lack a unified effort? In your opinion how do we get more people working together towards the same goal?
7. How do you share information about your movement to others?
8. Have you ever heard of Green Overview?
 - a. If so, how did you hear about it?
 1. What do you enjoy about the website?
 2. What do you wish was different?
 3. Do you find it easy to use?
 4. How often do you visit the site?
 5. Would anything make you more inclined to use the site?

For example: green restaurants are posted on Green Overview and can be located on a map or outsourced to google maps, or you are notified via email about upcoming events.

6. Do you think you would be more likely to use Green Overview as a mobile app as opposed to just an internet website?
 - b. If not:
 1. Where do you find information about sustainability or climate change movements?
 2. What features would you want a site providing “sustainability” information to have?
 3. **Green Overview Description:** Eco-net is a non-profit organization dedicated to promoting sustainability initiatives throughout the country of Denmark. By creating the online platform, Green Overview, Eco-net aims to provide the citizens of Denmark with an online database filled with information pertaining to everything “green”. This includes, but is not limited to, green events, projects, companies, and organizations located in

various areas throughout the country. Currently the website has 4 main features: the Green Pages, the Green Calendar, the Green Library, and the Green Profiles. Would you consider using a platform like this?

4. Do you think an online database with sustainability information provides any use to the sustainability movement?
5. Do you think you would be more likely to use a platform that provided information on sustainability in a mobile app as opposed to just an internet website?

Appendix D - Employee Interview Questions and Consent Form

I. *Employee Interview Consent Form*

We are students at Worcester Polytechnic Institute in Massachusetts. We are conducting a research project on behalf of Eco-net to identify ways to enhance user involvement and expand the community. As part of this project we are conducting a series of interviews with key individuals. We have asked you to participate because we believe you have unique knowledge of these issues that will be valuable to the project.

Before we begin, we would like to thank you for taking the time to participate in the interview which will last about 45 minutes. Your participation is entirely voluntary. You may refuse to discuss any question or terminate the interview at any time. With your permission we would like to record the interview. The tapes, notes, and subsequent transcripts of the interview will be kept confidential and will be accessible by only the members of the team and our immediate faculty advisors. Your name will not be used in any subsequent report or publication without your permission. If you have any questions or wish to find out the results of the survey, you can contact the team by email at gr-teameconet@wpi.edu.

If you consent to be interviewed at this time, we would ask that you indicate your agreement below.

I agree to participate in the interview _____
Interviewee Signature _____ Date

Interviewee Name

Please initial for permission to record _____
Interviewee Initials

Interviewer signature _____ Date

II. Employee Interview Questions

1. What is your opinion on why users are not engaging on the website?
 - a. They do not know about Green Overview?
 - b. The website does not promote engagement?
 - c. The website is confusing?
 - d. Do you need one group to start using it to get others involved?
2. What are some advantages of using wordpress?
3. What are some disadvantages of using wordpress?
4. What restrictions have you faced with using various softwares due to finances? (have you wanted to try different softwares but are unable to because of lack of funds?)
5. Would you consider using a different software than wordpress?
6. Do you have any suggestions of what suite/platform/tool we could use to create the mockup?
7. Are there any additional functionalities that you would like to see added to the platform?
8. Based off of preliminary survey and interview results, some additional desired features for the platform are a more robust events calendar and access to petitions. Do you see any issues in implementing these?
9. Do you have any additional suggestions for us?
 - a. Who do you think would be the best people to test our mockup?

Appendix E - Usability Testing Interview Questions and Consent Form

I. Usability Testing Interviews Consent Form

We are students at Worcester Polytechnic Institute in Massachusetts. We are conducting a research project on behalf of Eco-net to identify ways to enhance user involvement and expand the community. As part of this project we are conducting a series of tests of our new design for Green Overview's website and app. You will be asked to interact with the designs and perform a set of tasks, and then interviewed about the design.

Before we begin, we would like to thank you for taking the time to participate in the interview which will last about 45 minutes. Your participation is entirely voluntary. You may refuse to discuss any question or terminate the interview at any time. With your permission we would like to record the interview. The tapes, notes, and subsequent transcripts of the interview will be kept confidential and will be accessible by only the members of the team and our immediate faculty advisors. Your name will not be used in any subsequent report or publication without your permission. If you have any questions or wish to find out the results of the survey, you can contact the team by email at gr-teameconet@wpi.edu.

If you consent to be interviewed at this time, we would ask that you indicate your agreement below.

I agree to participate in the interview _____
Interviewee Signature _____ Date _____

Interviewee Name

Please initial for permission to record _____
Interviewee Initials

Interviewer signature _____ Date _____

II. Usability Testing Interview Questions

Website Tasks

1. Can you try to create an account?
2. Look for a book about sustainability.
3. Can you list 2 green movements located in Copenhagen?
4. Can you find the contact information about the 350 organization?
 - a. Can you find the date of one of their events?
5. Can you find where to access petitions you could sign?
6. Can you read out the description of a podcast?

Website Interview Questions

1. Describe your experience with the website.
2. Was there any task that you found difficult or frustrating to perform?
3. Was navigating easy or difficult?
4. Please rate the design of the website on a scale from 1 to 5.

Mobile Application Tasks

1. Find Events in Central Jutland
 - a. Now switch back to events in Copenhagen
2. Find Groups in Central Jutland
3. Find the “The Green Student Movement” Group and favorite it
 - a. Now, tell us how you would contact them if you wanted more information
4. Find the “NOAH” Group
 - a. Can you read us the first line of the description?
5. Can you navigate to “create an event”?
6. Can you tell us the time and exact location of the event “Make the Earth Green Again” that is happening in the city of Copenhagen?
7. Can you go back and find where your “favorite events” are saved?
8. How about your favorite groups?
9. In the Events tab, can you try to search for an event using a specific term?
10. Find the event that is happening soonest.

Mobile Application Interview Questions

1. Describe your experience with the mobile application.
2. Was there any task that you found difficult or frustrating to perform?
3. Was navigating easy or difficult?
4. Could you see yourself using the app on a regular basis?
5. How would you rate the app on a scale from 1 to 5.

Appendix F - Results from Online Survey

Chart 1: What is your age?

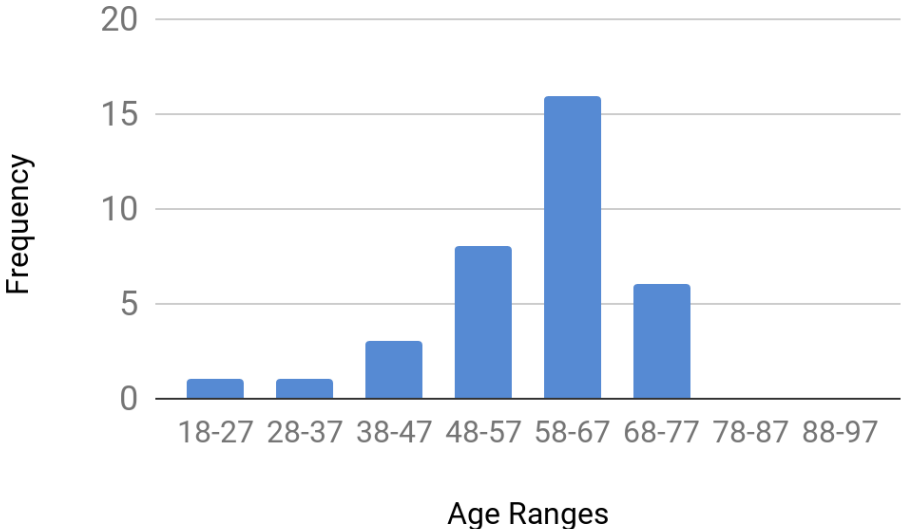


Chart 2: What is your gender?

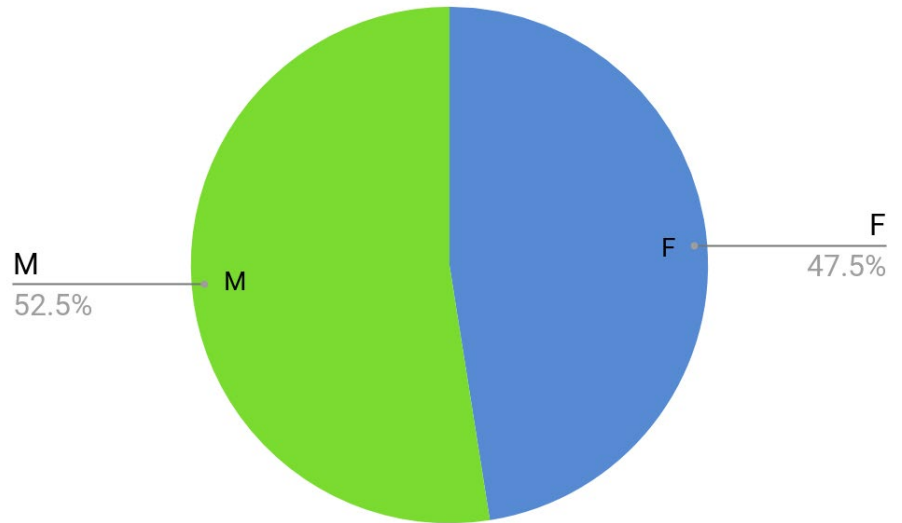


Chart 3: Where are you from?

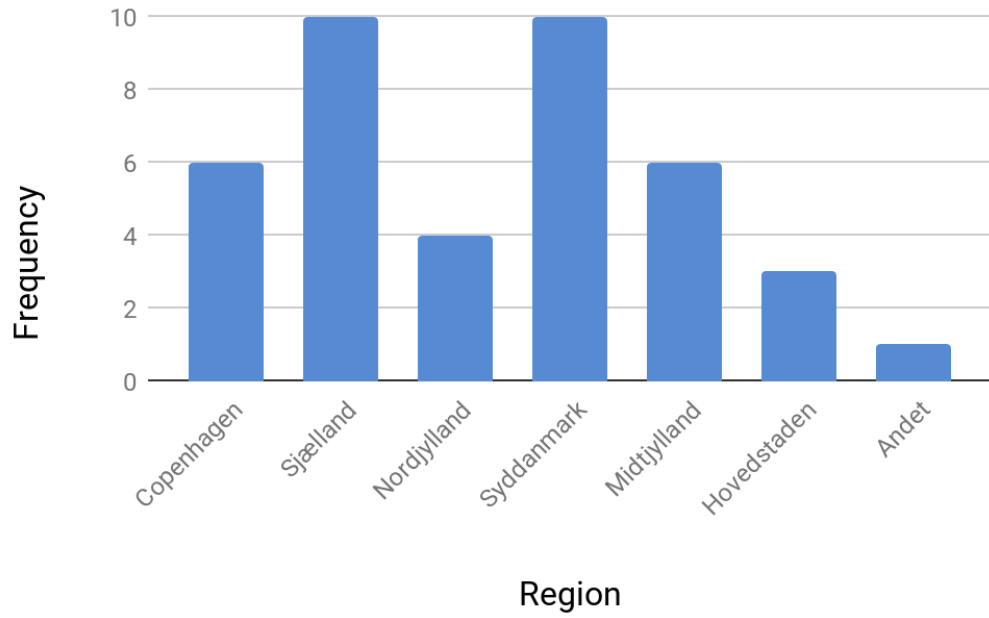


Chart 4: Is sustainability interesting to you? On a scale of 0 to 10. 0 being not interesting at all and 10 being extremely interesting.

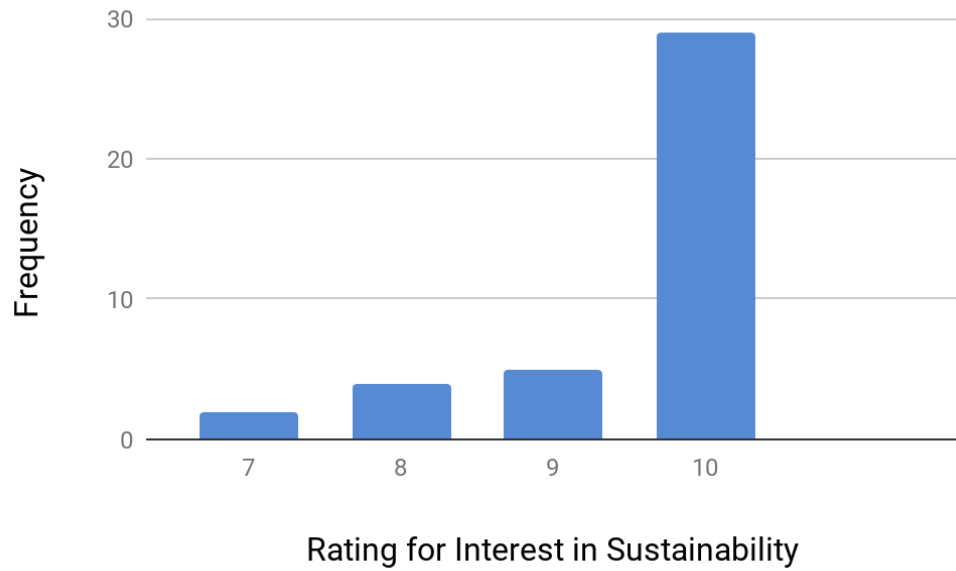


Chart 5: How often do you visit the Green Overview website?

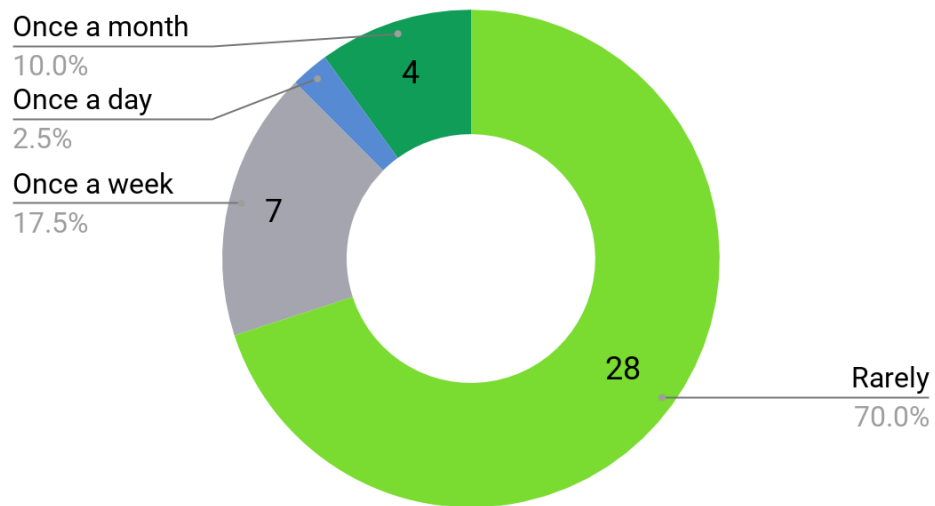


Chart 6: What is your primary use of Green Overview?

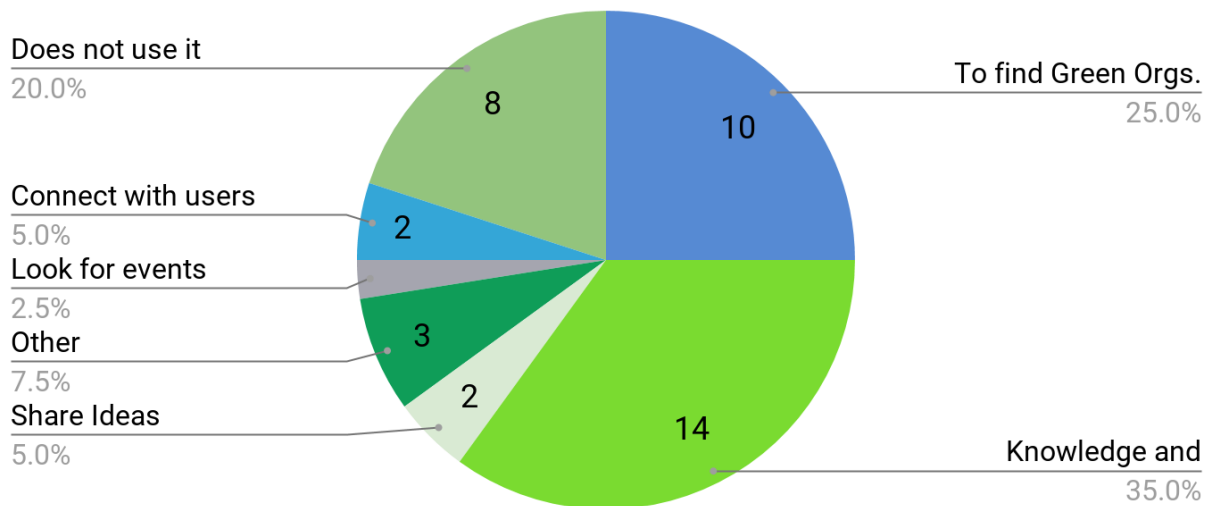


Chart 7: What additional information, or content would you like to see added to the website?

Responses

- News
- Possibility of custom content
- Local news and inspiration

- Never visited
- Solar cell intervention by the Folketing
- More about climate and CO2 reducing plants. Meetings on climate

Chart 8: Rate your overall satisfaction with the website.

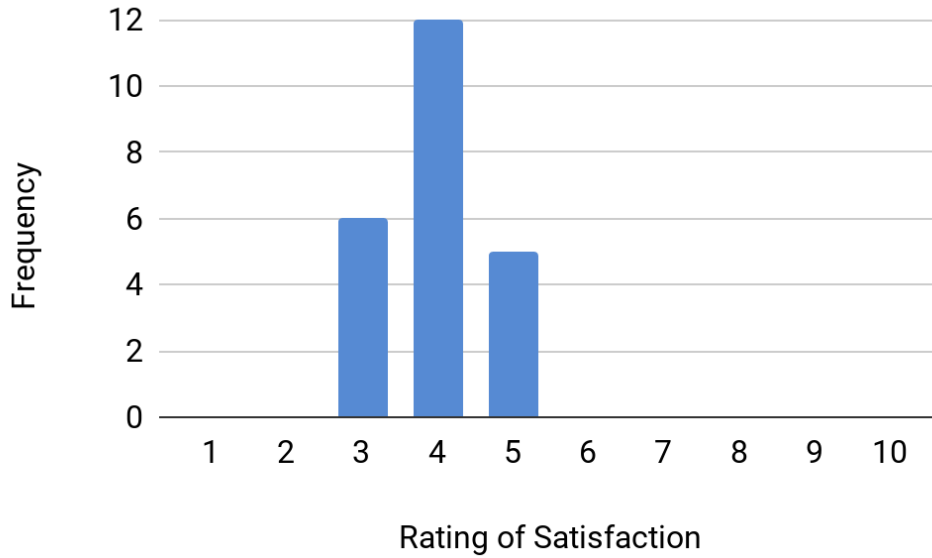


Chart 9: Rate how easy the website is to use.

