



Re-envisioning the WPI Storying Climate Change Initiative

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WPI

Re-envisioning the Storying Climate Change Initiative

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Abstract

Current means of portraying information about climate change — such as via statistics or news stories — are socially distanced and therefore unable to emphasize the human perspectives behind this worldwide issue. Contrarily, storytelling has the power to develop intrapersonal connections that can lead to more cognizant thinking and solutions regarding climate change. The goal of this project was to use a social media platform to share the stories and experiences of Czech citizens regarding climate change and enable broader dissemination and sharing of future stories through the WPI Storying Climate Change initiative. Through interviews with Czech citizens, the team collected stories and documented them on an Instagram account to increase the visibility of these stories to a vast audience.

Acknowledgements

Throughout working on this IQP project, there were numerous people and organizations that assisted the team. Without their substantial contributions the team would never have been able to make this project a reality. We would like to thank each individual and organization.

First, we would like to thank every person who agreed to participate in interviews by the team about their experiences with climate change. Thank you to Kamila Hofmanová, Morgan Henley, the bartender Petr, Marek Rakouš, Ondrej Altman, Petr Franc, Lucie Gomezova, Peter Mistrík, Michaela Neužilová, Petra Key, Luděk Hofman. Whether they spent half an hour giving a long interview or just five minutes, they all gave the team insights that created the backbone of this project. We would like to especially thank Kamila Hofmanová and Morgan Henley as they helped put the team in contact with others to get even more interviews.

Second, we would like to thank the Council on International Educational Exchange (CIEE) for assisting the team in multiple ways. None of the members of the team had ever visited the Czech Republic, and CIEE members provided substantial help in understanding the cultural norms of the country. CIEE members also participated in most of the interviews the team conducted and provided the team with a space to work.

Next, we would like to thank Professor Melissa Butler and Professor Kimberly Hollan, the team's advisors, for helping the team throughout the project. They both were invaluable to the project by helping review the report, guiding the team in the right direction for the project, and much more.

Finally, we would like to thank Dr. Ingrid Shockey, the founder of the Storying Climate Change initiative. Professor Shockey assisted in creating a final goal for the project and guiding the project in a direction that would best assist the larger initiative.

Executive Summary

Climate change is a phenomenon that poses a great threat to the planet. Warmer climate patterns have led to global heat waves, sea level rise, and the collapse of ecosystems as carbon dioxide (CO₂) released by humans has caused the global temperature to rise (Lindsey, 2022). As a result of increased global temperatures, the Czech Republic primarily experiences climate change through heat waves. The increase in the intensity and frequency of heat waves has directly caused around 3000 deaths from 2006 to 2017 (Urban & Kyelsý, 2020). In addition, heat waves have caused over 60% of all crop losses in Europe, limiting the food supply and causing more deaths (Researchers from Czech University, 2020).

However, statistics like these do not portray climate change meaningfully enough to develop interpersonal connections between those who experience the effects and those who do not. Storytelling can promote climate change in a lens that offers new insights, understanding, and solutions (Lockwood, 2022). The WPI Storying Climate Change initiative, led by Dr. Ingrid Shockey, aims to alter the conversation of climate change from one primarily focused on policy and climate science to a more diverse view of people's experiences. Unfortunately, climate stories collected from past IQPs still often go unnoticed as the initiative's database reaches few people.

The goal of this project was to use a social media platform to share the stories and experiences of Czech citizens regarding climate change and enable the sharing of future stories collected through the WPI

Storying Climate Change initiative. The team achieved this goal by fulfilling three objectives:

1. Utilizing social media to re-conceptualize the WPI Storying Climate Change initiative
2. Developing a multi-method approach to content creation
3. Providing recommendations to future IQP teams to further the WPI Storying Climate Change initiative

Research Methods

To accomplish these objectives, the team conducted surveys and interviews. The team created two different formats of interview questions to be used in different situations: a long-form and a short-form. The team organized the interview questions for both formats in a way to facilitate semi-structured interviews, which provided structure but allowed for more free-form answers (Ryan et al. 2009). Long-form interviews were more formal and guided while short-form interviews were more casual and improvisational. All the interviews aimed to get information regarding the interviewee's demographics, experience with climate change and climate action, and opinions of climate change and climate action.

The team created a survey to collect quantitative data regarding experiences with and awareness of climate change and to identify potential interview participants. Survey questions asked about the extent of impact from different climate change events and the respondents' lifestyles related to sustainability. The team distributed surveys to environmental organizations through

email, provided surveys to local shops with a physical QR code, and sent surveys to individuals the team wanted to interview through Instagram DMs. The team received five interviewees from the survey.

Research Findings and Analysis

The team received 16 survey responses and interviewed 11 individuals. All interviewees noted changes in weather patterns and events, such as warming winters which have led to noticeably less snowfall. But the most discernible effect of climate change that respondents experienced were heat waves during the summers.



Figure 0.1 Interview with Peter Mistrík, November 16, 2022

Several interview participants described the heatwaves as “unbearably hot in the city” (P. Mistrík, personal communication, November 16, 2022), and that such heat was exacerbated by a lack of air conditioning in the Czech Republic; the participants stated that many buildings are not yet equipped to handle the rise in temperature. The respondents also noticed an increased frequency and extremity in natural

disasters. In the summer of 2022, a fire occurred in the Bohemian Switzerland National Park; even though the forest is 90 kilometers away from Prague, two acknowledged seeing the smoke in the city. Forty-five percent of the respondents believed that the forest fire was due to drought that has caused other issues in the forests, like bug infestations and monocultures.



Figure 0.2 South Moravia after the tornado in 2021 (Bednarz, 2021).

Many respondents also explained the abnormality of a tornado in South Moravia in 2021. One participant, Lucie, grew up in the area of which the tornado occurred, and the tornado directly affected her by destroying the gravestones of her grandparents. Upon seeing the impacts of the tornado, Lucie explained that she “fear[s] that if we don’t act, these events could happen more and more often, and right now we are not really prepared for it” (L. Gomezova, personal communication, November 16, 2022). While all interview participants acknowledged that climate change is a serious problem and 94% of the survey respondents indicated that climate change was either a serious or very serious problem, very few of the respondents

engaged in climate activism. Only three interview participants engaged in climate activism, two of which were students at a climate sit-in at Charles University. The other participant, an active environmentalist, joined marches and attended climate events. Respondents gave several reasons behind not participating in climate activism; many noted that activism is usually led by young students, which has been shown throughout Czech history like the Velvet Revolution. While few of the team’s interview participants engaged in climate activism, they did take climate action to improve the environment (Figure 0.3).

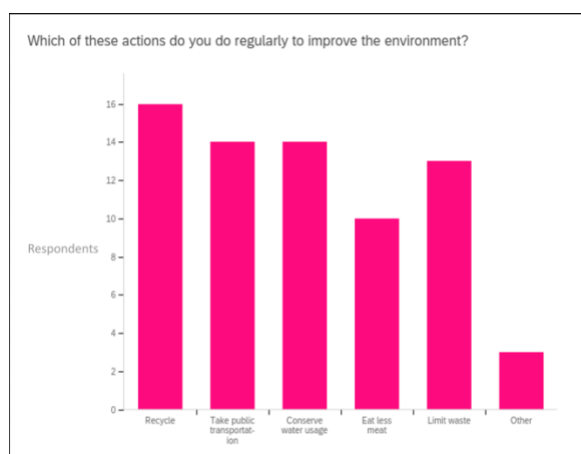


Figure 0.3 Environmentally-Responsible Actions

In both the survey and interview data, the respondents took actions such as recycling (100%), taking public transport (88%), and conserving water usage (88%). However, two interview participants also indicated that living environmentally-friendly is inconvenient for many Czechs’ lifestyles, stating that citizens are generally not concerned with climate change.

All participants recognized that a big producer of pollution are companies and

industries in the Czech Republic, especially the coal industry. Participants believed that more sustainable energy sources should replace these coal industries. Although plans have been made to phase out coal by 2038 (Iea, 2021), there is a clear disconnect between acknowledging climate change compared to taking action and engaging in activism against climate change in our research.

Storying Climate Change Through Instagram

The team created an Instagram account, @wpistoryingclimatechange, to expand the outreach of the WPI Storying Climate Change initiative and gained 72 followers while reaching a total of 969 individual users over the course of the project term. Instagram’s “accounts reached” data — which describes the number of users that had the project account’s content appear on their device — provided the most useful statistics from Instagram’s “Professional dashboard” in which the data is housed. To understand how to best utilize an Instagram account to give exposure to climate stories, the team altered the frequency, style, and type of posts and subsequently analyzed the data on reached accounts. Reached data from the first 30 days of posting on the account showed spikes in the number of accounts reached on certain days related to distinct posts, as seen in Figure 0.4. The team concluded that varying content with regard to the featured interviewee is best for maximizing the number of users reached.



Figure 0.4 Day-to-Day Data of Reached Audience (Instagram, 2022)

In terms of post type performance, shown in Figure 0.5, Feed posts and Reels reached a much greater proportion of non-followers compared to story posts. The team concluded that interview clips, the main form of content for the project Instagram account should be included primarily in Feed posts and Reels to reach a greater audience.

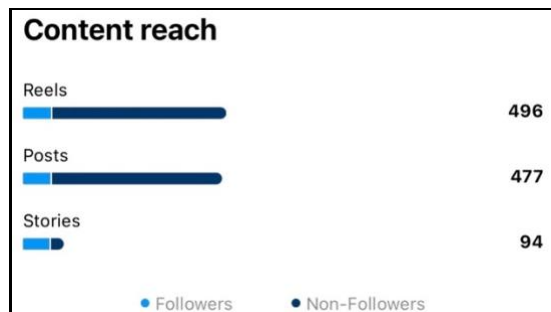


Figure 0.5 Data of Content Reach (Instagram, 2022)

Recommendations

Based on the team's findings from interviewing Czech citizens and Instagram posting, the team recommends that future WPI Storying Climate Change IQP groups approach conducting interviews and utilizing the Instagram account by:

- Following and direct messaging organizations in the host country via Instagram during ID2050 to build connections for interviews
- Creating a survey before arrival at the project site and widely distributing it within the first week of IQP
- Making interviews feel conversational by practicing with each other and improvising alongside guided questions
- Following an Instagram posting schedule and preparing content ahead of time, especially for when the data collection period comes to an end
- Developing a consistent aesthetic for posts that is visually appealing and unique to the project site
- Promoting the project Instagram account when communicating with others and reposting content on personal Instagram accounts

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Authorship

All members of this project contributed equally to writing, editing, and formatting for this report. The team split chapters up by sections and subsections for individuals to write and then edited collaboratively. Isaac and Terrence conducted the interviews and all members contributed to both asking questions and taking notes. Timothy was primarily responsible for taking, analyzing, and editing the videos of interviews, while Terrence took photos of activities. All group members worked together to create interview and survey questions. Chase processed all audio that was recorded during interviews and created the Instagram Guidebook. Terrence created and uploaded content for the Instagram account, while co-managing the account alongside Chase.

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1.0 Introduction

Climate change is a problem. The planet's atmosphere is warming due to increased carbon dioxide (CO₂) released into the atmosphere by humans through transportation, agriculture and energy consumption, rising 2.58 parts per million in the year 2021 (Lindsey, 2022). The more CO₂ that is released per year into the atmosphere, the worse — and more frequent — dramatic climate events become. Warmer climate patterns have led to global heat waves, sea level rise, and the collapse of ecosystems. With numerous devastating effects, climate change is an important issue that must be addressed.

While climate change impacts the planet on a large scale, individuals feel the regional effects much more. In the Czech Republic, for instance, the most prevalent effect of climate change is heat waves with an increase in the intensity and frequency of heat waves directly causing around 3000 deaths from 2006 to 2017 (Urban & Kyelsý, 2020). While the increased intensity of climate change-induced events has led to such prominent impacts, climate awareness in the Czech Republic is still relatively low compared to other European countries. In a European Commission survey conducted in 2021, while 78% of the European Union believed climate change was a serious problem, only 64% of the Czech respondents thought it was a serious issue (European Commission, n.d.). There has only recently been an increase in government intervention for environmental policy that plans to change the energy sector in the Czech Republic toward renewable energy (European Environment Agency, 2020). Even with the Czech government enacting more environmental policy, progress in climate action cannot succeed if there is a lack of understanding within Czech communities.

The increased prevalence of climate events can make it difficult to empathize with broadcasts and numbers — the only thing that people can truly empathize with is other people. For

this reason, the best way to gain support for climate change is by telling the stories of people that have been negatively impacted by climate change. While not everybody has experienced dramatic weather events, many people feel climate change in more subtle ways that impact many aspects of their life. With research indicating that stories can alter people's perception of their topics (Bloomfield & Manktelow, 2021), collecting the stories of Czech citizens' experiences with climate change can provide an accessible medium to engage more people.

In 2014, WPI established the Storying Climate Change initiative to create a catalog of experiences with climate change around the world. This initiative seeks to help change people's viewpoints on climate change by documenting the lives of people threatened by climate events to bridge the gap between science and experience (Dr. Ingrid Shockey, personal communication, September 2022). Other project teams working on this initiative have compiled stories from places such as Japan, England, Australia, and India. For instance, the Australian team noticed most of the farmers they interviewed were skeptical of human effects on climate change (Chintada et al., 2020). On the other hand, the England team noticed that most people believe in climate change and felt its effects (Arias Philippi et al., 2020). While each of these projects documented several impactful stories, the initiative engaged in little to no outreach through social media and no standardized format to present the stories. The initiative's lack of fundamental promotion has made it difficult to access such stories and share them with the world. Although a handful of past projects attempted to use platforms such as Instagram to promote the WPI Storying Climate Change Initiative, they fell short in continuing the promotion after their project term.

The goal of this project was to use a social media platform to share the stories and experiences of Czech citizens regarding climate change and enable the sharing of future stories

collected through the WPI Storying Climate Change initiative. The team achieved this goal by fulfilling three objectives:

1. Utilize social media to re-conceptualize the WPI Storying Climate Change initiative
2. Develop a multi-method approach to content creation that incorporates climate stories and contextualized underlying themes regarding climate perception
3. Provide recommendations to future IQP teams regarding the use of social media to further advance the WPI Storying Climate Change initiative

To document these stories, the team conducted semi-structured interviews and utilized an Instagram account to showcase the stories recorded, providing context of climate change and environmental studies in the Czech Republic through informative posts, and tracking the team's project progress. Utilizing interviews alongside educational and contextual posts, the team presented a collection of interviews that sought to understand and express the opinions and experiences of a wide variety of citizens in the Czech Republic.

2.0 Background

Before conducting interviews in the Czech Republic, it is necessary to understand why climate change itself is an important issue to research as well as how people feel about climate change. Storytelling is an effective method to both understand people's opinions on climate change and educate people on the topic, and the use of social media for storytelling provides an avenue for a large viewership to gain awareness of climate change. This chapter explores the global climate change crisis, the history of climate change activism in the Czech Republic, the social theories behind climate change perception, the importance of storying climate change, the WPI Storying Climate Change initiative, and the use of social media for current climate activism to establish the necessary context behind the multifaceted nature of this project.

2.1 Global Climate Change

While storytelling is important, first it is important to understand what climate change is, and how it is affecting life on the planet. "Climate change is a long-term change in the average weather patterns that have come to define Earth's local, regional and global climates" (NASA, 2022). While this definition does not necessarily fault anthropogenic causes, human interaction, mostly through the burning of fossil fuels, has led to an unprecedented rise in global temperatures since at least the mid-20th century (NASA, 2022). Earth is now experiencing some of the hottest and driest summers ever recorded. For example, at the beginning of the summer of 2019 in Europe, temperatures elevated to levels that had not been seen in over a century (Vishnubhotla, 2022). The change in climate is also causing a dangerous rise in sea levels. Since 1880, the global average sea level has risen by 8 inches as seen in Figure 2.1 which features two distinct studies measuring the rise in sea level (light blue line and dark blue line).

GLOBAL SEA LEVEL

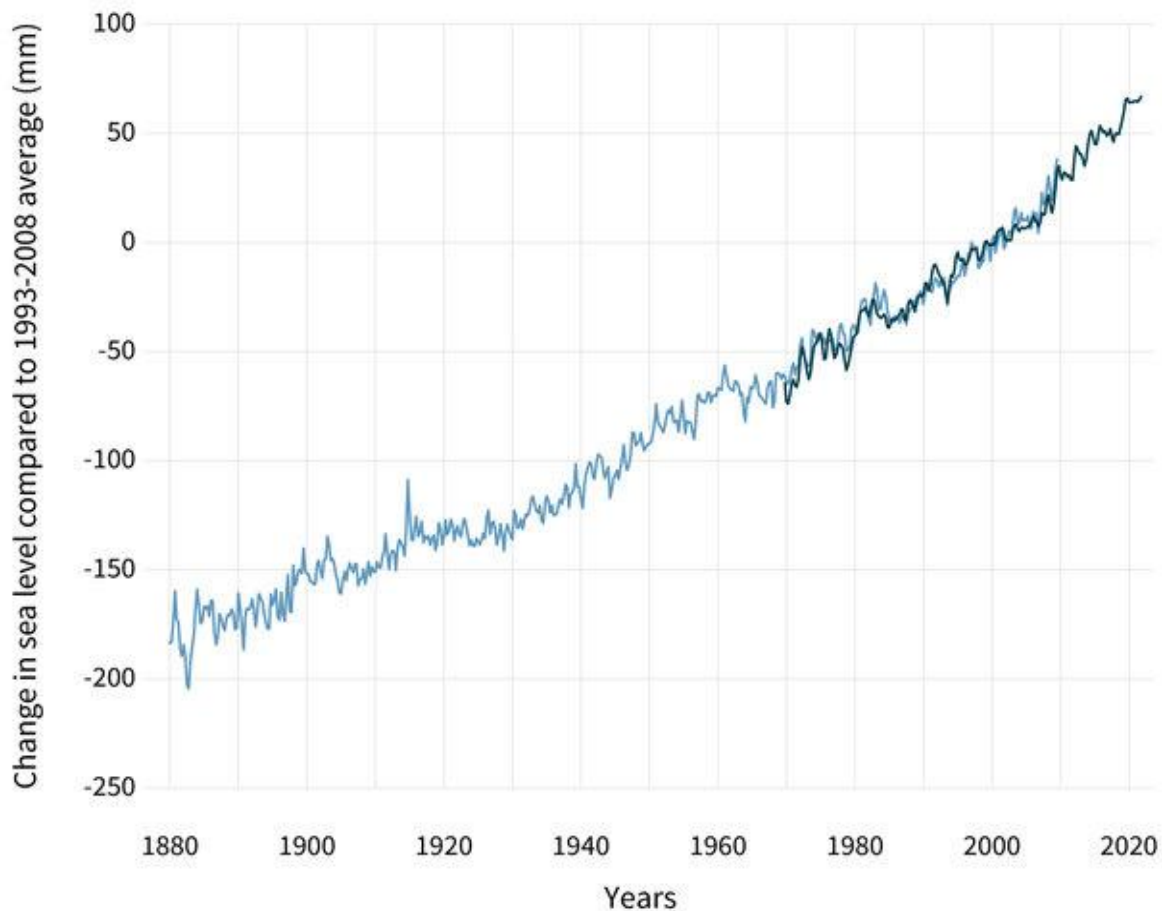


Figure 2.1 The difference in the sea level from each year relative to the average sea level from 1993-2008 (Lindsey, 2022).

The sea level rising not only causes an increased risk of flooding for coastal cities, but also allows dangerous storm surges to travel farther inland and cause more damage (Lindsey, 2022). These changes have already forced an average of 21.5 million people every year to be displaced from their homes. With this number only predicted to grow, experts predict that there will be as many as 1.2 billion people displaced by 2050. (*There could be 1.2 billion climate refugees*, 2022). This may already cause concern, but the climate is pushing toward even warmer temperatures and more extreme weather (Vishnubhotla, 2022). It is also predicted that Europe will be about 7.5

degrees warmer on average by 2050 (Bastin et al., 2019). While that may not seem so dramatic, the changes in climate are equivalent to all of Europe moving over 500 miles south toward the subtropics (Bastin et al., 2019). The effects and human contributions to climate change depend on the region, thus it is important to understand each individually to bring about positive change.

This project's focus on the Czech Republic necessitates a dedicated look at how climate change affects this country. The Czech Republic, along with Germany and Poland, make up an area dubbed the "Black Triangle" or the "coal heartlands of Europe". These countries account for the absolute majority of all coal production and power generation in the European Union (Patočka, 2019). Coal generates over half of the Czech Republic's electricity and is a crucial energy source for the Czech Republic, but it has a severe impact on the environment by releasing CO₂ into the atmosphere. Due to the transition out of communism in the Czech Republic, the CO₂ emission levels decreased until 1999, with a seven-year period of stagnation, before sharply decreasing again up until 2019, when data collection appears to end when the Czech Republic government began transitioning out of coal energy (Zemplinerová, 2020).

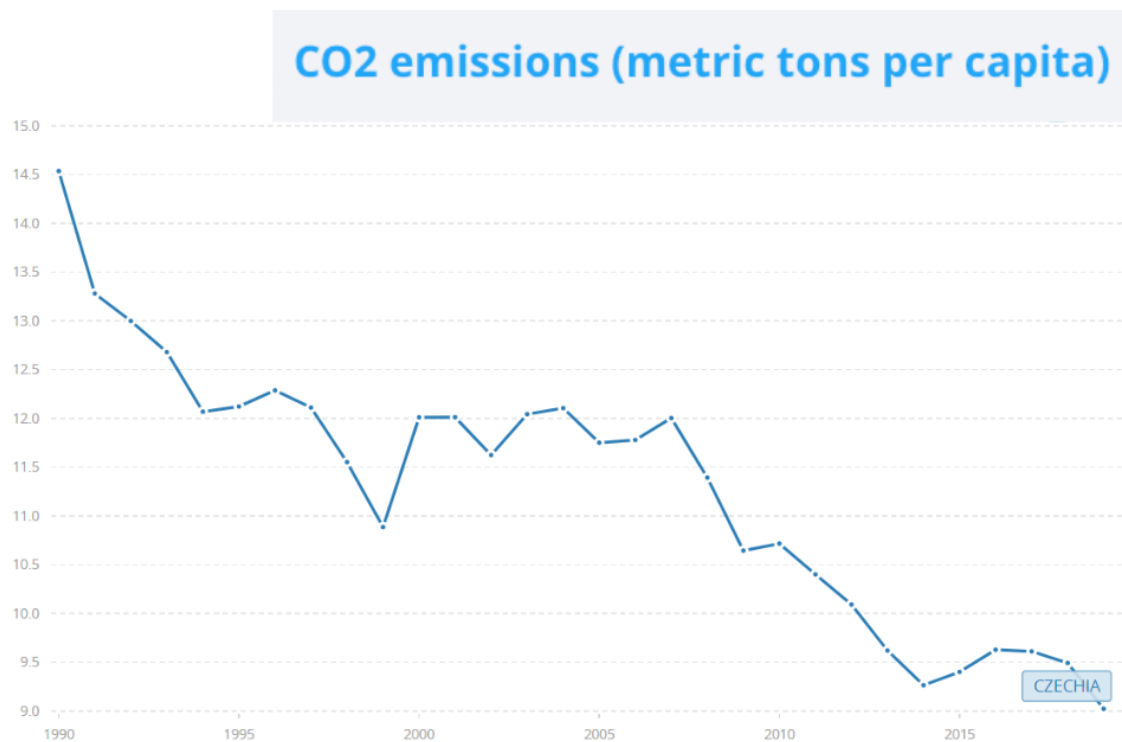


Figure 2.2 The amount of CO₂ emissions each year in metric tons per capita in the Czech Republic (World Bank Group, 2020).

As a result of prior coal production and CO₂ emissions, a major problem the Czech Republic faces from climate change is an increase in overall temperatures and an increase in heat waves, causing major problems for health and agriculture (Badura et al., 2021). In 2015, one of the hottest summers in Prague's history, the death toll increased 30% over the mean in one day (Urban et al., 2017). On average, heat waves in Prague have increased the mortality rate by over 10% above the mean (Urban et al., 2017). Since there are now more effective measures to mitigate the negative effects of heat waves, such as air conditioning, the number of deaths caused by heat may decrease even as the problem continues to worsen. Heat waves in conjunction with dry conditions have also caused over 60% of all crop losses in Europe (Researchers from Czech University, 2020). The loss in crops causes even more deaths that may not be directly caused by heat waves by making food less available, but are still a consequence of climate change. Awareness

of the facts of climate change and the intertwined nature of climate and earth systems is important, but it is only the first step toward environmental improvement.

