Abstract

With rising environmental concerns worldwide, Eco-net aims to spread knowledge of sustainable living in Denmark through their web portal, the Green Overview. This project created a social media marketing strategy to promote Eco-net’s green portal to the younger generation that will inherit the green movement. This entailed the creation of an Instagram account, redesign of the Facebook page, and production of a marketing resources kit that provided Eco-net with mock-ups of posts, instructional guides, hashtag lists, and brand development suggestions. Additionally, this project provided Eco-net with a list of government representatives, public figures, sustainable companies, green organizations, and youth groups in a comprehensive outreach guide to recruit influencers and collaborators.
Spreading Knowledge of Sustainable Living to Empower the Next Generation

Climate change is an issue that is now affecting every country worldwide. Sea levels are rising, weather patterns are changing, and greenhouse gas emissions have been increasing. If the world’s average surface temperature continues to rise, the impacts on people and the environment will only get more severe. The Intergovernmental Panel on Climate Change, consisting of over 1,300 scientists from around the world, forecasts a temperature rise of 1 to 5 degrees Celsius over the next century.\(^1\) For reference, the average global temperature was only 2.8 to 5 degrees cooler than today at the end of the last ice age, when the northeast United States was entirely covered in ice.\(^1\) Figure 1 shows a Danish sculpture warning of the upcoming consequences of exponentially increasing temperatures on Arctic life. Scientists believe that climate change results primarily from the burning of fossil fuels.\(^3\) Although more countries are turning towards renewable energy, climate change is a global challenge that requires international participation.

Many countries are working to reduce carbon dioxide emissions, and Denmark is one of the front runners. Denmark currently ranks fifteenth out of sixty on the Climate Change Performance Index.\(^4\) However, more changes still need to be made. Despite the 2015 Paris Agreement to reduce emissions, global carbon emissions increased 1.7 percent in 2017 and a further 2.7 percent in 2018.\(^5\) In order to become carbon neutral, more people need to educate themselves and get involved.

There are countless opportunities for everyone to make changes in their daily lives that will help create a more sustainable future, such as saving energy, recycling more, eating organic food, limiting transportation use, and supporting environmental movements.\(^6\) But people are not educated enough on global warming to make these changes. The National Center for Science Education (NCSE) surveyed 1,500 teachers and learned that teachers who want to teach climate change have a hard time accessing available information.\(^7\) The public needs more opportunities to learn about climate change.

In 2015, Nielsen Holdings, a data measurement firm, polled 30,000 consumers from over 60 different countries. Their findings showed that, overall, 66 percent of global consumers are willing to pay more for sustainable goods, while 73 percent of millennials are.\(^8\) Even though there is global interest in living sustainably, our sponsor, Eco-net, a grassroots environmental organization in Denmark, finds that their sustainability website is not attracting a large number of users, especially a younger audience. To engage a younger demographic, Eco-net seeks to market the website using social media.

This project aimed to spread awareness of our sponsor’s sustainability portal by developing a social media marketing strategy. This strategy included the creation and modification of Instagram and Facebook...
accounts to reach the most people as possible in Denmark. In order to target the younger generation, we surveyed college students to determine what visual content they valued most. Finally, identifying potential information gatherers for the website and developing an outreach guide helped give our sponsor connections for the future.

**Sustainability and Global Warming**

Global warming and climate change are terms used to describe the changes in climate and temperature across the globe over a period of time due to both natural and human influences. Global warming has already had observable effects on the environment. Glaciers have shrunk, ice on rivers and lakes is breaking up more rapidly, plant and animal ranges have shifted, and trees are flowering sooner. In order to avoid the temperature rise predicted by the IPCC, environmental changes are becoming a necessity.

Sustainability is most easily defined as meeting the needs of the present without negatively impacting the ability of future generations to meet their needs. Sustainability is a broad term, meaning that it can manifest itself in different forms. This project will reference the environmental pillar when mentioning sustainability.

**Danish Environmental Issues**

Denmark, for years, has been a front-runner in environmental policy. The Danish government has placed an emphasis on intertwining economic growth and environmental sustainability through progressive climate, energy, and environmental policies. Countries’ sustainability performances can be measured through the Environmental Performance Index (EPI), which takes into account environmental health and ecosystem vitality. In 2018, Denmark ranked third in the world for the best EPI ranking. Despite this achievement, Denmark’s EPI revealed that they still struggle with their forests, fisheries, and agriculture. As seen in Figure 2, factors that contributed against Denmark’s positive ranking were tree loss, trophic level of fish, and nitrogen use in agricultural production. Although it is not present on the EPI report, environmental degradation induced by climate change is one of the largest factors harming Danish native wildlife. This impact on wildlife and the environment, largely from climate change, is threatening the sustainability of our planet.

**Downsides of Conventional Farming**

One of Eco-net’s goals is to promote the creation, sustainability, and growth of small independent farms. One reason for this is because the use of synthetic fertilizers on large industrial farms contributes to the excessive levels of nitrogen which is harming Denmark’s environment. Within the past 30
years, the number of farms in Denmark has been reduced by more than half from just over 100,000 farms in 1982 to about 40,600 in 2012.\textsuperscript{12} As shown from Figure 3, the number of full-time farms is rapidly decreasing. However, although the total number of farms is decreasing, the average size of a Danish farm has more than doubled since 1982, from just below 30 hectares to about 66 ha in 2012.\textsuperscript{12} These statistics show that the number of smaller farms is diminishing and they cannot compete with larger industrial farms. Our sponsor, Eco-net, is trying to spread knowledge about organic farms and all of their benefits. Although it may not seem like much, buying organic food from small farms is also a way to help conserve the environment. But because the average farm size is still increasing, the environment is continually being damaged by industrial farms’ harmful farming practices. They generate greenhouse gases and use toxic fertilizers and pesticides to cheaply and more efficiently manage their large production quantities.