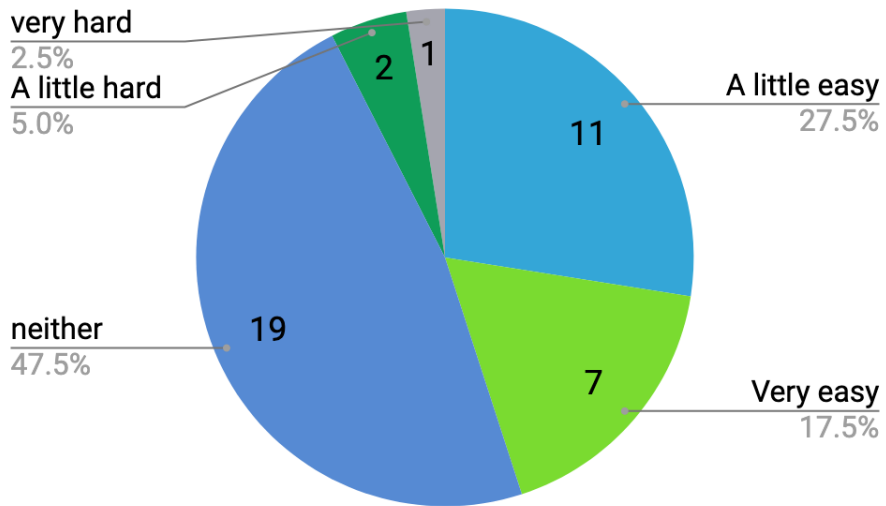


Chart 10: Do you find the content on the website relevant?

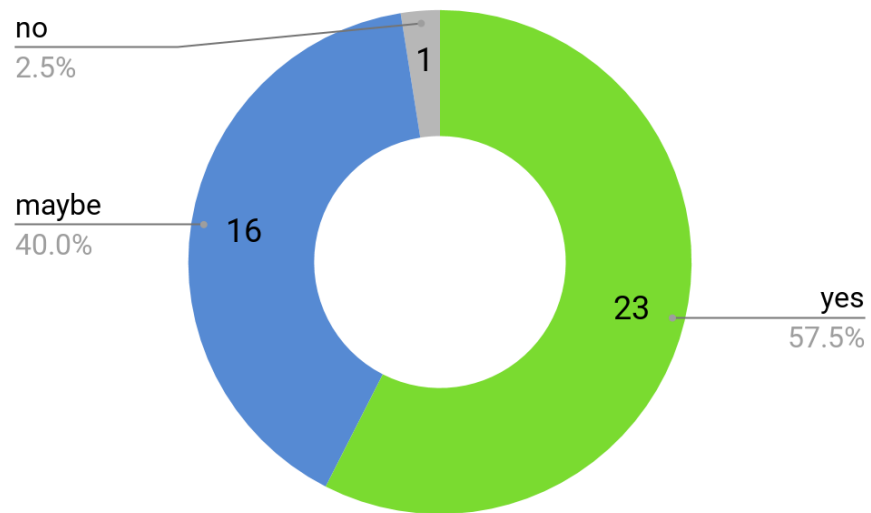
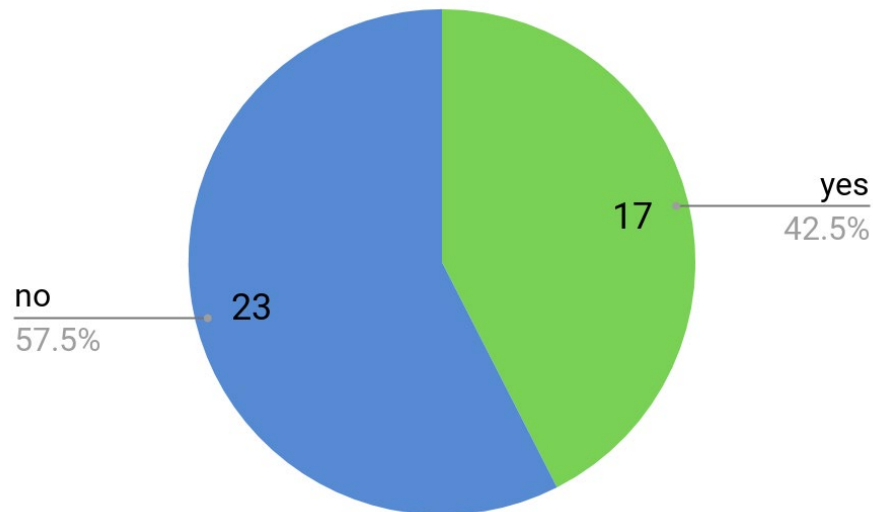


Chart 11: What is your favorite aspect, or feature, of the website?

Responses

- Events
- That it is an Overview
- That it exists
- Search Function
- Relevant information
- Network
- Library
- Green Pages

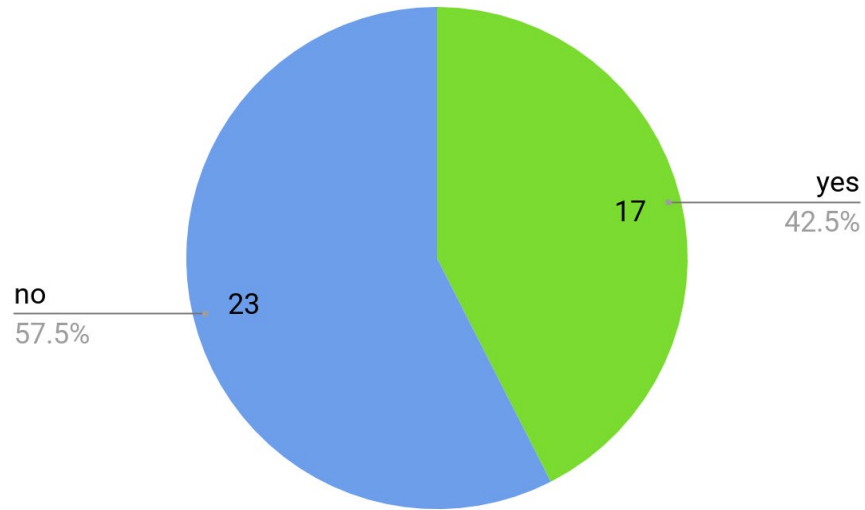
Chart 12: Are there any aspects, or features, that you think need to be improved? If yes, please explain.



Responses

- News
- Opportunity to subscribe to news about things I care about.
- Maybe I miss some pictures that can make it easier and more inspiring to click around the website
- Seems confusing with the many divisions - in addition, some of the information is obsolete
- There is very long search time. Can be reduced without buying a new server.
- Green Overview must be more locally founded. I do not travel to Copenhagen to attend meetings for example.
- The page appears messy. There is a need for simplification and less boring layout
- The green color is not screen friendly
- The design and search features (possibly selected categories on the front).
- Information about it at all
- Everything can be done
- More collaboration with Extinction rebellion
- No results will be shown even if there is () in example 1. Better search function.
- Better clarity, simplification, more coherence so the whole feels more like "a unified package"

Chart 13: Do you use any other platform similar to Green Overview? If yes, please list them.



Other Platforms

- Facebook
- Green Difference
- Organic, organic today
- Wikipedia
- Organic National Association
- LinkedIn
- Permaculture Denmark
- NOAH
- Fairtrade
- Extinction Rebellion
- Bolius, idea

Chart 14: Would you like to receive updates about green organization, events, projects, etc. via mail?

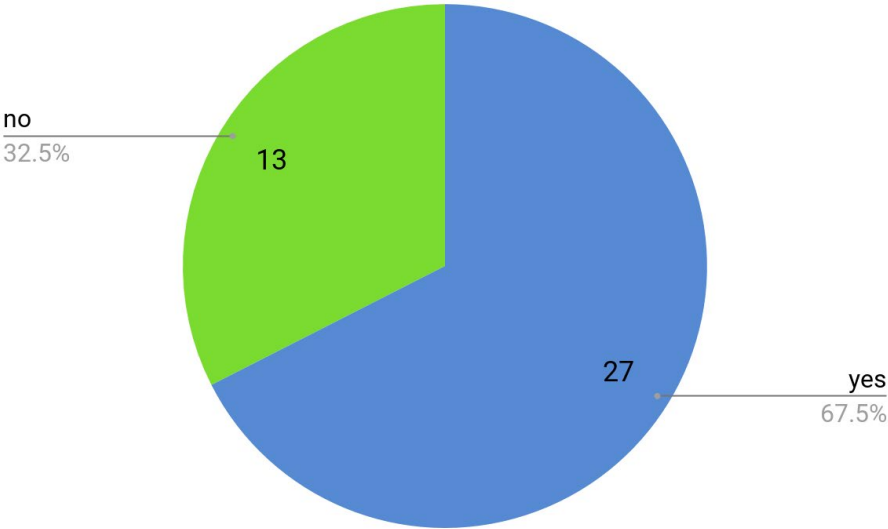


Chart 15: If yes, how often would you like to receive these updates?

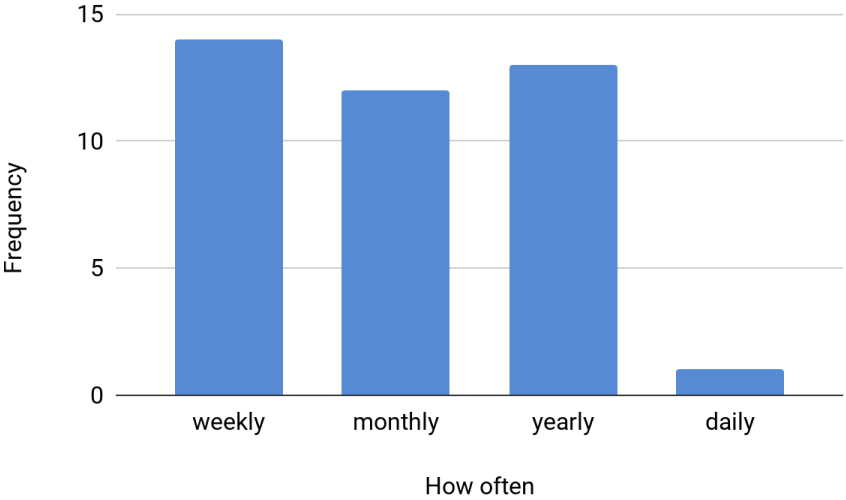


Chart 16: How likely would you be to use a mobile application version of Green Overview?

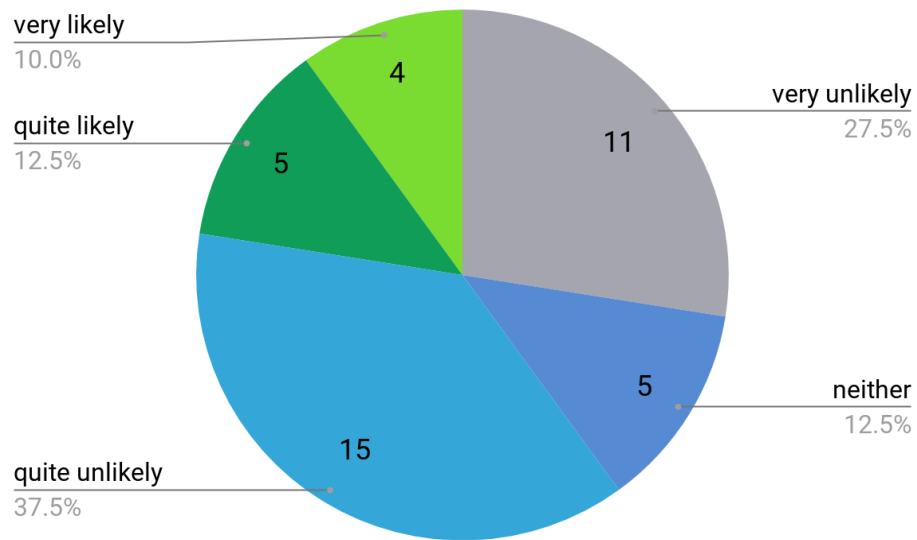


Chart 17: Do you have any additional suggestions?

Responses

- Ability to easily share content. Could sign up for events. More network-like. Features that stand out from other platforms.
- Manage to make the page appear clear, systematic and intuitively simple.
- Get everyone's contribution so it a complete overview

Appendix G - Transcriptions of 13 Interviews conducted with members of various Green Movements

I. Transcription of Interview with 4 members of the Green Student Movement

How did you hear about this event?

Person 1: They post a lot of things on their Facebook page and I follow them and I have friends who participate in all of the meetings. They spread the news.

Same thing for you guys, did you hear about it through the Green Student Movement?

Person 3: I actually heard it from her.

So you guys use a lot of word of mouth, you guys talk to your friends, kinda thing

Person 2: Also the University talked about it at the, like, ya, at the University.

Person 4: I think this event is pretty big on Facebook, but I showed up because I got friends that said “Hey, come as well”, so maybe a lot of people know about this but they show up when their friend calls them.

In your opinion how do we fight climate change? Is it at events like this or like in your opinion, I want to hear your perspective on do we do more for climate change and being more sustainable.

Person 1: I think, well, in the end it’s up to the politicians to make major decisions, but I think the way we engage more people in the common movement, I think that’s the community feel, the more community feel the better expressed - the more you feel like you are a part of something, the more you want to join or participate.

Person 2: The way you say “Grass Roots” movements? They worked before so why not again? They seem to be quite effective.

Person 3: I think constantly, this awareness of constantly getting reminded to remember the climate everytime you make a decision and remember the politicians, remember the big corporations so everytime you make a decision you remember the environment.

Person 4: Movements like this are important tool but it’s in there, in the European Parliament, in Brussels? it’s the politicians responsibility, so its ahh, good start to engage in grassroots movements.

So do you think people are aware of what’s going on and they’re just not taking action? Or do you think there are still a lot of people who don’t really understand climate change and aren’t really aware of the effects of it?

Person 1: I think it depends on where you are in the country. I think here in Copenhagen people are pretty aware and are starting to take responsibility as well, but in different parts of the country far away from the Capital I don’t think, I don’t think it’s such a big

issue there. People know of course, it's everywhere through the media but I don't think they, I don't think people in the small cities consider it their responsibility in the same way because we are closer to the center of power it's easier for us to see the people who need to take responsibility.

So do you think it would help then if they had access to a way of like knowing about all the events going on in a centralized location because on Facebook and such it's all spread out you have to find the particular movement near you?

Person 1: Yes, but this Climate Strike/ March tomorrow is a perfect example of how its spreading, how it's possible to spread to people near you. I mean that's the most important thing.

Person 2: I think things are happening in the provinces as well, also because people kind of use it to brand themselves now, it's kind of a modern wave, being like "climate friendly". At least the island that we come from is really active in this area. They say no to plastic now, spreading that all around the island also just with the...

Person 3: "Bright Green Island" Project which is about making the island like completely carbon neutral.

Person 1: But at home, it's kind of a different thing because it is kind of a closed community, they have the possibility of feeling a part of something like we maybe do here, I guess it's easy to see we are as opposed to. It's different, it's more cultural than for instance the cities around, it's always been a different mentality about the city compared to lots of western Danish cities. But not at all like home .

So do you think like a green social media, where people could come and engage and connect with other people and sort of talk about climate change and spread awareness that way, do you think that would be a good tool for continuing to help the efforts? Really connecting, like you talked about, different communities all around Denmark?

Person 2: I think the interest is definitely there, like because now it seems like everyone is kind of aware that this is a problem so its like what can we do about it? I think it would be very popular to have a platform or something where there are some activities or advice, or groups and stuff because I think people want to do something. Definitely.

So do you think on that platform you would like to see like a lot of information about it, or more of a community where people talk to one another, and like different groups as well as maybe event listings and postings, like what would you like to see in a social media platform?

Person 2: I think, you know, there is a lot of research in this area currently and it's like moving so fast so maybe it would be very cool to have a place where you have the updated news on what to do about climate change like: what do we do about plastic, how much does it really effect nature, and what's happening with the ocean? And all these things like what can I do like how do I live a climate friendly life?

Person 1: For someone being a considerate consumer it's sort of difficult, you don't know which rules to follow. Is it things grown close to where you live? What, which rules are most important.

Person 2: I think it's also, kind of important to decide whether it should be kind of a question about moral because I don't know if that's what we want either that we should do like "so is that second hand?" or "did you buy this from New?!" or how it should work because if someone starts in a community it's also important that it doesn't get snobbish and it's not like "ya you know I am living a very climate friendly life" like so it's kind of like a "saint?" thing.

If there was a site to do this would you be more interested in using it on your laptops, like on the internet, or would it be easier for you to use it in a mobile application like on your phone, would you have a preference? Would you use both?

Person 1: I don't think I have a preference.

Person 2: Maybe it's more accessible to everyone with an internet page, like if you want to get like a broad age as well.

Person 3: I was actually thinking that like something like an app with local events or something would be very nice so that you would know where to go.

others agree

Person 4: I think it's easier to go to a website than download an app, that's pretty difficult.

Person 3: But you might want to come back frequently because like if you're really engaging yourselves in the community you want to like, "ok so where can I go today?"

Yes, so like that's one of the things we were maybe thinking about too, maybe having an app for the events of what's going on and then a website of all the other information that we talked about.