2.2 Climate Change Action & Awareness in the Czech Republic

With climate issues growing worldwide, climate change activism has also expanded, and the Czech Republic has been no exception. The rise of prominent climate change activism in the Czech Republic began during the Velvet Revolution — a nationwide protest that ended communist rule in Czechoslovakia in 1989 — as the public and the political body of the Czech Republic started actively recognizing the deteriorating state of the environment and its effects on public health. By the end of the revolution, the number of environmental organizations grew dramatically, from almost no activism to over eight hundred environmental groups led mostly by young students (Fagin, 2000). The new democratic government encouraged the creation of new climate groups and demonstrations by promoting liberalization and freedom. These groups went through struggles to influence policy as well as public opinion, but persisted in gaining attention about climate change. Climate activism has continued to grow since the 1990s with environmental groups adapting to the changing political leadership as well as the convictions of the impressionable public. Although the level of engagement with climate activism in the Czech Republic fluctuated over the years, environmental groups have enabled the majority of the Czech public to acknowledge the growing problem of climate change today.

2.2.1 Rise & Struggle of Climate Change Activism

The communist ideology remained impactful in the Czech Republic even after the revolution: “The legacy of four decades of communist rule on political attitudes and values was a deferential political culture and a fear of radicalism” (Fagin, 2000). Tensions from the aftereffects

of communism, the lack of internal and hierarchical structure of both the transitioning government and the newly established organizations, and the differences in opinions on how to improve the environment slowed the momentum of environmental progress; thus, climate groups began to detach themselves from formal policy (Fagin, 2000). The political elite of the Czech Republic waited on these environmental groups to adapt and push for greater environmental change in policy, but once these organizations were ready, the focus shifted away from environmental concern.

By 1992, the election of Václav Klaus as prime minister caused radical climate change protests and ideology to disappear, as Klaus worked actively to politically marginalize the environmental non-government organizations (NGOs) in the Czech Republic (Fagin, 2000). Klaus convinced the public that environmental concern was unfashionable while shifting the focus to economic liberalization. Klaus believed that the need for a successful economy trumped the environmental movement and that environmentalism was a threat to democracy, thus government concern for the environment began to decline, which caused public concern to decline as well. The public also prioritized the economy over the environment due to many Czech citizens working in and depending on the coal industry. This led to the government neither preparing nor enacting virtually any new environmental laws from 1992 to 1996 (Fagin, 2000).

In addition to the exclusion from politics, almost all environmental NGOs underwent a financial crisis. Klaus encouraged the idea that the environmental movement was one of radicalism which connected to people's fear of communism. This caused complacency with the current state of the environment and little funding to climate groups and climate action. With very little funding, environmental organizations engaged in less radical activity and beliefs to survive. Despite Klaus'

rule, NGOs survived and a small set of large NGOs learned to work at an elite level to propose policy.

2.2.2 Renewal of Climate Change Activism

In 1996, a change in the prime minister of the Czech Republic marked the re-emergence of the environmental movement. Pressure from the EU and OECD to improve environmental regulation allowed NGOs in the Czech Republic to propose new legislation, thereby gaining influence within the open and consensual political structure. In contrast to the young students at the start of 1990, older citizens in the Czech Republic oversaw the now structured NGOs which led to participation in more direct action and radical tactics, thus increasing the public's value of the environment. In 1996, 87% of people agreed that environmental organizations were useful and important in the Czech Republic (Fagin, 2000).

2.2.3 Public Awareness & Opinions of Climate Change

Although greenhouse gas emissions in the Czech Republic have declined since the 1990s as seen in Figure 2.2, environmental policy and climate activism had very little to do with it; the collapse of many industries during the transition to capitalism caused the decline (Zemplinerová, 2020). The coal industry and the tycoons that run them still influence the media and politics greatly, making awareness of climate change scarce compared to the economic effects of the coal industry (Patočka, 2019). Currently, the Czech government has made plans and acted to progressively phase out coal in the energy sector by 2038, relying on more renewable sources. They will slowly increase the cost associated with carbon emissions imposed onto coal companies by the government, which will decrease the competition of coal thus advancing the phase-out of coal. The economy of the Czech Republic will go through restructuring as well as changes in

employment of many miners and power plant workers (Iea, 2021). The regulation of this industry, though beneficial from the point of view of climate change, bears significant negative economic and social consequences for local regions, thus making the topic controversial (Čábelková et al. 2022).

Despite dependence on these industries, the public still considers climate change an important matter. The European Commission surveyed 1,000 Czech citizens and found that nearly 64% of respondents consider climate change to be a very serious problem. Fifty percent of respondents say they have taken action to fight climate change in the past six months, but this statistic rises to almost one hundred percent when given different options of action such as reducing waste, recycling, and lowering energy consumption (European Commission, n.d.). Within the Czech Republic, younger respondents are more likely to believe in the existence of climate change and to be more aware of climate change risks than their older counterparts — younger people are also considerably more likely to attribute the cause of climate change to human activities than older respondents, who perceive it more as a natural phenomenon (Lorencová et al. 2019). Individuals who have been directly impacted by extreme weather events such as hurricanes or flash floods also have strong beliefs in climate change and expressed considerable concern about future risks; they were more inclined to undertake adaptation and mitigation actions compared to people with no experience with extreme weather events, who assessed future risks as low or none (Lorencová et al. 2019). To a great extent, emotional factors, including individual values and political preferences, influence perception of climate change risk.

2.3 Social Theories Governing Climate Change Perception

While storytelling may not encompass the ethos that science inherently has as the systematic study of nature and how it operates, it promotes climate science in a social science lens

that can specifically tailor to the perceptions of viewers. This section explores the importance of understanding optimism bias and environmental justice in order to truly understand the transformative power of storytelling and how it might act as a catalyst for climate action.

2.3.1 Climate Change & Optimism Bias

The worry that people have with regards to climate change depends on both their perception of it as a hazard and their exposure to its effects. People who do not live through drastic climate events, such as floods or forest fires, tend to downplay the risk of climate change to themselves due to their lack of exposure. A lack of exposure to such hazards reinforces the inherent biases humans possess, which in turn shape their perception of risks. Optimism bias — in particular — describes the tendency of people to “underestimate their likelihood to experience negative events” (Dricu, Kress & Aue, 2020). While people view drastic climate events occurring around the world as hazards, a lack of direct exposure to them decreases the perceived risk and thus maintains the idea that climate change only affects others.

Optimism bias in climate change instills the mindset that individuals are “safer than others living elsewhere and... safer than future generations” (Beattie, 2009) from the effects of climate change. The inherent spatial and temporal disconnects associated with climate change makes it difficult for people to understand the importance of fighting against it. It is also difficult to sympathize with others who are affected; the idea that climate change is “not personal, it won’t affect us, [thus] it’s others that need worry” (Beattie, 2009) is understandable when exposure to the hazards of climate change is invisible. Unfortunately, these seemingly invisible climate hazards will eventually become more and more visible to the entire planet. Exposing and sympathizing with the visible, current disasters is a necessary step toward greater climate action.

2.3.2 Environmental & Climate Justice

In order to fully understand the effects of climate change, people must recognize the lived experiences of those directly impacted — especially those who are subject to the most severe climate events. The effects of climate change within one community may be completely different from another due to the vulnerability of their local environment: whether it be the specific landscape where they live, susceptibility to stronger climate events, or ability of local housing to withstand such climate events. Unfortunately, this means that most harmful effects of climate change tend to be disproportionately felt in the poorest communities who lack the adaptation capabilities (Odeku, 2022). According to a 2021 US Environmental Protection Agency (EPA) report, “minorities are most likely to currently live in areas where the analyses project the highest levels of climate change impacts” and “[individuals] with low income or no high school diploma are approximately 25% more likely...to currently live in areas with the highest projected losses of labor hours due to [global warming]” (Environmental Protection Agency, 2021). Grasping the full story of climate change requires an understanding of the inherent inequality in local environments that derives from structural forces embedded in institutions and economic systems.

Environmental justice is a term that is associated with the disproportionate environmental hazards faced by marginalized communities. Dr. Robert Bullard, regarded as the “Father of Environmental Justice,” defines environmental justice as “the principle that all people and communities have a right to equal protection and equal enforcement of environmental laws and regulations” (Bullard, n.d.). When the idea of environmental justice first came about in the US around the 1980s, it focused on more pollution rather than climate change, under recognition that communities of color often lived in the closest proximity to large, commercial sources of pollution (Coolsaet, 2021). A 2014 estimate from the Environmental Justice and Health Alliance for

Chemical Policy Reform posed that 3.8 million Americans lived in “the fenceline zones closest to potential harm and with the least [amount of] time to react in the event of a catastrophic release from over 3,400 facilities (Environmental Justice and Health Alliance for Chemical Policy Reform, 2014). Within the United States’ “fenceline zones,” average household incomes were 22% below the national average and the percentages of Black and Latino populations were 75% and 60% greater, respectively (Orum et al., 2014). Additional studies conducted around the world prove the same point: “low-income households and people of color have greater exposure to environmental hazards” (Banzhaf et al. 2019). Age discrimination also contributes to unequal environmental impacts and speaks to the importance of rooting climate change within an environmental justice framework; a lack of consideration of the environmental quality for elderly citizens can “contribute to keeping older people indoors, isolated and relatively immobile, contributing to social exclusion” (Day, 2010). Outcomes of environmental justice can include “cleanliness and lack of pollution[,]... peace and quiet[,]...[and] walkability” (Day, 2010), encompassing both availability of environmental luxuries and lack of environmental hazards. An awareness of environmental justice is a necessary next step to garner more informed interest in climate change upon consciousness of interpersonal empathy.

Viewing climate change in the paradigm of environmental justice provides an alternative to simply viewing it as a vast consortium of adverse weather patterns. Rather, it forces people to carefully consider the implications of climate change: who is responsible, who is affected the most, and how to approach adaptation and mitigation efforts. Understanding the ethics of climate change, and thus viewing it as a justice dilemma, is referred to as “climate justice” (Coolsaet 2021). The effects of climate change, in correlation with the distribution of environmental hazards, are rooted in injustices. While it is important to regard different parts of the world in the lens of justice, it is

equally as important to avoid generalizing how different communities face these injustices. Esme G. Murdock details the importance of considering the context of different communities in *Environmental Justice: Key Issues* (Coolsaet, 2021):

It is necessary to emphasize that the context of particular communities and how they experience historical and continuing injustices affects and connects to the forms of resistance and strategies these same communities employ to combat environmental injustice. Environmental injustice looks, feels, and is experienced differently by different communities. (p. 8)

To truly understand the stories of climate change, it is imperative to examine climate change through the lens of climate justice; changing the view from analyzing heat waves to analyzing the different impacts heat waves can have on people, for example, can give far greater insight into the climate solutions people need for their everyday lives. The narratives of climate change bring to light the true experiences behind this global catastrophe and unearth the roots of differential climate perception.

2.4 Storytelling & Climate Change

Utilizing stories can bring to light certain aspects of a problem that scientists commonly overlook during research and problem solving. By providing context in the form of people's real experiences, problem-solvers can create new ways to approach practical technological solutions (Lockwood, 2022). Studies have found that the wording of stories or including certain content can influence people's perception of a topic or alter their engagement with the story itself (Bloomfield & Manktelow, 2021). In the case of climate change, influential stories have the potential to engage more people and accurately portray the setting or morals behind such an issue that is often more statistically focused.

It is important to utilize storytelling as a strategy to aid in perceiving climate change through a social lens when focusing on the experiences of people. "Truth is a matter of perspective"

(Moezzi & Janda, 2017), and while stories can simply function as a narrative or an explanation of a circumstance, they can also explain the multitude of ways in which certain phenomena impact humans. Scientists often use stories to advance their thinking and execution of studies that they conduct (Moezzi & Janda, 2017). When it comes to climate change issues, however, stories are less common. Scientists often rely on factual information as the basis for the majority of climate-related studies and tend to leave out the experiences of humans. In a prominent climate science journal titled *Energy Policy*, only eighteen papers referred to the word “stories” in editions since 1985 (Moezzi & Janda, 2017).

Despite not having much coverage in the science space, stories can be powerful tools. Stories themselves are not just mere accounts of an event from a certain perspective; stories can serve as data in the context of science and problem solving. In scientific studies especially, hard numbers may cover up the circumstances that create the problem. Storytelling can act as a means to convey overlooked aspects of a problem and to get more people engaged with a problem. Using these stories can increase climate change mitigation efforts. For example, in the Caribbean, storytelling served as part of a comprehensive project that presented songs to young people to increase their engagement with climate change and action. The authors concluded that storytelling was effective when appealing to the culture of which the people involved in the study belonged (Plummer et al., 2022). Documenting the experiences of Prague citizens regarding climate change might prove useful for engaging more people in the diverse problems individuals face because of climate change around the world.

2.5 Storying Climate Change – The WPI Initiative

The WPI initiative of creating climate change storytelling projects originated via the efforts of Dr. Ingrid Shockey, an environmental sociologist who works with the WPI Global School. The

Storying Climate Change initiative aims to alter the conversation on climate change from one primarily about policy, action, and climate science to a more diverse view that incorporates the experiences of individuals. Understanding the different impacts of climate change – from sea level rise to droughts and wildfires to increased storm surges – requires the ability to see through the eyes of those affected the most. Storytelling gives a multitude of new perspectives to build upon the current thinking behind climate change solutions. To date, the Storying Climate Change initiative has allowed student-led Interactive Qualifying Project (IQP) teams to engage with citizens in Japan, Iceland, China, England, and Australia, to name a few. Continued work toward this end will help people garner a more complete frame of reference around the current climate crisis and the steps needed to address it. Research in the Czech Republic will enhance the Storying Climate Change initiative by representing the voices of a Central European nation in a post-Communism society.

Past projects have had deliverables primarily consisting of documentaries and long final paper reports. The central website for the initiative connects these projects to form a repository of the stories from different parts of the world. However, the stories within the website are disconnected from the central theme of storying climate change; the projects operated in different ways that appeared unorganized when examining each project as individuals within a collection. While the website functions as intended — merely compiling the projects into one location — it does not reach a great audience due to its lack of accessibility.

2.6 Using Social Media to Promote Activism & Storytelling

Contrary to publishing a documentary and final report paper, the use of social media — particularly Instagram — will allow for more publicity and discoverability of the initiative. The

following sections detail how Instagram works and its current uses as a platform for environmental and climate activism.

2.6.1 The Inner Workings of Instagram

Instagram is a social media application that allows users to connect with others online by sharing pictures and videos, along with being able to comment on others' posts and chat with followers (Instagram). There are two billion Instagram users as of December 2021 (Statista 2022), so creating an Instagram account allows for the potential to reach a much greater audience to promote the WPI Storying Climate Change initiative. A well-curated account will allow the team to share the climate stories and experiences, educate users on the impacts of climate change, and give updates on the project experience.

There are three primary ways of posting on Instagram, and three types of tags that can market an account to particular users, each described below in Table 2.1. A post entails the actual content being promoted, whereas post tags add context to the post to expand the post's discoverability.

Table 2.1 Instagram Terms and Definitions

Types of Posts	Post Tags
<u>Feed Post</u> : a post of up to ten pictures/videos accompanied by a caption that will appear on users' feeds	<u>Hashtag</u> : a word, phrase, or other set of letters preceded by a “#” that categorizes content to make it more discoverable
<u>Story</u> : a picture or short video that appears on users' profiles for 24 hours	<u>Location Tag</u> : a blurb of the physical location of the post to make it discoverable in the context of that location
<u>Reel</u> : similar to a Feed post, but only consists of a short video (maximum of 90 seconds) and a caption	<u>User Tag</u> : a mention of other users involved in the post that can reach followers of the other user

2.6.1.1 Posting on Instagram

Feed posts are used in a more formal way and can generally provide the most information. Posts consist of pictures, and occasionally videos, that are available to followers on their Feeds — the primary section of Instagram where users see the posts of users whom they follow — and are accessible to general users in the “Explore” page: a feed devoted to posts made by accounts that are not followed by a user, but tailored to the interests of that user. Oftentimes, these pictures or videos are prepared in advance or are posted well after the event being portrayed.

Instagram stories are more informal due to their temporary availability and the fact that users must click to open them rather than have these posts appear on their Feeds. Story posts require less preparation — stories typically consist of pictures taken during the event being portrayed or re-uploads of posts made by themselves or other users. Stories often display the “personal” side of users more so than posts, which are aimed to be more presentable.

Instagram Reels are videos, often accompanied by text boxes, that appear in users’ Feeds that generally communicate information quickly and informally. Unlike stories, Reels are not temporary. There is a lot of potential for growth of a user’s following by using Reels, as Reels are more often shown to the general public in the Explore page of Instagram than Feed posts. This means that users who do not follow one’s account would be more likely to see their Reels rather than their Feed posts.

2.6.1.2 Tagging on Instagram

Hashtags are additions to the caption of a post, emphasizing the main aspects of the post/user that can help categorize the post among the other content of Instagram users. Users can click on hashtags to see other posts that use the same hashtag, creating a connection between the content of similar accounts, such as between accounts that post about climate change. When users

like posts with certain hashtags, Instagram will provide posts with the same hashtags to those users' Explore pages. Thus, users tend to add certain hashtags to the captions of their posts to promote their account's discoverability.

Tagging locations and other users are also viable options for increasing discoverability. Similarly to hashtags, users can click on location tags to find posts that have also tagged that location. Location tags are generally useful to gain more of a local following than a general following. However, showing one's location can garner interest from followers, especially those who are interested in the locations being tagged. User tagging allows viewers to click on the tag and go to the profile of the tagged user. Featuring other users via tagging can attract interest from their followers, promoting collaboration among different users — especially those with similar interests and/or status as an influencer. Within the climate space, this feature could prove useful in attempting to build a following of users that are also interested in climate change.

2.6.2 The Need for Social Media

The current rise of social media as a common source of news and opinions gives the WPI Storying Climate Change initiative a great opportunity to reach a large number of people who are already interested in climate change. Social media “allow[s] non-elite actors to play a much greater role in shaping public [opinion]” (Pearce et al., 2018), thus providing the team with the opportunity to make a far greater impact than simply publishing findings on a website. Not only is social media an easier way to get information – it is becoming one of the most prominent ways that people get their news (Mavrodieva et al. 2019). With the goal of this initiative being to portray climate change as more than just facts and figures, reaching a larger audience has a huge impact on how people regard climate change – especially those who already support climate activism.

Along with being able to reach an audience that is interested in climate change, using Instagram helps target a younger audience. As of 2021, 76% of young adults aged 18-24 in the US use Instagram (Auxier & Smith, 2021). Reaching young people is an important consideration for this project, as the 18 to 24 year-old age group is the next generation of the workforce who will have a great effect on society as we know it. Using social media to educate young people on the lived experiences of individuals impacted by climate change can shift the focus of climate science from numbers to emotions.

The foremost reason social media has risen to the level of being a primary news/media source is because it promotes the succinct presentation of information. We are currently in an “era of shrinking attention span[s],” where people want to receive information quicker. Thus, marketers and news sources alike will have to adapt to having less time to sell their product or give their information (Subramanian, 2017). Social media outlets provide a solution that old news sources cannot: a large amount of information in an engaging format. For example, an Instagram post can have up to ten pictures and a caption. Producing media that fits well within those limits, such as a few pictures and a brief caption, requires being concise and clever with content portrayal. Transforming the WPI Storying Climate Change initiative to attract a larger, younger audience growing up in this “era of shrinking attention span[s]” requires the transition from older forms of educational media — such as formal reports and lengthy documentaries made by previous Storying Climate Change groups — to more modern methods widely used in social media.

2.6.2.1 Creating a Successful Logo for Social Media

To successfully use social media, it is important to create a logo that properly promotes the project. A logo “is a graphic element to identify a company/service/product. A logo is like a ‘signature’” (Adîr, 2014), thus it is important to consider the initiative's logo for social media use

compared to how it is portrayed on the original website. Logos are commonly used as profile pictures and in many posts on social media, therefore it is one of the most common elements of an account that viewers see. It is important that the logo properly represents Storying Climate Change and is aesthetically-pleasing.

The main purpose of a logo is not to perfectly describe a project, but to generally reflect its values and attitude (Adîr, 2014). To create a successful logo, the logo must be “simple, relevant, distinctive, memorable, adaptable, reproducible, legible, and coherent” (Adîr, 2014). A logo that represents WPI Storying Climate Change should include each of these elements to properly promote the initiative.

2.6.3 Activism & Social Media

Social media has fostered a large change in activism and social movements around the world. Its use as a primary source of news allows more people to gain awareness of movements. Social media has the ability to “make knowledge sharing much more transparent and accessible within large, distributed, global organizations” (Murthy, 2018), which allows for more awareness and pushes for greater involvement — even if that involvement may only be at the digital level. Social media serves “a role in helping develop and maintain a sense of community in large activist organizations” (Murthy, 2018) by offering a platform for like-minded individuals to share ideas for a collective improvement of society; social media thus acts as “motivator for participating in these platforms” (Murthy, 2018) from a level of being aware/caring about an issue to joining physical demonstrations organized via social media outlets.

Activism via social media is often led by young people — especially with regards to climate change. Using social media as a form of portraying beliefs and opinions about problems in society is attractive to the younger generation due to the “marginaliz[ation] from participation

in politics” that many youths currently feel (Belotti et al., 2022). The established institutions that promote an unsustainable society and economy (e.g. dependence on fossil fuels) are deeply ingrained in older generations who have been living through society with values that do not align with the future health of the planet and the people who will be living in it. Social media as an outlet for activism for young people plays on “generational understanding of communication technologies” because “digital media platforms host specific mechanisms for young people to cope with formative political events, thereby taking ideological distance from older generations” (Belotti et al., 2022). This “ideological distance” is the root of change in values where morality is applied to facets of society that older generations ruling the government have historically tended to overlook, such as sustainability and justice. Social media provides a large population of young people with the ability to connect under an overarching idea of promoting good for the world — this makes social media a primary target to increase the awareness of the WPI Storying Climate Change initiative and allows the initiative to enter the larger discussion in a large community that ultimately leads climate discussion and activism.

2.7 Summary

Climate change is a problem by which humans across the globe are affected, and the citizens of Prague are no exception. While scientists use numerical data to analyze environmental issues, there is often a disconnect between the development of climate solutions and the needs of people. Storytelling can serve as an important aspect in representing the different perspectives of climate change in Prague. Documenting the experiences and beliefs of Czech citizens will manifest a different and more human perspective in the conversation of climate change in the Czech Republic. Giving these perspectives exposure via social media will allow others to hear the climate stories of Czech citizens and further the WPI Storying Climate Change Initiative.

3.0 Methods

The goal of this project was to use a social media platform to share the stories and experiences of Czech citizens regarding climate change, and enable the sharing of future stories collected through the WPI Storying Climate Change initiative. The team achieved this goal by fulfilling three objectives:

1. Utilize social media to re-conceptualize the WPI Storying Climate Change initiative
2. Develop a multi-method approach to content creation that incorporates climate stories and contextualized underlying themes regarding climate perception
3. Provide recommendations to future IQP teams regarding the use of social media to further advance the WPI Storying Climate Change initiative

This project took place between October 24th and December 16th in Prague, Czech Republic. Developing a “multi-method approach to content creation” required the team to conduct interviews with Czech citizens, process individual interviews to display their climate stories, and perform additional research to develop a variety of content. The team’s contributions to the WPI Storying Climate Change initiative were made through the creation of an Instagram account that documented the trip, housed the interview videos, advertised the climate change storying efforts, and offered a modern platform intended to reach younger audiences. To provide assistance to future IQP teams, the team also created a set of recommendations for future Storying Climate Change projects to follow.

3.1 Utilization of an Instagram Account

In order to share the stories of Czech citizens regarding climate change and provide the Storying Climate Change initiative with online exposure, the team created an Instagram account

in conjunction with Dr. Ingrid Shockey, with the account officially under Dr. Shockey's name. The team used an Instagram account, titled @wpistoryingclimatechange, to post content related to the climate experiences and stories of Czech citizens — videos of people describing their stories, pictures of climate change events, information contextualizing the climate change problem, and climate activism. The team ensured posts were polished before posting on the main @wpistoryingclimatechange account by creating a “test” Instagram account. The following sections describe the creation and development of the account into an established platform for the WPI Storying Climate Change initiative.