**Environmental Impacts from Conventional Farming**

Wildlife in Denmark is taking a heavy toll due to the use of toxic pesticides. The use of pesticides is one of the largest factors in the 70 percent decline in the number of insects in Europe from 1996 to 2017.\textsuperscript{14} A study done by the Danish Ornithological Society revealed that the diminishing population of insects has had a significant effect on bird life, with nearly 3 million birds disappearing from arable land over the last 40 years.\textsuperscript{14} Eco-net aims to stop the destruction of wildlife by promoting organic farming, since the damage is largely from harmful farming practices, such as those practiced routinely by large commercial farming operations.

In addition to environmental effects from pesticides, Denmark is experiencing the impact of rising global temperatures on its

![Figure 3: Trend of the decreasing number of full-time farms in Denmark.\textsuperscript{13}](image-url)
coastal areas. There is increased erosion and flooding of low-lying coasts, tidal areas, and river valleys as a result of rising water levels and altered precipitation patterns. Eco-net is also raising awareness of climate action by spreading knowledge and keeping a calendar of peaceful climate rallies and protests. Our sponsor believes that, in order to save the environment, people must stop the ongoing destruction of nature by raising community awareness for organic processes and sustainable living.

The Green Overview

The Grønt Overblick, or Green Overview, is a portal of Eco-net and the Network for Ecological Education and Practice meant to educate and share knowledge about Denmark’s sustainable initiatives and inspire advocacy for a greener community. The mission of Green Overview is to bring together Eco-net’s sustainable projects and initiatives that take place in Denmark. Additionally, this portal gives users an overview of any current events happening in the efforts to make Denmark a more sustainable community.

**The Green Overview is not a well-recognized website**

The Green Overview also has its own obstacles to overcome, aside from those facing the environmental movement as a whole. Eco-net is trying to prevent the environment from further declining due to increasing climate deterioration. Through the Green Overview, Eco-net is working to connect the various environmental movements to allow for better organization and clarity, and ensure a wider audience, when publicizing the ways that people are able to live sustainably. The Green Overview struggles with marketing itself to the public, as well as finding people to help upload and organize content. To help Eco-net and the Green Overview overcome these challenges, this project developed a marketing strategy that will help spread awareness and increase the number of users.

**Facebook and Instagram are the most effective social media platforms to market the Green Overview**

There are numerous social media applications that are used daily to market brands across the globe, but the two that are most useful for the purpose of expanding the Green Overview’s user base are Instagram and Facebook. Instagram is a platform that allows users to post images with captions that others can view. As shown in Figure 5, the age demographic of Instagram is primarily from 18 to 34, meaning that this application could specifically target a younger audience. Facebook is similar to Instagram in that users can post images with captions on which viewers can comment. Users can also friend each other, share posts, and post content beyond images. Because both platforms have specific marketing advantages, they are each helpful to spread awareness of the Green Overview website to a targeted demographic.

**Instagram favors promotion to younger generations**

In the current digital age, Instagram is used not only as a personal social media...
platform for enjoyment, but also as an effective way to market a brand, business, or product. According to a recent study, eighty percent of all accounts on Instagram follow some type of business, so it is certainly effective for Eco-net to publicize there. The primary age range, as referenced above, is the demographic that Eco-net wants to target with the portal because they believe that the younger generations are going to have the burden of taking care of the environment. Lars Myrthu-Nielsen, the head of Eco-net, also believes that these younger generations truly care about creating environmental change and want to live more sustainably, as evidenced by the number of conversations, protests, and other forms of media addressing the problem. However, the problem is that this generation doesn’t have all the necessary information on how to turn their commitments into action on sustainability. The Green Overview portal is Eco-net’s solution to provide them with this knowledge. Making a Green Overview Instagram page will help spread awareness and get younger people to learn about sustainability, since Instagram favors promotion over interaction. As can be seen from Figure 6, an average day sees users sharing more than ninety-five million photos and videos, meaning Instagram’s users see the highest rate of engagement, at 0.84 percent of all users, out of all the major social media platforms. Eco-net believes that they have a good foundation for the content on the Green Overview portal, and that their main focus needs to be increasing the overall number of users on the website. Instagram is an efficient way to put out information to be viewed by large numbers of people due to the format of the posts. The following section discusses the content that Eco-net can use to increase the awareness of the Green Overview portal.

**Instagram allows a company to promote its product.**

When an Instagram user clicks on a new profile, the first thing they see is the profile’s header. A header is essentially the description of whatever that profile is, and businesses frequently use this section to attract new users. A header consists of a personal bio, profile picture, business or organization description, and links to other channels. The use of a catchy slogan in the bio, along with links and a description of the company, can instantly draw a person’s attention when they first visit an Instagram page. The bio is also important because it “is what a potential follower would read to understand what the account is for before following”. An eye catching logo for the profile is also critical as it will be one of the first things that a new viewer will see. This logo should be well designed so that the viewer isn’t confused and can recognize it quickly. Consumers spend on average less than 15 seconds viewing a logo so it needs to be easy to recognize. Fortunately, Eco-net already has a well-established logo, shown in Figure 7, that they can use to attract new viewers to the page. This logo can be used across all social media platforms to link their branding together in a professional and organized layout.
Facebook targets the largest audience in Denmark

While Instagram is an important tool to use for marketing the Green Overview, it is helpful to market through multiple platforms in order to expand the audience that views Eco-net’s content. Facebook is by far the most used social media platform in Denmark with 3.04 million users, or about fifty-five percent of the country’s population using the platform daily. As a result, Facebook is one of the best platforms through which to market the Green Overview. Eco-net currently has a Facebook page, but the posts are infrequent and repetitive, the content is not engaging, and the page itself does not make Eco-net’s organization recognizable to new viewers. Consistent visuals and engagement strengthen branding

One of the best ways to make a page more recognizable is by improving the consistency of the visuals. Branding needs to be consistent across all platforms to help people immediately recognize the organization, regardless of the channel. A company that does this well is Coca-Cola, which uses the color red consistently across all posts on all platforms. Eco-net’s Facebook page could follow a similar strategy by using the color green across all of its posts to keep a consistent design with its Instagram and web pages. Additionally, it is necessary to engage with other users on a regular basis to promote awareness of the organization. Research demonstrates that if an organization is only making daily posts, they are essentially having a conversation with themselves. Engagements with other companies or groups, even competitors, are highly beneficial as they allow for audience expansion. Through joining conversations, actively engaging with other companies or organizations, and creating a consistent and visually pleasing page, the Green Overview will become a significantly more recognizable portal.