II. Transcription of Interview with a member of the Green Student Movement

Alright, so I guess, some of our first questions are, you know, just give us your opinion on how any societal movement, or actions, is carried out? Is it through people, or is it the government, you know, what's the most important part of that and you know what are some critical aspects for make sure any kind of movement works effectively?

Is this just in general?

In general, yeah!

So kind of my own personal opinion and experience in some sense? OK. I think a social movement works best, of course, when its multidirectional in the sense that it has broad popular support which is voiced quite loudly in different ways. It can be demonstrations or in letters to newspapers or just that way in right now it's just obvious that climate change is just part of a national agenda in civil society. But then to be successful it also needs to have some kind of spear heads that work with the actual, with in, or with the actual workplaces of power. Um I think that a lot of the time social movements create a lot of public support or public interests but perhaps are not organized so as to move into those places of power to change things. Um and in many ways I think successful social movements, I think some of them can be a very small group of people. Some of them, the revolutions in east europe happened because 10 people got together and decided to do something so there this tension between, do you need a small, very well organized team who work like in positions or with positions of power or do you need the big, public, broad support, or i mean most, like the best thing would be if they go together. If that makes sense?

OK, so, specific to climate change, though, do you think like people are doing enough, like you said to push for making change in the government? Or do you think people are aware of the issue, just not doing enough, or do you think people actually just really aren't aware as to how bad climate change is?

I think, in the Danish context, many people have been aware for a really long time like most people, there are very few people in Denmark who do not accept climate change as this sort of human derived issue. But the political will to change anything has been really small and i think that has been very much about the fact that Denmark is very... The political will hasn't been there probably because Denmark is a very comfortable society where the political debate is about where to move allocations of funds to different welfares, goods. So there hasn't been that idea of a crisis and I think basically the reason there is a feeling of a crisis now in some parts of the populations is more due to a global movement then it is anything to do with anything in Denmark. Particularly and I think that people are, its difficult to say that people are doing enough, there always more to be done, but I do feel like the climate change issue since I mentioned before the summer last year, the summer of 2018, has really gained momentum because this was the first time in Danish history that danish citizens actually experienced physically the effects of climate change even though it only resulted in nice summers by the beach, it made people quite worried. And i think that is a huge that played a huge part in mobilizing people. And then together with Fridays for future and other such things I think those connected really well

and created a much broader movement than just a year ago. But right now i am not seeing so much political will. No, I am seeing a lot of political maneuvering around presenting some kind of political will, but i am not seeing any action that sort of acknowledges we are in a crisis.

So how do we, or as danes how do you encourage people to continue to push for that change in government? Is it like what people are doing, and rallying and gathering outside or does it come down to more voting or how does, how do you think the best way is to actually influence those people who make the decisions?

I think with regards to voting, with regards to voting in politicians that care about this issue, something like “making the election green”, I think that's seems to me that's something that could be quite successful. Like I mentioned before it's one of those very targeted campaigns that works to mobilize people just around the issue of voting just around this certain issue of climate change. And I think it reaches, it has broad support in the fact that it reaches into each municipality it has like an ambassador in each municipality who through their own networks are going to be influencing the people in that municipality. I think that is a good concerted effort in getting votes, people out to vote, and getting them concerned about climate change. There was a second part of your question, getting politicians concerned about climate change.

How do we influence them? How do we encourage them?

I think the editor of one of the daily news papers here in Denmark had a point, he said the function of the demonstrations right now is actually to give the politicians the popular support that they need in order to start making policies about climate change. Because as we saw in France with the “yellow vests”, if that's what you call them in english, I am not so sure if there is not, the “yellow vests” were basically a reaction to the implementation on policies about climate change that were going to be effecting the most vulnerable populations of France, so there was a political will to do something about climate change, but it was affecting disproportionately the people at the bottom of the scale and they rose up against that, understandably. So there has to be some kind of connection between social justice, economic justice, and climate change issues, because they are going to be effecting the wealth that we have, and that is what politicians are really afraid of. And in Denmark which is all about I mean despite increased liberalization since the 90's and erosion of the welfare state, it is still about maintaining quality of life that is supported by public services that we have, so all politicians in Denmark are afraid of climate change policies that are going to have to make the quality of life worde, and that is why they are all jumping in the band wagon of technological solutions, and such things, because that will solve the issue of money.

How important is social media in all of these movements, and especially climate change, in your opinion, like, do you think they help a lot, like do certain platforms really help promote awareness, make people more aware, interacting with one another? How do you think social media fits into this?

It's a good question. I am actually kind of off social media at the moment, or I have been for some time, I have a Facebook account and I have an Instagram account, but I don't

use them anymore. Um, so for once I have actually been outside of what's going on with regards to that even though I used to be once very much inside. So I would say i've gotten to know what's happening in a different way through friends but I think social media is especially instrumental in getting young people engaged and I don't think that social media is going to get someone going from not knowing about an issue to suddenly standing outside of parliament and demonstrating for it, but I think campaigns on social media can make people who might already be a bit triggered or interested in the subject aware about where they can go to engage but to create that actual engagement you need that face to face interactions and you need a friend to drag you along. So it does, social media does create that bridge between someone wants to do something and they want to get other people in, but the social media i think really only makes people aware that they can enter in and then you need some kind of mechanism for them to do that. But i think that might be my cynical because i can just sit there and say "I like that."

Yeah, but you're not really involved

But I also think that social media, just to add one caveat, social media is not just a place where we consume, it's also a place of cultural production. Especially for youth today, people who are under 20, maybe even under 18, like, it's a place where I used to once have a blog online but now they have like, they actually produce cultural content on instagram accounts, and on snapchat so it's also, so if you look at it as a place of production it's also a huge, maybe empowering factor in the fact that they can have a say. So there is both the direction that makes people aware, from someplace on high, let's say a campaign or organization, but there is also the direction from below where young people are producing cultural content for these different movements. I think you can see that, you know just like all the banners that were at the global rallies, I mean, some of them, I find it so interesting that the, some of the tag lines were the same in Germany, and in china and in Brazil because we're all reading the same kind of things and they have all been produced in the same context of the internet, so there is something there.

So let's say Im in Denmark and I'm very passionate about climate change and wanting to do something about it, where do I start, where do I begin to actually do something, just if I never met you, or never met anyone who is involved what would I do?

That's a really good question. Where do you start? I guess you start with a google search, I guess google searching is really the place you start. But that's going to get you random information I supposed. So I mean the way that i've become involved is through friends, but that requires you to have friends who are involved. So this is very interesting, actually that's the problem and that is what I have been struggling with myself is where do you start if you are starting from scratch.

And maybe that's part of that action thing is that there probably a lot of people out there who do care, and are passionate about it but really have no idea where to even begin, and where they should be doing these kind of things, so they kind of give up on looking you know and I think maybe that's where, potentially, Green Overview could come in, and what were are hoping to learn is how could it be that resource to find these kind of things as well as maybe that mobile application that we talked about is that it could show the different events and the different groups that are around and wherever you live, whether it be Copenhagen or just around Denmark in

general and maybe it could show you different things you could go do and different things you could be involved in and the times and location and so that was kind of an idea we had. Maybe you have some thoughts on that.

Yeah, but that's also what I think is the potential power of Green Overview. Like if it was a well known website and a well functioning website it would really be a good resource for people who just wanted to start being engaged to go. And then I guess, I mean I've been talking to a lot of people who are a bit older, like over 60 years old, and they are happy to go to a website that they have heard about, where as young people would know about such a place through social media mostly so if it also had an instagram account, or an app like you say, but that, you maybe find out about it through a hashtag or something but not like that, but I think it definitely has that potential. And then the question is, how do you bring it to the people?

It's like, do you want to target it more of being a resource for information about sustainability and climate change, or do you want to focus it more on actually connecting people and showing where certain events are and how they can get involved or maybe both, but I don't know. In your opinion, do you think that would make it too cluttered? With information, and events, and social? Or do you think it should just be targeted?

I think that's all about, to be honest, I think that is all about presentation, I'm sure it could encapsulate all those things and still be effectful. I was recently on the Green Student Movement's website and that really spoke to me because it was, they just re-did their website and, or they just made their website, they are very new, and it was very clear, the message was quite clear and then there was an option to engage which was basically a link to their Discord platform which is just basically like Slack. Do you use Slack? So it's like Slack, but a non-profit I think, so basically you just jump on their Discord platform channel and you're in, immediately you're in where the organization is happening. Now that appealed to me because I have used such platforms before and I just wanted to get in and see what was going on and of course it's not going to appeal to people over 35, or over 40, but there is something there that like, I didn't need to attend a meeting or go somewhere to see what people were talking about immediately. But that is like within one organization, and I have already decided that I am sort of aligned with that organization. So I think the power of Green Overview is to me atleast is a place where information is gathered and it's very clear how you can engage, and if you want to engage then you follow the links to the different organizations, and you see when they are next meeting. Well you can see that on Green Overview as well but, you can see maybe their contact information or things like that.

Maybe just, as a clarification you had said maybe there is a need for one website or place for people who don't know anything about sustainability to go to and get involved, and say Green Overview, is very well known and people go to that website what do you think people would be looking for right off the bat, would it be these groups? Or would it be like, daily tips, or news, or politics?

Oh that's such a good question. I think the, but that's my personal preference, in my personal opinion as of this moment is that Green Overview would be immensely useful for people looking for information on how to engage. And so information like, consumer

information I find to be at this moment somehow irrelevant mostly because I'm of the political opinion that we've been talking about how to consume for like the past 10 years, and for my it's just a structural issue it's not an issue of whether we buy the right plastic or not. So I feel like Green Overview actually has the potential to get people critically engaged in a political way which i did to be much more important than whether people recycle or not. And I think people, there are lots in Denmark has a kind of a string history of critical consumer advice, there's like different organizations that exist basically to inform consumers about products that are quite well known that release magazines and have a website, and they are very much also about sustainability. So I would say that Green Overview would really be a good place to go to really get like how can I be politically engaged. But again that's just my political persuasion more than anything else because I do think that people, if they are confused about what kind of consumption choices and what kind of other things are best, then they have other places to go. Does that make sense?

Yes, since we are redesigning it, or reorganizing it, I feel like maybe we should have a few more narrow things right on the, either the home page or if you scroll down a little right to capture their attention, you know what I mean so I feel like it should be more, have more specific things.

Yeah, prioritize the information because it's not like having information, like consumer information or other information is bad, but then it needs to be presented in a way so that that is less of the visual.

III. Notes from Interview with 2 volunteers of One World Center

Told them why we were at the demonstration, about Eco-net and Green Overview, and that we were looking for people to interview.

Person 1 and 2: students from Copenhagen, volunteering with One World Center to maybe get people to join their program, they are all individually involved in other humanitarian projects, centered around poverty in Africa.

- One World Center- organization aiming to take action against world wide poverty and climate change
- Had a hard time finding out about this event
- Heard about it from a Professor's friend
- When they tried to google it, nothing came up, had to go back to professor to get details
- Liked the idea of an application because they couldn't find anything online
- They are people who are interested in sustainability but want information on how to get involved
- Application with events, times, places, organizations who are holding it would definitely help them with their project!
- They have their own Facebook page and tried to find events via Facebook
- People taking action vs. Parliament
 - "People are definitely aware, but I think it's a combination of both to get more sustainable action"
 - "Spreading awareness about what people can do is definitely important"
 - "Needs to be backed up by Parliament"
- "I think that these events are somewhat effective, but there are not a ton of people here, so we need a way to get more people aware of these types of events."

IV. Transcription of Interview with a member of Extinction Rebellion

Okay great! Alright. Just to start we just wanted to know more about your movement and your experience with sustainability initiatives.

Yeah. sure. So I am here as representative, I guess, of Extinction Rebellion Denmark which is a movement gone pretty global. It is hard to say it is represented in some 30-40 countries at some level but they probably at different stages of organization or of getting together. Here in Denmark, again it is a movement, we don't have membership fees or anything so we don't really know how many people exactly we are but I think there is about maybe 70 people who are active in making things happening at some level and then there is a wider range of people who are likely to show up to our actions. We have pretty much the same goals as the UK movement. So there is three of those. The first one is that we want politicians to tell the truth about climate change and the ecological crisis. Here in Denmark it is very much you get the impression that we are really there and we just need a few corrections and then we are on the course to solving this problem and we don't feel that that is the case at all. The second goal is to um we want the danish economy to be carbon neutral by 2025 which is very very ambitious goal. The third one is we want the citizens assembly, you might have heard of it. I know they have one in Ireland. It is kind of a citizens assembly, as a supplement to the current democratic process here in Denmark. If you are new to this idea of the citizens assembly, it is not a governing body it does not have any official power. It is more of like a think tank that then gives recommendations to parliament.

Um so you know based on everything you kind of said, there you were talking about one being the economy and companies and then we look at government. In your opinion, how do we fight climate change and where does the change really happen? Does it happen more with the government, or is it companies, or is it with the people?

All of the above. I guess the question is: Where does it start? Um and I think right now we kind of maxed of how much we can do as individuals. There has been a lot, they way it has been explained to me is that we have the cup 15 in 2000 and something 9 here in Denmark. That was a big support. A couple thousand people went to the streets and they didn't change anything. So I think people were kind of disillusioned with the whole political process and they started doing it on a personal level. Like minimizing their own impacts and all those kind of things. Which were kind of good. Like people started moving into communes and housing and stuff like that. Then we will just be the change if the politicians won't do it. And that's kind of been going ever since. And I think we can reach a level where the whole climate issue has become so individualized that we are missing out on what are some obvious steps to take to make things better. So yeah on the political level, or even the government level. Um sorry the copper level. That is one answer to it. I think it is a matter of whether it makes more sense to focus your energy and right now certainly need for a change in politics. A really good example is that well you can buy an electric car as an alternative to a car that runs on fossil fuel but then you still need I mean, 17% of the energy that goes into your car is going to be made by burning coal. So you really, in many cases, you only have the choice between two bad options. And I don't think we can change that just by consumer pressure alone. I think

that kind of is a story that has been told to focus on the individual rather than politics and companies. So yeah. Does that answer your question?

Yeah absolutely! So from there we want to know, do you think society is taking enough action to fight climate change? Or do you think people are just not really aware?

I'd say both. And I think one follows from the other. I mean, if you look at the ITCC reports and the changes that we need to do globally to prevent just the worse from happening, yet alone stopping climate change altogether, it is very drastic what we need to be doing and we are nowhere near doing that globally. And I also believe that Denmark has a big responsibility for minimizing its own impact. So what else we are not doing locally and in my country either. I think that a big reason for it is that we are just not aware of how serious the situation really is. I am a psychologist and I think there is a lot of *psychological* measures that play here. That are brain is simply not geared to perceive the kind of risk that this is. So I don't think we are doing enough and I think one reason why we are not doing enough is that we simply don't understand the gravity of the situation.

Okay. So now to kind of follow up on that question: Do you think social media could be used to help increase awareness and improve the awareness especially in Denmark?

Eeee, that is a good question. I think it could be used to channel awareness into action and I think that is what we are hoping to do. Umm, then there is a whole issue, I am not an expert in social media, so but there is this whole issue of echo chambers that if you are conscious about climate change then you will be exposed to stuff about it and if you are a climate change denial then you will be exposed to stuff that denies climate change. So whether you can raise awareness about it, I mean well we are trying to do it right. We are trying to reach out to people who might be interested in this and then get them to come to some of our awareness raising events and hopefully show up and have awareness raised.

So, currently that is what you are doing right now to try to increase awareness, part of it?

I think we are trying to convert, I think we are more trying to make people active than trying to increase awareness. I think there is very large awareness in my country. Even if the full gravity of the situation is not understood. I think people are aware of this issue. So I think it is more a question of expanding on that initial awareness and hopefully mobilizing people to do something. I think those two actually go hand in hand. I think that if you see a way to act on a problem you are more willing to learn about the seriousness of it. So by giving the people a way to act on it, I think, also make them more willing to learn more about it. Even if it means internalizing some facts about the world that are not really nice to look at.

So personally how do you share information about your movement to others? I know you talked about: you message people and you look to try to have people come to some of the different gatherings, and whatnot, but do you have any other methods that you use to share information about your movement?

Umm, social media. I mean I am only involved in the Facebook group and I know we also have an Instagram account and then there is this docup which is kind of like a news

bulletin board for activism. When we remember we also post stuff there. Then we do some work with journalists, trying to get mentioned in like the official or mass media yeah.

Okay. So do you think if there was a social media platform that was, its sole purpose was everything to do with green and sustainability, do you think your movement or you personally would have a use for that or if it something you would be interested in using?

Yes, sure. I mean it depends on the amount of users or the quality of the users. That is everything on social media that if we saw that, because that is another platform that we then need to update. So if we felt that our time was given well out, that the people we could reach on that platform were spot on and their responses to the stuff we put up. Then sure, we might do that.

Okay. And then I want to get your opinion on so there is also a mobile application that maybe shows certain events and gatherings like yours in the are, do you think that would have any use? Just for people to see what they can do and take part in push for sustainability and climate change.

Maybe. Maybe. Not sure if it is a functionality that facebook already have. I mean when one critique you might aim at that these big social medias that become kind of like cancers which is swollen up the whole internet. Of course it is easier when it is all in one platform but it also problematic. I am not sure if showing up an action is a spontaneous thing where you know you get a notification and then uh uh uh hey, lets go to do civil disobedience because that the thing I forgot to mention, but that is kind of where we stand out from some other climate moves is that we have, we do non-violent civil disobedience. One of the primary ways that we try to draw the attention to ourselves. I think that if you haven't done that before then that it is a longer process to be willing to be arrested for this cause. One of the consequences, if I do get arrested, and it is not something you just make up your mind of about it but if we only have one action goal then we could quickly draw to it. Hey there is something happening here going on right not then sure. I think they have already tried to do that with facebook livestream something like that. It would help to see what the added value could be for us.

Thank you for taking the time to talk to us.

Yeah. If you could come up with something to help people organize around this that would be fantastic.

V. Transcription of Interview with a member of 350 Movement

Our first question is, if you don't mind, tell us a little bit about your movement and what you guys do and just give us a little history of it.