3.1.1 Creation & Pilot Test of Instagram Account

While short videos serve as the primary mode of storytelling, another facet of this project is utilizing social media to share these stories. Creating an Instagram account allowed the initiative to reach a much greater audience to promote the WPI Storying Climate Change initiative, share climate stories and experiences, educate users on both environmental studies and the impacts of climate change, and provide updates on the project experience. The use of a centralized social media account under the name of WPI Storying Climate Change was new for the initiative and established a platform for future Storying Climate Change projects to share their stories.

3.1.2 Creation of a New Logo

The logo of Storying Climate Change will serve as the profile picture for the Instagram account, as well as on most of the posts for branding purposes. The team determined that the logo previously used was not suitable for future use (Figure 3.1) because it was not relevant, distinctive, or memorable. While the logo is clearly about climate change by showing a melting iceberg, it is difficult to understand how it represents storytelling, thus it is not specific or relevant enough to

accurately represent the initiative. The team decided that addressing these problems with a new logo was the best solution.

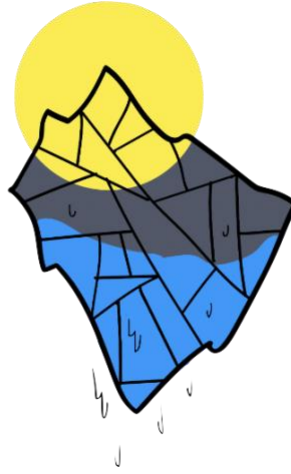


Figure 3.1 Original Storying Climate Change Logo

The team created the new logo by developing multiple different concepts and finding which best followed the metrics detailed in 2.6.2.1. Figure 3.2 shows the final design. The new Storying Climate Change logo is relevant as the book and text make clear the importance of storytelling, while the melting earth provides imagery for climate change as a global problem. With a unique logo that accurately describes the initiative, the team used the new logo on the vast majority of posts made on the @wpistoryingclimatechange Instagram account.

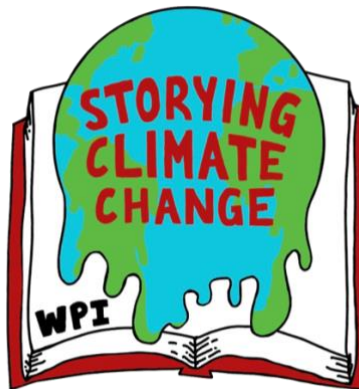


Figure 3.2 Final Design for the Storying Climate Change Logo

3.1.3 Using Social Media to Story Climate Change

The stories of Czech citizens and contextual information regarding climate change were the two main topics covered on the @wpistoryingclimatechange Instagram account. The team shared stories in video form and made informational posts that involved text descriptions and pictures to display the ideas in different ways. In order to accomplish the first two objectives pertaining to social media and a multi-method approach to content creation, the team utilized the various features of Instagram including Feed posts, Stories, and Reels to share the documented climate stories and engage to as many users as possible.

3.1.3.1 Instagram Posting Strategy Development

Feed posts consisted of pictures from the team's project and informational slides about concepts of environmental studies that related to the project's findings. During the beginning of the project — before the team had conducted interviews — the team created introductory posts: such as “Meet the Team” and “Welcome to Prague” posts. The content from these introductory posts served to provide context to the project and initiate the team's production without having to jump right into informational posts.

Story posts on Instagram are the most casual form of content, only being viewable for up to 24 hours. The team used stories to promote posts and to give a “behind-the-scenes” look into the project that showed followers what the team was doing in the Czech Republic. Story posts required less preparation, so the team pursued frequent story posts to promote Feed posts, and eventually as a means to display the “personal” side of the project – thus, these posts pertained less to the topic of storying climate change and were more oriented toward giving updates throughout the project.

Similar to Feed posts, Reels are permanent; Reels generally convey the same kind of information as Feed posts, but in a more structured video format. Thus, the team used Reels just as often as Feed posts to provide the narrative experience; this was done by posting short clips from interviews, with the permission of the interview subject, that focused on a particular topic. Interview clips from individual interviewees, as well as a mini-documentary-like video of multiple interviewees addressing the same short questions, were portrayed in Reels. The material in the Reels were the actual stories themselves; with the initiative serving to provide a greater audience with climate change narratives and experiences, the primary target was to promote the interview clips rather than the general information on posts or stories.

Along with planning what content the team created and posted, determining how to make posts more discoverable required the use of tagging methods with the most prevalent being hashtagging. Hashtags can be advantageous to accounts that wish to be seen by as many users as possible, as posts with hashtags will appear on the Explore page. Thus, the team added certain hashtags to the captions of the @wpistoryingclimatechange account's posts — examples of commonly used hashtags were #climatechange, #climateaction, #environment, #climatestories, #green — which allowed users to discover the project account. The team also created and used #wpistoryingclimatechange in every post to serve as a hashtag unique to the initiative.

Similarly to hashtags, users can click on location tags to find posts that have also tagged that location. Location tags are useful to gain more of a local following rather than a general following, as the locations the team tagged were in the Czech Republic – the team often tagged “Prague, Czech Republic” as many of the interviews were completed in the city. One example of using a specific location in Prague was for a post about a sit-in at Charles University, where

students slept in a Charles University building as a climate change protest. The location the team tagged was “Charles University - Prague.”

User tagging allows viewers to click on the tag and go to the profile of the tagged user. Featuring other users’ Instagram accounts garners interest from their followers, so tagging the accounts of organizations with whom the team worked allowed the WPI Storying Climate Change account to grow a potential following from their followers. This was primarily done with FridaysForFuture, particularly on the post about the sit-in at Charles University. The team tagged FridaysForFuture - Prague account (@fffpraha) on a picture with their logo.

Developing a strategy for posting on the Instagram account was a process that involved some level of trial-and-error. With this project having served as the pilot test, there was no set goal for how many followers the team wanted to obtain or how many posts to make, rather the aim was to create a baseline for future WPI Storying Climate Change projects to build upon and adjust as needed. The vision of the WPI Storying Climate Change Instagram account was to grow the awareness of this initiative and provide informational posts to the public in a way that hasn’t been done since the establishment of the WPI Storying Climate Change initiative in 2014.

3.1.3.2 Utilization of a Test Account

In order to ensure that the team’s Feed posts, stories, and Reels were posting properly — particularly in the first week — the team created a “test” Instagram account alongside the main account. The team simply used this account to make sure that we uploaded posts successfully, primarily in having the correct information, formatting, and an aesthetically-pleasing appearance. This separate account did not have any followers, nor did it follow any other accounts. It simply

existed for the team to use as a safeguard to proactively avoid any potential mistakes before posting any content.

3.2 Multimedia Approach for Storytelling

Adopting a multimedia approach for this project with the creation of an Instagram account was useful for this project to become more discoverable by anyone in the world, including those of environmental and climate studies. The Instagram account served as both a content outlet and a promotional medium for the initiative that the team marketed towards individuals who frequent social media for news and updates on environmental and climate studies.

3.2.1 Creation & Analysis of Interview Clips

In order to document the stories, the team recorded interviews using a Canon Rebel T1i camera and a tripod, which captured the raw and unfiltered responses from interviews. The team also gathered videos and photographs of the Czech Republic to visualize the interviewees' experiences and to make the Instagram posts visually appealing. The team documented any climate activism they observed as well as environmental signs that acted as supplemental footage for the informational posts and stories both within the city of Prague and in more rural areas.

To analyze the data, the team first swept through each interview using hierarchical axial coding to group responses and experiences on a specific topic (Mortensen, 2020). The team highlighted key phrases and ideas in different colors to differentiate overarching topics, including climate effects, climate justice, climate awareness and climate activism. The team then created connections between different parts of each interview and used these groupings to compile clips for the Instagram account. The team edited footage based on the coding analysis using iMovie, a video editing software, with audio that the team recorded using a Zoom H1n microphone and

processed through Audacity, a digital audio editing software program. Along with the recorded information, the team added transitions and manually generated subtitles in iMovie that matched the footage to allow viewers to easily follow the content. The goal when editing the footage into shorter clips was to create overarching ideas for each Reel post featured on the Instagram account to provide awareness while keeping the integrity and authenticity of the interviewees' experiences and beliefs.

3.2.2 Educational Content Posts

To complement the interview clips the team created on the Instagram account, we created educational Feed posts based on topics relevant to recent Reels. Instagram is a platform that educators feel can be beneficial for “acquir[ing] and shar[ing] knowledge” (Carpenter et al., 2020). The team included a variety of educational content consisting of topics that gave background to storying climate change in the Czech Republic:

- Social science—making viewers aware of how certain biases influence people's perceptions of climate change;
- Environmental studies—teaching viewers how to interpret and analyze human interactions with the earth; and
- Czech history—providing deeper context to the interviews and perspectives of the Czech citizens whose stories are being told. This context is important for viewers to understand the significance of the stories the team is telling, along with justifying the initiative's goal of educating people about climate change through nontraditional methods.

The team's Instagram account seeks to encapsulate the project in the frame of personal experiences by highlighting the stories of individuals in the Czech Republic. Providing additional context in the form of educational content enhances the interpersonal connection between viewers

and storytellers. More than anything, the project was meant to tell the experiences of the Czech residents the team interviewed and allow them to express their feelings and stories on climate change.

3.3 Document Opinions & Experiences of Residents Through Interviews

A very important aspect of the content creation portion of the project was the interviews with Czech citizens. These interviews gave the perspective of individuals that formed the basis of many of the posts featured on the Instagram account. Interviews yielded stories of individuals for the team to promote via short Reels on Instagram, provided inspiration for informational posts regarding environmental studies and climate change, and assisted in drawing conclusions about overall climate change in the Czech Republic. The team created two sets of interview questions — one consisting of 16 questions (Appendix A), and the other with 4 questions (Appendix B) — to provide more flexibility in the timing of interviews and allow for more variety in Instagram post structure.

3.3.1 Finding Participants

In order to find individuals to participate in our research, the team used a convenience sampling approach succeeded by snowball sampling. Snowball sampling was suitable for this group, as the team did not have established connections with many Czech citizens (Taherdoost, 2016). The team began by emailing individuals of multiple organizations such as Charles University and CEE Bankwatch Network to schedule interviews. While some organizations like CEE Bankwatch Network — an environmental organization based in Prague — responded and a representative from this organization agreed to an interview, overall, setting up interviews through organizations generally proved to be difficult. As emailing organizations provided few leads, the

team decided to try direct-messaging organizations through the Instagram account. The team believed this would be more successful because individuals more frequently checked Instagram and could see the project's progress by viewing the @wpistoryingclimatechange profile. In addition to contacting organizations online, the team also spoke with individuals directly to ask for interviews. The team got several interviews with people working at Council on International Educational Exchange (CIEE), the organization that coordinated the Prague IQP cohort's travel. The team first identified one individual to interview, who then provided additional contacts of their coworkers that were willing to participate. Team members also spoke with people working at various local establishments which led to interviews. The team received recommendations of different Czech environmental organizations to contact through some of the initial interviews. In the end, we contacted eight different environmental organizations via direct message on Instagram and were able to establish connections with some individuals.

3.3.2 Developing & Conducting Interviews

The long-form version of the interview questions produced interviews between about 20 to 25 minutes in length. The team organized interview questions in a way to facilitate a semi-structured interview format, which provided structure but allowed for more free-form answers (Ryan et al. 2009). Each interview started by asking respondents to read a consent form which informed them that the interview would include visual and audio recording and how the team planned to use recordings. The interviewee then could agree to or opt out of any part of the interview. The first few questions focused on information related to their demographics, work, and life in the Czech Republic. These questions helped the team correlate data across interviews and helped the interviewee feel more comfortable for more in depth questions. The next questions targeted their opinions and experiences of climate change, current and future predictions related

to climate policy, effects of climate change, and climate activism. These questions deviated somewhat depending on the interview. The team asked several questions that were specifically targeted based on demographics to understand their opinion on what certain groups are doing and should be doing about climate change. The long-form was optimal for people that may not know as much about climate change or for people who had enough time for an interview, as more questions let the team gain a lot of information from each interviewee regardless of prior knowledge.

Short-form interview questions obtained similar information from interviewees, however with a different format. While these interviews were still semi-structured, they generally ranged from five to fifteen minutes and were slightly less structured than long form interviews. After getting consent from the interviewee, the team asked respondents five consistent questions. Once respondents had answered all the questions, the interviewer improvised questions to target relevant subjects in which the interviewee had shown particular interest. The team used this type of interview in instances where the interviewee had a lot of prior knowledge about specific aspects of climate change and/or when the interviewee had limited time. The more flexible nature of the short-form interview allowed the interviewer to target specific points of knowledge and dig deeper into the topic at hand without taking an excessive amount of time.

In terms of conducting interviews, each team member filled certain roles during the process. Isaac and Terrence were the primary interviewers, as one of their responsibilities was to curate the original set of interview questions. Timothy and Chase primarily set up, operated, and maintained the equipment outlined in Appendix O. All team members rotated roles at some point during the seven-week period spent in the Czech Republic. During all interviews, the team showed respect and maintained ethical standards in research by reminding respondents that they didn't have to

answer questions that made them feel uncomfortable and that they could skip any questions they didn't want to answer. To that same end, the interviewer started each interview with proper introductions and ended them with saying thank you.

3.4 Survey Development

To assist with snowball sampling, the team created a survey that was sent to organizations and individuals who showed interest to gather basic information and feelings towards the climate. We also distributed surveys via QR code on pieces of paper at various locations throughout Prague – this included local stores, cafes, and Charles University buildings. Respondents could indicate that they were willing to participate in an interview, and the team promptly scheduled interviews with respondents who showed interest.

The team created the survey on WPI Qualtrics and utilized Qualtrics's results and data reporting features to assist in gathering findings and graphs. The survey consisted of three main parts: the first focused on demographics, the second explored respondents' experiences with climate change, and the third asked if respondents would be willing to participate in an interview. Respondents who expressed interest were asked to provide their contact information, so that the team could contact them. The survey provided the team with quantitative data, which, coupled with the qualitative interview data, the team used to develop meaningful ideas and prompt discussions based on these stories.

4.0 Findings & Discussion

This project focused on collecting the stories of Czech residents' experiences with climate change and sharing these stories effectively through an Instagram account. Through collected interviews and surveys, the team found commonalities and trends from those interviewed such as effects of heat waves on individuals, awareness of climate change, and lack of activism from individuals in the sample. The team also found that the most effective strategy for the greatest outreach was posting consistently and having a variety of posts through the Instagram account.

4.1 Disconnect Between Climate Acknowledgement & Involvement

The interviews and surveys the team collected resulted in common trends throughout most respondents. The team noticed that respondents were aware of climate change and that it is a serious problem — they see the different effects of climate change in their daily lives. Participants take actions of sustainability such as recycling and taking public transportation; however, few individuals engaged in climate activism in the team's sample. The stories that came from these respondents presented themes explained in this section.

4.1.1 Respondent Demographics

While a majority (62%) of survey respondents lived in the urban areas of Prague and Liberec, demographic data indicate that these respondents were evenly split between suburban (19%) and rural (19%) locations within the Czech Republic including the suburban town of Brandýsek, an unspecified suburb of Prague, an undisclosed suburban location, the rural towns of Kolín, Teplice, and an unspecified rural location within South Bohemia.

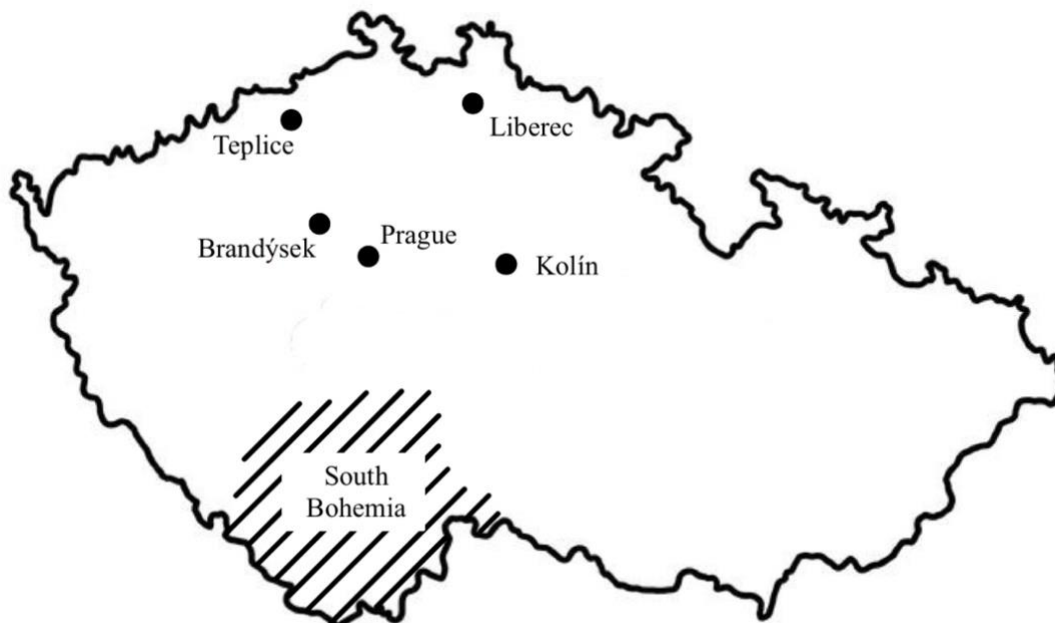


Figure 4.1 Map of Locations within the Czech Republic

The majority of survey respondents were either young (50%), or middle aged (38%), with only 12% of respondents aged 60 years or older. There was an even split between male and female respondents, so the survey findings are not influenced by a predominantly male or female group.

In addition to surveys, the team conducted eleven interviews — with five female respondents and six male respondents — that resulted in personal insights into climate change in the Czech Republic (Table 4.1). The interviewees furthered the team’s understanding of the thermal changes and natural disasters that have affected them as well as the contrast of climate awareness and climate action within the Czech Republic.

Table 4.1 Interview Participants

Participant Name	General Age	Occupation/ Organization	Sex	Interview Type
Kamila Hofmanová	Adult	CIEE	Female	Long, In-Person
Morgan Henley	Adult	CEE Bankwatch Network	Female	Long, In-Person
Bartender	Adult	Bartender	Male	Short, In-Person
Marek Rakouš	Adult	CIEE	Male	Long, In-Person
Ondrej Altman	Young Adult	Student	Male	Short, In-Person
Petr Franc	Young Adult	Student	Male	Short, In-Person
Lucie Gomezova	Elder Adult	CIEE	Female	Short, In-Person
Peter Mistrík	Adult	CIEE	Male	Short, In-Person
Michaela Neužilová	Adult	CIEE	Female	Short, In-Person
Petra Key	Elder Adult	CIEE	Female	Short, In-Person
Luděk Hofman	Elder Adult	N/A	Male	Written

4.1.2 Heatwaves & Natural Disasters

The team found that every respondent noted the changing temperature in the Czech Republic as one of the biggest personal effects of climate change – especially with respect to warming trends in winter and summer. One participant, Marek, said he loves skiing and has gone skiing with his family since he was little, but now rarely goes anymore due to the lack of snowfall and warmer winters.

Respondents felt the greatest effect during the summer. When asked on the survey about how individuals felt the effects of specific climate events, respondents indicated that they felt increased hot weather events the most compared to all other kinds of climate events; increased hot weather events was the only category in which every respondent indicated feeling at least “a little” effect. Fifty percent of respondents indicated feeling either a lot of or a great deal of effects from

increased hot weather events. In contrast, many respondents indicated feeling either no or a little bit of effects from severe storms (44%), increased cold weather events (62%), and flooding (69%). The data make it apparent that the most impactful climate change effects for these respondents are from events related to hot weather: i.e. heat waves and drought. This notion is further evinced by the interview data.

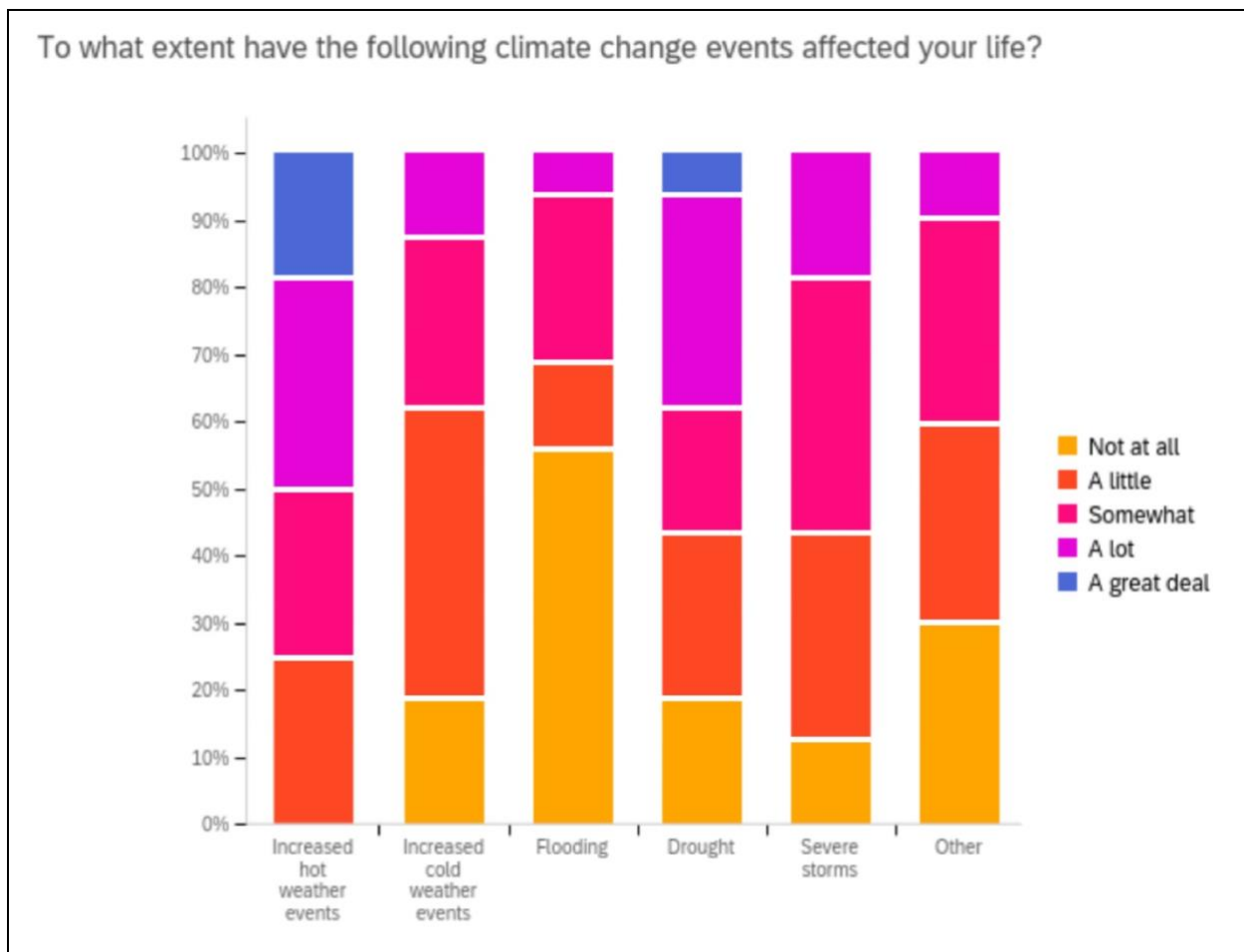


Figure 4.2 Extent of Effects from Climate Change Events

One interviewee, Morgan Henley, was an American environmental activist that worked for CEE Bankwatch Network in district heat funding who has lived in Prague for several years. She commented on how heat waves affect individuals differently. Morgan remarked that “a lot of

people who can't afford two months on the Croatian seaside...run to Prague's few swimming pools and it gets pretty crazy" (M. Henley, personal communication, November 2, 2022). Two CIEE participants concurred that working during heat waves would be unbearable without air conditioning units. However, since these participants had access to air conditioning, which is not common in the Czech Republic, they were better equipped to endure the hot summers. Consistent with the team's background research, this aligns with the idea that different groups are disproportionately affected by the environment. While higher socioeconomic communities can escape the rising temperatures in the Czech Republic, poorer communities, who cannot afford air conditioning or vacations during the summer, face a greater impact. In addition, heat waves are a major effect of climate change on individuals in the team's sampling of Czech residents. All participants reflected that heat waves have become an issue and noticeably different from years prior, which is in accordance with the prior background research that suggested heat waves are one of the greatest climate problems in the Czech Republic.