Varying content is important to engage an audience regardless of the platform that is used. According to one study, the posts should be in a ratio of eighty percent entertainment to twenty percent informational. In terms of the visual content, there are certain aspects of images that are known to attract more viewers than others. Images that have a background and a single dominant color draw much more attention than those that don’t. Images that use primarily the color blue receive twenty-four percent more likes than those that use other dominant colors. Pictures with people’s faces in them have been shown to have a thirty-eight percent higher chance of receiving likes and engagement, and posts which taught people something new were shared 522% more than posts that weren’t advice focused. These statistics were all considered when designing posts for Instagram and Facebook. Another aspect to consider is how each post is tied together on the page with the other posts. Keeping posts within similar color and sizing themes shows a higher level of professionalism and organization which appeals more to users. Eco-net has to consider their current posts and what their future posts will be if they want to maintain that high level of appeal. For Instagram, each post includes a caption underneath, where the account can write a description of the photo with the purpose of further engaging viewers. Lengthy captions that champion story-telling and authenticity are driving positive results that provide an opportunity to build a stronger relationship with an audience, so, a majority of posts that are made will include lengthy captions. Finally, and most importantly for increasing followers, are the hashtags on each post. A hashtag is a descriptive label of the post that comes in the form of “#hashtag,” which links the post to a page that features every post using that specific hashtag. The use of hashtags allows the Green Overview and Eco-net pages to be seen by people who aren’t yet following the pages. For Eco-net, most of the hashtags would be related to environmental sustainability, so it was important to figure out which are the best hashtags to use to help increase engagement.
Project Methods and Findings

The overall goal for this project was to spread awareness of Eco-net’s Green Overview portal by developing a marketing strategy that would increase the user base and recruit potential contributors. To reach this goal, the team pursued three main objectives, as shown in Figure 8. Objective one was to develop a social media marketing strategy to generate exposure for the Green Overview website. Eco-net wants to market their website to a younger demographic so that young people can better work towards sustainability. The popular social media channels, Instagram and Facebook, were the most useful sources to increase awareness of the portal and advertise the Green Overview’s brand. Objective two was to survey Danish college students to evaluate the appeal of the Green Overview’s marketing strategy. This was done in the form of an image selecting survey to gather information on hashtag effectiveness. Finally, objective three was to identify potential influencers and develop an outreach guide on how to engage them. The support of influencers would enable Eco-net to advertise their Green Overview portal more effectively. The team provided Eco-net with a marketing resources kit containing mock-up designs of social media pages with sample posts, branding strategies, hashtags, and a recommended posting schedule. Additionally, the marketing resources kit included a spreadsheet of potential influencers and sample letters utilizing accepted outreach strategies to most effectively contact these influencers.

Develop Online Marketing Strategy

In order to help expand the user base of the Green Overview, the team developed an initial strategy to allow Eco-net to market across multiple social media networks. This strategy included the creation of mock-ups for both Instagram and Facebook pages, including profile pictures, bios, headers, as well as potential posts and captions.

Identifiable and personalized branding creates more engagement for the Green Overview website

The first step to improve the marketing of the Green Overview on social media was to further develop its brand. For Instagram, two example profiles were created that Eco-net
could choose to use for the Green Overview. These profiles contain a header that uses the link space to direct viewers from Instagram to the Green Overview website. The headers are listed in both English and Danish to allow for different options when choosing to start the profile. Eco-net webmaster, Thomas Elvin, stated that there are different connotations to using Danish and English in social media posts in Denmark. According to Thomas, Danish is seen as casual, local, and entertaining whereas English is seen as serious, professional, and internationally focused. The Green Overview is still in the beginning stages of its marketing, so the focus will be towards Danes. However, they still want to appeal to an international crowd, so the English option will allow them to easily transfer languages once they get a larger following. Figure 9 shows the mock-up of the Instagram page in Danish. The username that was ultimately chosen was grontoverblik, as that is Green Overview in Danish. The only exception is that the Danish letter “ø” was not used as Instagram doesn’t allow it.

The Green Overview already has a very well developed and visually appealing logo, so there was no need to change it. Since Instagram’s profile picture can only accommodate a small circular image, the entire “Grønt Overblik” logo was not used as it would be hard to read. Instead, the ‘ø’ from Grønt, shown in Figure 10, which has a similar appearance to the Danish organic symbol, was used as the profile picture. This is simple and visually pleasing but is also recognizable to the Danish people.

Another potential feature to increase the Green Overview’s engagement with followers would be to have their account verified. Instagram’s verification process requires an account owner to apply through an online form. In some rare cases, Instagram will automatically verify an account. Accounts usually achieve verification status by having a large influence in their respective community or have high levels of engagement with a large following.

Developing Eco-net’s brand on Facebook was a different process than it was on Instagram because Eco-net already has a Facebook account. Rather than starting a new page from
scratch, the existing page was updated to make it more recognizable and consistent with the color schemes that are presented in the Instagram page. The first step towards this was to redesign the page’s profile picture to one that is simpler and easier to recognize. The original profile picture of the Eco-net Facebook page, shown in Figure 11, does not accurately represent Eco-net’s individual organization. It does not follow the typical green color scheme, and while it does contain Eco-net’s logo, the logo is very small and difficult to identify. It would be challenging for a new user to know which organization is the owner of the account. The point of the current image is to show that Eco-net is part of a network of organizations, but this is not expressed well as a profile picture and would be better suited to being a post. As a result, the team designed a new profile picture that would be far easier for Facebook users to recognize. In order to create the new profile picture, the team deconstructed Eco-net’s logo and edited it to ensure that it would be a design the sponsors and current users are familiar with. The new profile picture, shown in Figure 12, is a more condensed version of Eco-net’s logo to allow it to fit in a circular space and still be readable. The background color of the image is green rather than white, to help keep a consistent color scheme with both social media pages. This created a more organized and professional design to Eco-net’s brand. After adding the new profile picture to the Facebook page, the final design change was adding a border around the Eco-net banner. This helped improve the page’s overall color scheme and aesthetic. All of the proposed changes to the page are shown in Figure 13.