So you specifically are interested in Klima, ok, so I wasn't part of Klima___ from the beginning but I got involved in December or January and the initiative started with the Danish affiliate of 350.org, if you know them, and in Denmark it's called Klima Bevegelsen --- and it's been an NGO in Denmark since 2008 I think, just before the Climate Summit here in Copenhagen in 2009. And they've been focusing a lot of time... but they were inspired by protests and they wanted to do something similar and usually it's not the kind of thing they do, they do a lot of lobbying work and so they said basically, "let's just do it and see what happens." And I think when I first saw it I thought it was a horrible idea because then you have to stand there every week and you don't know when the election is going to come and the risk of failure is bigger than the risk of success because you have to be there every week and if you don't then it's sort of like, it's not really important enough. So I joined because I saw that there was a lot of people there but there was also a lot of room for improvement in the sense that you could make it more welcoming and more fun to participate, and so I've been a co-host and helped find some of the speakers for the different Thursday mornings.

So in your opinion, with climate change and sustainability, what's the biggest difficulty or challenge, is it more that people aren't aware of the issue, or is it that people are aware and they just aren't taking enough action to actually go about being sustainable and fighting climate change?

I think certainly people are aware of the issue, we spent the last 10 years being aware or becoming aware. I think the problem has been that, at least in Denmark, people are very strong believers of the "system" so if the politicians don't seem to act, or take it seriously, then people don't, aren't really concerned. And they expect, usually, other people to lead the way. And so I think what is needed is partly making it a lot easier for people to act on these issues and see that they can make a difference in their daily life. And also that realization that politicians are not going to do something unless they feel pressured by us to do it. And in that sense it's, the important thing is to learn to be, to take a moral stance and visibly say that this is important and that we are not going to go away until something happens.

So do you think that the government is doing enough or they're not doing enough to help fight climate change? Or where do you think the government puts climate change on the priority list?

The current government? They don't really. They would rather that it all went away and that they didn't have to talk about it. So, generally, I think they see it as a huge expense, something that you have to invest a lot in now and you can't see the benefits. And why do that when you can give tax-breaks instead? And I think they will have to be, sort of, dragged into the future, kicking and screaming because they would like to say that they are green and they know they have to say they are green in order to win the election, but they are not really committed to doing very much. So I think Denmark, for the past 20 years or so has had this positive self image of being very green or very, sort of, elitist in

sustainability. And for the past, I don't know, 15 years or so, we haven't really been doing that much. So we've just been resting on the laws, on some innovative and visionary politics that happened 20 years ago.

So do you think the best way to influence or persuade the government to push for more climate change policy and things is to continue what you are doing in the marches and things outside of the government building or is there petitions you can sign or how do you, do more people need to be involved?

Well yeah, obviously more people need to be involved and people need to vote to change the government basically. I have little faith in the current government will do anything unless they are pressured to do so. And I am also part of a campaign call So Er Den Nu, which focuses on making sure that climate and environment politics are the number one issue for the election. And the idea is to petition, initially, so now more than 21,000 people have signed it and the idea is that using, building a list of people who want to take action and be part of making sure that there won't be any election debate anywhere in the country where climate and the environment isn't an issue that is raised and discussed so that none of the politicians are capable of dodging it in that sense. And right now we are working, organizing what we call Green Dinners all around the country on April 10th so the idea is that people can host dinners in their own homes and have a discussion about climate and the environment. And ideally also use this as an opportunity to talk some of the people who aren't engaged in these types of issues, or use it as a platform to get people who are already worried about these issues to get more engaged.

So you talked about engagement, how do you think social media could play an effective role in engaging people and continuing to grow the movement and initiative?

I think it already is. It's lowering the barrier for how people can get to know about these things and how they can get interested in it. There are a number of Facebook groups for people who are concerned about climate change. They can find each other and realize that they aren't the only ones that feel this way. Because a lot of people who have these concerns, they're surrounded by people, they are realizing there are people in their workplace and their families who do not share their concerns so they feel alone to some extent I guess it's this sense of pluralistic ignorance where we all think we are the only ones worried about this. So we need to be a lot more visible with our concern and talk to people about these things. And social media, in that sense, is an easy platform to use to get people to talk about these things but it also, very easily becomes kind of an echo chamber where the people who engage with these posts, because of their algorithms, they see more of it, and the people who don't engage see less of it.

So do you think maybe there needs to be a separate social media dedicated just to green initiatives and anything that has to do with sustainability? so that that way they sort of cut out everything that's not to do with it?

No. I think quite the opposite I mean separating it out in that way would just make it worse because then, I mean, my Facebook feed is already filled with climate stuff because that's what I engage with, so Facebook already knows this and can adapt to that. I think the problem is more if we want to build a bridge to people who aren't interested in

this or, then social media can become a barrier. So that's why we are doing the dinners as a way to sort of open up this to people who need to build on existing social relationships to be interested in it.

Ok, so you don't think it would be beneficial to maybe have an application or website that would show when certain green events were, or like the dinners you talked about, or the movements outside of the government building, like do you think an app that kind of showed all that information, or a website that showed that information would be beneficial or do you think it's just better to keep it on Facebook and the websites?

I think there's, well that's a different question from what you asked before I think. But I think there is a lot of potential in sort of creating greater alignment within the Green Movement because it's very fragmented and people aren't, you know, so many things are happening that you know, people can't even keep track of it even if they spend a lot of time doing it. With the Green Student Movement and the climate strikes and all the different green NGO's and so on, but I think if you tried to create that kind of overview, I think it would be a frustrating experience for most people because they would hope to find a few simple answers but there won't be any simple answers because all the different groups will have ideas of what to do and how to do it. But even so, I guess, if you have that kind of overview, it might at least push all the organizers to collaborate and take more care in planning events that sort of end up on top of each other because right now we have this weird situation where we have the demonstration every Thursday morning, but now because of Friday's For Future, the school strikers will be striking on Fridays outside of parliament, so we, technically we would have two days a week where we have people would be there, so we kind of divide up our attention and our impact and that's a little bit silly.

So what's the best way then to really try to unify those, because there are so many different groups and we seem to hear this a lot, that there are a lot of different groups doing a lot of different things, but how do we unify all the groups together? And is it people being stubborn, or just not knowing about other groups or is it... in your opinion, how do we really unify those groups?

I think, my experience is that just going out and saying that you want to unify won't make it better. It's basically you need to do something that appeals so broadly to everybody, that they feel like they are missing the party if they're not part of it. And I think that the climate strikes for instance have the energy to do that because they are so many people, and so many young people who are part of that, that all the other groups will align to be part of that. But it's also, extremely disorganized, and, you know, people just add in their own strikes where ever, because it's just an idea it's not an organization and I think it's better to think in terms of where you find concrete actions to rally around rather than trying to get you to be part of the same organization. We have that challenge with *green organization* because we have three demands and then we try to get people to sign up to those demands and then use that as a platform to put pressure on the politicians, but, you know, our idea would be to be sort of a common platform or kind of alliance for all the different green interests. But you basically sort of need to have the momentum that people feel that they should be part of this one other than something else. And the way it works in Denmark right now is that many of the groups, they start with

momentum that they borrow from the outside, like the extinction rebellion or the Friday's for future, they are international initiatives that are then copied to Denmark, and then they use the, sort of social media presence of those groups to build a presence in Denmark. So I don't think there are any easy answers, I think what we are trying to do, sort of do, I hope, is something that will work for the longer term because we also make an effort to bring NGOs on board and then they have some resources and they have some money to put into it and make sure that it can be sustained not just something now, but something for after the election. I guess it's a matter of philosophy basically which approach you think works best because I think having one unified movement is unlikely and in any case, people are different and they help fund one initiative or start one initiative, then they will feel for that and then you know, even if its existed for three months, they will still feel like this is the most important part to be, important project to be part of. And if somebody comes along with a different project with a new name, then you'll be like "why should I give up my project to be part of yours, why shouldn't you do the opposite?"

Well alright, I think that's what we have today, so thank you so much again for taking the time to talk to us a little bit, we know your busy, so I appreciate you fitting us in to your schedule

Well sure! Well what will be the project, the product of your project?

Ya, so right now we are trying to learn, talk with different people in different movements and see what their feelings are about the issue and their opinion, and we hope that we will be able to cater that kind of thing around Green Overview's platform. We are trying to help improve their website and make it easier to use and then potentially give them a mobile application that could be used to share events and certain things in Copenhagen and in Denmark that could help push for sustainability and those green movements like you talked about. Try to get a more unified effort, so that's what we hope to be able to provide them, and that's what we are trying to learn right now.

Yes, because I mean there are different aspects to that I guess because one is the political movement and one part is sort of grass roots movement of skills sharing or supporting people locally doing all these things which might not be specific to political, in that sense. I think just opening up people's' eyes to the different possibilities of what we could do locally would be useful as well.

VI. Transcription of Interview with 2 members of the 350 Movement

Taking part in these helps us get more of an understanding of how things work here, because this sort of thing doesn't really happen as much in the US, especially like a calmer protest like this, you just don't really see it so it's good for us to know how this happens here the attitudes towards it. so you were talking out, did you help organize this event?

Person 1: Yeag, we are part of this kind of small group of coordinators, so we are actually from different, kind of, grassroots organizations. So I'm with the Green Student Movement, you are in the...

Person 2: Parents', um, Climate Parents. I was in Climate Parents after I started here [Climate Protests on Thursday].

Person 1: And also we of course have the 350 Movement and also the Grandparents' Movement for Climate Action, and such and also I am one of the coordinators for the Climate Strikes for Future and were just, like, a small group of green organizations

So how did that work, like reaching out between all of each other and organizing this together? Was that easy?

Person 1: Well you've been here longer [looking at Person 2]

Person 2: I just saw it, like a link, on Facebook and I came and little by little I got involved. It's just like organic, it just grows! It's not, I think before I thought of this, before you have these organizations, and now we are organizing and there's a board and there's, you know it's very buratic, but this is just like, it's growing! It's much more organic, it's not like a movement, now we're gonna make a campaign to this, that may happen as well, but it's much more people just "i want to do this, I want to do this" and it grows.

Is that also how you spread the word about this event too? Through Facebook, word of mouth, talking to people?

Yeah, primarily that, and also, I think a lot of people come here because we go home and we spread the word and also a lot of people are some person's friends and friends-friends and all that, but uh, ya mostly on Facebook I'd say.

So the people we are working with, Green Overview, is supposed to be an online platform where people can share information about events like this, and also like resources for knowledge about how to live your life more sustainably and stuff like that. So would you like to have access to a platform that's more specific like that rather than having Facebook, which is general and commercialized?

Person 1: I'd say, I'm not a big fan of more platforms. We have more and more apps and all that that we have to use. I like, I think Facebook just has it all together and

Person 2: And you can reach other people, who are not part of the platform. You have to, that's just another, you have to make sure people know about this, you have to know,

make sure people know about this platform, you have to make sure, so its like it's not easy to reach people where they are.

Person 1: and I think it's really hard to gather all the different events that are like, that's happening. So, so I would be afraid that I was missing out, or something like that. For me personally I wouldn't use that I would, I get enough information through Facebook I think.

We just wanted your input on, like, if you would be using this platform because it is mostly for, the idea is mostly for green organizations and movements to join in one platform. But if you think it is complicated then I see where it comes from, but we are trying to get a little bit of everyone to like, contribute so it's like the place where people can know of all of the events and stuff like that.

Person 2: Well maybe it is different for you, in the US. You're from the US?

Yes!

Person 2: *laughs* Because I don't know how it functions there. I mean here, everybody is on Facebook, maybe you need another place to meet. I don't know

Person 1: And of course you can make such a platform, and you know, uh, and some feedback for such a platform would just be that you have this kind of, some kind of calendar, and then you have some information about what you can do yourself, what do the politicians have to do, something like that. Uh, and then also something, um, interactive like, um, here are some things you can sign, or um you can be a part of this, or a chat or something like that so that it won't be only this one way communication but there would be a place for like dialogue-

Discussion

Person 1: and ya discussions and also it would be nice to go somewhere and have all these petitions where I could just click and sign, and such so but it's, it's also it doesn't only like uh, what the word, inspire to do something but actually give you the means to do it, ya something like that.

VII. Notes of Interview with a member of 350 Movement

How many of the gatherings have you been to?

This is my 3rd time coming.

How did you find out about this gathering?

A friend told me about them, she is one of the coordinators, and I live nearby.

What do you think the problem is with global warming? Action/awareness

I think people are slowly becoming aware, but are relying on some kind of technology to come out to solve the problem. I want people to know that there are ways to live a more sustainable life. Its ok to drive an electric car.

Do you use Facebook or any other social media platforms to find information about these events?

I don't really like facebook, but I know a lot of people use facebook to find events and information. People are always sharing and posting. $\frac{3}{4}$ danes use facebook, so I know it is a very popular way to spread information and engage with people.

How effective do you think these movements are at promoting sustainability?

I think these are a great way to gather and increase awareness. These “demonstrations” are not considered demonstration or protest, they are street meetings. Similar to the US, Denmark citizens have the right to assembly on any streets (approximately 25 people), but police here don’t care, they come to check in and make sure that everyone is all set, then leave everyone alone in peace. There are no “counter demonstrations” like there were on Friday because 1. This is not considered a demonstration, and 2. Most people are in support of this movement.

VIII. Transcription of Interview with Independent Green Activist

Ok great, so I guess we can start right? So our first question is, have you ever been involved in any green movements or any sustainability efforts? Like is there a specific group that you have ever been involved with or heard of?

Yes and No. I have been involved in starting groups like that back in time but mainly i have been working with support of groups that were already there. But I was involved in the start, before sustainability really came on the agenda, I was involved in a big movement that had a really large part of its activities linked to sustainability and environmental issues.

And so, what did those groups, like what there their primary function and what did they do? Did they have gatherings or were they just more information based? Or like what did those groups do?

They were pretty much, how do you say, activists in the sense that they were trying to make the agenda visible to people. They were not specialists in any kind of way they were doing activism in the sense that they were doing happenings and street activities and stuff like that

So they were trying to promote awareness to the public and just get people more [involved], ok.

Scaring people *laughs*

So do you think now enough people especially in Denmark and in Copenhagen they are aware of the issue of sustainability and climate change?

Very much.

So you think people are very aware of it?

I'd say it has increased very much over the past 2-3 years and it has escalated quickly, last summer when we had a summer period so hot that we had never experienced it before. And many people had their eyes opened during that time. "This is nice but is it really nice?"

Ok. So we've kind of heard that a lot people have said it seems that recently there is a trend that more people are really understanding the issue and becoming more aware, but that kind of transitions into the next phase, are people not taking enough action to actually go about being more sustainable and fighting climate change, or do you think it's something that the government isn't doing enough of? Like where is the disconnect if... like why is it still an issue if everyone knows about it? Is it just people aren't doing enough?

I think people know, generally know about it, maybe not in detail, but knows about it, but they don't know what to do about it. And they are starting to, how do you say, garbage, separation, recycling yeah, plastic one thing... That kind of activity, has become very common. People are very much aware of that, especially with plastic I think, but I also think there are a lot of people who think that the government and maybe not as much the

government as the big companies, have a responsibility that they are not living up to. That they should be doing much more. I think people in general have the feeling that they, they can do only that much. But that “me and me and me” and “you and you and you” will not do the big thing for us. We have to have some legislations, some regulations in that sense. We have to have stronger control of the companies, how they are producing how, for big things that they are, that we know already is harmful to the environment and stuff like this. So in that sense the government and the companies have a responsibility that they are not really taking upon themselves.

So do you think the best way to influence the government to make these changes is by protesting? Or is it by voting for different candidates? Or is it, like how do we go about making the government more aware and making it something the government actually wants to do and help fix?

I think all of it, we need to do all of it. Protesting is one thing, we also need to vote for the candidates, we need new government, we need people who take these issues serious. But i also think we need to explain to people that it makes a difference! That what they do in their daily life makes a difference if you are using gallons of clean water and just throwing it out. It makes a difference if you are not caring about how much heat you put on stuff like this, it makes a difference. So each one of us can make a difference and i think for a long time people have had the feeling that it didn't really matter. “I can do this and probably should, but it doesn’t really matter.” And we need to make people aware that it does matter. Whatever we do each of us it does matter. Also how we take positions on who we vote into parliament and stuff like this.

And so that's where we hope Eco-net and Green Overview can help and that their platforms will be able to show people something that they can do, as well as, you know, what groups they may be able to join to actually come and learn and connect with other people in Copenhagen and in Denmark so that they can hopefully help influence the government and just, unify towards this goal. So do you think that there is a value in having a social media style website, like Green Overview is trying to do and actually fighting climate change? Or do you think they should target it in a different direction.

No, I think it’s worthwhile having a kind of direction because people can often sit with a question of “where do I go” or “who can I ask” or “where can I find answer for this and that” and in that sense I think it makes sense to have a place where you can get an overview. It has to be very simple in its way of presenting itself. Because we are used to, I mean if a web page is too confusing or if there are too many things that I have to consider before I go into it, or while I go into it then I would rather go somewhere else, or not go anywhere at all. So it needs to be very simple: what can I do, who do I ask? Like very simplified in its presentation.

And that is one of the things that we are trying to figure out, trying to make it as, because right now its seems like the website is very cluttered, and there is just a lot of things that are going on.

Too much information!

Right, yeah, so we have to try to figure out the best way to present only the content that people want to see and that's actually useful and valuable.

It can be divided up to issues that have to do with energy, waste or garbage, or farming or organic farming, like the themes are, instead of having all the organizations, all the details of what people do, like if you know, I want to know when I put my garbage, in all these different boxes, there is a rumor saying that when it leaves my backyard its put together again, for instance. That's a rumor, it has been running for years. So people say, why should I bother having all these boxes when it comes to the municipality, they just throw it all together again. That kind of, how do you say killing bad rumors, could be very useful, because if that kind of rumor goes on and it has been a rumor for the organic food production too that they mix the conventional milk with the organic milk and sell it as if it was organic milk, all of it. It's a rumor that goes on. And people who are not very strong in faith, can skip taking care of anything, skip taking action when they believe in rumors like that and are not convinced that things are different. In some sense it needs to be very simple, maybe you do it "you think this is the truth, that's not the truth, this is" and you can find more information through these organizations, they do this and that. Like that kind of simplification would be useful I think.