Figure 4.3 Interview with Morgan Henley, November 2, 2022.

In addition to thermal change, all participants were aware of or directly affected by natural disasters in the Czech Republic. Two participants from Prague shared how they could see and smell the smoke of a forest fire that burned through the Bohemia Switzerland National Park in the summer of 2022, despite being 90 kilometers (56 miles) away. Almost half of all participants attributed this fire, which burned over 1000 hectares of forest land (Bohemian Switzerland National Park, 2022), to drought. Peter Mistrík, a male who worked at CIEE, stated “...because there was so much drought and the temperatures were so high the weeks before, that it just got out of any control and it spread” (P. Mistrík, personal communication, November 16, 2022). In addition to fires, two participants discussed other dangers to the forest, such as bug infestations, in particular bark beetles, that have killed numerous trees. Ondrej, one of the students at Charles University, pointed out “[the forests] were essentially like infested with bugs that overpopulated due to the high temperatures and large parts of our forests died, and now they're just bare” (O. Altman, personal communication, November 15, 2022). Consistent with established research, drought in forests contributes to the prevalence of beetles and amplifies climate change not only in the Czech Republic, but throughout Central Europe (Hlásny et al., 2021). Morgan also pointed out the growing problem of planting monocultures in the forests, the planting of a single species within an environment. Although these monocultures increase timber trade and profits in the Czech Republic, they have led to the growth in severity and frequency of extreme weather events due to lack of biodiversity (Janová et al., 2022).

In addition to drought and forest fires, five participants mentioned extreme weather patterns such as the tornado in South Moravia in 2021, one of whom experienced it personally. None had ever heard of a tornado in the Czech Republic before this event and never thought that a natural disaster could occur and be so devastating.



Figure 4.4 South Moravia after the tornado in 2021 (Bednarz, 2021).

South Moravia, a region where farmers have had a long tradition of growing wine and fruit, has now turned into “one of the driest regions in the country and farmers struggle more and more” (L. Gomezova, personal communication, November 16, 2022). One of the interviewed, Lucie Gomezova, grew up in South Moravia, and she said she was not prepared for the destruction that the tornado caused. The tornado affected her directly as her grandparents’ headstones were destroyed in the village where her mother grew up. Lucie believes that these storms will become more frequent, and change is needed to protect the communities from these storms.

Despite all of these climate events being mentioned in interviews, the survey respondents did not indicate feeling strong effects from them. Thirty-one percent of respondents reported climate change had a little effect on their lives, while another 38% indicated climate change only had somewhat of an effect on their lives (Figure 4.5). Although less than one-third of the survey

respondents felt a strong effect from climate change events in their everyday lives, these effects were still noticeable enough for interviewees to indicate that climate change is a problem. These climate effects, whether direct or indirect, influenced the perceptions of the people interviewed towards climate change.

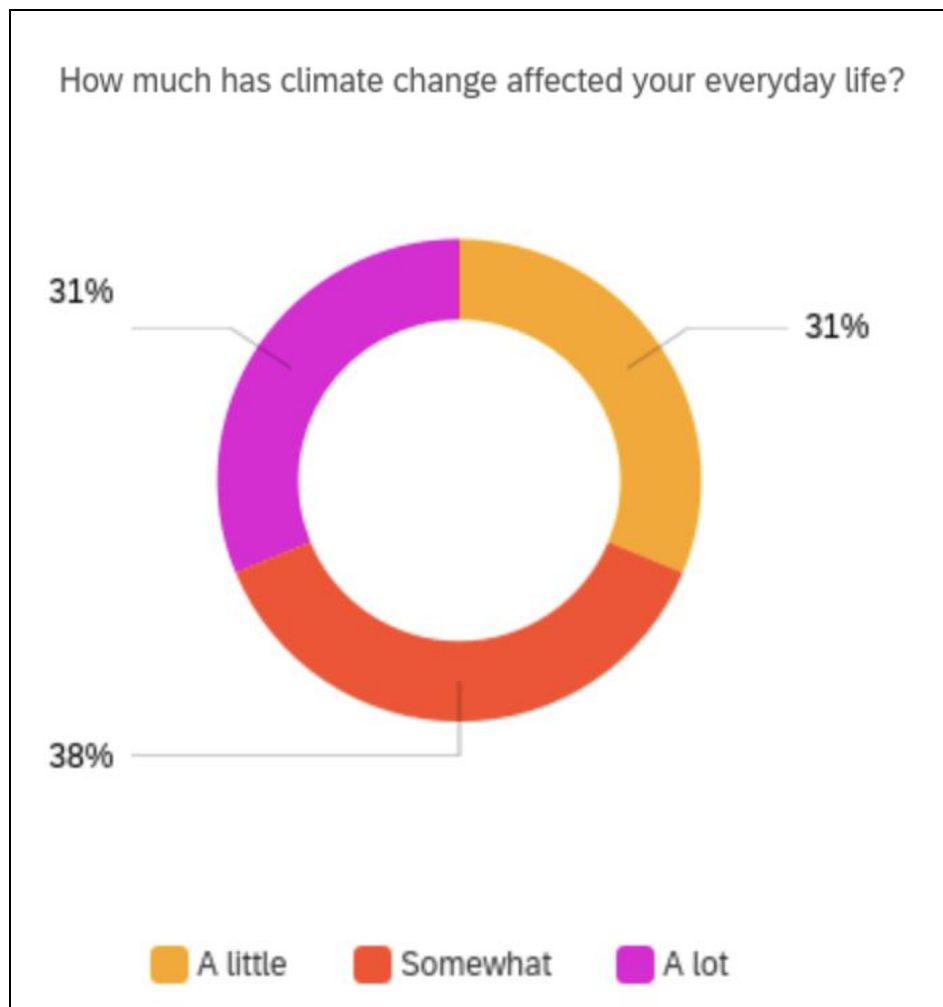


Figure 4.5 Level of Effect to Everyday Life Posed by Climate Change

4.1.3 Climate Awareness

It is evident that respondents perceive climate change as a problem that society must address even when they do not personally feel the severe effects themselves. The vast majority of

survey respondents felt that climate change was a significant problem, with 75% indicating it was a very serious problem and 19% indicating it was a serious problem (Figure 4.6).

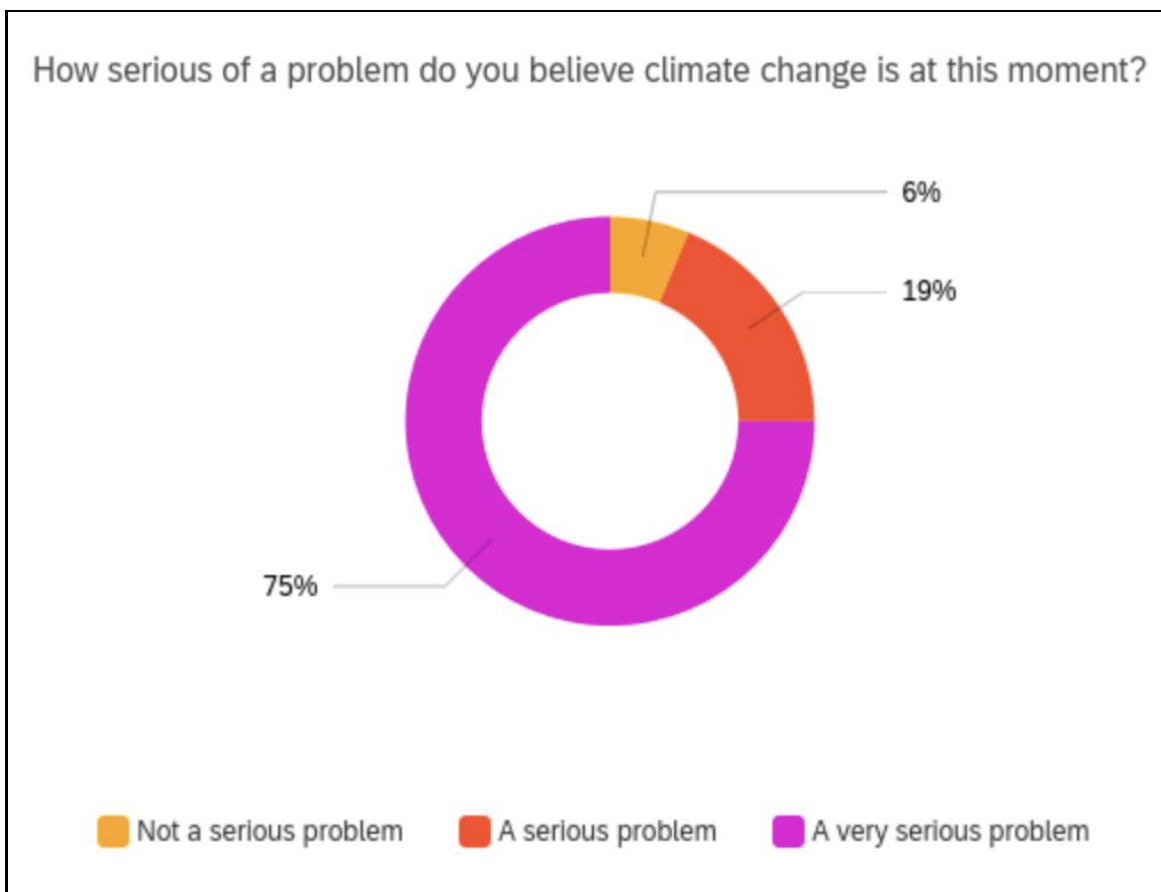


Figure 4.6 Perception of Climate Change as a Problem

Although all interviewees experienced the effects of climate change differently, they all noted that they believe climate change is a problem: to an extent of being called the “greatest issue of humankind” by one participant (M. Henley, personal communication, November 2, 2022). Although one hundred percent of the interview sampling noted the great severity of climate change which further strengthens the findings in the team’s survey, the team’s previous background research indicated that about two-thirds of the sampling would consider climate change a very

serious problem. This could be correlated to the convenience sampling the team conducted. Each interviewee expressed that they have seen the issue more evident in their daily lives and believe it is a great problem for the future. While not everyone associates these occurrences with climate change, the underlying idea remains. For example, one team member interviewed a bartender in the outskirts of Prague who explained that farmers see the changes of the environment firsthand, but might not call it climate change specifically. On the other hand, the bartender said citizens of the city of Prague do not experience the same changes, but they agree climate change is the issue. The awareness of climate change as a problem, even without necessarily feeling the strongest effects, is an important prerequisite to understanding the need to prevent and mitigate individuals' impacts on the environment.

4.1.4 Climate Action & Activism

It is apparent that there is a high level of climate awareness in the sample the team interviewed, and we found a similar result related to climate action. All survey respondents and interviewees engaged in some environmentally-responsible actions. According to the survey data, the most common actions were recycling (100%), taking public transportation (88%), conserving water (88%), and limiting waste (81%). Respondents who answered "other" reported actions such as minimal car usage, avoiding flying, upcycling clothing, avoiding plastics, and investing in sustainable technology for their homes (e.g. solar panels and super insulation).

Which of these actions do you do regularly to improve the environment?

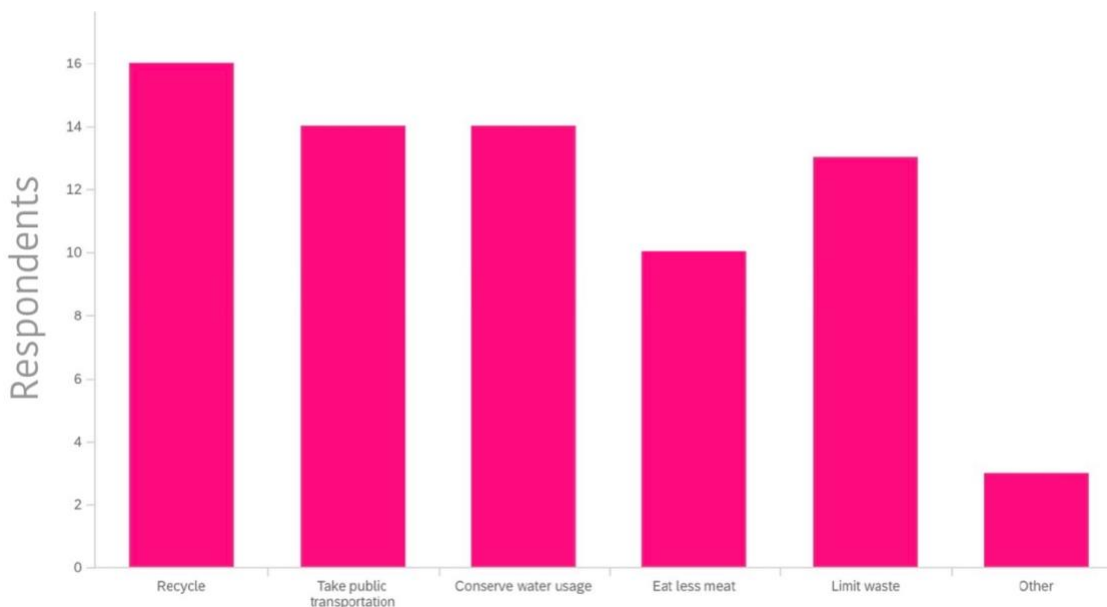


Figure 4.7 Environmentally-Responsible Actions

The first two options — recycling and taking public transportation — were the most prevalent and arguably the lowest-effort actions that could be taken to mitigate climate change/environmental harm. With recycling centers handling disposal and cities providing public transportation — both of which are very well-established in the Czech Republic, as the team has seen — individuals do not need to adapt their lifestyle to ensure the sustainability of these actions.

Conserving water, eating less meat, and reducing waste still had more than 50% response rate across the entire sample of survey respondents, but were not nearly as popular. These aspects of sustainable actions stem more from personal choices rather than availability of sustainable resources — resource usage and consumption do require a lifestyle change. The required effort of regularly doing these different environmentally-responsible actions corresponds with the

difference between the number of respondents doing low-effort versus high-effort actions, however a definitive claim cannot be made without further questioning about willingness to make sustainable lifestyle changes.

Although all of the interviewees and survey respondents indicate taking action to support the environment in some way, some interviewees believed the majority of Czech citizens are not concerned with taking action. Marek, a young male who worked at CIEE, commented that many people find things like reducing waste and eating less meat inconvenient; “We are living very comfortable lives and no one really wants to give it up” (M. Rakouš, personal communication, November 8, 2022).

There were also mixed opinions on the level of government action. Four interviewees specified that the government could be doing more for the environment by increasing funding for the grassroots communities affected by the changing temperature or changing systems to better compliment environmentally friendly actions. “And it’s not just about, you know, having a bike, it’s also about making sure that the city is built for bikes” (M. Henley, personal communication, November 2, 2022).

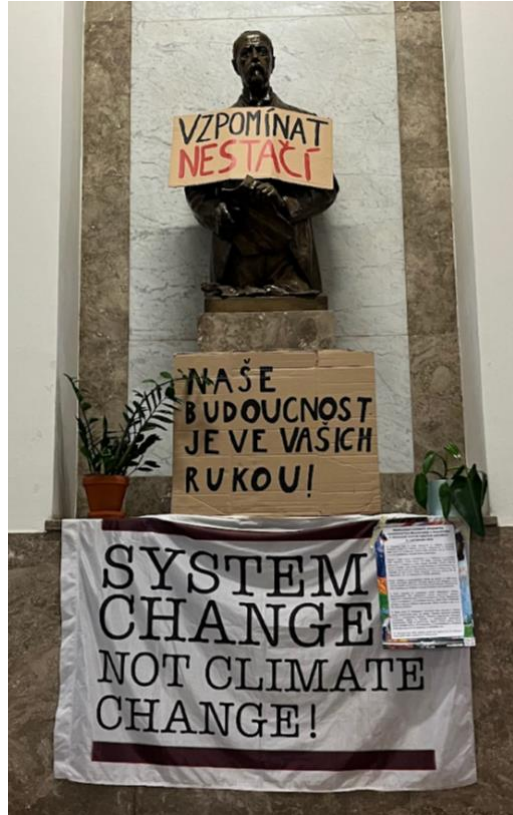


Figure 4.8 Sit-in at Charles University. The upper sign reads “Remembering is not enough” and the middle sign reads “Our future is in your hands”.

Two interviewees participated in a sit-in from November 14 to November 16 that consisted of students not just from Prague, but from all around the Czech Republic. They demanded changes from the government and their university towards sustainable energy and immediate steps towards zero emission plans from the government. Students slept overnight in classrooms and offices with posters and banners supporting their cause.

On the other hand, two different interviewees believe the government is not the one who can create change, they remarked that the government is busy with other matters, and that change starts with the individual.

While there was a split in how respondents held the government accountable for taking action to combat climate change, all interviewees acknowledged the responsibility that companies

and industries need to take concerning climate effects they have caused, especially the coal industry. Corresponding with the team's background research, the coal industry remains a major pollutant of the environment despite government plans to slowly phase them out by 2038. Coal industries cause a majority of the CO₂ emissions in the air, but emissions have decreased to about 9 metric tons per capita due to the government enacted plans to slowly transition out of coal energy (World Bank Group, 2020). While phasing coal out of the energy sector has begun to decrease emissions, the total phase out of coal is easier said than done. During the communist era especially, there was a great focus on the economy and coal mining and no discussion of the environment in the Czech Republic. Petra Key and Luděk Hofman, two of the older respondents, remembered no traces of climate activism or care for the environment. Rather, surface coal mining devastated the landscape and power plants ravaged nature: "It was exploitation and depletion rather than thinking about sustainability" (P. Key, personal communication, November 2, 2022). It was not until the Velvet Revolution that climate change was seen as a growing issue.

Today, respondents recognize the effects coal has had and still has on the environment and think that renewable energy would be a better alternative for the environment. The interviewees also believe the corporations need to be held accountable for their effect on the environment. The current focus of the discussion on the role systems and structures plays in shaping environmental outcomes is reminiscent of the Velvet Revolution, which was a period of change and protest.



Figure 4.9 Interview with Lucie Gomezova from CIEE, November 16, 2022.

For example, when the team asked Lucie, who was an involved student at the time of the Velvet Revolution, how those events compared to climate protests today, she explained that the Velvet Revolution was an “absolutely fantastic time.” There was a sense of hope and she saw the bright future ahead. In contrast Lucie remarked that “young people right now who are climate activists...see a bleak future ahead.” The passions are the same, but they are fighting to reverse the bleak future. Petr Franc, one of the students at the climate sit-in at Charles University, concurred that activists are fighting “out of fear” and “out of the impending doom.”

Petr was also one of the three interviewees engaged in climate activism. Along with Petr, the team interviewed another student, Ondrej, at the sit-in. Morgan has also participated in many marches and support events for the environment. There appeared to be a much stronger prominence of individual climate action by doing low-effort environmentally-responsible actions more so than

partaking in climate activism or doing high-effort environmentally-responsible actions that require larger lifestyle changes.

These themes align with the survey data, pictured below in Figure 4.10. When asked about engagement with climate activism, 51% of respondents indicated little or no engagement with climate activism.

How high would you consider your level of engagement in climate activism?



Figure 4.10 Environmental Activism

Besides Petr, Ondrej and Morgan, none of the other interviewees had ever participated in activism although they recognized the importance of it. Some of the reasons they gave were that they did not have time or they did not know anyone participating. Activism also serves as a physical exertion of effort and lifestyle change, whereas making environmentally-responsible decisions tend to be very low-effort and do not necessarily result in direct lifestyle changes. The interviewees who participated in activism noted the necessity to make changes that will help the future of the planet and their lives.

It is clear that students and young people are at the forefront of change in the Czech Republic based on the climate sit-in and the history of the Czech Republic.



Figure 4.11 Interview with Petr Franc, one of the two students the team interviewed during the sit-in at Charles University, November 15, 2022.

For instance, Petr noted that there is no real climate change movement in the Czech Republic due to a lack of unity and drive. Although there is not a prime minister like Václav Klaus in the Czech Republic, he observed that environmental groups today lack a sense of radicalism due to the conservative nature of society. The challenges that seem to arise from these young activists is the individualism and “doomerism” of tackling climate change. Petr notes that while fear may drive many activists, hope should not be lost for a better environment. He emphasized that the student activists must “be vigilant.”

4.2 Instagram Results & Analysis

Within the first week of arriving in the Czech Republic, the team established an Instagram account (@wpistoryingclimatechange) to share the stories that were documented through the survey and interviews. The team altered the frequency, type, and style of Instagram posts to

analyze the account's activity and popularity. Instagram has a built-in Insights feature that provides standard data — graphically and numerically — to all Instagram users within a “Professional dashboard” that displays how well that user's posts are performing based on their Insight statistics. These statistics include the audience reached and engaged, post type performance, and the total number of accounts reached in the previous 30-90 days. Post engagement is classified as users either liking or commenting on a post, accounts reached describes the number of users who had the content appear on their device, and profile activity refers to the number of users who click on the content to explore an account's profile. Outside of the built-in Insights feature, one can also analyze data such as basic follower demographics and individual post performance by their own observation. The team analyzed these statistics to understand the optimal strategy for the WPI Storying Climate Change initiative's Instagram account to be successful.

In terms of the general audience for the Instagram account, during the term the team gained a following of 72 users — 62 of which were individuals with the remaining 10 being organizations. Of the 62 individual followers, 88% are WPI students and staff. Regarding the 10 organizations that follow the project account, 50% are based in the Czech Republic, 10% are international, and organizations related to WPI make up 40% (see Figure 4.12). With most individuals and organizations being related to the project's institution, and the majority of the remaining organizations being from the project site's location, it is evident that branching out from the communities that one is already a part of is difficult when promoting an initiative.