A new slogan was also implemented to help improve the page’s overall branding. Twenty slogans were drafted and then translated to Danish to test the coherency of the translations. From there, the slogans were sent to the Eco-net board to find their opinions on what would be best for the Instagram page. After compiling the board’s most liked slogans, they were checked with our sponsor, Lars. These select slogans were recommended but the final decision is up to the discretion of our sponsor.

Varying content is important to engage an audience

Every post an organization makes needs to engage viewers enough to make them want to continue viewing that organization’s content. When making a single post or series of posts, the primary details considered were visual content and associated hashtags to generate maximum exposure.

The team divided the posts into five categories to keep viewers engaged. **Informational or advice-focused posts** present a piece of information relating to sustainability that the average user may not know in order to engage them. **Location specific posts** highlight specific sustainable events and mention their locations to attract any users familiar with the area in which the event takes place. The third category presents positive and **thought-provoking quotes** to catch viewers attention. Sharing knowledge and information is a good way to spread awareness of the Green Overview,
especially since there is a special page on the portal dedicated to green knowledge and inspiration, called the ‘Green Library’. **Polls** request viewers to choose from a list of options. An example of this type of post for the Green Overview would be to have each option make reference to a specific environmental event found on the website. The viewer would then pick which event they would most prefer to attend. The significance of this type of post compared with the others is that viewers are encouraged to actively engage with the post rather than just view it. The final category was focused on **direct promotion** of the Green Overview portal to ensure that viewers were aware of the website’s purpose. By presenting a variety of informational and engaging content, the Green Overview can appeal to and retain a wider audience.

Hashtags are a simple way of categorizing posts to help them be seen from a wider audience. Jenn Herman, a social media trainer, suggests that using a combination of extremely popular, moderately popular, niche-specific, and branded hashtags would generate as much exposure as possible. This mix of hashtags fits best with Instagram’s sorting algorithm to optimize exposure for posts. The team created a list of specific hashtags by investigating tags on posts found on the Green Overview portal. Searching for these tags on Instagram then resulted in corresponding hashtags. It was also useful to develop a few Green Overview specific hashtags to go along with the others. Over time, these specific hashtags will become associated with the Green Overview, and they will continue to bring in new users.

**Sample posts will guide Eco-net to learn and manage their social media accounts effectively**

There are multiple features that go into making a post successful for engagement, and each must be considered carefully. The recommended list of both Danish and English hashtags will provide our sponsor with a variety of tags to use for numerous social media posts. The team broke up hashtags into four different categories: extremely popular, moderately popular, niche-specific, and branded. Breaking up the hashtags into these categories allows for the post to appear in different places across Instagram’s application, which increases the chance for users to locate the social media accounts. Picking only one category of hashtags was avoided as it limits the Green Overview’s social media growth. For example, if posts only used the most popular hashtags, they would instantly be lost among the thousands of other posts in that category. This is especially important for the Green Overview to remember since the account does not have nearly enough followers or engagement to be highlighted on the **featured** page for that given hashtag. Similarly, if posts only used niche specific hashtags, there would not be enough total engagement within the tagged category, which would in turn limit the Green Overview’s page to a certain level of growth. This is not ideal to spread awareness of the Green Overview and will not help increase its user base. Thus, Eco-net should evenly balance the amount of extremely popular, moderately popular, and niche specific hashtags they use.

Selecting sustainability and environment based categories from the Green Overview webpage provided a format for the list of hashtags. However, each category needed to be slightly different so that the lists could cover most of the subsections that fall under the category of sustainability and the green movement. To select which categories were to be used for the hashtags, the team went directly to the Green Overview website. On the Green Overview website, there is a section called the “Green Calendar” which is a dated list of different green events and activities that groups, people, or contributors have uploaded. Each of these posts on the Green Calendar has a list of tags that are uploaded with it so that if someone were to search the tag “sustainable” on the website, they would be able to see all related posts that have that tag. From this page, the team chose the tags that appeared most frequently, but also emphasized those that varied from each other enough to give our hashtags list a wide ranging spread. Some of these hashtags are “sustainable”, “organic”, “food”, and “energy”.
A short list of “branded” hashtags that relate specifically to Eco-net and the Green Overview was also created, such as “Eco-net” or “Green Overview”. Eco-net can use these to try to get their followers to begin tagging their own posts with Green Overview related content, which will help increase their engagement. The full list of hashtags is included in the supplementary materials. Another important thing to note is that Instagram has added a cap of thirty hashtags per post. Therefore, Eco-net must be slightly selective of the hashtags they use, and only include hashtags that directly relate to the post.

After selecting which hashtags to use, the team began development of the content of the sample posts, including captions, location, and hashtags. The captions of Instagram posts were both entertaining and informative to draw in new users and increase engagement. The team selected twenty-five general pictures from public-use websites based on the hashtag categories that were taken from the Green Overview website. The team also drafted posts based on photos taken at sustainability events in Copenhagen and at our sponsor’s farm in Svendborg. All of these pictures were paired with entertaining captions that connect back to the Green Overview website for promotion. After drafting the caption, the team picked a location for each photo based on where it was taken. Then, the team selected thirty of the most relevant hashtags for each post.

These thirty hashtags included a mix of both Danish and English, and belonged to a specific category that best related to the post. All the above information was compiled into a single document to provide to Eco-net. See Figure 14 as an example.