Ya that's a really good idea, that is something we talked about like having tips or things you could do in your everyday like to be more sustainable, I mean it's one thing to look at different companies and organization type things, but if you yourself are not actually living sustainably because you don't know how to do it, that's definitely something that we can consider incorporating into the website. I mean that's probably a great idea just for people to come on and learn a couple different things that they could do everyday, so ya, i think we could definitely implement that.

It's necessary to figure out who's the target of a website like this because people who are very well aware of the situation like I am, like people who are working with things like this, they are probably only using it for, ah how do I get in contact with this or that organization. Well I know overview, they can help me. That would be simple and helpful and easy but if it should be, if the ring should be spread to more people, or people who are less aware, it should be very simple and easy to find answers, I believe.

And another thing that we actually thought about doing was designing a mobile application, and that would be more geared towards people who are looking to find different groups and different events where they could go and participate. Because in some of our interviews, we talked to different people and they said, we would really like to get involved, but we don't know where to go or where to start or join these groups. A lot of it is just friends telling friends, which is fine and great, but i think if we could create a mobile application where people could go on and look to see what's around them and they could go and actually participate, you know that's actually one of the things we were looking at. What do you think about that?

Working in your local area, yeah that would be good. I think that would work for young people especially, I think all the people like myself would probably not use that as much, but I trust in the young generation to use that! And I believe it would be a way to make people find each other. That would be good, that would be helpful.

We thought the same kind of thing, have the website that everyone could use, but I know that there is a lot of younger people, especially myself that I prefer to do a lot of things on my phone just because it's easy for me and always on me, where as my computer is not always with me.

And we know that system already, we know where to go eat, like if you were in Norreport, you would know it pops up on your telephone, you know there are good burgers here, so that is used already, so just add it to the green area!

I had another question, so um, are you on Facebook at all?

Oh yeah.

So one of the aspects that Green Overview currently has is like a social aspect very similar to Facebook, but we have kind of found with other people that they're not really willing to go to another social media platform to engage, do you agree with that?

Yes I agree, I think we have enough of them. Let's make the one we have better. I think the people are tired of being online all the time and the more we are on various networks we have to check in and check out from, we get tired of them. I think so. My daughter, the same age as you are goes "no, I use instagram, that's it. I'm not using anything else," though she has profiles on various others.

And then another question, not as related but you had mentioned earlier that you had helped create and start a lot of different groups, what have you found is the best way to get people engaged, like do you have to give them a certain type of information, or just through word of mouth, getting people know know to get involved, or is there any specific tips that you might have?

There is probably not one answer to that, because it's probably different from person to person, what they, what activates them. I'd say the most effective way is to have something absolutely concrete for someone to do. The less concrete the more, the easier they can skip out on it. If you have a task, we have to move this from A to B, we need hands, go on and help move it from A to B, that is something people can easily see themselves in, but if they have to read a lot of things before they move from A to B, they probably will be bored before they get to do things, but it depends you can also find students to whom this information would be useful before they take this position on doing something. So I'm not sure we can say its either or, it's probably many different things, but from my experience, it varies a need of something concrete to do, knowledge is not enough to get people to be active. And this is a little bit the same of what we talk about before, what can I do in my life to do something different from what I'm used to in order to take active part in the change that needs to be done so if it's not concrete and i'm not able to turn down my heat or seperate my garbage, or not buying too much new clothes and all this stuff then I wouldn't know what to do, it needs to be, "you can do this" or "you could do that". This would help and this would help.

I think that's definitely something we could use, for our website, like what we put on either the home screen or individual tabs that will draw your attention to things you could do right away, like you said.

Probably separate things, "To Do" and "To Not", they are two different things! There are things you can do without knowing very much and if you want to know more this is where you can find the information. That would be helpful I think. People can choose or they can do something, and say I need to know more and then they go from one site to another.

Appendix H - List of Features for Website and Mobile Application Mockups

I. List of features for website mockup

- Green events
- Green organizations
 - i. Green businesses
 - ii. Green movements
- Green information
 - i. News
 - ii. Articles
 - iii. Books and Journals
 - iv. Podcasts
 - v. Videos
- Petitions
- Ability to search for information
- Ability to sort by location
- Ability to have an interactive discussion

II. List of features for mobile application mockup

- Green events
- Green movements
- Ability to save events and groups
- Ability to search for events and groups
- Ability to sort events and groups by location
- Notifications pertaining to favorited groups or events

Appendix I - Transcription of Interview with Eco-net Webmaster

Transcription of Interview with Eco-net Webmaster

The purpose of the interview is to talk about the platform, the website. Trying to understand a little bit of the technical background. Thank you for taking the time today. So just to get kind of get into it the first questions is: what is your opinion why users are not engaging the website? Do you think it has something to do with the way it is set up or do you think it just not being promoted enough? We just want to know your opinion on that.

I think that different things that may be the issues with the current website. Em I think cuz originally the website was not intended for social engagement. A lot more of like a static website as I said before. I can also sent you the old website we had before. This is basically what the website was based upon and since the last team they focused on the social aspect. We are still in the process, I think, of making the platform more like a social platform than database lookup yellow pages kind of website. I think that's the transition we are still in. And also I think Lars has a very specific view of how the things should be done which I think we should move in, maybe, another direction. There is also a thing there that he is still thinking how the old website works. It gets difficult to transition to this new thing.. That is one of the issues, that is transition yeah. The other issue I think is maybe that the website is not that targeted as of now. Because when you visit the website it really depends how much you know about sustainability and environment when you search on the website. So what we actually found out maybe was that it should be treated more to two specific things: the one should people just want to learn how to live environmentally friendly and about sustainability and another thing was these organizations or communities want to get involved with these people and maybe try to sell them sustainable products and all these kinds of things. So there is both this personal aspect an individual aspect and also this corporations and organization aspect, we should focus more on. But ideally we were told that we should focus on just getting people interested in the website. So that's what we mainly have focused on for now. Also because we are not a company, we are more like an organization. We get money from donations and everything. That is also a thing how the website should be build upon. That people want to support that. I think that is the sum of the issues we are still dealing with. And also how to really make the website stand out from other websites. What we are really doing, there are actually not other danish websites doing that and we are also in a period right now where people really like to know about their local community and about what kind of things they can support in their community. We should look at facebook or other platforms they are a lot bigger and it is a lot more difficult to get to know what is actually happening in your local environment. That is also a thing that we have talked about targeting more on this website and making more easy and clear. And also the website is made up around a national focus and not a global focus. What we talked about maybe working together with other organization, other countries not only Denmark. All these things we would really like to improve and I think the main thing is how to really

make it easy for people when they come to the website, interesting and easy to go through because there is so much information.

So do you think the website is a bit confusing for some people or do thing maybe it is maybe too complicated?

I think the thing is that when you visit the website you have too many options to choose from and too many options seems like it is too complicated for people even though we have tried to simplified all the things. I think that we should really, when you visit the website, it should help them take the hand, these are the options. Going down and learning about sustainability, knowing about your local environment, what organizations are there. So it should really be very very simplified. So they feel like they are guided through the whole process. It seems like right now it is just when you go there you can just search stuff and then you could approve things. Maybe people find it too complicated too quickly. That is also, we can look at our google analytics we can see if that the bound trade is very high. People only stay there for a few times do not come back. At least maybe know about the website more or know about some of the organizations. But mostly new people come into the website, they actually just end up contacting us finding information and not using the website at all.

So you use wordpress for the website now, right, for the website?

That is when we had to move from the old website to the new one, we wanted to do it as quickly as possible because the website was going to be shut down. We didn't have time to build a custom one so we looked at platforms and found Wordpress. Basically what is handling all the indexing on the website and we just moved all the data from that platform to this one. The only thing we have changed since then is the design and also making it more of a social website. The real problem is all of these plugins are working together and all these different things that aren't really complete together and also the website wasn't really focused on being a social website but only a search engine.

Ok, so what are some disadvantages of using wordpress then?

I think the thing is Wordpress wasn't built for this kind of purpose, it is easy to get started with it and start prototyping things but it gets very heavy and cumbersome when you starting adding more functionality. Ideally we would need a platform that will support what we want to do with this website whether that is a social platform or something that is built for the kind of purpose we want to use it for. Because right now some of it is very patched together to function for Lars. Originally there were 2 developers but the other one left and it is only me to make the decisions.

So how difficult would it be to make a custom website, would you need any new software to make it?

The thing is you can use if you have the money you can of course have someone make this from the ground up. The thing is if you have the money you can build it, there are prebuilt platforms that support different kinds of things people actually use like the social platforms that support social activity so we could move our current stuff to that platform and there would be an improvement from something like this, also if we had the sponsorship or the money we could make a totally custom website but I think for now I think we need to determine exactly what we want to do with this platform. Do we want to be a completely social platform, and should we invest the money into a platform that fits our needs as of now. Lars doesn't know the best way to go, if it was my decision I would maybe chose maybe one of these things I have sent you, and use what they have made already because it is something that is supported and what we are building right now is something that only us are maintaining it .

And you can still have all the databases on one of the social media platforms and things like that you currently have on the Green Overview platform?

Of course the transition and moving the data would take time ya But I think with enough time to transition it would be possible, The other thing is I think that we can also the other way to go is we use the current platform we have since we have used it for so long and we really try to figure out how to improve upon the platform that would be the easiest way to go about it and we could try to optimize it as much as possible, because the other thing would take a lot of work to move this data. We already talked about it with the last team and we thought it was too much right now and that's why they focused on the word press part.

So if we designed a mock up, to what extent could you implement those changes, is there any limitations if we just created something and had you build it.

I think it really depends on what kind of design you make, if it is just a design thing then the current platform use has a page builder we can change in any way that we can fit better. That wouldn't be difficult at all, however if it is specific functionality that is not supported by Wordpress, that would be something we would have to develop or find another platform. I would say you should not make a mock up that is limited to what we can do, make ideal platform we could look for.

So what you are saying is, the design isn't really affected by Wordpress it's more just the function of what you are building.

You could say that ya, you can make any design and we could aspire to make that with what we have now because we could change that in Wordpress. The design we have now is just me designing it, I haven't looked at any specific things for the platform.

So what other additional functionalities would you like to see added to the platform or what other long term things would you like to see implemented to help the platform.

I think it would be more customized content, when you sign up for the website, all the content should be shown based on what you are interested in. It should be much more focused on what content you are interested in. They tried a little bit with the last team. They can just check some buttons about what they were interested in. Depending on what they were checked they were shown companies organizations. It should be a lot more focused on things you are interested in.

When we go about designing our mock up, do you have any recommendations on the best way to do it or do you have any experience making a mock up?

I have used some from time to time, most of them cost money if you want to use a good one. It just depends on what you are using but I would say you should take inspiration from the current website and from the last team. I think the new mock up should be very simplistic and engaging. That's the two things, the other being the focus on being localized. All the things in Europe municipality or in your region. This is what people are looking for or what they are interested in. All these factors together is what the design or usability should be in your mock up.

Another question we wanted to ask you is what is your experience in app design and mobile applications and is there a platform you know have maybe similar to Wordpress that you could make and application in?

Ya there are different ways how to do this, if you want to make it from the ground up you should use Meteor, which is a Java Script notes stack platform. You could code the whole website in Javascript and run this very efficiently. This takes a lot of time to build. You could also make web apps. Just make a template and show the website inside this web app. It is the same website just a mobile version of the website shown inside this web app. It is the easiest way to make an app without customizing a bunch of things. Also if you use one of these platforms they usually have built their own apps going along with their system. So that's basically my experience with, I haven't really coded something from the ground up to make a functional app like that. That is why I think it is better to use a web app.

So if we created a mock up, for what the app would look like, could you take it to a company who specializes in that, is that in the financial capabilities of Eco-net or is that a bit far fetched?

I think that it's the same issue with the current website if we got the money or the sponsorship we could do anything. So it really depends on what we can do right now. So of course if we had the money we could take it to a company. I think what you should really focus on is what should it ideally look like and the functionality so we would have something to strive for. It shouldn't be really limited of what we can do right now. It should be what the ideal website or app would look like. The mockup and design are the most important

When we go about testing the mock up, is there is any suggestion of who we should interview for testing the mock up? Maybe current users?

We have a way to look at who is using the website the most frequently and they could be your test subjects.

Appendix J - Results of Website Mockup Usability Testing Interviews

Chart 1: Look for a book about sustainability (task 2)

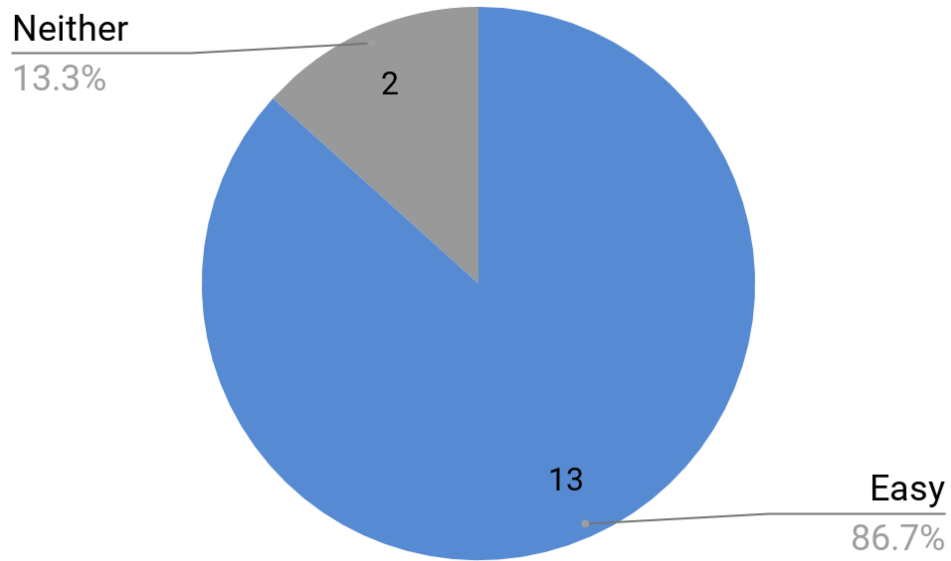


Chart 2: List two green organizations (task 3)

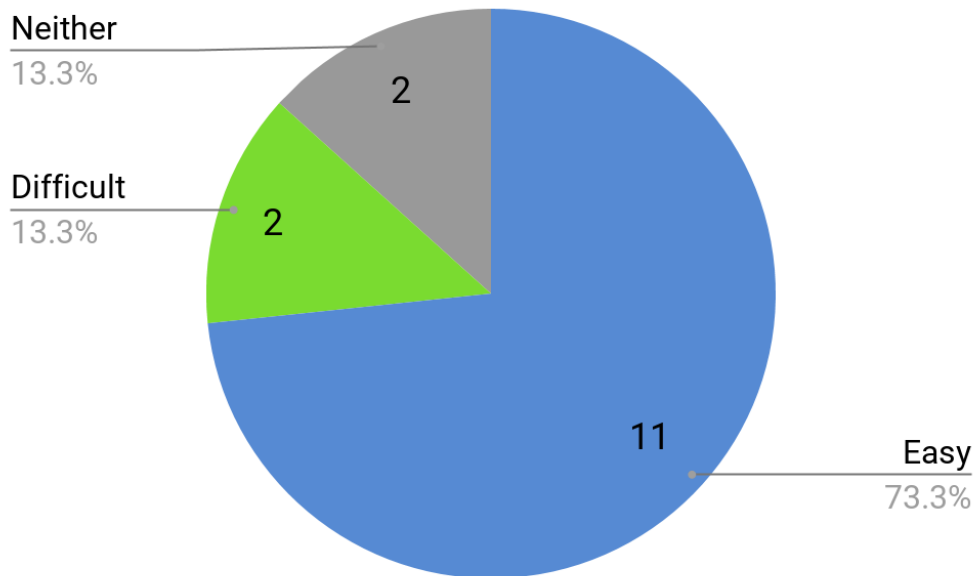


Chart 3: Find the date of one of the 350 organization events (task 4)

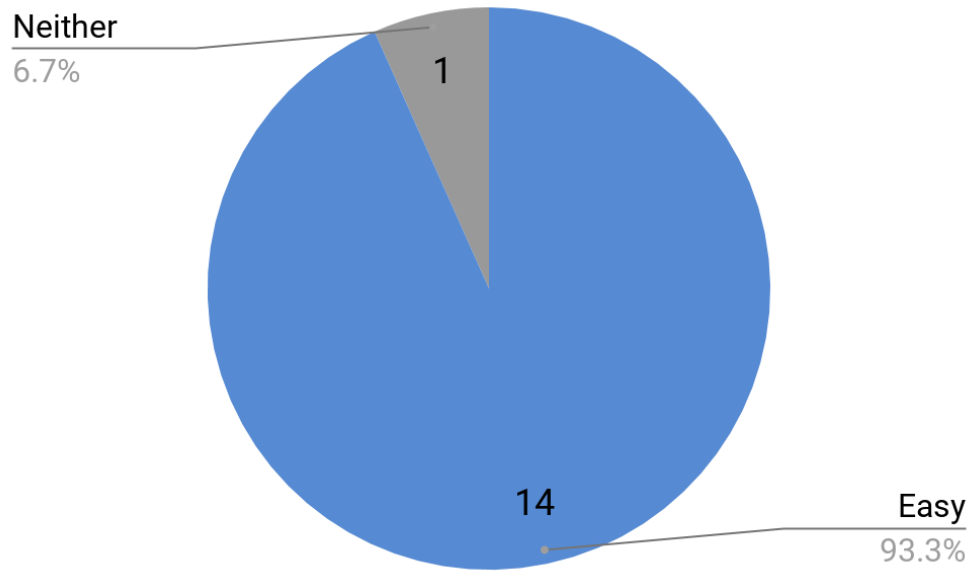
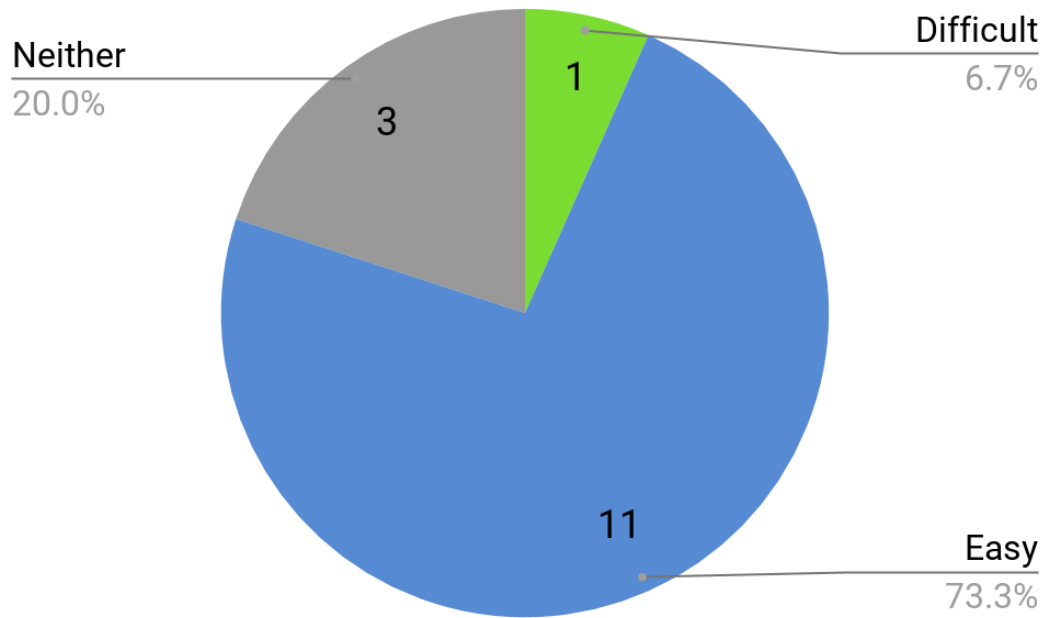


Chart 4: Find a podcast (task 6)



Interview Comments

Person 1: Used profile icon to create account, I had to click on the account to be able to see a search bar which made me insecure. It was hard for me to find the podcasts. It was not clear.