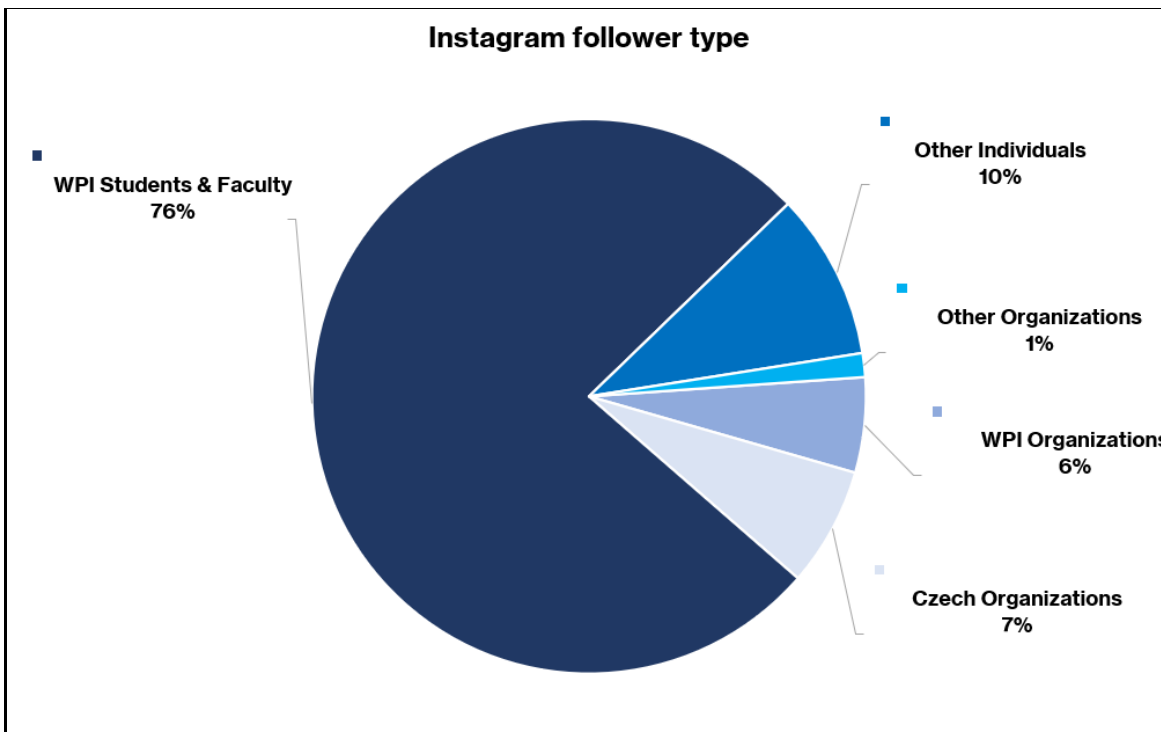


Figure 4.12 Data of Instagram Follower Type (Instagram, 2022)

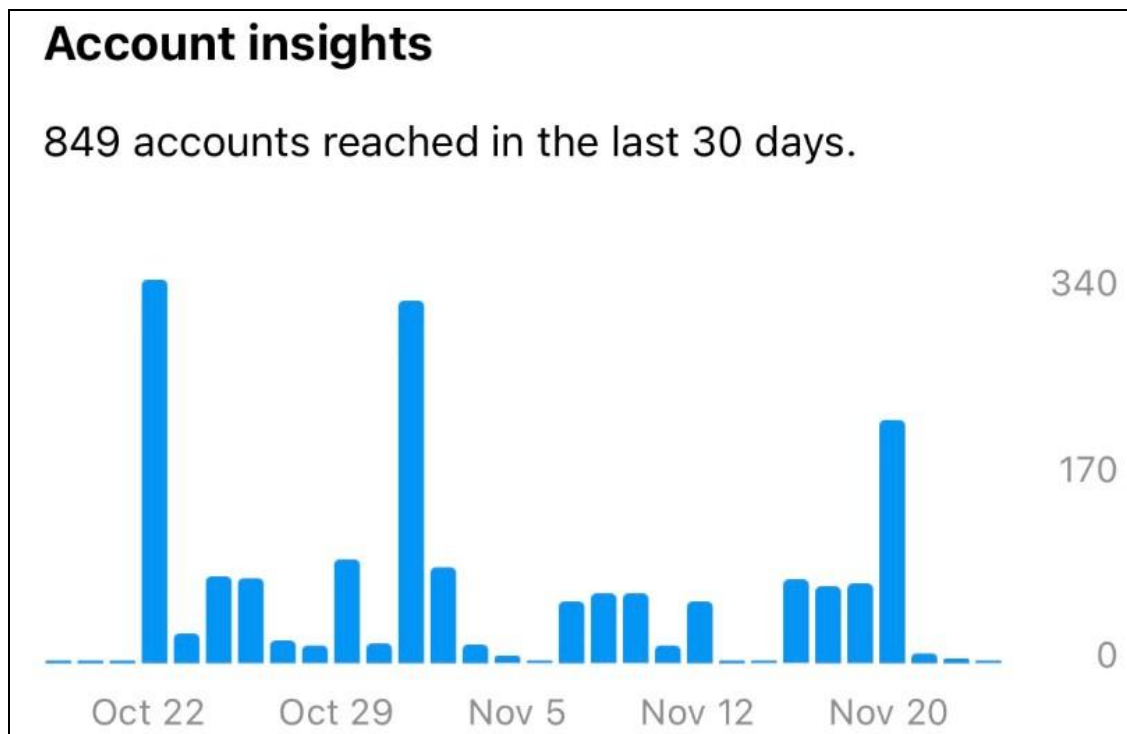


Figure 4.13 Day-to-Day Data of Reached Audience (Instagram, 2022)

According to the dashboard, @wpistoryingclimatechange has reached 849 accounts since its inception, with 5% of the account being followers of the project account, and 95% of them not following the project account. Utilizing various climate-related hashtags including but not limited to #climate, #climatechange, or #climateaction, has tended to increase the number of users that see the project account's content. With slightly less than half (46%) of the project account's following not being reached in a month-long period, it is evident that reaching accounts — let alone followers who are most likely to see the content — is more complicated than simply posting the project's core content. Different measures, such as promotion and altering the ways in which content is created for the Instagram account, may increase the proportion of followers reached in the future.

The number of accounts reached has varied in magnitude at different points since the team created the project's Instagram account. As seen in Figure 4.13, there were multiple peaks for the number of users reached on certain days, with a maximum of 340 accounts which then quickly decreased in the following days until the next spike. Two of the three large spikes followed a distinct post on the project account; the "meet the team" post (post #1) and the first reel (post #5) were the first of their kind to appear on the account and performed well above the other posts. Based on the large number of users reached after a distinct post, it is evident that varying content type is best for increasing the number of accounts reached. The third spike occurred after a Reel from a different interviewee (post #12), Marek, which reached 207 users after the previous post (post #11) had reached 62 users. Alternatively, a sequence of Reels from the same interviewee — e.g. posts #5, #6, and #7 in sequence from Kamila's interview — reached 319 users, 73 users, and 61 users, respectively. There is a clear difference in performance between a Reel from a distinct interviewee boosting the number of users reached and a sequence of Reels from the same interviewee experiencing a drop-off in the number of users reached. The data from the sequence

of Reels from Kamila compared to the first Reel from Marek suggests that alternating posts of Reels from distinct interviewees aids in increasing the number of users reached.

For overall audience engagement, out of the 67 users engaged, 41 are followers of @wpistoryingclimatechange and 26 are not following the account. From this data, it appears that a higher proportion of followers engage with content on posts compared to non-followers. The number of followers that engaged with the project account by liking or commenting is about the same as the number of followers reached in the same time period at 41 and 39 users, respectively. From the follower reached and engaged data, it is evident that the followers who see the project account's content (those who are reached) are the followers that engage with the content (those who like or comment). The accounts reached and engagement data show similar results when comparing followers, however; when comparing the influence of the @wpistoryingclimatechange account, the reached data provides more valuable insight into the actual outreach of the content being posted on the account — thus, how many users are learning Czech stories of climate change.

In terms of performance, the content reach of posts and Reels were very similar in reaching a larger audience than the account's following, whereas story posts reached a much smaller audience that did not extend far past the account's following. As shown in Figure 4.19, story posts reached only around 20% of the number of accounts as posts or Reels. It is also shown that followers make up the majority of the users viewing story posts, whereas non-followers make up the majority of those who view posts and Reels. Instagram's Explore feature (see Section 2.6.1.1), which mainly showcases Reels, is very likely the reason for the project account's story posts reaching a much smaller number of accounts compared to posts and Reels. The Explore Page also can explain why a much larger proportion of non-followers view posts and Reels, as posts related to a user's preferences — hashtags or similar accounts followed — will appear on the Explore

Page. Story posts are catered more to followers of a specific account with how the Stories feature is presented on the platform. It can be concluded that the optimal way to reach the most accounts is to make posts and Reels, as they will reach many more users — not just those following the project account.

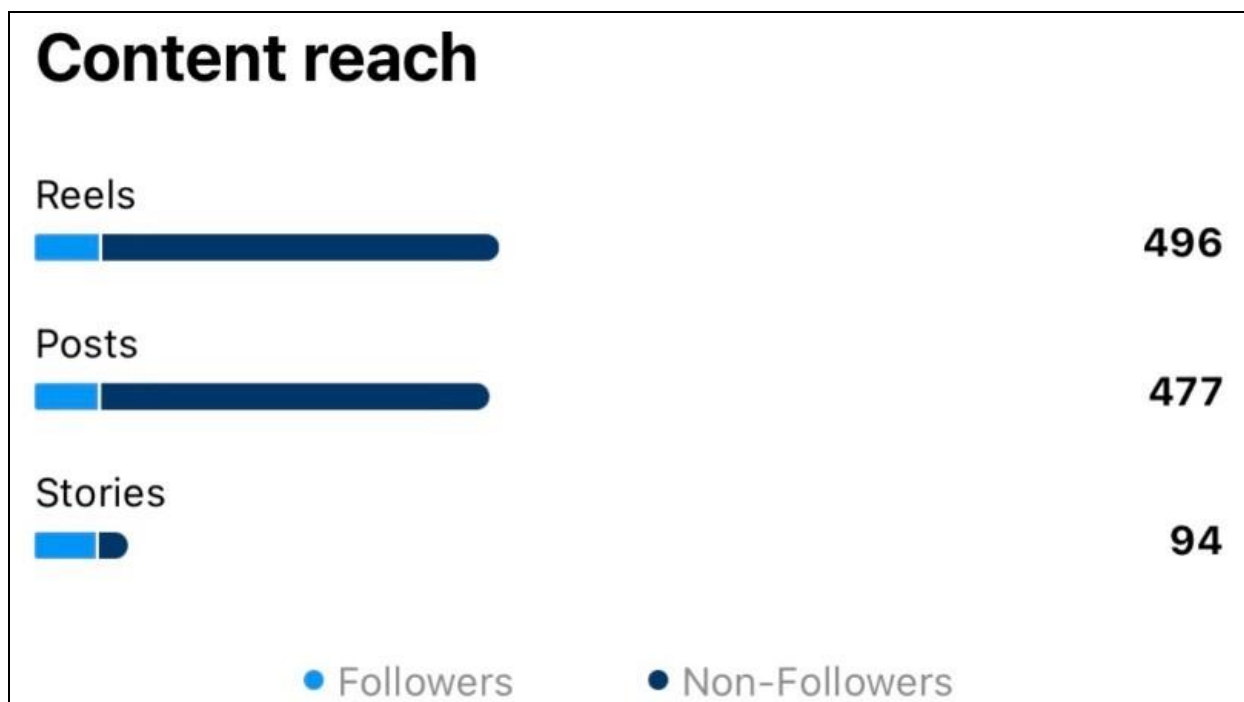


Figure 4.14 Data of Content Reach (Instagram, 2022)

The following tables detail the five most popular posts, Reels, and Stories, respectively. The posts, Reels, and Stories are ordered from top-to-bottom in terms of performance regarding the number of accounts reached alongside profile activity.

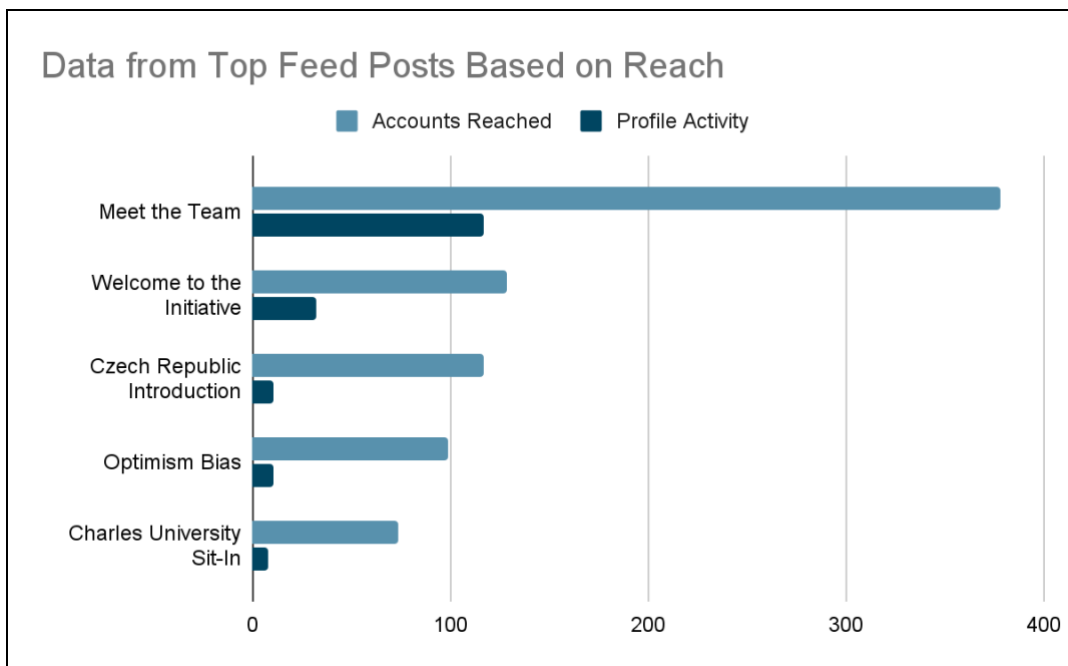


Figure 4.15 Data from Top Feed Posts Based on Reach (Instagram, 2022)

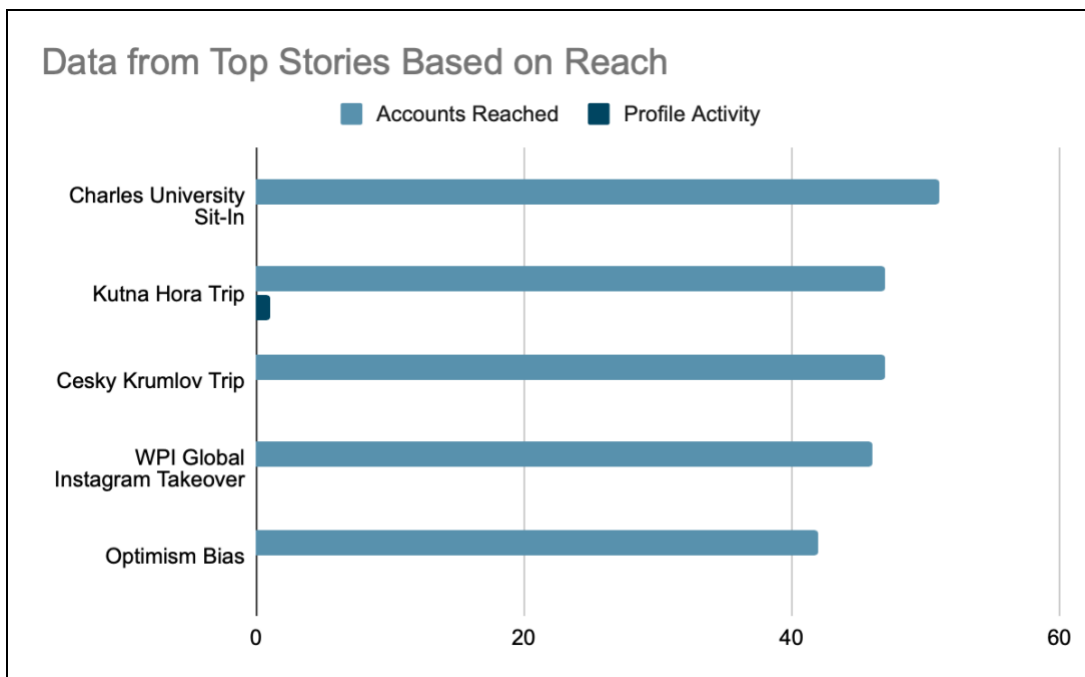


Figure 4.16 Data from Top Stories Based on Reach (Instagram, 2022)

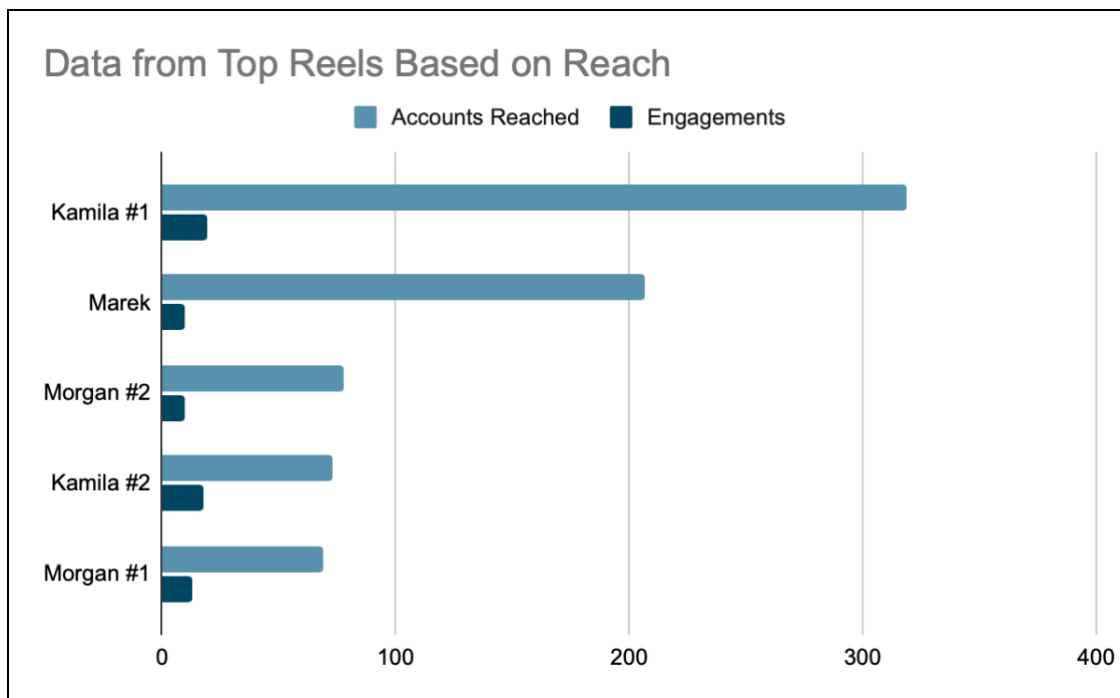


Figure 4.17 Data from Top Reels Based on Reach (Instagram, 2022)

As mentioned earlier, the most popular posts and Reels were the first of their kind. The “Meet the Team” post was the account’s first post, which was also reposted by the official WPI Instagram account. Similarly, interview clips from the first Reel with Kamila, a CIEE employee, were part of the first Reel the team posted. It generally appears that the first posts and Reels are the most successful due to support from individual followers and from reposting by WPI. Apart from the two most-reached posts and Reels, there was a steep decline in accounts reached and engagement. Determining a post strategy that can avoid the drop-offs shown in the tables above will be important for the future of the WPI Storying Climate Change initiative to reach a greater audience that can stay engaged with the content being created.

The data obtained from Instagram’s Insights feature allowed the team to draw conclusions on how best to present climate stories on a social media platform. From the follower type data, it is clear that users related to WPI make up the majority of the project account’s followers. Fifty-

four percent of the project account's followers were actually reached in a month-long period, thus simply posting core content to the account was evidently not enough in terms of reaching as many users as possible. Varying the type of content — such as using clips from distinct interviewees when posting consecutive Reels — along with making the interview clips the focus of Feed posts and Reels, has shown to maximize the number of users reached by the @wpistoryingclimatechange account. Using these findings from the Instagram data, the team created multiple recommendations for future Storying Climate Change IQP teams.

5.0 Recommendations & Conclusion

In an effort to ensure continued growth of the WPI Storying Climate Change initiative, the team developed recommendations based on the successes, failures, and limitations observed over the project term. It is imperative that future Storying Climate Change IQP groups are made aware of these aspects that were involved in our process. The re-envisioning of an existing project required a multitude of trial-and-error experiences; from developing unique ideas for content to experimenting with posting strategies, the team greatly expanded upon what previous WPI Storying Climate Change teams had done. This section serves as a guide for future Storying Climate Change groups to build off of what this group has started and provides ideas for IQP teams to continue sharing stories on the Instagram account.

5.1 Recommendations

The team has several recommendations for future Storying Climate Change IQP groups that will be posting on the Instagram account that we created for this project. Recommendations provided by the team were driven by experiences as the project developed, and by data from the team's findings relating to Instagram. These recommendations cover the methods for creating high-quality posts on Instagram and maintaining consistency, building connections, and promoting the account to expand its following and reach as many people as possible.

5.1.1 Posting on the Instagram Account

In terms of creating posts on the @wpistoryingclimatechange Instagram account, the three most important aspects for maximizing and sustaining engagement include post format, developing a consistent post schedule, and utilizing a "test" account. We recommend that future teams use a common post format to create uniformity and consistency between each IQP

group's posts on the account — aesthetics such as color scheme and font should remain consistent among all informational posts. Based on the data displayed in Figure 4.21, we recommend that future groups post consistently and frequently; days in which the team did not post any content were among the lowest for the number of accounts reached. As story posts also reached a much smaller proportion of non-followers compared to posts and Reels (see Figure 4.23), prioritizing informational posts, written interview quotes, and interview Reels is recommended approach for how to schedule the posts on the project account. The team also recommends that future groups build up a collection of content (Reels and informational posts) before the halfway point of the term. This approach of saving content for later weeks will allow for consistent posting as the writing portion of the IQP project increases during the final weeks. From the team's own experience with piloting the @wpistoryingclimatechange account, we recommended the use of a private "test" account to preview what posts will look like before going live with them on the main account. The "test" process will aid in minimizing mistakes that could potentially be made when posting directly to the main account with any content — especially video content.

5.1.2 Outreach & Building Connections

Using a social media platform to share people's climate stories may sound simple; however, building connections in the climate change space on Instagram to spread the stories to as many people as possible is important for all future IQP teams who will utilize the project account. Future groups can achieve expanding the WPI Storying Climate Change initiative's social media network by following, direct-messaging, and emailing local climate and environmental organizations. We recommend that future IQP groups begin following and contacting climate organizations based in the project location during the ID2050 class to set up the project for success early in terms of acquiring interviewees and collaborations with the organizations. We also

recommend creating and sending a survey to collect contacts and preliminary data to these organizations. Surveys have the potential to provide useful data and an opportunity to connect with interviewees — particularly from local people who may have not otherwise been reached (see Section 4.1).

5.1.3 Promotion of the Instagram Account

With the focus of the project’s Instagram account being to spread people’s climate stories, it is important to constantly give publicity to @wpistoryingclimatechange in order to maximize the number of users the stories reach. Utilizing hashtags, location tags, and subtly inserting advertisements when contacting organizations can all aid in the promotion of the project account, thus we recommend that future IQP project groups continue doing these. Adding a variety of relevant hashtags at the end of a post’s caption — along with tagging the location the content was sourced from — has the potential to add discoverability to these climate stories (see Section 2.6.1.2). If a survey is distributed or an email is sent to an organization, we recommend using the WPI Storying Climate Change logo and adding a link to the Instagram account. Providing easy access to the project’s account alongside the survey or an email may spark the interest of the reader or participant, causing them to view the Instagram and be introduced to the various stories available.

5.1.4 The Interview Process

During each interview, the team aimed to record the interviewee’s responses and experiences in the best possible quality. As the project progressed, the team learned that the interviewer needs proper etiquette and must be professional. The team used a microphone to record the audio of each interview, and later came to the conclusion that interviews should take place in

a quiet environment for formal interviews, to reduce background noise — the team realized this after conducting interviews outdoors and near construction. In addition, the team recognized that an interviewer should be cautious to avoid causing audio disturbances — such as making short remarks in response to what interviewees are saying — and ensure that the participant has finished responding before asking the next question.

Along with the interview setting, interview conduction was an important aspect that the team built upon throughout their time in the Czech Republic. Having access to the interview questions will lead to a continuous, professional interview with no awkward pauses. As time went on the team learned that some improvisation in conjunction with prepared questions gives the best results. Early on, a stricter script was followed by the interviewer; this led to issues such as repetitive answers for questions the interviewee had little knowledge about, and disruptions to the flow of the interview as the pre-set questions could not predict the direction of the conversation. Fewer and more general scripted questions allowed the interviewee the freedom to share deeper content, while allowing the interviewer a chance to discover the best topics for deeper discussions.

5.2 Limitations & Avenues for Future Research

The primary outreach barrier the team faced was a lack of response when reaching out to Czech organizations. After emailing several environmental organizations during ID2050 (Appendix P), only one group responded with one individual willing to do an interview with the team. Upon arrival in the Czech Republic, the team contacted over ten Czech organizations or individuals via Instagram direct messaging; while the team received a few responses, the potential opportunities did not come result in interviews. Thus, reaching out to organizations virtually — which the team assumed would be the primary method of outreach — did not fare successfully. The team also pursued less spoken interviews with people outside of Prague than within Prague,

limiting the location diversity of the interviews. We did pursue multiple large environmental organizations based in Brno, and in doing so, the team did not plan to contact other organizations outside of Prague. The team planned to travel to Brno hoping to conduct many interviews, which led to the team expecting to gather a large number of interviews. Unfortunately, after a great deal of promising communication, the organizations failed to contact the team to finalize the trip plans.

Due to these limitations, the team was forced to use convenience sampling rather than a more accurate quota sample for interviews. A quota sample is where participants are chosen based on predetermined characteristics, so the total sample will accurately depict the distribution of characteristics of a wider population (Taherdoost, 2016). The team would have gathered individuals representing multiple demographics such as different ages, socioeconomic classes, and locations. In contrast, the team utilized convenience sampling, where individuals are selected from a large group by who is most convenient to get (Taherdoost, 2016). In this case, the most convenient individuals were those from local environmental organizations and those who were already known through existing team connections. Unfortunately, with only one individual from an environmental organization being willing to do an interview with the team, most of the team's interviewees had ties to CIEE. This meant that most of the interviewees and survey respondents were professional and more likely to have a stable income and high quality education. The lack of demographic diversity in using a convenience sample, as was shown in the survey results, highlighted a strong bias toward perception of climate change as a serious or very serious problem. Results from the survey data could not be the basis for claims beyond the beliefs of CIEE staff due to the potential bias that could arise from such an extrapolation of the sample. The sample was too small to be reflective of the total population of the Czech Republic.