Posts for Facebook are formatted in a different manner than they are for Instagram. Although Eco-net already has a Facebook page and has been making posts, they lack variety and are only focused on publicizing events on the Green Overview. Because Facebook posts do not require a picture with a caption, the content of the posts can vary much more in style. The team selected five different categories of content style and created two sample posts for each category. The use of pictures did help to emphasize some posts, such as location-focused posts, polls, and Green Overview specific posts. However, images did not add value to posts in other categories, such as informational posts or quotes. For posts that included an image, the captions followed a similar format to Instagram and required the same strategy to make sure they were both entertaining and informative with factually correct information. An example of one of these posts is shown in Figure 15. For the posts that included quotes
or advice, no additional text was necessary. An example of one of these posts is shown in Figure 16. All of the sample posts are editable at the discretion of our sponsors.

Interacting with other organizations attracts new viewers

When interacting with other users, it is important to find organizations with similar goals. Eco-net can find posts and pages to comment on by searching keywords they commonly use into either Facebook or Instagram’s search bar. Once they have located an organization to interact with, Eco-net can comment on either the organization’s posts or page. There is no limit to how often Eco-net can interact with other groups; ideally they should be interacting with other organizations on a daily basis, which can be a time consuming workload. Eco-net should plan to interact with other organizations at least as many times as they post. If in the future they are able to hire a social media manager, they can interact more often.

Instructional guides help outline procedures in a step-by-step format

The development of Instagram and Facebook instructional guides provide detailed directions so that our sponsor can make use of the suggestions and best implement and manage changes. The Instagram guide provides a complete and detailed set of step-by-step instructions on how to start a new account, including the settings and header details. The guide also covers how to navigate the website, how to follow other users, and how to make posts. These are all pivotal to ensure a new account’s success. Finally, the guide covered some of the finer details of Instagram, such as how to apply for verification and how to best use the ‘discover’ and ‘suggestions’ pages.

Because Eco-net already has a Facebook page, the Facebook guide only provides instructions on how to interact with other organizations on the platform in order to improve the page’s recognizability. Currently, Eco-net does not interact with other accounts, other users, or their own followers. Their posts are set up on an automated schedule that does not directly provide engaging content. This guide covers the different types of interactions in which Eco-net should be engaging to help boost their engagement and user base for the Green Overview.

Visual demonstrations are more effective at conveying information than text

Visual representations are more concise and easy for our sponsor to understand. Long sections of text can be overwhelming and confusing for someone who does not speak English as their primary language. Attempting to explain the process of navigating through a social media platform purely through text also results in an excessively long document that can be difficult to follow. Capturing and editing screenshots while navigating the social media platforms was the most effective way to demonstrate the actions described in the instructional guides. For Facebook, the screenshots demonstrated how to interact with other organizations. These interactions included liking a page from a business page,
liking and commenting on posts, and posting on other pages. Figure 17 is an example of a visual used to demonstrate these processes. This figure shows where to go to like a page as your own page. For Instagram, screenshots of starting a new account, converting to a business account, navigating the website, and making posts added clarity to an otherwise confusing process. It was necessary to make this guide much more extensive in length than the Facebook guide as there was far more information to cover. Figure 18 is an example of a visual used to help a beginner navigate the Instagram application. From this figure, a user can learn how to go to the main feed, search for pages or posts, make a new post, view notifications, and go to their own profile. Explaining where all of these features are located would have been hard to follow and would have taken paragraphs of text. By using visual demonstrations in almost every section, our sponsors could easily follow the instructional guides, included in the supplementary materials.

Figure 17: Liking a page from a Facebook business page

Figure 18: Navigating the Instagram mobile application

Identify Social Media Appeal

The team administered a survey to Danish college students to collect information on the appeal of our sample social media posts to the younger generation. With these data, the sample posts were tailored towards their interests.

The team used the WPI Qualtrics survey software to construct the survey, which is included in the supplementary materials. It consisted of several short interactive questions to increase the likelihood of participation. Each question represented a different category relating to sustainability and prompted the respondent to select the most appealing of five images. The categories were organic farming, climate action, green lifestyle, sustainable energy, and organic food. These were selected through an analysis of the most frequent posts on the Green Overview website by identifying the most common tags across all of the posts. The team then confirmed that these categories were existing hashtags on Instagram and Facebook by querying for them on both platforms.

Next, the team retrieved the pictures for each category from the websites Pexels and Unsplash, which offer copyright and royalty free images. The team selected the pictures methodically encoding each picture in a certain category with specific visual content descriptors. The websites were also useful to examine the common kinds of visual content that appeared for each category. Based on the content of the image, backgrounds, and color scheme, the team selected 5 images for each hashtag category and made sure that each picture had at least...
two different descriptors. By doing so, the survey revealed what types of visual content are most appealing for each category.

To administer the survey, the group visited Copenhagen Business Academy, Copenhagen University, University of Copenhagen (Fredericksberg campus), and Copenhagen Business School. Students completed the survey via an iPad as they walked past the team in public spaces around each university. A total of 100 students completed the survey.

After receiving all of the responses, the team used Qualtrics software to compare the results. Because each image was encoded with different visual content, the team determined the visual content that was preferred for each category relating to sustainability. Eco-net can use these results to tailor their posts to include the most preferred visual content.

The survey validated research on most appealing visual content for sustainability related posts.

Figure 19 shows how many participants selected each picture for the given categories on the survey. These are the gross findings, which show what type of images college students found most appealing for each category. By presenting the gross findings in an ascending bar chart, it was easier to see the distribution of responses.

Figure 19: Results from the survey per category
For the #OrganicFood category, the image of a person holding a basket was the most selected image. The image of the vegetables at the farm stand was the second most selected image, only one vote behind. The visual content attributed to the basket picture was that it contained a person, raw produce, and it had a light blue tint. The farm stand picture also had raw produce, a wide variety of colors, and no background. Because these were the only two pictures with raw produce, raw produce was the most popular type of visual content for the #OrganicFood category. The other pictures featured prepared food, a large background, and a quote.