Person 2: I liked the tabs: "they make sense." Those are the most important things I would want to know about. Is there is a possibility for translation?

Person 3: Clean and obvious, I like that you can click on the leaf and go back to homepage. Add a summary sentence on the home page.

Person 4: Like the design, difficult to find specific things, DROP DOWN MENUS.

Person 5: I feel happy. It was very easy to use. It was easy to find all of your objectives. I like the color scheme and layout. I didn't get the event questions but it was good.

Person 6: Label the location and then have a drop down menu. Maybe do that for the app too.

Person 7: I like the way you improved the things people are interested in. Confused about the term groups (same thing as the app). Maybe figure out a word to explain movements, organizations, companies.

Person 8: A part of me thinks that the LEARN tab would not be the first thing I would like to see. The majority of the people want to find an event/organization. Did not like the scrolling option since she can't see some of the things on the page. I would like to have smaller pictures on the homepage so I can see that there is more to the page. It is very attractive. You should have that translating button.

Person 9: Did not think the leaf would take you back to home. I had a hard time interpreting LEARN.

Person 10: I did not have a problem with the website once I interpreted what you were asking. It was relatively easy and straightforward. I go to hard website to figure out where to go and this one was very easy. It doesn't take a high IQ to figure out how to use it.

Person 11: This is "way" better than the current Green Overview, very simple, just a few clicks to get places, sign-up was a little confusing with "get-started" and "get-involved", compared to current version it's a 10! "Sneak peak" of content on the homepage, volunteers all over the country to add information.

Person 12: Self explanatory, easy to use, wasn't confused, navigating was pretty easy.

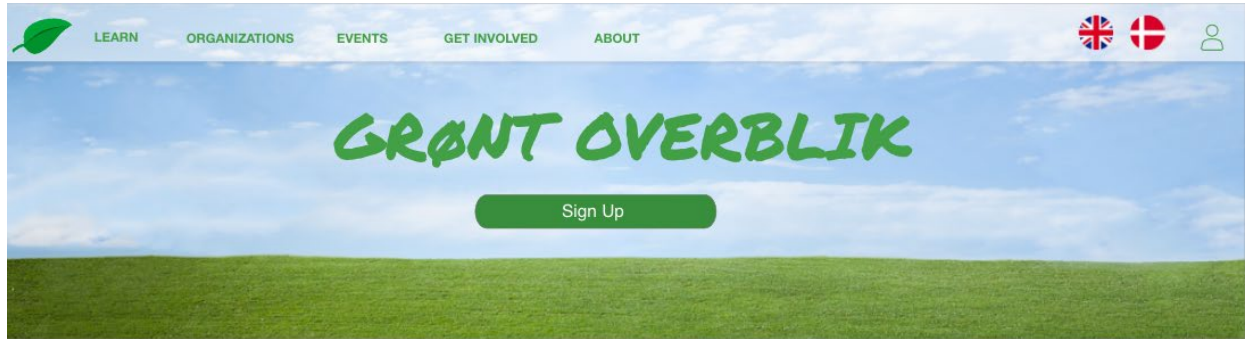
Person 13: Self explanatory, easy to use, wasn't confused, navigating was pretty easy.

Person 14: Very easy to navigate. You set it up in a very similar layout than I was thinking. Events of all organizations rather than just the ones of 350 movements. More content. Very manageable. I would like to be able to filter events.

Person 15: Show where you can find the app. What is the news? Missing: bulletin board. Add a section for “new ideas”. When you go in organizations: what about the categories? We can add the different categories. How do we teach the anchor person? It was easy because I saw it before. Ability to add to calendar. Simple.

Appendix K - Final Website Mockup with Updates from Usability Testing

Image 1: Home page



The Power Of Green Overview

Watch the video to the right to learn more about how to find green events in Denmark as well as interact with other users. Click the button below to head to our forums, where you can ask any questions you might have.



Upcoming Events



March 11 —
Climate March
8:00pm • Prins Jørgens Gård 1



March 12 —
Student Gathering
8:00pm • Prins Jørgens Gård 1



March 16 —
New Member Meeting
8:00pm • Prins Jørgens Gård 1



March 17 —
Climate Workshop
8:00pm • Prins Jørgens Gård 1



[Learn](#) | [Organizations](#) | [Events](#) | [Get Involved](#) | [About](#) | [Legal](#)

Image 2: Learn tab

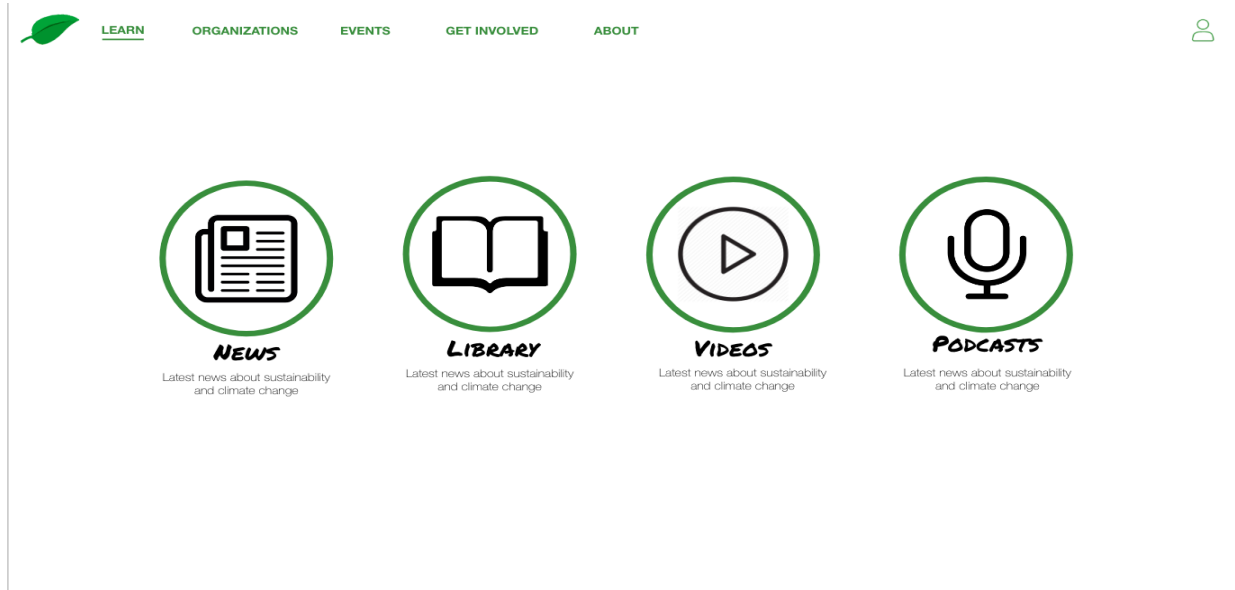


Image 3: News

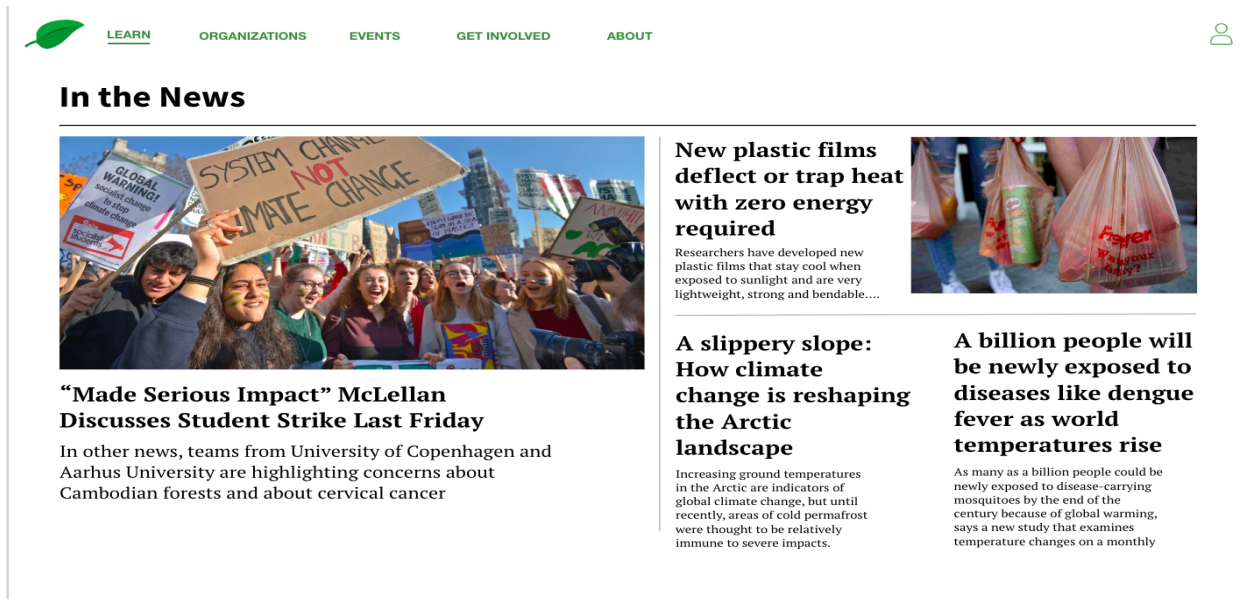


Image 4: Library

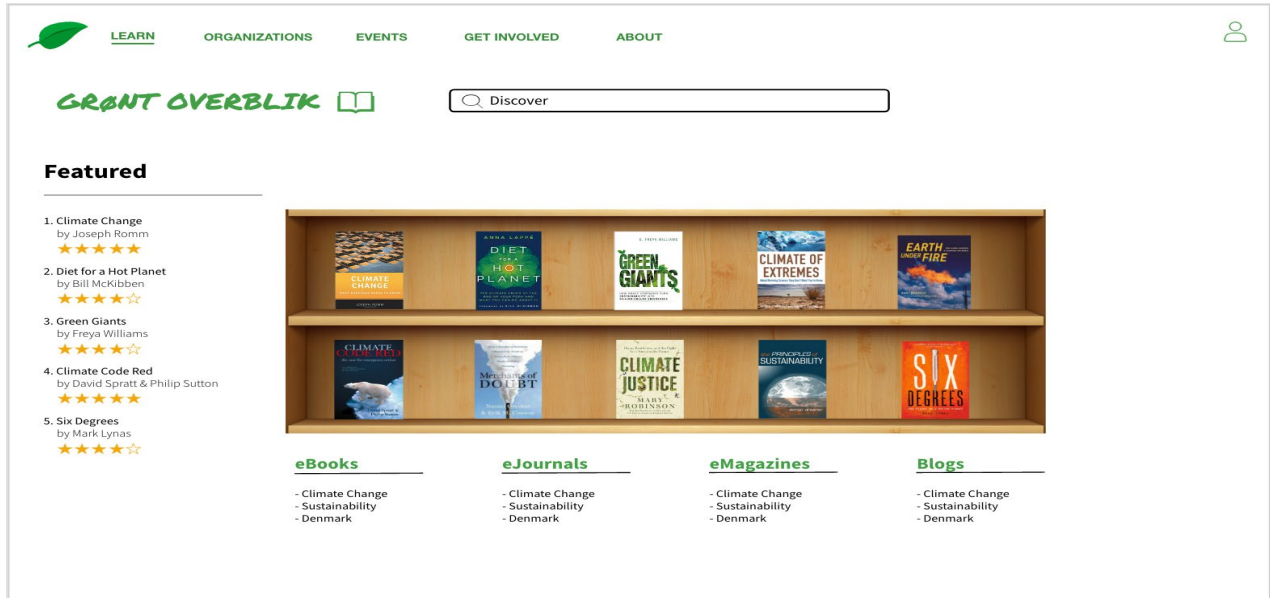


Image 5: Videos

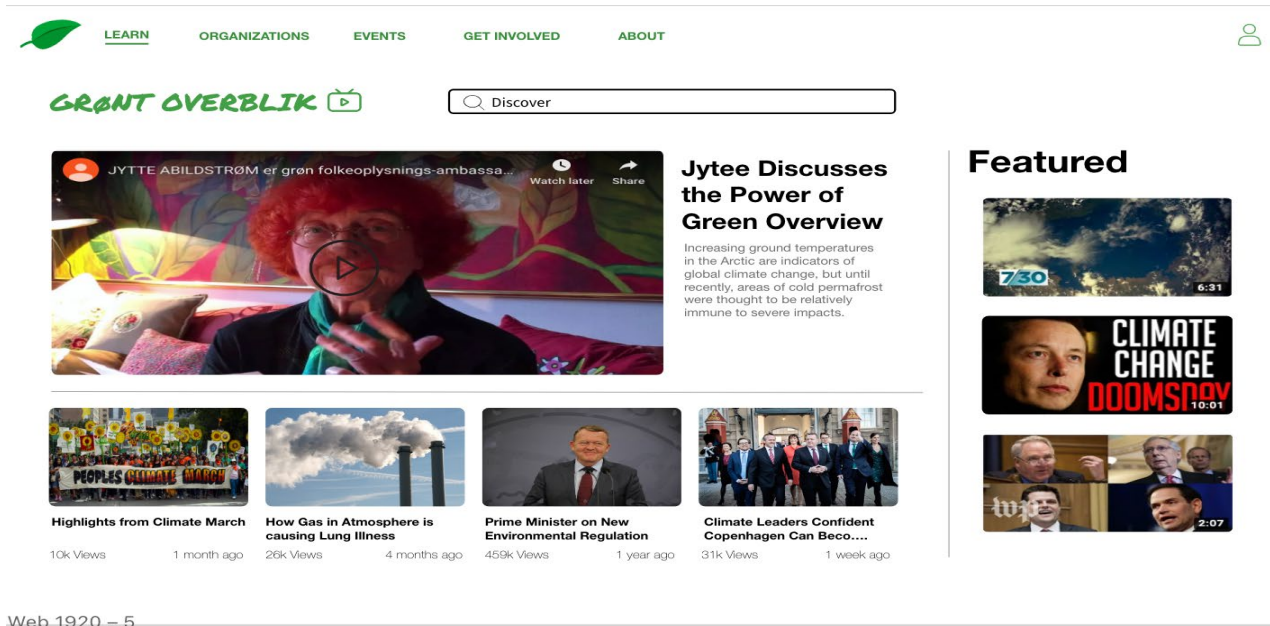


Image 6: Podcasts

LEARN ORGANIZATIONS EVENTS GET INVOLVED ABOUT

GRANT OVERBLIK

Discover

Most Popular

Climate Cast
MPRnews

Climate Cast
MPR News
This is a show where we want to make deep theology easily understood and applied to our real lives. Here we discuss the importance ...

HOT & BOTHERED
DISSSENT

Hot and Bothered
Dissent
This is a show where we want to make deep theology easily understood and applied to our real lives. Here we discuss the importance ...

DOWN TO EARTH

Down to Earth
DTE
This is a show where we want to make deep theology easily understood and applied to our real lives. Here we discuss the importance ...

+
More

Image 7: Organizations tab

LEARN ORGANIZATIONS EVENTS GET INVOLVED ABOUT

GRØNT OVERBLIK

Organizations

Discover Copenhagen

Groups

350 Klimabevægelsen

350 Klimabevægelsen er en bred folkelig bevægelse, der kæmper imod global opvarmning, og for en seriøs klimapolitik i Danmark og på internationalt plan.

Verdens Skove

350 Klimabevægelsen er en bred folkelig bevægelse, der kæmper imod global opvarmning, og for en seriøs klimapolitik i Danmark og på internationalt plan.

Grønne Studenter Bevægelse

350 Klimabevægelsen er en bred folkelig bevægelse, der kæmper imod global opvarmning, og for en seriøs klimapolitik i Danmark og på internationalt plan.