The limited diversity of the demographics featured in our samples restricted the scope of our findings. If we had a greater generational variety of participants, an interesting subject of research could have been to look into how optimism bias affects different age demographics. The survey data showed that the middle-aged demographic may be strongly influenced by optimism bias compared to younger demographics. It would be intriguing to do further research into the difference between optimism bias in older generations and pessimism bias in younger generations with regards to climate change. Another research topic, given the greater diversity of respondents' locations, could be the availability of water resources for urban, suburban, and rural communities in the Czech Republic with increasing drought due to climate change. As was discussed in Section 4.1.2, the apparent difference between those who feel effects from drought versus those who do not feel effects from drought despite feeling the same increased hot weather events could be indicative of injustices regarding access to local water sources. A final idea for research could be exploring the willingness of Czech citizens – or any citizens at that – to make lifestyle changes to become more sustainable. Low-level efforts like recycling are simple tasks, while reducing waste and consuming less are much higher effort actions that require greater levels of change. Investigating whether any hindrances to make these changes stem from a lack of belief in the severity of climate change or simply from selfishness could provide into the future of sustainable action and climate activism.

In terms of the @wpistoryingclimatechange Instagram account's future success, further analysis of post performance, following, and outreach will be required to increase the publicity of climate stories. As more IQP groups use the Instagram account to share people's stories regarding climate change, the account will likely develop a greater following. With more followers, a greater amount of engagement with the content will most likely follow. As the following and engagement

increase, more analysis can be performed on post type and follower demographics; this analysis will allow future IQP groups to develop a more efficient post schedule and strategy that are catered to the majority follower demographics. Future groups may also analyze past groups' direct-messages with climate organizations and individuals and perform a content analysis on the messages. The content analysis could analyze the length, wording, and ideas included in messages and compare such aspects to response rate from those who were contacted by project teams. Messages could then be created that would have the best theoretical probability of receiving a response, thus increasing the chance to receive promotion and interviewees from climate organizations.

5.3 Conclusion

Stories provide a unique personal perspective that scientific quantitative data cannot adequately represent. In the scope of climate change, different environmental impacts and actions taken to combat the phenomenon are revealed through past experiences that often go unnoticed. The team not only discovered the different impacts of natural disasters and changing temperatures felt by Czech citizens, but also the action, or lack thereof, taken in response. The WPI Storying Climate Change Instagram account presented these stories and provided a platform where they can be shared to a greater audience. The work of spreading stories of climate change experiences does not stop here — there are several individuals whose stories have yet to be told and many locations where the effects of climate change are overlooked. This initiative brings light to the unfortunate truth of what climate change truly is: a concept well-known with a history of stories untold. Now is the time to make a change.

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Appendix A: Semi Structured Interview Questions

Certain questions were elaborated upon with general, non-specific follow up questions or with additional questions that are not included below and were interviewee-specific.

Opening Questions:

1. Tell me a little bit about your background?
 1. What do you do for work? Where do you work?
 2. Are you originally from the Czech Republic
 3. How long have you lived in the Czech Republic?
2. Have you gone to university?
 1. If so, what university did you attend and what did you study?
 2. If not, what is your level of formal education?
3. What do you like to do for fun in general?
 1. What outdoor activities do you enjoy?
 2. How do you enjoy your local environment and landscape?
 3. Do certain aspects of your local environment promote or hinder activities?

General Questions:

4. Do you think climate change is an important issue, and who should it be important to?
5. How do you feel that climate change has affected your personal life?
6. What do you feel is the biggest change in the climate that you have personally noticed?
7. What do you think should be done about climate change in the Czech Republic/around the world?
8. Have you ever seen environmental activism in the Czech Republic? In what ways?
9. How much of climate change do you think can be attributed to humans?
10. How much responsibility falls on the governments versus individuals for combating climate change?

Demographic Questions (These are example questions for a specific group and can be changed to be asked of other groups, e.g. College Students, Workers, Scientists, Retired, etc.):

11. As a college student, what do you think you should be doing to help with climate change?
12. As a college student, what do you think people of your parents generation should be doing about climate change?
13. As a person who has experienced communism in the Czech Republic, how have you and others changed your perspective on climate change?
14. How has the climate changed in the Czech Republic since you were a kid?

Wrap-up Questions:

15. How do you see climate change affecting the future?
16. Do you have any ideas of how climate change can/should be tackled?

Appendix B: Short Interview Questions

Certain questions were elaborated upon with additional questions that are not included below and that were interviewee-specific.

1. On a scale of 1 to 10, how much of a problem is climate change (10 being a big problem, 1 being not a problem)?
 1. Can you provide any further explanation as to why you chose that number?
2. What effects of climate change do you fear will impact the Czech Republic?
3. What aspects of climate change have impacted your life so far?
4. What can be done within the Czech Republic to combat climate change?
 1. Have you personally taken any measures in an effort to combat climate change?

Appendix C: Survey Questions

Certain questions were elaborated upon with selecting particular options, which are provided with corresponding questions, or by allowing for free response.

1. Do you consent to participate?
 1. Yes
 2. No
2. What age are you?
 1. 18-39 years old
 2. 40-59 years old
 3. 60-79 years old
 4. 80 years or older
3. What is your gender?
 1. Male
 2. Female
 3. Other
 4. Prefer not to say
4. What country are you originally from?
 1. Czech Republic
 2. Other: (free response)
5. Where in the Czech Republic do you live? (free response)
6. How would you describe the community you live in?
 1. Urban
 2. Suburban
 3. Rural
7. How serious of a problem do you believe climate change is at this moment?
 1. Not a problem at all
 2. Not a serious problem
 3. A problem
 4. A serious problem
 5. A very serious problem
 6. No opinion
8. How much has climate change affected your everyday life?
 1. Not at all
 2. A little
 3. Somewhat
 4. A lot
 5. A great deal
9. To what extent have the following climate change events affected you life?
 1. Increased hot weather events
 1. Not at all
 2. A little
 3. Somewhat
 4. A lot
 5. A great deal

2. Increased cold weather events
 1. Not at all
 2. A little
 3. Somewhat
 4. A lot
 5. A great deal
 3. Flooding
 1. Not at all
 2. A little
 3. Somewhat
 4. A lot
 5. A great deal
 4. Drought
 1. Not at all
 2. A little
 3. Somewhat
 4. A lot
 5. A great deal
 5. Severe storms
 1. Not at all
 2. A little
 3. Somewhat
 4. A lot
 5. A great deal
 6. Other
 1. Not at all
 2. A little
 3. Somewhat
 4. A lot
 5. A great deal
10. How high would you consider your level of engagement in climate activism?
1. Not at all
 2. A little
 3. Somewhat
 4. A lot
 5. A great deal
11. Which of these actions do you do regularly to improve the environment? (check all that apply)
1. Recycle
 2. Take public transportation
 3. Conserve water usage
 4. Eat less meat
 5. Limit waste
 6. Other: (free response)
12. We are interested in collecting the stories of Czech natives' perspectives on climate change and any personal impacts felt from it. Would you be willing to participate in an

interview — in-person or online — to further discuss your experiences with climate change?

1. Yes
 2. No
13. How proficient in English would you describe yourself?
1. Fluent in English
 2. Some English
 3. No English
14. Please enter your name and contact information and we will make sure to contact you with further details:
1. Name
 2. Phone number
 3. Email address

Appendix D: Kamila Hofmanová Interview Transcript

As the majority of the participants do not natively speak English, many exhibited stuttering and pauses. The transcripts have been edited to most accurately depict the participants thoughts and experiences despite the language barrier.

Coding Key: Climate Justice Climate Action/Activism
Climate Awareness Climate Affects
 _ = personal story and points

Interviewer: OK, so just to get started, can you tell me a little bit about your background? What do you do for work? Are you originally from the Czech Republic? How long have you been here?

Kamila: Yeah. So, I was born and raised in the Czech Republic, in Prague. After I finished my bachelor's degree, I moved to the US where I lived for seven years, but I have been back in the Czech Republic for the last five years. Regarding my work, I'm working with American students; I am a program coordinator for faculty-led programs for a company called CIEE. In the past, I was an elementary school teacher and then I was working a little bit in...as an immigration and relocation consultant. Would you like to know something about my free time or what I...?

Interviewer: Uh, yeah, that's what we got next. So, what do you like to do for fun? Is there like any outdoor activities that you really enjoy? Anything about your local environment that you particularly like?

Kamila: Like, yeah, that's actually one of the reasons why I returned from the United States back to Prague; because I'm...like in my free time, what I mostly do is like bicycling, running, hiking. That's...I love all kind of sports and outdoorsy stuff. So, what I love about Prague is that the nature is so easily accessible. You know, like you can pretty much hop on the bicycle in the center, and the bike paths takes you...like you can be in the woods within like 45 minutes. Uh...yeah, so I'm like a little bit of a fanatic like when it comes to sports, and I also like reading. I used to run marathons in the past.

Then like you were asking about the environment, what is like one thing that, uh, that concerns me a little bit is, I believe it's caused by the climate change, it's like this parasite in the woods in the Czech Republic that is like attacking the trees and then like they pretty much die and they need to be cut down. So, like in the mountains, especially like in the north of the Czech Republic, the Beskids mountains, they are like disappearing...the forest is disappearing. So yeah, that makes me kinda sad.

Interviewer: So, we'll get into the more climate centered questions now. So, what do you feel is the biggest change in climate that you have personally observed?

Kamila: Oh I...I remember, like when I was a kid, uh, summers used to be much colder and rainy. It could like rain months at the time, and that completely changed. Like now we have pretty much tropical summers above 100...I mean above 35 degrees Celsius, which is like, I think, 120 in Fahrenheit. So, it...we didn't used to have summers like that. And then winters are very mild, like winters are now pretty much kind of like fall in the past. We don't have much snow; it rains a lot. So yeah, these are the changes that I noticed.

Interviewer: So, is there any like...any of these changes that have affected you personally?

Kamila: Personally, I wouldn't say...I'm sorry what did you say?

Interviewer: Just anything that's like affected your daily life?

Kamila: Not really. I mean, uh. I can imagine like maybe...I mean, since we're like developed country, right? So even if...I don't think it affected the Czech Republic that much when it comes to...I don't know like agriculture, like some crops that are like...that we eat every day that wouldn't be able to grow here anymore. I don't think that happened. But so...But I mean, even if it happened, we can always like export like food from other countries. So, I don't...it really didn't affect me in any way in my daily life.

Interviewer: Do you remember the flood in 2002?

Kamila: Yeah yeah yeah yeah.

Interviewer: Was there anything of that that affected you? Do you remember it? What was it like?

Kamila: Uh, I remember it. I mean it didn't really affect me personally like nobody from my family or from people I know were really affected by it. Uh, and at the time I...I don't know, I don't really believe that it was caused by the global warming, or you know I...I think it might have been just like one of these incidents, or like occurrences that can happen like regardless of global warming. But maybe I'm wrong.

Interviewer: Yeah, but we're getting people's opinions of it. So you know we don't have to...

Kamila: But I mean it was 20 years ago, right? Yeah, I don't, I don't really believe it was caused by global warming since it was such a long time ago.

Interviewer: Is there any other like disaster, like weather events, that you remember that like affected you at all?

Kamila: I remember that we actually had a tornado. It was I think last summer or spring. There was like first tornado ever in the Czech Republic; it was in Moravia, like an eastern part of the Czech Republic that happened only once. So yeah, that might be also caused by it. But besides that, no, we don't have any earthquakes, nothing like that. But this I think it's mostly because we don't have sea, you know, and there's no ocean.

Interviewer: That's true, yeah, yes. Can't really get any tsunami here. Have you ever seen environmental activism in the Czech Republic? In what ways?

Kamila: I remembered there was some strike like two years ago. I cannot remember what was the organization called, but. They were like activists at the...Náměstí Republiky, like Republic Square. They, uh, like they set up the kind of like gallows and they like put the rope around their necks and they were standing on the ice blocks, like ice cubes. It was like this form of protest. That's what I remember. And then I think there was some strike I think was like a year ago. Some activists, they like shut off the water in the parliament. Somehow, they go to the pipes or that was just for like 2 hours.

Interviewer: So there has been some crazy stuff.

Kamila: Yeah, but for me to be honest I think, uh, like when like these type of strikes, I don't think they make any change like they...Usually like in the Czech Republic, I think the general, like what people think about activists is that they are more like some cases like nut cases you know. But then we also have, uh, like organizations like ARNICA or Rainbow Organization, it's called Hnutí DUHA in Czech, like Rainbow Organization. So, they do meaningful work. You know, like they try to discuss with politicians like what changes they could implement in order to change the environmental situation.

Interviewer: Is there anything that you've been involved with?

Kamila: Not really, like only...the only thing I do is I try not to be so wasteful you know, like don't use too much water or gas, electricity. I don't drive. I always use public transportation or walk.

Interviewer: How much of climate change do you think can be attributed to humans?

Kamila: I would say maybe 50%. I mean, I feel like it...it's happening like naturally even if humans didn't exist. But we definitely contribute a lot.

Interviewer: What do you think we should be doing about climate change? Do you think it's something that we should be trying to solve, or do you think it's like we may be causing it a bit, but it's not really something we have to deal with.

Kamila: No, no we should...we should behave ecologically. You know, like a lot of times, people think that it doesn't make any difference. You know, like they think like somebody say "oh what can one person do?" But if everybody does it, then it makes a difference.

Interviewer: Is there anything like specific that you think we should be doing?

Kamila: Oh, I think what I'm doing. Just not be wasteful, uhm, maybe like return little bit back to the roots, like be more modest.

Interviewer: And, uh, do you think climate change is an important issue? Who do you think it should be important to?

Kamila: I think it is important...should be important.

Interviewer: Should it be important to everyone? Is it something that like government should be working on, or do you think it's important in something like companies? Like, do you think they should be just focused on profit or is it something they should also be...

Kamila: No, definitely they should...they should be aware of like how much damage they're causing. It affects everybody you know.

Interviewer: How much responsibility falls on these different groups? Is it something that you were like a government problem and they're the one most responsible for fixing it? Is it something that's happening collectively, each individual? Or is it like something companies should be focused on. Or is it like a mix of them?

Kamila: I think it's collective issue like everybody should be aware and everybody should try to behave. So you know, we have only one planet, so everybody should behave in the way that it's not harmful, or at least try to reduce. I mean, it's, all of us contributes right by, you know, like when we drive cars or fly for vacation, stuff like but there are small things, at least small things you can do to lower the impact little bit. Yeah, like uh, I think the company should find ways how to be more environmentally friendly. Yeah, you know, like use green energy or like solar panels, stuff like that.

Interviewer: Uhm, is there anything specific that like your generation should be doing particularly, do you think?

Kamila: I think they should like educate themselves. But I think that's more like up to educational system.

Interviewer: You know, like just people of your age, like you know or just around. Like you know, not like people that are younger and still in school, not people that are older and retired, like still in the working class. What do you think that that kind of group should be doing? Is there anything in particular they should be doing, or is it really all the same as everyone else?

Kamila: I think there are not really differences like between the age of the people or...But I think I think it should be maybe part of the curricular, you know? Like to teach kids like how to behave, uh, like environmentally friendly. Because a lot of people don't even realize. They just don't care, they don't have that awareness.

Interviewer: Yeah, so something that should be like talked really young. I mean that's just something that the younger generation should really be learning.

Kamila: I think so.

Interviewer: Have you seen any changes to...like you were talking about how like climate activism stuff has done crazy like demonstrations. And is that like something new? Is there like any big changes you've seen in climate activism over the years?

Kamila: I haven't really noticed. But to be honest, I think like Czech Republic, Czech people in general, they, uh, they are not concerned about this issue. You know, like we are a little bit like ignorant towards this I think. But I think it's also because it doesn't really impact us...impact us yet as much.

Interviewer: Yeah, you got the landlock and you got like relatively mild climate, makes sense. I mean like you can give anything if it's just like a feeling of like. Yeah, I've seen some more crazy stuff happen, like is there anything like that that you've seen kind of activism changing.

Kamila: Like something crazy that was happening here really?

Interviewer: Like yeah, is it just like as has the way that demonstrations have been happening, has happened like changed over the years?

Kamila: Not really. No, like only people demonstrate about is the government. But it's not because of the climate change.

Interviewer: How do you see climate change affecting the future? It can be here, it could be just in the world, what do you think?

Kamila: I think it will increase the misery in developing countries. You know, like with the...there'll be more opposite of drawn? Uh, it will be too hot, people will not have enough to eat. You know, I don't know. Maybe the planet will be one day will be so hot, it's not going to be livable anymore. Animals will die off. Yeah, become extinct. I think it already actually in the Czech Republic. I think the insect is like becoming extinct like 1/3 of the insect just disappear.

Interviewer: Yeah, yeah. Do you think, like you were saying, do you think it's something mostly like that that's going to be affecting like the poor countries and the developing countries?

Kamila: Yeah.

Interviewer: Do you have any ideas of how climate change should be tackled or how we should keep those changes from happening? Or just as you mentioned, just little things that the individual should be doing. Do you think it should be really just small individuals?

Kamila: Well that also. But then, like the companies who are like the causing the most damage, uh, should change, like uh, and orient themselves more like a green energy or, uh, try to change their functioning in some way.

Appendix E: Morgan Henley Interview Transcript

As the majority of the participants do not natively speak English, many exhibited stuttering and pauses. The transcripts have been edited to most accurately depict the participants thoughts and experiences despite the language barrier.

Coding Key: Climate Justice Climate Action/Activism
Climate Awareness Climate Affects
 _ = personal story and points

Interviewer: Alright, so just to get started, can you tell me a little bit about your background like where you work here and how long you've been in Czech?

Morgan: So yeah, my name is Morgan Henley. I'm originally from the US, but I've been living in Europe for about 12 years, mostly in Prague, but also in Paris and in Brussels. And now I work at Bankwatch. It's an organization that monitors public funding, mostly EU funds but also the European Investment Bank and European Bank for Reconstruction and Development, and to make sure that the funds go to good projects and not too bad projects. And I specifically work on district heating, so it's like the big heating systems, mostly in cities and focused on central and Eastern Europe, so that covers Czech Republic, Slovakia, Poland, Hungary, Romania, Bulgaria. Uh Estonia, Lithuania, Latvia and Croatia sometimes.

Interviewer: So, what is your level of formal education? Did you go to university?

Morgan: Yes, I have a Master's degree that I got here.

Interviewer: Oh yeah, like which university?

Morgan: At Charles University, I studied international relations.

Interviewer: All right, what do you like to do for fun? Do you do anything climate related? Do you like to go out and go for hikes? Anything like that?

Morgan: Uhm yeah, well, I consider activism is one of my hobbies and something I do. So that can be going to protests or I don't know, being engaged with local groups. That's something I've been doing for the past ten years or so. Also, yeah, I was involved in green politics, so being activist there. And yeah, I like to go swimming. I like to be outside. I'm originally from Florida so I like the sunshine. And yeah, like walking around, but mostly in cities, I'm actually not so nature oriented, which is kind of rare in this work, but yeah.

Interviewer: So is there any differences you've seen in the climate since you've been here? I know that hasn't been so long, so if not, is there any like big differences from where you were at home?

Morgan: Oh, definitely. I mean, it used to be...like winters were much colder. When I first was here, I remember it snowed on Thanksgiving, so that was 12 years ago and now it usually doesn't snow until January or February, if it snows at all. And some I've had some winters here where it's just a day or two. So that's quite a difference, uhm, I mean, it's really unseasonably warm right now. Like today, I was walking around and just my sweater or even a coat or jacket. So, I think I mean sometimes you have a bit of a longer fall year, but yeah, but the most like substantially different thing is the summers. The summers are much hotter. Like and I mean it's a city that's not really built for the heat like I'm from Florida and we're built for the heat. So we have air conditioning and swimming pools everywhere. But here, when it's hot, it's not very pleasant because you know you're using public transport that doesn't have air conditioning. Cities

like...the buildings here, like most of them don't have any air conditioning there...like this, I mean so it's kind of hard to avoid the heat. And you really feel also just the mood of people, it gets a bit intense. If everyone is really, really hot and has no way to escape the heat. So yeah, either you suffer staying in Prague or you have to go to the beach. Which takes money. So a lot of people who you know can't afford to spend two months on the Croatian seaside, you know they run to Prague's few swimming pools and it gets pretty crazy.

Interviewer: Yeah, so you were mentioning that like yeah it's people going crazy from the heat. Is there any way that you feel like this climate change has affected you personally?

Morgan: Well, yeah, as I mentioned, I'm from Florida, so yeah, it gets pretty personal. I mean my week experiences hurricanes regularly. But in terms of like in the Czech Republic, I think yeah, the hot summers, it's really makes you think about where you want to live and do you really want to live in a city? And do you really want to live in a place that's not built to be cold? I mean and also as I work on heating, I know the challenges is also cooling, it's not that different. And you know they're not going to have air conditioning in the city, you know, maybe ever unless it's just going to like rise like a lot of the electricity demand, which is not something we want either so...yeah, I think it really makes you also think about also the like the natural disasters that have been happening here. They've gotten more intense. There was like a tornado last summer which like from the US it's not that surprising. We get tornadoes and it's you know, not like [surprising]. But for Czechs, it was really once in a lifetime experience and on one hand it's nice to see like the solidarity because lots of people they donated money to help the residents that were affected, but it's also, you know, as someone who's lived in a place that has hurricanes and tornadoes regularly, it's like this isn't a one off thing, it's something you know I grew up being used to and maybe it's time Czechs would also need to start getting used to.

Interviewer: Do you have any stories from any of these, like hurricanes or tornadoes that have been around here?

Morgan: Well, none of them has impacted Prague. Prague occasionally floods, and so the water will get quite high. And yeah, I mean it's usually...it kind of shuts down the city for a few days but it's not...it didn't like...I don't have like a farm or something that was destroyed by the flooding, so probably not. But in Florida of course like you know our home gets damaged by the hurricanes regularly, so.

Interviewer: So yeah, I know you're a bit involved...you're already pretty involved in climate activism around here, like what kind of ways are you involved with it?

Morgan: Well, I've been working, I would say in this sphere now for five years. So previously at Greenpeace, as well, where I worked on climate energy topics specifically, and before that I was in Brussels working for the Green Party. So also a bit adjacent to climate energy topics. Uhm, but also yeah, as an activist, you know, joining different marches, you know going to like documentary screenings or support events for organizations that work on it. So, I think it's been pretty like steady activism for the past, yeah, 10 years or so, but it's mostly started here in Prague.

Interviewer: How much of climate change do you think can be attributed to humans? Is it all of our fault? Is it kind of a combination? whatever you think.

Morgan: Well, I believe the science. I believe that yeah, it's the most acute, uh, issues that we have with climate change are probably man-made. So, uh, I mean, I'm not a scientist, so I don't really...I'm not very good with data about it, but yeah, I mean I don't have any doubts that it's attributed to humans.

Interviewer: Do you think that it's an important issue that we have to deal with? I'm sure that you know, considering what you've been doing, that's I'm sure what your answer is, but who should it be important to?

Morgan: Yeah, I think it's the greatest issue of of humankind, and I think all of us need to be involved in it. I think there's different ways you can be involved in it. Not everyone has to work in an NGO and you know, do it professionally, but I think...and I...But I also believe it's about changing the system and you know, making making it easier for everyone to be able to make choices that are better for the climate. And it's not just about, you know, having a bike, it's also about making sure that the city is built for bikes. And that you know car companies aren't getting government funding while you know...for building big trucks and not for electric vehicles, so it's also I think...as much as I think individuals do play a part of it, I think it's also a system that needs to be, you know, transformed, and I think we can do it, but we also need...then the people...the everyday people to care.

Interviewer: Is there anything you think should be specifically done in the Czech Republic for climate change?

Morgan: Well, is this when I should give my spiel about what I work on or...? Well, I think in general like the Czechs they still use a lot of coal. It's a very coal heavy energy system, so that's the first priority is to phase out coal and then not introduce gas, because that's the proposals. For something especially air heating, like what I work on, Uhm, so in building much more renewable capacity, uh, making the city more...or the country better built for electric cars and just transport in general. Probably need to eat a lot less meat and also protect the forest. We need to make sure that the forests can, you know, absorb whatever CO2 it can and so having mass deforestation or monocultures, it's really hurting. Especially in the Czech Republic there are big problems with monocultures for rapeseed planting and for...there was a really big blight on forest, uhm, like a bark beetle plague sort of, I guess it's how you call it, that really hurt a lot of the forests, so making sure that there's better protection of those forests as well.