For the #ClimateAction category, the image of an inspiring quote and a person cleaning trash were the top two selected images. The visual content attributed to the climate action sign image was that it contained a quote, had blue text, and represented people taking action. The visual content attributed to the person cleaning a beach was that it contained a person, a large blue background, and also represented a person taking action. The rest of the pictures represented causes of climate change and the effects of global warming. Because the two most selected images represented people taking action against climate change human participation was seen as the most popular type of visual content for the #ClimateAction category.

The results for the #GreenLifestyle category strengthened our belief of human participation as a popular type of visual content. For this category, a person riding a bicycle and someone planting seeds were the most selected images. Both of these images not only contained a person, but showed them performing an action that allows them to live a greener lifestyle. The other images represented a green background, an environmentally friendly product, and a human in a healthy environment.

The image of the windmill and the image of the solar panels were the two most selected images for the #SustainableEnergy category. The visual content attributed with the image of the windmill was a large and scenic background and its representation as a source of renewable energy. For the solar panels, it was attributed with a blue tint, small background, and its representation as a source of renewable energy. The rest of the images represented ways to conserve energy and non-sustainable energy sources. Since the two selected images were the only images of renewable energy sources, this visual content was the most compelling for the #SustainableEnergy category.

For the #OrganicFarming category, the image of the cow and farmer were tied for the most selected image. The other photos featured industrial farming practices, a landscape of a farm, and crops. The top selected images represented visual content of a person farming and farming animals. The team interpreted the visual content of a person performing organic farming practices and an animal as the top visual content for the #OrganicFarming category.

Looking at the all of the categories as a whole, the images of people tended to be more popular than the images of landscapes, scenery, and products. There was not sufficient evidence to determine whether the size or color of an image’s background effected its visual appeal. For images regarding sustainability, it seems that most appealing images demonstrated actual involvement in sustainable practices.

Of the five categories relating to sustainability, only four of them contained a picture of a person. Looking into these data even further revealed that pictures of people or faces were selected 28%, 54%, 67%, and 60% of the time for the #OrganicFood, #ClimateAction, #GreenLifestyle, and #OrganicFarming categories, respectively. Therefore, respondents selected a picture of people or faces an average of 52% of the time when given the chance. These data are significant, since this type of image only made up 40% of the options in those four categories. This confirms our background research that suggested images of people and faces are more appealing to viewers. Based on this data analysis, the team made recommendations about how often to post various types of visual content.
Develop Marketing Resources Kit

After compiling the data obtained from our surveys and making necessary adjustments to our social media pages, the team constructed a marketing resources kit. This kit contained the recommended social media pages for both Instagram and Facebook with sample posts, data on what visual content students found most appealing, and a recommended posting schedule for each platform which would attract maximum attention. Additionally, this kit contained a spreadsheet of Danish influencers, draft emails, and information about each influencer, which will be described later in detail.

**Posting at times of peak engagement will maximize views for users in specific regions.**

To create the posting schedule, the team conducted extensive research on user engagement with Instagram and Facebook based on the day of the week and time of day when there was the most activity. The research was focused on total engagement and nonprofit engagement. These findings were presented so the Green Overview can maximize the number of views on their content and engage the people who invest themselves in non-profit organizations.

Based on research done by a data science team from Sprout Social, an organization that aids business with social media management tools, the global time of maximum engagement for Facebook is Wednesday from 18-20 CEST; For Instagram, it is Wednesday from 17-19 CEST and Friday from 17-18 CEST. These data are visually presented in Figure 20. These are the peak times when the most global users are online, likely because there are people active in both the United States and Europe. By posting on social media accounts at their respective peak times, Eco-net will be able to maximize the promotion of the Green Overview portal to a global audience. Additionally, Figure 20 displays the highest engagement periods for users viewing

![Figure 20: Global engagement for Instagram and Facebook. Times are shown in CST.](image)
content of nonprofit organizations, like Eco-net. These peak times, which are different from the global times, are beneficial for posts that are advertising their mission and upcoming events, rather than general posts about sustainability. The peak times for nonprofit self-promotion on Facebook are Wednesday from 15-16 CEST and Thursday and Friday from 15-17 CEST. For Instagram, the peak time for nonprofit self-promotion is Wednesday from 20-23.

In order for the Green Overview website to generate a significant following, it will first have to start out locally. It is therefore important for the Green Overview website to begin posting at their local peak engagement times before attempting an international outreach. Local peak times are highly based on the average work and school schedule. The times that experience the most average engagement throughout the weekdays are 05:00-07:00, 11:00-13:00, and 17:00-19:00. These times are before work, during lunch, and after people get settled at home, respectively. The time frame from 17:00-19:00 aligns with most of the global engagement times, so this is the range that is stressed most in our posting schedule.

As for frequency, the team found that the Facebook page should be making a minimum of three posts per week and a maximum of one per day. Although studies show that posting one to two times per day on Instagram is optimal, our team recommended the same range as Facebook in order to decrease the amount of maintenance required on Eco-net’s part.

Figure 21 shows the posting schedule for Eco-net’s social media platforms. For a given week, there are four different schedule types to give Eco-net flexibility with the number of times they want to post on social media each week. Although research recommends a minimum of three posts per week, the team made the ‘minimum’ week with only two posts, since our sponsor has limited staff availability and the acquisition of social media expertise will take some considerable engagement and training. This posting schedule also shows which times are peak times. The team has incorporated a peak time for every day of each schedule to maximize engagement.

The team designed the posting schedule so that Eco-net can use the same schedule for both platforms without any conflicting posting time. This is so the person responsible for posting can take time to make a separate and thoughtful post on both

![Figure 21: Posting schedule for Instagram and Facebook](image)
accounts. The team designed the ‘minimum’ schedule specifically for times where the Eco-net staff are very busy with other work. If Eco-net decides to use this schedule, they have the ability to make the same post on both platforms since Instagram and Facebook are connected. Because the peak times for the ‘minimum’ schedule are similar for both platforms, they can make the same post and still get maximum engagement.