+ More

Companies

Løs Market

LØS market gives you the opportunity to choose a green purchasing model. Get past the shop and buy in a whole new way

ALL NRG

LØS market gives you the opportunity to choose a green purchasing model. Get past the shop and buy in a whole new way

State of Green

LØS market gives you the opportunity to choose a green purchasing model. Get past the shop and buy in a whole new way

+ More

Image 8: Organizations and Movements

LEARN **ORGANIZATIONS** **EVENTS** **GET INVOLVED** **ABOUT**

GRØNT OVERBLIK

Find Groups

Groups and Movements

Discover Type Copenhagen

VERDENS SKOVE
We work for the conservation and sustainable use of the world's forests both the Danish forests and the rainforest. We have over 30 years of experience in preserving forest and biodiversity. World Forests started as ...

FRIDAYS FOR FUTURE
FridaysForFuture is a movement that began in August 2018, after 15 years old Greta Thunberg sat in front of the Swedish parliament every schoolday for three weeks, to protest against the lack of action on the climate crisis.

YOUTH NOAH
FridaysForFuture is a movement that began in August 2018, after 15 years old Greta Thunberg sat in front of the Swedish parliament every schoolday for three weeks, to protest against the lack of action on the climate crisis.

350 KLIMABEVÆGELSEN I DANMARK
FridaysForFuture is a movement that began in August 2018, after 15 years old Greta Thunberg sat in front of the Swedish parliament every schoolday for three weeks, to protest against the lack of action on the climate crisis.

GRØNNE STUDENTER BEVÆGELSE
We work for the conservation and sustainable use of the world's forests both the Danish forests and the rainforest. We have over 30 years of experience in preserving forest and biodiversity. World Forests started as ...

ELDERS CLIMATE ACTION
A project of Elders Action Network
FridaysForFuture is a movement that began in August 2018, after 15 years old Greta Thunberg sat in front of the Swedish parliament every schoolday for three weeks, to protest against the lack of action on the climate crisis.

DET ØKOLOGISKE RÅD
FridaysForFuture is a movement that began in August 2018, after 15 years old Greta Thunberg sat in front of the Swedish parliament every schoolday for three weeks, to protest against the lack of action on the climate crisis.

Solar Group
FridaysForFuture is a movement that began in August 2018, after 15 years old Greta Thunberg sat in front of the Swedish parliament every schoolday for three weeks, to protest against the lack of action on the climate crisis.

Image 9: Movement Description

LEARN ORGANIZATIONS EVENTS GET INVOLVED ABOUT

350 Klimabevægelsen i Danmark

Green Movement • Copenhagen, Denmark

About

350 Klimabevægelsen er en bred folkelig bevægelse, der kæmper imod global opvarmning, og for en seriøs klimapolitik i Danmark og på internationalt plan.

Contact

✉ sek@klimabevaegelsen.dk

🌐 <https://www.klimabevaegelsen.dk>

📘 @klimabevægelsen

350
KLIMABEVÆGELSEN
I DANMARK

Events


Image 10: Events tab

LEARN ORGANIZATIONS EVENTS GET INVOLVED ABOUT

GRØNT OVERBLIK
Events

Sort by: Week | Month | All

04
April




Climate March outside of Parliament

9:00 am • Prins Jørgens Gård 1

We are holding a local strike on Stændertorvet this day. Come and join a sitdown strike - take a blanket to sit on, a filled thermos bottle and clothes to suit the weather. Help show that we in Roskilde take the climate seriously! All age groups are welcome.

04
April




Climate Workshop

9:00 am • Prins Jørgens Gård 1

We are holding a local strike on Stændertorvet this day. Come and join a sitdown strike - take a blanket to sit on, a filled thermos bottle and clothes to suit the weather. Help show that we in Roskilde take the climate seriously! All age groups are welcome.

06
April




Friday Gathering

9:00 am • Prins Jørgens Gård 1

We are holding a local strike on Stændertorvet this day. Come and join a sitdown strike - take a blanket to sit on, a filled thermos bottle and clothes to suit the weather. Help show that we in Roskilde take the climate seriously! All age groups are welcome.

10
April



Climate March

9:00 am • Prins Jørgens Gård 1

We are holding a local strike on Stændertorvet this day. Come and join a sitdown strike - take a blanket to sit on, a filled thermos bottle and clothes to suit the weather. Help show that we in Roskilde take the climate seriously! All age groups are welcome.

Image 11: Get Involved tab

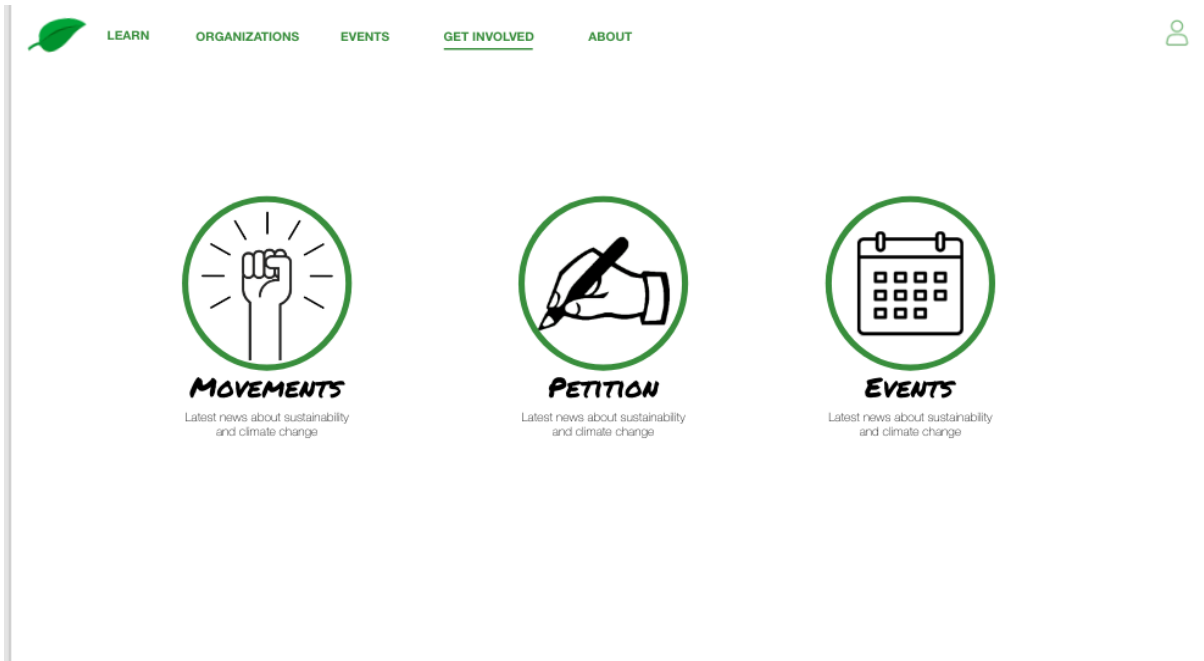


Image 12: Petitions




Image 13: About Page

LEARN ORGANIZATIONS EVENTS GET INVOLVED ABOUT

GRØNT OVERBLIK

About Us


What is Green Overview?



Green Overview is information about the 1000+ green and sustainable initiatives in Denmark! It is the union Network for Ecological Education and Practice / Eco-net , which is behind the portal Green Overview, which is offered to all in the green Denmark for visibility and networking.

[READ MORE](#)


Our Mission



The goal of the portal is to bring together the many sustainable projects, initiatives, events and publications, which takes place in Denmark. The background is Oko-net work for public education and knowledge sharing. By making information about the variety of sustainable initiatives available, we hope to inspire a green and sustainable community change.

[READ MORE](#)

Check Out Our Mobile Application!



Download the Green Overview mobile application on the App Store and Google Play to find the latest news on Events and Groups on your area!

Contact Us

eco-net@eco-net.dk

[f](#) [@](#) [t](#) [in](#)

[Learn](#) | [Organizations](#) | [Events](#) | [Get Involved](#) | [About](#) | [Legal](#)

Appendix L - Results of Mobile Application Usability Testing Interviews

Chart 1: Find events in Central Jutland (task 1)

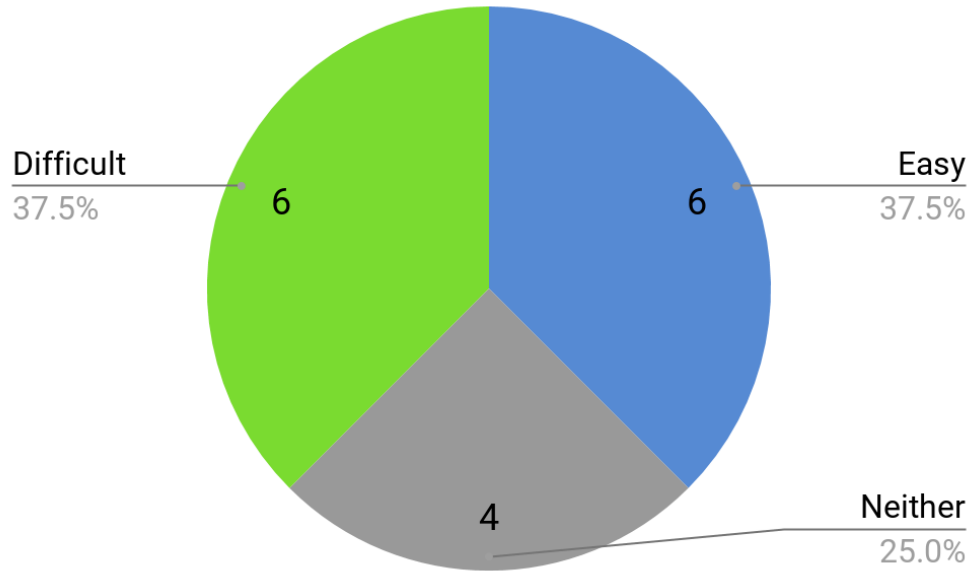


Chart 2: Find groups in Central Jutland (task 2)

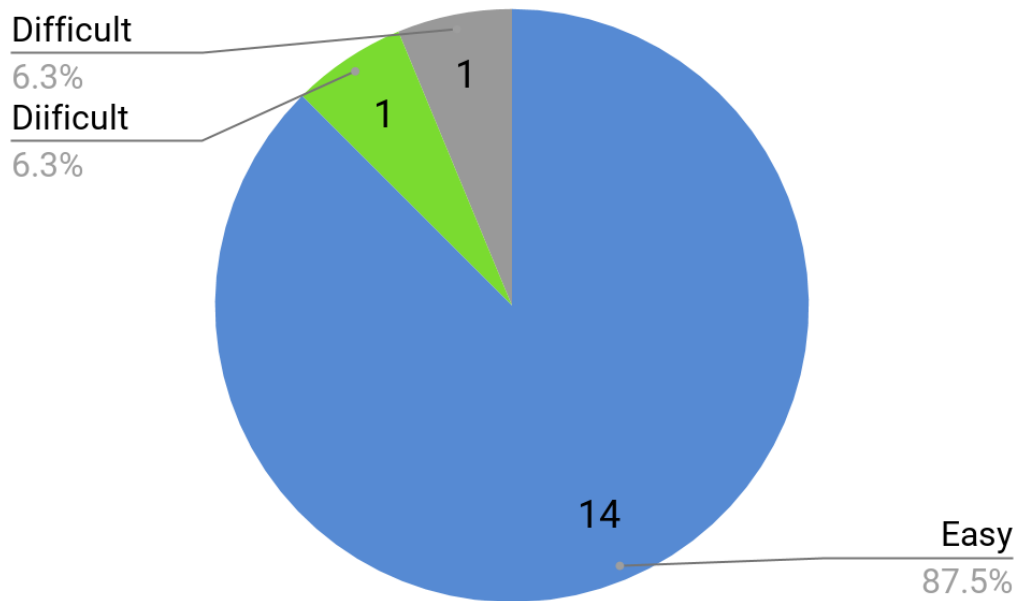


Chart 3: Find the Green Student Movement group and favorite it (task 3)

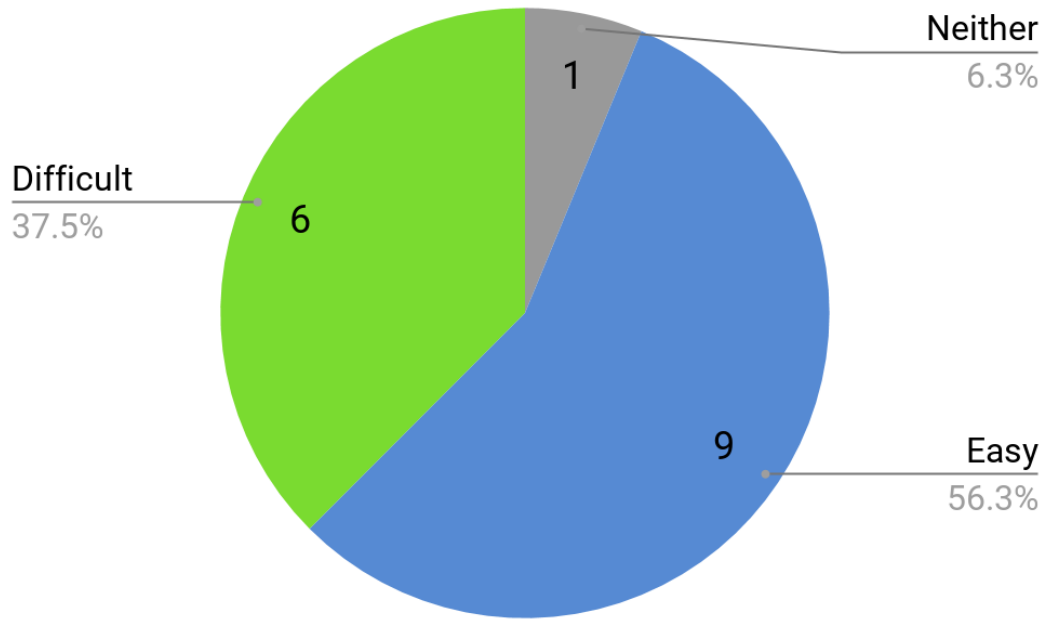


Chart 4: Find the NOAH group (task 4)

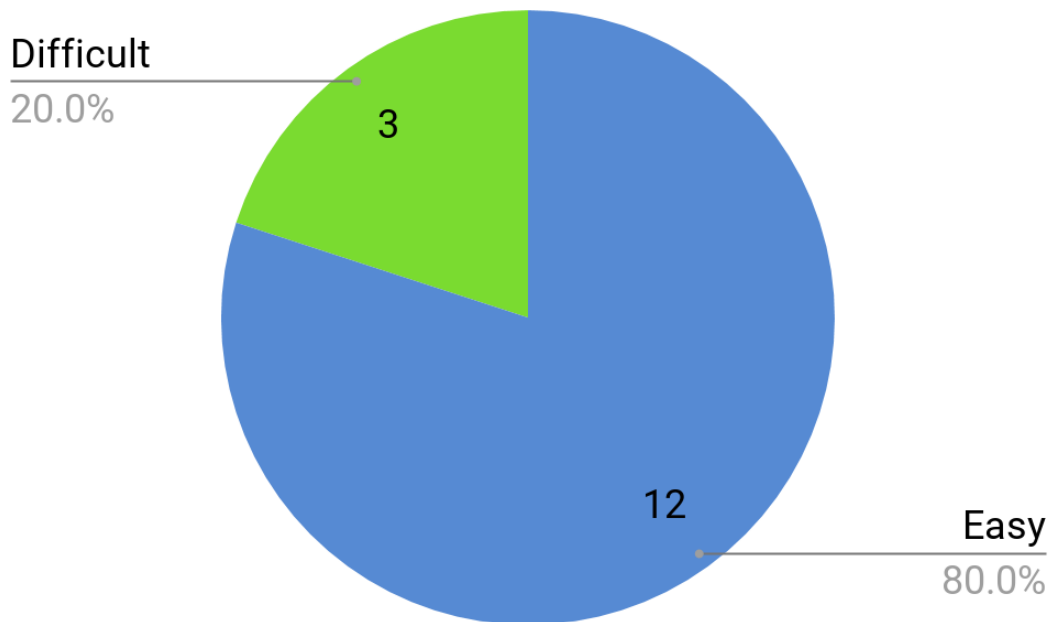


Chart 5: Give us the time & location of the event Make the Earth Green Again (task 6)

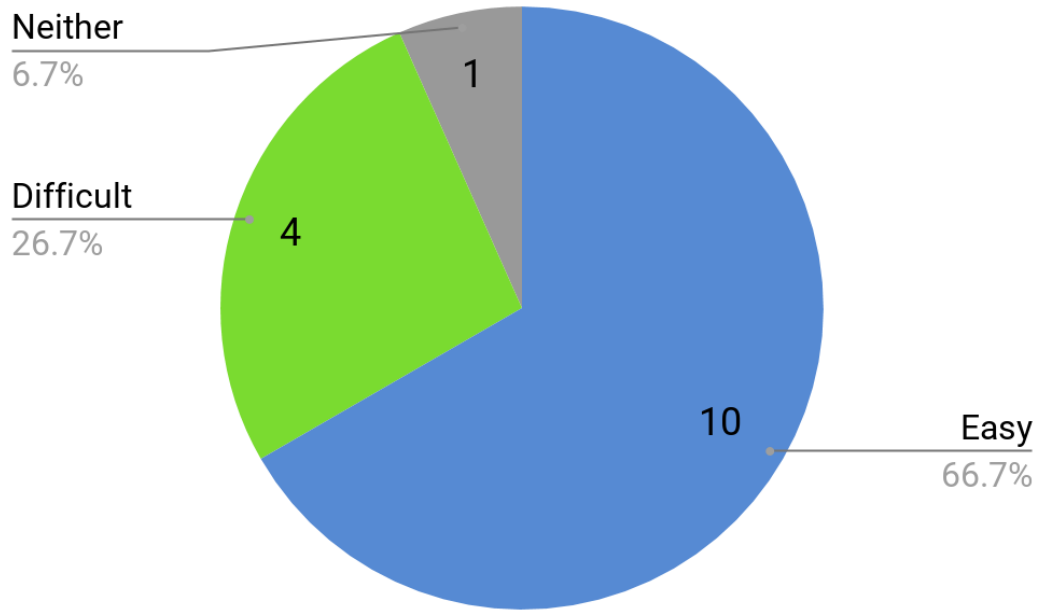


Chart 6: Where would you find your favorite events? (task 7)