Interviewer: So you're you seem to be definitely thinking that every...it's a really important issue that like should be dealt with. So how much responsibility on that falls on certain groups, like government versus individuals versus like companies or NGO's?

Morgan: Well, I think, uh, she mentioned it before, but yeah, I think it's mostly government that should be, you know, enacting plans that make it easier for all of those other groups to play their part. I think companies also play a role. I don't think we should over rely on them. Especially, you know they have a profit motive, so they will probably always do what's in that interest. But I think they can also operate in a way that doesn't necessarily have to be detrimental. I think people yeah when they work together, they can, you know, influence these things, whether it's companies or governments. And of course yeah, individual choices are important. But it's also I don't think it's worth. People feeling that, you know, personal guilt that "Oh man I flew twice a year and I'm, you know, going to contribute so much to climate change." Whereas you know people still have personal jets. Like I will consider not flying to the US once you know Kim Kardashian gets rid of her personal jet. But you know if they're flying to go shopping for a weekend, then, well, That's the problem. So I think there's a sort of...it's it's a collective effort that we need and and that unfortunately makes it hard so...because it's there's no one-size-fits-all.

Interviewer: Do you think that there's any difference in what younger people versus working age versus like retired people and what what they should be doing? And what responsibility lies on?

Morgan: Well, I hope that everyone does a little bit of everything but I see that it's...Like at least with Europeans, I see young people take it very seriously. And yeah, like you know, in Sweden there's this word for like flight guilt, which I was kind of just talking about. Where young people in mass are saying they never want to fly again or never want to fly in their life. And that makes me a bit sad, because I think that they should have the opportunity to travel, just like I did. And so, I think it should be a bit more distributed and just because younger people are maybe more aware of the situation, I don't think they should have to bear, you know, the brunt of sacrifices.

Interviewer: How do you think climate change is going to affect the future?

Morgan: Well, it's not looking good, so I think you know resources will get more scarce. Energy will be more of a kind of scary topic. We already see it right now with the debates in...about heating in Europe this this winter. Land will get more rare or get more scarce, so we will also need to make sure that you know people have a place to live. And people who are the most impacted or probably the ones that are contributing into the least. So how do you you know make sure that the most vulnerable, you know, have a place...a place to live...food to eat...jobs to have. That will really be a challenge. Yeah, I mean we already see wars happening that are, if not started, exacerbated by climate so...I think we will...also I don't know, but it could also go into a very hedonistic...like we're all going to burn anyway, so enjoy the time we have. I think that is also happening more and more so...

Interviewer: Is there anything else relevant that you'd like to say? If not, that's completely fine, just giving you the chance.

Morgan: Yeah, I mean I guess I could say that in my time living here, the topic of climate has grown in, you know, importance quite a lot. When I first got here it was quite niche topic and there would be a climate march with like, I don't know, 30 people showing up or something. But it's really increased in the past decade and I think it's increased everywhere. But Czechs, I think it's not a very easy topic. Because it's a small country, so they kind of feel, "Oh, it's not our fault like why should we do anything if China is not doing anything? US doesn't do anything Russia's not doing anything?" So that kind of is a good place for them to kind of escape blame. Meanwhile, burning coal and you know, driving a lot and doing lots of other things that are bad for the climate. So I think it's...but it's improving up. I don't know how much you follow European Union politics, but right now the Czechs have the presidency of the EU. And you know they're doing their best, whatever that means on the climate legislation that they need to get passed. So I think, compared also to maybe like neighboring Hungary or Poland, Czechs are also much more progressive, but then compared to I don't know Austria or Germany, not at all, so it's all in context I guess.

Interviewer: Thank you, that was the end of our listed questions. Is there anything else you guys can...

Group Member: A couple quick ones, so you're talking about how you you believe in the science of climate change. What do you think the average Czech citizen, whether it be Prague, whether it be just outside or maybe the farmers that are way outside, what do you, the average Czech citizen thinks about climate change?

Morgan: I used to know these numbers when I worked at Greenpeace, but I don't remember anymore, but I think like the majority believe in climate change. And then it just goes decreasingly down of like is it human? How much is it caused by humans and then to like how much should we be doing about it? I guess it's the same everywhere but I guess like Czechs would be something like the US. Uhm, maybe maybe better? I don't know. But of course, really, there's a very big divide between like rural and urban areas like everywhere, but here it's quite

acute. So, and it's also been politicized, so there was a very famous well there...one of the former presidents, Václav Klaus, he was a huge climate skeptic and for years he just, you know, went on against doing anything about climate. And his kind of beating this same drum over and over again, that really had an impact on the country. And so climate skepticism sort of lived here longer than it probably should have, I would say. And like he even wrote a book about it, like the planet is blue, not green (Blue Planet in Green Shackles). So it became quite politicized. But that was a while ago, but the current president isn't much more interested in solving climate change, I would say. So, it's it also. It's...it usually...It kind of says more about your political beliefs than I don't know your education level or your...where you live, but I guess it's all connected.

Interviewer: So, you're saying there's a divide between the people in the cities? And now what is that divide like, is it more people believe it in the cities versus out?

Morgan: I mean people...but then if you talk to people living, you know, on farms or near forests like they see...they're more in touch with the nature so they see the way the nature is changing. So if you can relate it to that like oh, but do you remember like the forest being this bad? Or what about the fires or something like that then? You just have to kind of approach them from a different way. If it's people living in Prague, you can just say climate change and people all agree, not all, but you know the majority and everything. Yeah, it's also about age. So, people my age or your age would probably majority, you know think that climate change is a very important issue. But I think when you look at like the rankings like between Czechs and other countries like where they would rank the most important issues. Czechs like usually put climate pretty low compared to to like Western Europe. You would put like security or migration or economic concerns much higher so...But you can look on euro stat. It's like the European Union's like polling basically. So you can see those statistics.

Interviewer: Anything else?

Group Member: That's my last question. So as somebody who's from the Boston area, the MBTA, our public transportation is very bad and like looking around Prague with the trams, the metro the bus system, just general like public transportation is amazing here. And do you think that there's other sort of sustainable acts that you've noticed? That's kind of more prevalent in Prague versus just America, especially Florida for you.

Morgan: I mean the public transport is a great example. I mean Prague has an exceptional one, even better than like most of Europe I would say. Uhm, but in terms of...I mean people don't...I mean like they don't shop as much as in the US. I mean it's...but that's changing. Czechs also shop plenty, but it's not quite as like consumeristic culture I would say. People really hold on to things for longer. Like you can tell if you get to a secondhand store because in the US you get to a secondhand store and there's new stuff all the time. Here, It will really be old stuff that you know, maybe doesn't need a second life. So you see that, and I mean also, I don't know, I haven't been to Boston in a very long time, but when you have like apartments in living, like in a more compact area, it's also easier for things like energy and like heating. Like when I work on district heating 'cause I don't know if it exists in Boston or or maybe your university, but it's not that big in the US, district heating, but it's usually a more efficient way and more energy efficient, so very practical...or not practical, just specific. And yeah, but Czechs also really love the nature. Like most Czechs on the weekends they're hiking or biking, or picking mushrooms or something like that, much more than the US. I feel like my American friends will go hiking twice a year and like, "OK, that's my outdoor activity." So back to Netflix and the bar. Also, you can take trains in Europe, much easier and the train system in the Czech Republic is also really good, so. Which in the US is yeah. Leaves a lot to be desired, so.

Interviewer: We have good highways. That's about it.

Morgan: Yeah, well, not even. I went to University of South Carolina. All the roads are garbage.

Appendix F: Bartender Interview Summarized Transcript

Due to the circumstances, a full transcript of the interview could not be recorded. The team took brief notes during the interview and summarized his responses.

Coding Key: **Climate Justice** **Climate Action/Activism**
Climate Awareness **Climate Affects**
 _ = personal story and points

- About half of people in the Czech Republic care about climate change, while the other half does not
- He believes people in the city of Prague care less about climate change than more rural areas
- If people are talking about nature and the environmental changes, it's because they must be the ones seeing it
- The only times he has seen climate activism has been small groups, about 100 or so people
 - They usually just stand around and protest and not much else
- He is from central Prague, but moved near his bar, which is on the outskirts of Prague
- People alive during the post-communist regime are still in politics, but now it's good [in terms of no communist regime anymore] so they do not care about climate change
- He was a mover and also worked in the office, but didn't like it so he opened his bar
- He noticed much more hybrids than electric cars, still an oil/coal presence in the Czech Republic

Appendix G: Marek Rakouš Interview Transcript

As the majority of the participants do not natively speak English, many exhibited stuttering and pauses. The transcripts have been edited to most accurately depict the participants thoughts and experiences despite the language barrier.

Coding Key: Climate Justice Climate Action/Activism
Climate Awareness Climate Affects
 _ = personal story and points

Interviewer: Alright, so let's get started. So just to start, can you just tell me a bit about your background? Where do you go to school? What do you do for work?

Marek: OK, so on from Czech Republic. I was born here, and I went to elementary school here, high school, university as well. I did humanities as my major in...for a bachelor's type of university program and...What else? Yeah, right now I work with tourists mainly and sometimes I help over here. But my main work is basically handing over apartments around Prague for short term rentals. So nothing so interesting, but...

Interviewer: And so you went to university, where'd you go?

Marek: Uh, for university in Prague. Over here in Prague.

Interviewer: ...or which school?

Marek: Oh, it's called Metropolitan University Prague.

Interviewer: Do you like to do anything fun that's related to the environment? Anything like that?

Marek: No, I guess not. Nothing like volunteering or something like this. I've never done it or anything.

Interviewer: Anything like hiking? Do you like to go skiing? What do you do really in the environment?

Marek: Right right, I understand yes. Well, I used to ski. I used to ski. I like to go on canoes, kind of on rivers. Sometimes with friends and hiking, I guess yes, with friends or with my family as well.

Interviewer: Is there anything particularly you like about that Czech environment?

Marek: I love, in the mountains, that kind of...especially in the in the autumn or spring, like it's a lot of colorful environments and you can see sometimes...you can see some animals as well and the wild streams kind of as it...or their rivers that you can actually go on...I think are really wonderful.

Interviewer: And what do you feel is the biggest climate change you've seen in the Czech Republic?

Marek: I think mainly I see it in the winters because we used to have a lot of snow. When I was a kid so we could actually also ski where my grandpa's kind of house is. It's in the mountains, but you know it's not the Alps so. Uhm, these dates in the winter? We don't really like several years now, we haven't really gotten so much snow, so it was impossible to ski over there. But let's say up to. Let's say probably 15 years back we still had, like enough snow that I could that I could ski over there. So I think that's most noticeable.

Interviewer: Is there anything related to climate change that has been affecting your daily life?

Marek: I'm not sure if this is just me thinking like too much about it, but I feel that the sun is kind of like a little more damaging. Like past couple of years...like when I'm outside, yeah, like for my eyes, on my skin maybe. That's what.

Interviewer: Is there any like climate, disasters, hurricanes, floods, anything like that that has affected you or you've heard stories from?

Marek: Well, I think it was this year, there was a big fire in the mountain regions, so basically where I come from. Yeah, and apparently like the smoke was...how kind of...you could smell it over here in Prague as well, even though it was a different area. So I think that's, yeah, recent.

Interviewer: Have you seen any environmental activism in Czech Republic?

Marek: I suppose like once in a while I see for example, on TV I see that...there's also actually a political party that is called like the Green Party, so they sometimes come up with topics to talk about in terms of what needs to be done better or how to protect the nature in Czech Republic and so on, and so I guess they I sometimes see.

Interviewer: Yeah, have you ever had any involvement in it?

Marek: No.

Interviewer: Is there any reason why not?

Marek: I don't know. I guess there's no particular reason. Probably if I had friends who would go participate and they would tell me about it, like come participate with us, maybe I would do it, but I haven't had friends like that.

Interviewer: How much of climate change do you think can be attributed to humans versus like just nature?

Marek: So I think it's mainly like what humans create what we...how we abuse the natural environment, how we kind of shape everything just for our comfort and we don't really care about how nature created. You know lakes, rivers, the normal environments. So, we just can't make everything according to ourselves, so I think it's mainly human touch that's done this.

Interviewer: What do you think should be done about climate change in the Czech Republic or around the world? So, anything specific here or something we should do around the world?

Marek: I think, well, we don't have the sea, so for example, like the initiatives I see about like fishing out garbage from the sea, I think it's wonderful. But over here we don't...It doesn't really concern us so to say. I think over here we should kind of educate people or, I think...let's say, young people now are more educated about it so they don't throw garbage in the woods, in the in the forests. We have some really beautiful national parks, so I think what we should do is not throw garbage out, especially like plastic and things like this out over there. And also, what I see in the rivers sometimes, like I don't know, garbage floating also makes me kind of angry and so I think we should probably produce more wasteless products if that's the right word. These days I quite often pass by shops that are on a basis that you bring your own containers and you can take the product without any packaging. You can just bring it back home and it's something you can just come with the same container. So, I think this is good. This is a good way to go.

Interviewer: Are there any particular groups you think climate change is specifically their fault? Like do you think it's like government's fault? Do you think it's just the individuals fault, the industry?

Marek: Ah, good question. I think the industry is, let's say, probably they kind of let out some pollution in the air, that I think is really a major thing that we can also probably kind of feel or smell in the area. And also, I think we would all have better lives if they somehow could [be] limited, or if they could do it so in a better way. So, I cannot really pinpoint it to an industry. I think I've heard that, so for example, the production of paper is not really that good for the air, or

it could be plastics as well, probably cars. There are also different cars that...different car parts that need to be somehow melted or how to say yeah? Yeah, I don't know the details, but yeah, I think the production of a lot of car parts are probably not so ecologically stable or not so good, and I think that's actually one of the major industries over here. I think we produce the Honda cars and the Skoda cars, obviously.

Interviewer: Is any of these groups particularly responsible for cleaning up the environment? Is it for the government to do it? To just people, to industry. What you think?

Marek: I think my opinion would be that it should be the industry, because the government has a lot of different jobs and I think the one who causes the pollution should be responsible for it in the 1st place, limiting the damage that is done that is. And then obviously these products you know they, like cars, they make our lives easier. But if they're responsible for, for example bad air sometimes or maybe some particular places are, you know, full of garbage waste product kind of from the production, then they should probably be responsible.

Interviewer: Is there anything in particular they should be doing?

Marek: It's a great question. Well, I think in terms of the, as I said the waste product, probably they should be, how to say, collecting it in a responsible way? I don't know. Trying to find a way to maybe either use it or just...I don't know actually. That's a great question. What can they do about it? Because, yeah, it's still garbage. Maybe just some kind of safe storage. Maybe just really trying to limit it because we don't have unlimited space over here, of course, so I think, yeah, that's stuff. I've heard of like some, maybe not from Czech Republic, I'm not sure, but some companies around the world do, just, you know, they take the easy way out and they take the garbage and ship it off to a country that will pay kind of to take the cover, or...*they will get paid*. you know they will get paid to take the garbage. These waste products and I think it's sad that some countries do that because they damage themselves just for a little bit of money.

Interviewer: Is there anything you think particularly falls on certain age groups like older retired people versus like working age or versus younger students, that kind of things Do you think responsibility for cleaning up the environment lies on certain groups, and what should each be doing?

Marek: OK. I don't want to really like give tasks to elderly people or retirees. If they feel like it, of course, it will be wonderful if they help. I think mainly it should fall to people who are in the working age, kind of I don't know between 20 or say like 18 and I think that retirement age is probably 65-67. So, I think in this span of the productive life they should be responsible for the garbage they create, just by living their normal lives. You know, so if let's say we... I should be more responsible in this regard as well, and I should probably go to the stores where I don't get new plastic packaging every time I buy something. So, I think we can all do something and it's a lot of years that we live our lives and we produce a lot of waste from the products we use. So, I think it should be mainly the working age group.

Interviewer: Do you think there's any particular reason like a lot of people in general aren't supporting climate change?

Marek: I think for the convenience, probably. It's just inconvenient in some ways. I know that some people don't even separate the garbage, which we do at my home, but I know that some people just put all the plastic in and everything in just the same garbage can. And I think for me that now feels really unnatural so to say, because for probably 20 years I've been hearing that we should separate the trash because it's at least something we can do. And especially like plastic bottles, they can be used again or paper, they can recycle it. We don't need to cut down so many trees. So I think if more people had this habit like my family, I think it would be better.

Interviewer: How do you think climate change is going to affect the future?

Marek: Probably in major ways. I guess it's kind of scary to imagine, of course. I think...It's scary seeing how much of like rainforest is just disappearing hour by hour, day by day. So, I think for example for the future of, let's say, tourism, that's kind of my industry. It will be rare to go into a natural, kind of a natural environment, for example, like a National Park like we have. I think countries should try to preserve it. Of course, that's really good that they do that. I think in the future for example of Brazil, I see a lot of this, like disappear. They will not have the nature that they used to have.

Interviewer: Is there any way you think we can stop it?

Marek: Probably we should stop like Ikea, you know, because they use a lot of wood every year. They apparently buy wood that is not certified...like they...because they just need cheap wood and I guess maybe they don't do it anymore, but what I heard was that they didn't really care where the wood came from. So, it was...unregistered, I guess something there.

Interviewer: Is there anything else that we haven't touched on that you'd like to say?

Marek: Well, I wonder who is like responsible for the oceans for...take in the middle of the oceans, where they have these big garbage dumps. I wonder who is responsible, and I think some people said that we should all kind of like ship it into space. I don't know if that's possible. I just think it's kind of disgusting that we did that with the ocean because I love the ocean. I would love to live by the ocean. And if you know this is how we treat the planet, it doesn't have a good future so that makes me sad. But so, I just wonder how this is going to work out with the ocean. All of this garbage in the ocean.

Interviewer: Thank you, that's basically it for all of our listed questions. Do you have anything else?

Group member: Yeah, so about the fire that you mentioned this past year, What was like the news coverage like? Was there anything talking about how it affects the environment, or like how climate change may have caused that in the Czech Republic?

Marek: I think people have been talking about how, for example, the tree is much drier for a couple of seasons. People who like monitor it that they kind of warned about it, but people did nothing because you know, again, like always responsible? somebody who owns some forest. They don't have, I suppose, the obligation to actually like make the woods in good condition. So again, I think we just need to find a way to pinpoint who should be doing what, so we so this doesn't happen again. I think the news coverage of, like our first, probably isn't enough. Sometimes we put more emphasis on should kids be using tablets in the schools or not. That's the topic of let's say, the, for example, September. I think in September they normally do this because kids go back to school. So, I think probably the natural environment should be more the topic overall. But to be honest, I don't watch the news so much, so probably somebody else could tell you more about the coverage, but I think this is the general talk that...actually the warnings that we had we did not do enough about.

Appendix H: Ondrej Altman Interview Transcript

As the majority of the participants do not natively speak English, many exhibited stuttering and pauses. The transcripts have been edited to most accurately depict the participants thoughts and experiences despite the language barrier.

Coding Key: Climate Justice Climate Action/Activism
Climate Awareness Climate Affects
 _ = personal story and points

Interviewer: So just to start, can we get your name?

Ondrej: OK, my name is Ondrej. I am from Prague, from Czech Republic.

Interviewer: Yeah, how long have you been here? for your whole life?

Ondrej: Yes. I've been born in Prague.

Interviewer: All right, so do you go to Charles University?

Ondrej: Not to Charles University. I go to like the University of Economics.

Interviewer: Okay, so what have you seen climate change? Why do you think it's important?

Ondrej: Well, I mean, I'm personally interested in the topic. I've like read the IPCC reports and stuff about here in Czech Republic. We have had like several years of like quite severe drought and our forests are actually really suffering. Huge parts of our forests died. There are mostly spruce forests, and they were essentially like infested with bugs that overpopulated due to the high temperatures and large parts of our forests died, and now they're just bare.

Interviewer: Is there anything you've personally experienced that's like made like changes to your daily lives because of climate change?

Ondrej: Not to my personal life. I'm quite privileged, but...to like live in a big city and everything. But you know I can see it, you know in the countryside.

Interviewer: Why do you think it's important to do this climate activism you're doing?

Ondrej: I think it's like really important for our future, for the future of all of us. You know if climate change continues and you know, the ecosystems will start collapsing, and we can have like global famine and other really uncomfortable things.

Interviewer: Is there anyone you think is particularly to blame for climate problems?

Ondrej: Mostly like the social industries, but also the governments that are like ignoring the problem.

Interviewer: Is there any...are they particularly responsible? For cleaning it up or do you think it's at an individual level?

Ondrej: Yeah, I think the companies that like cause the pollution should pay for the damages.

Interviewer: So, I heard that you're doing like a march on the 17th for like the...to go back to the Velvet Revolution sort of thing. Is there, like any sort of inspiration from the Velvet Revolution?

Ondrej: Yes, it's essentially inspired, you know, there was the Velvet Revolution 33 years ago and it started by sort of a similar student strike where students were occupying universities and striking for several days. And then they had this March through Prague, and they were stopped by the Communist police and beaten up and this started the whole Velvet Revolution and brought the regime change and sort of, we are inspired to by that and, you know, trying to do...you know trying to change the problems of our time

Interviewer: Is there any particular power you think students have for changing climate?

Ondrej: Well, usually historically students were kind of at the forefront of change, so I think it's sort of our responsibility to, you know, join some sort of protest...organized protest

Interviewer: Anything else guys?

Group member: I guess my one last question is what needs to change and how can students make that change?

Ondrej: Well, I think what really needs to change fundamentally is you know our economy is based on fossil fuels. And we need to transform our economy and to build, you know, low carbon energy sources and you know, we need to find the funding and the political will to do that. And I think this will not change unless we pressure our government and the corporation to change.

Interviewer: Is there anything else that? Yeah, you know, we want to say.

Ondrej: Uh, like oh, thank you for this interview and good luck with your efforts.

Appendix I: Petr Franc Interview Transcript

As the majority of the participants do not natively speak English, many exhibited stuttering and pauses. The transcripts have been edited to most accurately depict the participants thoughts and experiences despite the language barrier.

Coding Key: Climate Justice Climate Action/Activism
Climate Awareness Climate Affects
 _ = personal story and points

Interviewer: Right so first, could you say your name? Introduce yourself like, you know, if you're a student, where do you go?

Petr: My name is Petr Franc. I study both...I study at the Faculty of Law, Faculty of Arts and the Faculty of Social Sciences, so like it's like a triple degree, and yeah. I'm also engaged in like international student activism, so it's like climate change and like climate justice and similar topics is something that we tackle like daily in these spaces. Yeah, I just sort of ended up being mingled within this course of events for like the climate strike here being like a semi organizer, but of course I don't take like the main strains of the organizing of the events. That goes like to the amazing guys, especially the faculty of philosophy. Yeah, well, sort of just joining in into the moment.

Interviewer: So, our first question about climate change: What have you noticed in your time here in Prague, or just in the Czech Republic? And like what things have changed over time with climate change?

Petr: In regard to how it's being perceived, by the public, by students or...?

Interviewer: I'd say in general, like both perception and just like general weather trends or how the Earth has been.

Petr: So, for example, just like situational anecdotal evidence, The Faculty of Law has, in the long term, and that is the case of the majority of European countries been and still is considered quite, well you might say, reactionary. Just a lot of conservative people like I go there. Last climate strike here was done...the main one was done like 2019. And in comparison to 2019, this time around, actually even the faculty of law joined. And of course, in sort of like they could not organize something in the same scale and scope and shape that is being done here at the faculty of philosophy. But they still...they've managed to join. And so that just shows...it illustrates that if even the faculty of law is able, one the most conservative faculty ever since like 1948...it has been considered one of the most conservative faculty, joins in a movement like this, you are able to tell things are things are getting quite rough. But like in general, the current state of Student activism in Czechia here is just poor generally. I think in comparison to especially the Western countries that are really...like a climate strike that would be done in like France, Italy or like Spain, the scope which it takes and the like the way they're really able to, you know, go all in, that isn't really possible here. It's mainly been the cause of the fact that like the civil society in Czechia, or respectively in the former Czechoslovakia, has eroded for 40 years up until 1989, and now we sort of...there isn't really a student movement here. There's just...it's all very docile. You might say that is, I think, a question for another time. But yeah, I don't realize...I don't regard...I don't hold it in high regard, the state of activism in Czechia.