**Influencers in Denmark can help the Green Overview through marketing and collaboration**

Another way for Eco-net to spread awareness about the Green Overview portal and engage potential contributors to the website was through influencers. An influencer is someone who has a good public reputation and the ability to promote a product through their own personal venues. The team compiled a list of potential influencers using previous research conducted by the study group and utilizing the Green Overview database. This list contained the influencer’s contact information, job description, and involvement in sustainability. Our intended targets were Danish public figures, members of progressive student youth groups, leaders of green organizations, representatives from environmentally friendly companies, and municipal government members of agricultural or sustainability-related committees. It is hypothesized that these people, who already practice and focus on sustainability, would be more willing to either help spread awareness for the Green Overview website or volunteer their time as a contributor. Figure 22 is the key as to how the spreadsheet was color coded so that our sponsor would be able to easily distinguish between the different categories of influencers. The following sections provide an analysis on how the team found each type of influencer, and the full spreadsheet is available in the marketing resources kit found in the supplementary materials.

**Meeting local climate activist students allowed us to expand our social media connections to find influencers**

Finding influencers with which the Green Overview could connect allowed for collaboration to generate higher levels of engagement. To begin this process, the team made initial contact with different organizations and youth groups in Copenhagen and Denmark. Attending a variety of different environmental rallies and protests allowed the team to meet Danish students from Fridays for Future, Greenpeace, and Extinction Rebellion. From there, contact information and social media accounts were shared between one another. Social media accounts of these students were connected to the larger environmental organizations, and they frequently interacted with each other. Once the team located the environmental accounts, the account was then linked to that organizations website. On the website, there is usually a “contact” page that includes a general phone number, email, or form to fill out to contact an individual from the organization. While this is a viable option for the Green Overview, it isn’t the most ideal. However, other websites for different organizations include contact information for specific leaders or for individuals from the organizations with details such as email, phone number, and address listed. This is the best option for Eco-net to employ since they can personalize their contact emails and phone calls. This increases the overall chance of receiving a response and will give the Green Overview a higher chance of increasing their engagement.
Companies with sustainability initiatives and positive consumer perceptions could help to promote the Green Overview.

The Sustainable Brand Index is Europe’s largest independent brand study on sustainability within the business to consumer market. The study is based on research among consumers and shows how brands are perceived in regards to environmental and social responsibility. The Danish 2019 report, conducted by the Sustainable Brand Index, revealed companies with promising influencer potential. In order for a company to be an effective influencer, it must have a large following and a respected reputation. Because this report takes into account both research on the company and how Danish consumers perceived brands, the rankings were a result of both actual achievement and popularity. These are the exact types of companies which have the potential to become involved as influencers, since they are strong advocates for sustainability and enjoy significant consumer support. They are more likely to collaborate with the Green Overview because of their interests in sustainability and they are able to influence a large following of consumers.

Another way to find companies to collaborate with Eco-net was through shared contacts. A different IQP team in Denmark has interviewed social enterprises in Denmark and Sweden. Although most of these were very small companies, a lot of them had employees and management that were very driven and passionate about sustainability. These companies won’t have as much influence promotionally, but they do provide a better opportunity for collaboration. These companies are more likely to employ someone who may be interested in participating as a contributor.

Municipal government websites are a reliable avenue to find the contact information for environmental committee members

Every municipality in Denmark has its own website. After an investigation into these websites, the team found that navigating these websites was an effective strategy to identify government members in environmental committees. Each municipal government is structured differently and is comprised of numerous committees, so our team viewed the responsibilities of each committee to see whose goals best aligned with the mission statement of Eco-net. The first step in this process was to translate the web pages into English. Most municipalities contain general information on the municipal organization of committees on an ‘About’ page that contained information on all the committees. The team then identified the committee that focused the most on the environment, sustainable development, climate action, or Agenda 21. The committee page would usually reveal the names of the people who were on the board for the committee, but not the contact information. To find this, the website’s query tool was useful to search for personal contact information of the chairman. Unlike in the United States, the municipal website usually listed personal phone numbers and email addresses for the government representatives. The personal contact information will give Eco-net a much better chance of getting in contact with these influencers.

Public figures with large followings have the potential to significantly expand the Green Overview’s audience

While organizations, companies, and government officials are important sources for expanding the Green Overview’s user base, public figures are able to reach a much wider audience. Public figures are people with large followings on social media and have influence over those who view their content. The team found public figures who would be the most beneficial for collaborations with Eco-net by searching though the top 1,000 Danish influencers and selecting those who are known for promoting sustainability. It was important to pick influencers with different levels of popularity to ensure that Eco-net had the option to reach out to individuals with a
lower number of followers who might be more likely to respond, or individuals with a larger number of followers who would have more influence. The public figures listed on the influencer spreadsheet have a following ranging from a few thousand to one hundred thousand followers. Personal contact information for each of them, which the team found from their social media accounts and personal websites, was also listed in the spreadsheet. The response rate of contacting public figures is likely to be much lower than the other groups of influencers. However, due to the number of followers they have, even one response could lead to a significant expansion of the Green Overview’s audience.

Following statistical research on outreach emails will increase the Green Overview’s response rate

Once the team identified all of the influencers, personalized emails were drafted based on how each influencer could benefit Eco-net’s goal. For example, government representatives and leaders of green organizations are well suited to becoming contributors and influencers because of the number of connections they have, whereas social media influencers would be more helpful in promoting the Green Overview website. These emails were constructed based on the research done on twelve million outreach emails by Backlinko, a blog created by an internationally recognized search engine optimization expert, Brian Dean. Because the response rate for outreach emails is only 8.5%, a set of strict guidelines were followed to increase Eco-net’s chances of getting a response. These emails are included in the supplementary materials. In order to get the influencers to read and respond to the emails, there are very specific subject-line and content requirements that are shown to improve the response rate. Firstly, long subject lines have a 24.6% higher average of getting a response than shorter subject lines. Specifically, subject lines with 36-50 characters get the most responses. Next, sending follow-up emails to the same contact doubles the response rate. Therefore, our group also created short, follow-up sample email drafts for our sponsor to send to these influencers. Also, personalized subject lines boost the response rate by 30%. Since research was done on each influencer, there is advice on how to personalize each subject line. Finally, linking an Instagram account to the signature of an outreach email has been shown to be the most effective social media platform to link, and improves the response rate by 23.4%.