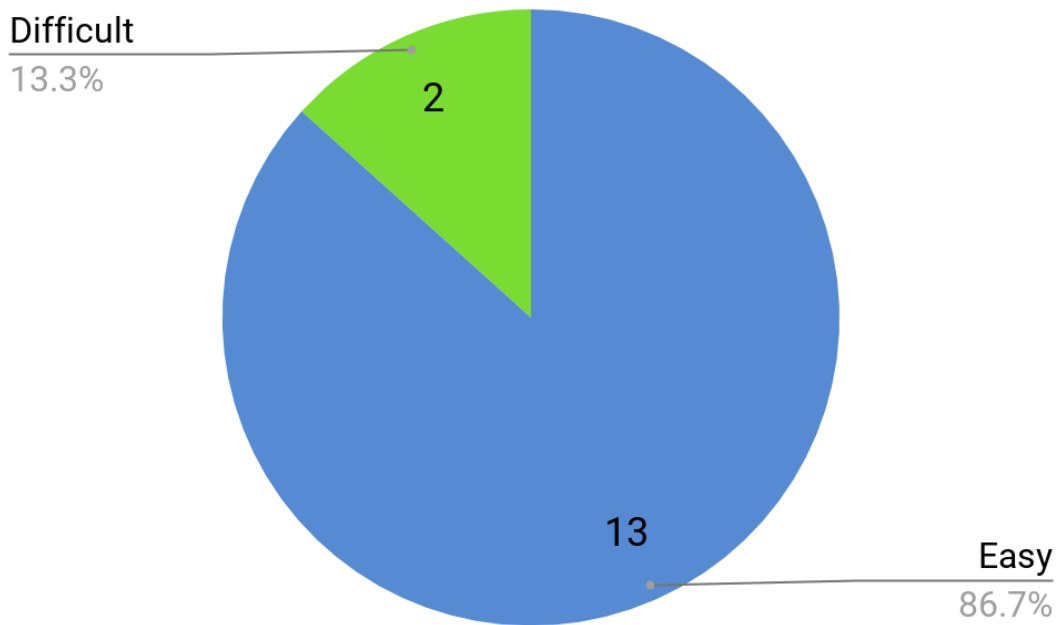


Chart 7: Where would you find your favorite groups? (task 8)

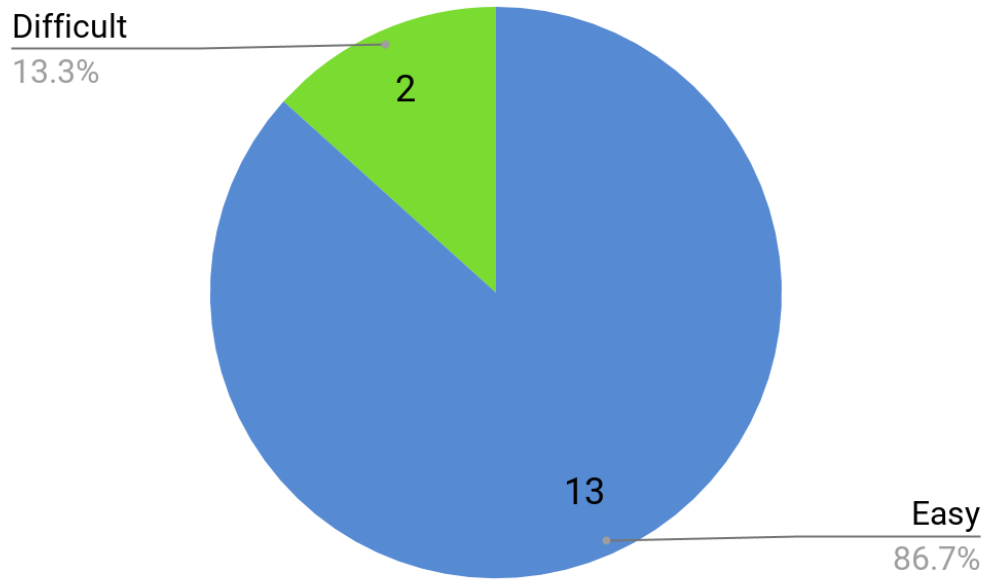


Chart 8: In the events tab, try to search for an event using a specific term (task 9)

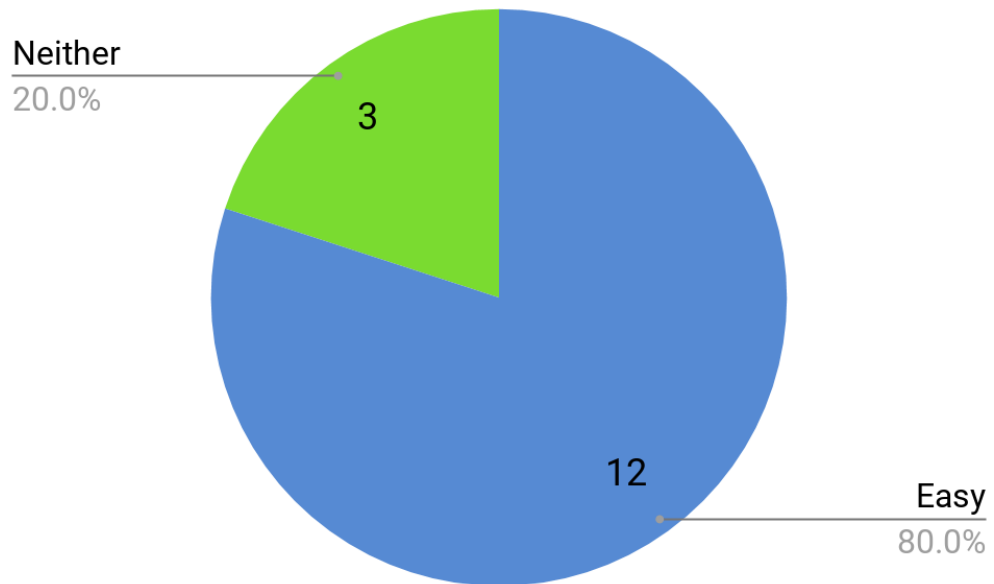
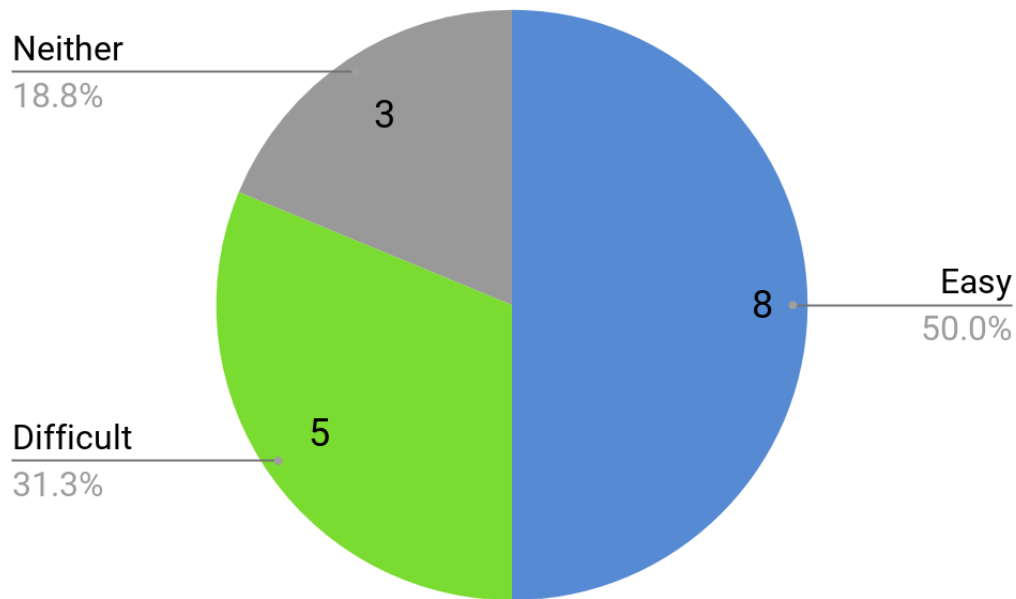


Chart 9: Find the event that is happening soonest (task 10)



Interview Comments

Person 1: It was pretty intuitive, a little annoying with search bar. Easy to use. I assumed it was the bell, the upcoming events wasn't super clear (bell). If I were doing this stuff in America I would.

Person 2: When you change tabs the location should remain constant. I am a very big fan. Make drop down feature more clear.

Person 3: I think a lighter green would be better for me. Confused about the bell. I didn't know there was a drop down for location.

Person 4: no comments.

Person 5: no comments.

Person 6: Pretty happy, easy to move around. If anything, maybe have the pictures labeled. I could see myself using this app on a regular basis.

Person 7: I was really confused for the first one to try to find the event in Central Jutland. Label pictures. The hearts are hard to see. I would be interested in using it.

Person 8: Pretty simple but I have to understand what you call groups. I also like that it is grouped by region. It could even be categorized by municipalities because people care about

their local region. I think if it is localized it could be very beneficial to use the app. Search functionality could be improved. I like the simplicity of this app.

Person 9: Very nice place to be able to add information. A bell for me is like an alarm. I wouldn't think to look for an upcoming event there. Likes the hearts. I should be able to go home.

Person 10: Confused about the buttons at the bottom. Confused about the hearts. You can use an arrow to help go back to the homepage. Easy once I had an explanation.

Person 11: Confused about the hearts. Add a feature that could help us go to the homepage. All apps are hard to use at first.

Person 12: Super easy, Icons make sense, easy to intuitively understand what they do, pictures should have titles/captions, hearts are hard to see, very easy to navigate

Person 13: confused by the favoriting, but other than that it was easy

Person 14: hard to see where the heart is, maybe make the location more obvious and stand out more

Person 15: I think it works similar to other existing apps. I was confused about the groups. The logo made it a little confusing.

Person 16: Easy and simple. Maybe the group symbol is confusing.

Appendix M - Final Mobile Application Mockup with Updates from Usability Testing

Image 1: Events tab



Image 2: Event description



Image 3: Groups tab



Image 4: Group description



Image 5: Create tab

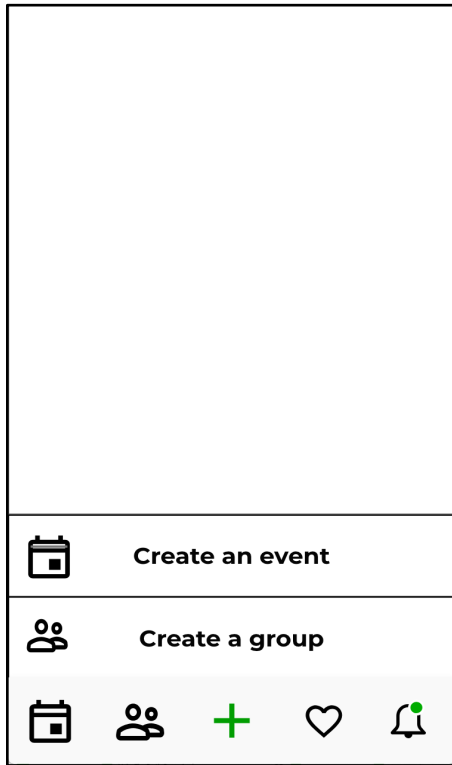


Image 6: Create an event

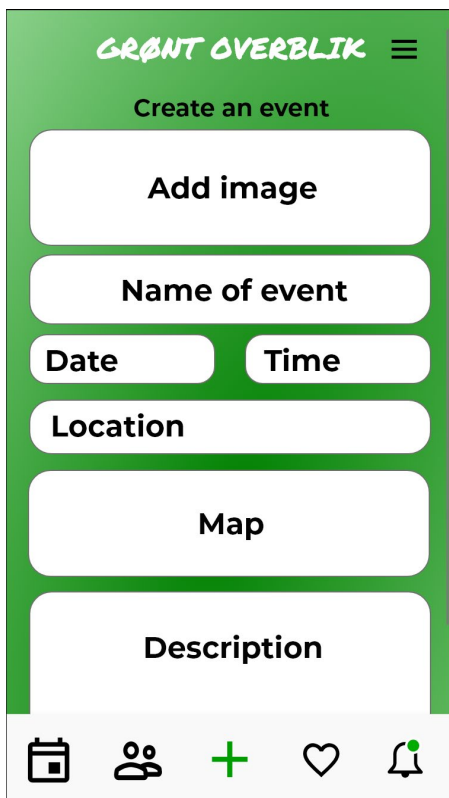


Image 7: Create a group



Image 8: Favorite events tab

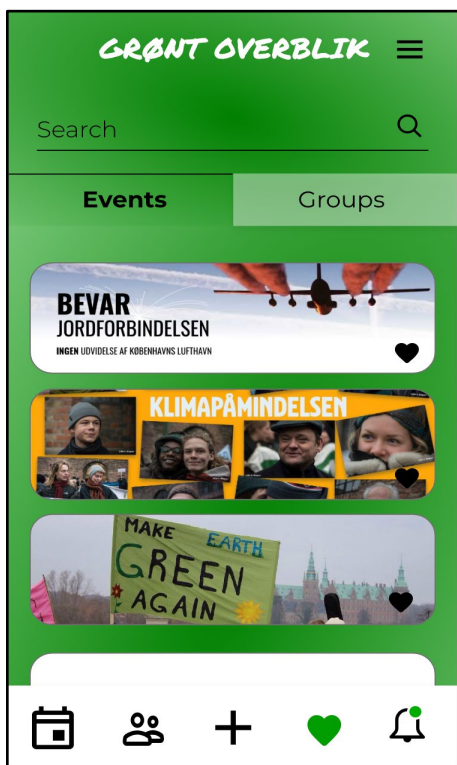


Image 9: Favorite groups tab



Image 10: Notifications tab

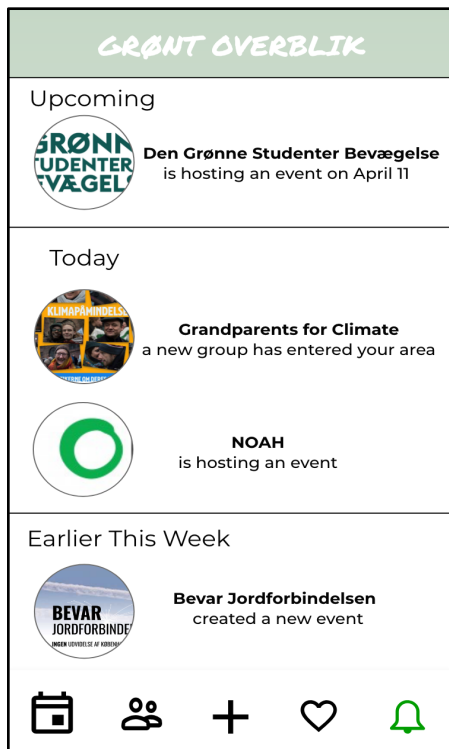


Image 11: Profile

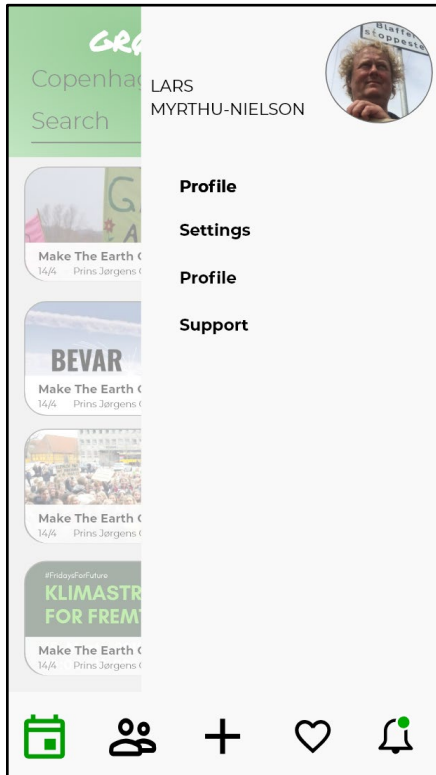
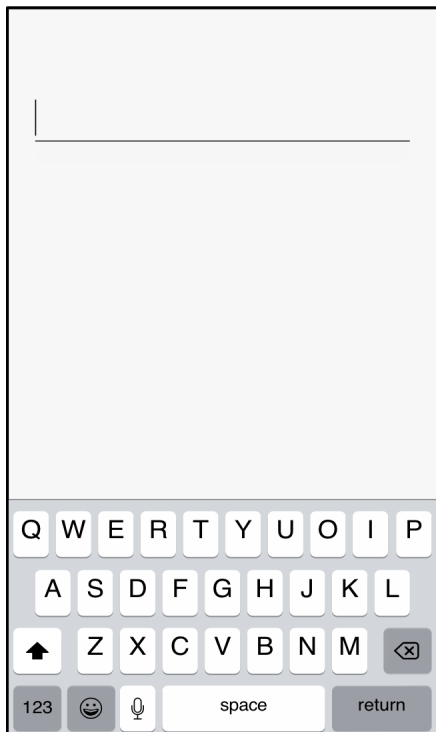


Image 12: Search Function



Appendix N- Business Prospectus Outline

Information about Eco-net

- Background and History of Eco-net
- Mission and Vision of Eco-net
- Organizational Structure
- Associated Organizations
- Eco-net websites

Justification for funding Green Overview

- Description of Green Overview current and future state
- Explanation of the benefits for the community

Vision

- Vision for Green Overview
- Description of what funding could do for Green Overview

Appendix O- E-files

List of E-files	File Name
Results from Online Survey	Online Survey Responses.pdf
Results from Interviews with Individuals with Green Movements	Interview Responses.pdf
Mockups Guide	Mockups Guide.pdf
Instructional Video	Green Overview Final.mov
Video Script	Video Script.pdf
Final Website Mockup	https://xd.adobe.com/view/65a523ce-097d-410c-720e-556d487a58fc-1394/?fullscreen&hints=off
Final Mobile Application Mockup	https://xd.adobe.com/view/ce23b4d2-1aa5-4093-5e9d-d38f20eec781-b812/