Besides these specific requirements, the team also utilized a basic outreach strategy within the content of the emails. First, influencers will not respond well to outreach emails that appear to be needy or desperate for publicity. It is important that our email portrays Eco-net as a ‘giver’. This means that the emails should appeal to the individual and acknowledge their impact as an influencer. Secondly, studies have shown that making a clear and respectful request results in a better response rate. Influencers are busy and will not know how to respond to ambiguous requests. After a description of Eco-net and the Green Overview portal in our sample drafts, the email then clearly requests their assistance to advertise the Green Overview website and/or their participation as a contributor. By being upfront, there won’t be any miscommunication regarding the request and they will know how to respond to the email. Additionally, for influencers in youth groups, organizations, and companies, the email presents the marketing pitch in a way to convince them that the Green Overview can actually benefit them. This strategy is to show off the credentials of the Green Overview. The Green Overview is special because one of its purposes is to connect the environmental initiatives across Denmark. This means that Eco-net can promote the Green Overview as a free way to advertise other organizations. People are more willing to do something if they can also get something from it. Finally, each outreach email will ask the influencer for another contact who might be interested. This way, if an influencer is not willing to help, but knows someone who might be, Eco-net can get another contact and continue looking for support.
Marketing business accounts on social media requires constant management

The goal of this project was to spread awareness of Eco-net’s Green Overview portal by developing a marketing strategy that would increase the user base and recruit potential contributors. To spread awareness, the team created social media mock-up pages along with an influencer outreach plan.

When first given the task of marketing through social media, the team considered using Facebook, Instagram, Twitter, and LinkedIn. Eco-net would not be able to manage all of these accounts given their current staffing limitations, so the team narrowed down these social media platforms by considering the Green Overview’s mission and how the platforms are used in Denmark. LinkedIn is a professional platform, mainly used by companies for recruiting. Although LinkedIn might have been useful for recruiting contributors for Eco-net, it is not very popular in Denmark. Additionally, the expected volunteers for the contributor position are unlikely to be on such a professional, recruiting-based platform. And although Twitter is a valuable tool to connect people, it is also unpopular in Denmark. Therefore, the team decided on Facebook and Instagram. Facebook, as the most popular social media platform in Denmark, would allow the Green Overview to advertise to the highest number of Danes. Instagram, being the fastest growing social media platform, both globally and in Denmark, is designed for promotion and is more popular with the younger generations. Because the younger generation will eventually be responsible for the green movement, it was important to find a platform for Eco-net to engage them.

Navigating multiple platforms and knowing how to engage other accounts is a challenge for social media novices. It requires time and attention to learn all of the different features and ways in which the accounts can be used. Because Eco-net wants more viewers on the Green Overview website, they need to learn how to navigate social media in a way that attracts more users. To gain and maintain followers, an account must continuously be posting and engaging with other people and accounts. It can be difficult to come up with content that is relevant, entertaining, engaging, and informative, but it is necessary. Because Eco-net is unfamiliar with Instagram and not active on Facebook, the team provided multiple instructional guides to help start their social media marketing campaign. These instructional guides and an in-person walkthrough will help the head of Eco-net, Lars-Myrthu Nielsen, familiarize himself with both platforms.

The team also created a posting schedule that provides specific times to post each week. Each of these times are the times of peak engagement when the most users are online. There are four different options to choose from each week, providing Eco-net with flexibility, while still keeping the schedule straightforward. The purpose of this is to significantly reduce the amount of decision-making on Eco-net’s behalf and save them time. When they do post, the team’s first recommendation is that at least half of all posts should contain people. From the survey data and background research, pictures of people will generate the most engagement. However, it is still necessary to vary the content, which is why the team created mock-ups of posts for Eco-net to use as examples. Regardless of these materials, managing both social media accounts can be a time consuming task. It is incredibly important to stay active by making posts, interacting with followers, and making new connections. Eco-net’s current staff is small and very busy, so the second and most important recommendation our team will make is that Eco-net needs to hire a social media manager. Eco-net has many visions and important and relevant ideas on how to spread knowledge about sustainability across Denmark. The social media campaign is designed to supplement Eco-net’s projects, not replace them. Addition of a social media manager would allow Eco-net to continually market the Green Overview website and expand its user base while allowing the current staff to continue with their work. The social media manager can either work as much as full time, or as little as a few days a week depending on how much work Eco-net wants to delegate to them. Although
the Instagram account is for the Green Overview and the Facebook account is for Eco-net, both platforms should be connected and promote each other. Eco-net should continue to promote all of their events, projects, and ideas to show people their dedication and passion for sustainable living.

In the future, if the budget allows for it and Eco-net is still struggling to gain followers, our final recommendation is for Eco-net to consider paying for advertisements on Facebook and Instagram. This is a way to guarantee views of their social media accounts, as these platforms will place Eco-net’s accounts in user’s feeds. If Eco-net does this, and they still are not gaining users, they should try to identify another possible reason for their stagnant following, since it will not be due to a lack of exposure.

Overall, social media will be an efficient form of marketing for the Green Overview if it has the proper maintenance. To expedite the implementation plan, the Green Overview Instagram account has been created. Following the tips in the “How to” guides and using our team’s deliverables will help Eco-net be successful and spread awareness for the Green Overview. With all of the environmental concerns spreading globally, it is important for every individual to do their part and live a greener life. It is a dangerous state of mind to think that one’s individual actions don’t matter. With proper exposure, the Green Overview will spread knowledge about sustainability so that every Danish family has the ability to live a more environmentally friendly lifestyle. The marketing strategy will increase environmental awareness so that Denmark can move towards a greener future.

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Endnotes