Interviewer: And so, for those who like do pursue activism at a high level, what do you think they believe needs to happen to have change both in just Czechia, Prague, or with any sort of facets of society that just needs to improve in order for climate change to hinder?

Petr: I think, because for them, or for us...for all activists here, it's very hard to sort of balance the need to radicalize whilst also being held in good optics by the quite conservative society, so that you're not being just disregarded as a noisy activist and not being listened to at all. I think what it's necessary is on the contrary for civil society and the student unions here: to re-radicalize. Because for now, it's all held within this very recuperated state of like...what, when you think of student activism in the Western countries, you get like the, you know, the French activists that's caused fire or that is very much just an overblown example. But here, it's like people in suits that call themselves unionists and talk about representative structures, but really they don't do anything. They've managed to fall into this trap of like the opulence of being able to shake the hands of politicians and take pictures of them. But it's all very tokenized. What I think needs to happen, is for these movements to re radicalize and to draft in more members that want more than just the opulence of shaking hands of politicians and that want the actual change, that is not afraid to be controversial, because controversy at this point is, I think, the thing that can lead them away from this docile state.

Interviewer: And then I say my last specific question would be like, why do you think activists, whether a student or just in general in Czechia, what motivates them to be a climate activist? What do they see for the future and why do they want to pursue activism for climate change?

Petr: I think, uh, I think what they draw upon, not consciously of course, is the same message that goes for any kind of activism, but that was well penned down with the queer movement. The message of silence is death. Because they don't...I don't think the like the really high level activists that are able to go into the streets, they don't do it because of the, you know, because of some positive motivation in the sense of what it might bring to them. They do it out of fear, out of the, you know, you might say the impending doom. And there's also, I think, sort of draws upon the European tradition. Whenever there were activists in Germany, before the Second World War, what drove them into the streets wasn't, you know, the prospect of their own self gain. But it was the feeling of German unheimlich, the weirdness of society. The like creeping docility, the creeping tranquility of society, wherein like fascism or the fights in the streets became just an everyday thing. So, I think it is very much the need for these feelings of doom not to become an everyday thing. That is what drives them in the streets. That is what propels them to do the work that they do.

Interviewer: Do you have any final closing remarks or comments?

Petr: There was this...though I do not know how to translate it, so that might be an issue, but I'd say just one always has to balance, when being an activist, between the total doomerism. It's not possible to change everything, it's all a systematic thing and, you know, I won't be the straw that breaks the proverbial camels back, and between the need to do something. Now of course the need to do something, whilst you engage in that, you might fall into the trap of individual responsibility. It's all just based on us as individuals and the real solution to solve the climate crisis is to recycle and to drink with like paper straws, which of course is not the solution. So, I'd say "be vigilant", that is like a quotation from a very famous martyr in the Czechoslovakia history that died by the hands of the Nazis. Be vigilant, that is the like the only mantra that one can give. And do not fall into this trap of individual responsibility because it's not about the individual, it's about the movement. But also, do not do the exact opposite, which is to, which is to...losing my train of thought here. You know, on the one hand it's individual responsibility and

on the other hand, it's to believe that it's...I cannot do anything about it. Know the margins within which you can be conducive to change and sort of be able to view the world in its inherent contradictory qualities, be able to be like a dialectical human being. I think you can tell that I study philosophy. I'm sorry if it gets like too abstracted away from reality, but I think that would, yeah, that would be the mantra, be vigilant, that's the only thing we can do well.

Appendix J: Lucie Gomezova Interview Transcript

As the majority of the participants do not natively speak English, many exhibited stuttering and pauses. The transcripts have been edited to most accurately depict the participants thoughts and experiences despite the language barrier.

Coding Key: Climate Justice Climate Action/Activism
Climate Awareness Climate Affects
 _ = personal story and points

Interviewer: So, first question on a scale of 1 to 10, how much of a problem do you think climate change is?

Lucie: I would probably say 9, meaning very serious.

Interviewer: Can you explain?

Lucie: I am, you know, I have grown up in the Czech Republic and throughout my lifespan, which is 50 plus, I have seen fairly major changes in the environment around me and like one of the quite prominent changes that as a child I remember our winters were quite...a lot more snowy than what I see now. And on Friday there was...on November 11th is, in the Czech Republic, it's called Saint Martin's Day and the saying was that St. Martin comes on white horse and that was sort of a general proverb that around November 11th, you should see the 1st snow. And it's hardly ever true now, so definitely a lot less snow. And in the summer, we get much longer hot spells. Again, when I was a kid, anything over like 32 degrees Celsius in the summer was quite unusual, but now we have hot spells of, you know 35 to 38 degrees Celsius in the summer, and that was unheard of when I grew up. So, I see it quite clearly. And also, I grew up in the South Eastern most part of the Czech Republic called, you know, South Moravia, it's wine country. It's...you know, they grow wine and fruit, and now it's one of the driest regions in the country. And farmers struggle more and more to make sure their crops can properly grow with these long spells of drought. So, I do see the changes within my lifespan, and I do worry for the future of my kids.

Interviewer: Is there any effects of climate change that you fear will impact the Czech Republic?

Lucie: Well, I think what they are saying that what we get now is, as you know, freaky accidents of the weather will become more and more common. And you know, as I said, warmer winters which is not altogether that bad in terms of comfort, but hotter summers. And for instance, two years ago, we had a tornado in South Moravia in the area where I grew up and we have not heard about a tornado in our lifetime and you know, in history before. and all of a sudden there was like a recorded tornado it went through like a fairly big swaths of land. It actually knocked down the gravestone of my grandparents in a village where my mother grew up, and it reaped like real havoc on people who were used to storms, but not of this magnitude, and I fear that if we don't act, these events could happen more and more often, and right now we are not really prepared for it, like our building codes are not tomato resistance because we have not had one for, you know, hundreds of years.

Interviewer: Is there anything related to climate change that has affected you personally?

Lucie: The hot spells in the summer are all quite uncomfortable. I am actually privileged enough that we have been able to make some changes to the place where we live to mitigate the effects

personally. So we rebuilt our house six years ago, like a serious rebuild and we added like super insulation. We added solar panels on the roof, and we have a heat exchanger, and at the time when we were doing it, I thought it's good to make it super insulated to save on heat in winter. But actually when...where it proved to be a good investment was in the summer because the Super insulation keeps the house cool in the summer without air conditioning. As long as we manage properly the opening and closing of the blinds and the ventilation, the place keeps cool even at the time when we had extended periods of real hot weather in the summer.

Interviewer: What do you think can be done within the Czech Republic to hinder climate change?

Lucie: I think more people can do what we do. I think building codes could be adjusted to address this and it could be demanded at the same time. Any kind of building in the Czech Republic is a major maze of bureaucracy, so like the authorities can address it by simplifying the bureaucracy. And the Czech Republic is a member of the European Union, and we do get quite a lot of funding on environmentally, you know, environmental mitigating measures, and again, if there was less bureaucracy involved, I think more people would do it. And also, like when we rebuilt our house and we got some subsidy for, you know, our super insulation and solar panels, it required a lot of investment upfront that later we, you know, apply for the subsidy and we got it. But I think for a lot of people this is cost prohibitive. The way the subsidies from the European Union work should be more, let's get the money upfront to be able to build something and something even quite simple. And I think a lot of people would do it, so like moving the changes to more grassroots level and giving support to even like small changes because like not a lot of people can afford like major big overall.

Interviewer: Is there anything you think we can do to keep climate change from happening at all?

Lucie: Yes, we all can save on heat, save on gas. This now has also major political consequences because you probably know that the Czech Republic gets almost all of its gas from Russia and the less gas we consume, the less money Russia gets for this crazy war. So, it's sort of twofold. So definitely taking personal measures to save energy. Eat less meat. Reconsider the ways we travel. You know, I think this can be done by every single individual as long as enough people are on board. So, I feel you know that is something that we can do, like what my government does is a different story, you know, and I do vote for political parties that keep the environment in mind. But at the same time, you know you know how government works, it's always some compromises, so I don't have, besides my voting, I don't have much effect of what my government does, but I can affect what I do, what my family does, how I raise my children. And I tried to do like really small grassroots steps in all these areas myself.

Interviewer: So just for last question, how do you think climate change will impact the future of the Czech Republic?

Lucie: I think we will see more weather extremes. You know, in some way we are lucky that we are...like we always...Czechs always like rooted to be a landlocked country because we all love to go to the sea but at the same time, we are not really threatened by rising sea levels which is a serious problems in some countries. But I think we are expecting warmer weather, longer periods of hot and drought in the summer, milder winters, but also more extremes because Czech Republic...weather in Czechoslovakia, it was Czechoslovakia when I grew up, used to be sort of fairly sort of equal, fairly predictable, and it is less predictable now.

Interviewer: Well, that's our questions. Is there anything else you'd like to say?

Lucie: I'm not quite sure, you know if you guys want to see like small things that I do and we do, I can show you. Like it's interesting because my husband is American, we have relatives in America and when they come, they very often comments on how sort of we run our household. And my sister-in-law, you know, who lives in California, and I think you know who is fairly environmentally conscious, was like this is really sort of inspirational. So there are a couple of things like in my family, we completely try to stop using, you know, single use plastic. So for instance, my kids get their school snacks in boxes or these special clothes wrappers that are washable and can be used for years. And it's a small thing, but it actually, you know, saves a lot of waste. I walk to work; I know that not everybody can walk to work. But you know, the Czech Republic has one great advantage. For instance, over America and its system of public transport. We can get, through public transport, almost anywhere and it's much easier to use and there are now these apps that help you find the connections, so definitely that is one thing that could be implemented also.

Group member: I actually have one question. Do you remember anything about the Velvet Revolution and like could you compare and contrast the activism from then to like climate change activism now?

Lucie: Hmm, that's a good question because I was your age when the Velvet Revolution happened, and I was a student at the Charles University, and I was very much involved. And you know sort of the heavy feeling of change was amazing and I guess what we saw during the Velvet Revolution was the hope. Sort of we are leaving the dark days behind and there is a New Hope for us. And you know, the 90s the 1990s, after the fall of Communism, here was like absolutely fantastic time to be in this country. And we saw the bright future and not all of the bright future took place, but you know we got the liberty, we were allowed to travel, get the education, we wanted to read the books that we. And it was like our horizons open up, I think right now, young people who are climate activists, they see bleak future ahead. It's kind of like completely the opposite, and they're not fighting...they're fighting for better future, but they don't see the better future. They see the bleak future and they're fighting to reverse that. So I think this is where the difference is. I think the passions are the same. You know, if you are a young person, late teens, twenties, you do have the passion to make things happen and it's good, but the prospects for the future for your generation are much sort of darker than they were for mine. This is where I see the big difference and I'm sorry for you guys and I have kids who are teenagers so I sort of see this from my kids as well.

Appendix K: Peter Mistrík Interview Transcript

As the majority of the participants do not natively speak English, many exhibited stuttering and pauses. The transcripts have been edited to most accurately depict the participants thoughts and experiences despite the language barrier.

Coding Key: Climate Justice Climate Action/Activism
Climate Awareness Climate Affects
 _ = personal story and points

Interviewer: So first, on the scale of 1 to 10, how much of a problem do you think climate change is?

Peter: Like 9-9 to 10.

Interviewer: Can you explain?

Peter: Yeah, because it will have tremendous effect on people's lives they're having and will have and is something which is not...I think it's not as addressed as it should be, that's where the big problem is. And yeah, I mean honestly, I don't want to really be around like 2100 just thinking of you know what the what the earth is going to be like for the people who live here.

Interviewer: What effects of climate change are you specifically afraid will happen to the Czech Republic?

Peter: I think it will be just more extreme weather, so either you know the heat waves in the summer or cold waves in the middle of winter. And we can see it. I think now is that the country is getting more and more dry. So in general, you have, you know, this long periods of drought and then followed by some extreme weather event. And yeah, I think that's it.

Interviewer: Is there any aspects of climate change that specifically have impacted you?

Peter: I'm not a huge fan of very warm summers, and as you've probably experienced during your time here in the Czech Republic, AC is not something that will be super common, you know, in the spaces. So, and we are lucky to have one here in this building, so I really like to spend as much time here during the summer, you know, working and staying late, you know, instead of just being outside because it just gets unbearably hot in the city. And this summer, in the north of the country, there was like a huge forest fire, like the biggest one ever, and that region is like 100 kilometers from here and on one morning we just woke up, you know, we opened up the windows and like: "What? There looks like fog outside", you know, it was really smoke, you know, coming from that, coming from the forest fire. And that forest fire, it was probably started by a man, but because there was so much drought and the temperatures were so high in the weeks before that it just got out of any control. And you know, and it spread and really went for like a month until it was finally extinguished, so that's the one thing I can think about.

Interviewer: What do you think could be done to hinder climate change in the Czech Republic?

Peter: In the Czech Republic? We would just need to live different lives I guess. Do not take cars whenever you travel anywhere, instead use more like public transportation. Shut off the power plants which are still, you know, using coal to produce electricity. There are not that many of them luckily anymore, but there are still some. Yeah, I mean, if all the people in the Czech Republic changed their behavior, probably wouldn't have that much of an impact. So it's more of like a global issue, not just a local issue.

Interviewer How do you think climate change will impact the future of the Czech Republic?

Peter: Yeah, as I said before, it will probably...it will be more you know, disturbing weather events, whether that's a flood or a tornado or long periods of drought. Just I think will be more extreme in terms of these weather events.

Interviewer: Yeah, I have one question. Have you seen any influence of technology and social media on like the awareness of climate change?

Peter: I think everyone is aware of climate change, it's more about their response to climate change. We are living very comfortable lives, and no one really doesn't want to give it up. So, I mean more and more people are driving electric vehicles, but then you know, your vehicle needs power from somewhere. Where's the power coming from? It could be a power plant, which is you know, fed by coal, so it's not that great at the end of the day, and what was the question again?

Interviewer: The influence of like social media and the technology.

Peter: I mean people are more aware of that now, I think that's sort of helping. It's just the the price of electricity here, which skyrocketed in the past year or two. So people will definitely, you know, try to save, which will help. But that's not really linked to it on to social media or technology, so I just think that people are now making decision on, you know what appliances to buy and how environmentally friendly they are. How much...what is the consumption of those appliances and so on. But that's more linked to the price than you know, being very conscious about the climate.

Appendix L: Michaela Neužilová Interview Transcript

As the majority of the participants do not natively speak English, many exhibited stuttering and pauses. The transcripts have been edited to most accurately depict the participants thoughts and experiences despite the language barrier.

Coding Key: Climate Justice Climate Action/Activism
Climate Awareness Climate Affects
 _ = personal story and points

Interviewer: All right, so first... on a scale of 1 to 10, how much of a problem do you think climate change is? 10 being high.

Michaela: Problem... OK 10. 11 maybe.

Interviewer: Why?

Michaela: I think it's becoming more evident that it exists, contrary to what some people still believe, and I think we feel it more and more in our daily lives. It's not just like a theoretical concept anymore, I think.

Interviewer: What effects of climate change do you feel will impact each of the public?

Michaela: I think it's definitely more visible and you can feel it more during the summers because it's so hot... it's become very hot, which of course leads to problems within like agriculture because the agriculture field is big here. Yeah, so it's mostly the rising temperatures, but then also the extreme things, like we had a tornado I think two years ago, so even these things which we've never come across before are now happening.

Interviewer: Is there anything that's impacted you personally?

Michaela: Yeah, during the summers the heat is unbearable and we still don't really have AC. It's more of an exception if it plays has an has AC, so during the summer it's better for me to be here because the office has AC. So yeah, it's the heat. Basically it's unbearable.

Interviewer: And what do you think can be done in the Czech Republic to hinder climate change?

Michaela: Hmm, that's hard because I think we're already quite good with not using cars as much because Prague has very efficient public transport system and you know, you don't need a car if you live in Prague and majority of the bigger cities But I think waste like producing waste and then the landfills and everything, that's still a problem I think. And then even like single use plastics, I think people still don't realize that it's not enough to recycle it, that the main thing is to not produce or use any.

Interviewer: How do you think climate change will impact the future in the Czech Republic?

Michaela: Oh, well, there will definitely be a huge impact. I mean, I don't know where the temperatures are going to stop. And of course like agriculture, and I think we're going to see more of the extreme things like tornadoes and storms. Stuff like that.

Group Member: Have you seen any like climate activism today?

Michaela: Today, yeah, well there's the students at colleges are joining the strike, so I think today it's definitely happening at the philosophical faculty. But yeah, it's in my bubble on social media there's a lot there.

Interviewer: Have you considered joining?

Michaela: No, not really. I don't think I would get a day off for that so.

Interviewer: Is it mostly just work gets in the way? Is there any specific reason?

Michaela: Yeah, I think it's about the practical things. And also I would feel a bit awkward because it's really just the students. I don't think the staff is joining them. It's just the student body at the universities.

Interviewer: Anything else you'd like to say?

Michaela: Looks like that's it.

Appendix M: Petra Key Interview Transcript

As the majority of the participants do not natively speak English, many exhibited stuttering and pauses. The transcripts have been edited to most accurately depict the participants thoughts and experiences despite the language barrier.

Coding Key: Climate Justice Climate Action/Activism
Climate Awareness Climate Affects
 _ = personal story and points

Interviewer: All right so. On a scale of 1 to 10, how much of a problem would you rate climate change as?

Petra: As one being...?

Interviewer: 10 being high.

Petra: And the question was again?

Interviewer: How much of a problem do you think climate change is?

Petra: 9 to 10 for sure.

Interviewer: Can you explain?

Petra: Well, there is scientific evidence, and we can also feel the impact of what's happening in our daily lives. Including here it's much drier. If there are storms, they're much more violent. It's the weather is more extreme. Water is missing from places where there was previously sufficient amounts, etc. So absolutely, most definitely.

Interviewer: What effects of climate change do you fear will impact the Czech Republic?

Petra: I am not sure about Czech Republic specifically. Well, the large sways between different temperatures, weather, et cetera. There could be flooding, there could be drafts, different things we have experienced, a kind of a Millennium scale flooding here within this Millennium, and but I think that Czech Republic given its size and location is probably going to be less effected than many, many other countries. So that the effects are not going to be as harsh as in some coastal places that might end up being flooded and some others, so.

Interviewer: Is there any climate change effects that you have felt personally?

Petra: Well, definitely much hotter summers. And also I remember winters that we would have snow for Christmas every year and it doesn't happen all that much.

Interviewer: What do you think could be done in the Czech Republic to hinder climate change?

Petra: Well, I guess the same things as everywhere starting from personal level, but also institutional level. You know, thinking about it, not wasting resources, water, et cetera. Changing habits to some extent. Czech Republic is already recycling, you know a big set back has been the gas challenge because of the war in Ukraine. So we were on a move to remove coal mining and power plants that use coal, but unfortunately this is being postponed, so. It's not just personal or on a state level, but it's a global issue. And it has to be addressed on a global level.

Interviewer: So you don't think it should be... We should even focus on Czech Republic individually?

Petra: Well, every element has its... You know, it's like a family. You start at the bottom individual level, the community level, district level, et cetera et cetera and it grows out. Personal responsibilities, you know... thinking about others in terms of Czech Republic. Yeah, I guess

speeding up some processes in terms of how energy is used, what's used to make energy and, how we consume it as well.

Interviewer: How do you think climate change will impact the future of the Czech Republic?

Petra: That's a good question. There have been initiatives. Everything you know, every force has its effect and counter-effects and you know some of the things that are related to climate change, but locally, during the Communist times, a lot of the economy was large scale and it did not respect the natural environment, landscape, etcetera... which is why we've had floodings, which is why we've had droughts in some areas. And these things are being gradually changed where... it's possible there are changes being done and people take initiatives; they're bringing back certain things into... because the Czech Republic is a country that's surrounded by mountain ranges. And a lot of things that is happening in these mountain ranges have effect within the country itself, like water springs for rivers etc. So you can start small and local but it will have eventually global effect, which is what a lot of people are doing... including, you know, there could be changes on the policy levels in terms of agriculture support for smaller farming, sustainable farming, farming that respects the landscape, et cetera... rather than these huge, kind of almost industrial-size producers. So there are ways and things are happening also with the help of the EU, which subsidizes a lot of these kind of sustainable and I guess environmental, environmentally friendly practices.

Interviewer: So you briefly mentioned Communism in the Czech Republic. Have you seen any big differences in climate activism?

Petra: Oh, there was zero climate activism during communism because everything was driven by economic plants which were five year old plants and the the whole communist economy was based around collaboration between all the communist countries. So there was a lot of interdependence and so there was a lot of coal mining, which is, well, the the coal mines are being shut down and a lot of the coal mining was surface coal mining. So the landscape is just totally totally devastated and there are places that you can see the former coal mines and it looks like Mordor from the Lord of the Rings. If you look into it, it's just awful, but the landscape is being worked with and changed and kind of put together which is helping. What I remember, in the 1980s, the northwestern mountain range because there were the coal mines, a lot of power plants... all of the woods there were affected by it, mainly by the whatever you call it, the sulfur oxide, whatever... it was that pretty much destroyed the woods. So there were no woods planted which are now beautiful and green. Everything takes time, but if people are conscious, you know things can happen. The problem with communism was that it was all big scale and without respect for the communities for the landscape for you know, the local resources, etc. It was exploitation and depletion rather than thinking about sustainability or how to preserve the landscape, the country, the community.

Group Member: How would you compare climate change activism and like that sort of thing to the Velvet Revolution and that protest and activism?

Petra: I am not sure that there is that much climate change activism within the country. It's probably... if it is, it would be I assume mainly kind of high school kids. My daughters just started... she volunteered for her school, they've got all kinds of different groups and committees, and she's in one for sustainability and environmentally friendly steps, etc. So starting at the school level is probably a good way to go because but there were kind of protests... the same ones that took place all around Europe before pandemic essentially. But since the pandemic, I didn't specifically notice. And of course there are organizations that protests and there were people who would tie themselves to trees, and, you know, try to prevent certain things.

Greenpeace and others... but this would be very limited. I don't think it has reached a large scale level here. And I think that a lot of activities that are being done are being done through groups like Boy Scouts and Girl Scouts and other groups that really do hiking and other outdoor activities because they see the effects and they see the need to to protect and conserve. But I wouldn't say that there are any large scale activist movements within this country.

Interviewer: Thank you, is there anything else you have?

Petra: Actually, one more one more remark. I think that one of the kind of impulses for pro environmental measures is this particular gas crisis, because people started thinking it's affecting my personal finances... so what do I do not to have to be reliant on gas or other forms of electricity. So there is a huge move towards, you know, on very personal and family level, which you know might be something that will have a very long term effect eventually.

Appendix N: Luděk Hofman Written Interview Transcript

Coding Key: Climate Justice Climate Action/Activism
Climate Awareness Climate Affects
 _ = personal story and points

1. My age is 62, I live in the Central Bohemia, in a village 30 km north-west from Prague.
2. I am living the whole my life in the Czech Republic. At first I was living in Liberec, the North Bohemia, than about 20 years in Prague and the last 18 years in a village.
3. I am quite interested in the problems of climate change, I have read various books, I follow the problems in the news.
4. So far, I do not feel climate change, I only feel hot summers.
5. Only people are responsible.
6. Climate change has not yet had any effect on me, I do not feel any significant changes.
7. The people I interact with are concerned about climate change.
8. The communist authorities did not care much about the environment, the situation was almost tragic (pollution by power plants, factories, two-stroke engines, etc.). Concern for the environment and air quality developed only after the fall of communism. Now I would say that the care and the laws to protect it are very good.
9. I think people don't really care what the energy sources will be, mainly that they are cheap. So I think they mostly agree with coal as well.

Appendix O: Equipment List

1. Audacity Digital Audio Editing Software
2. Canon Camera Tripod
3. Canon Rebel T1i Camera
4. iMovie Editing Software
5. Zoom H1n Handy Recorder

Appendix P: Contact List

Organization/Individual	Means of Contact	Reply?	Interview Conducted?
Council on International Education Exchange (CIEE)	Personal Communication	Yes	Yes
Nadace Partnerství partnerstvi@nap.cz	Email, Instagram DM	Yes	No
Charles University Institute for Environmental Studies uzp@natur.cuni.cz	Email	No	No
Ministry of Environment info@mzp.cz	Email	No	No
CEE Bankwatch Network main@bankwatch.org Morgan Henley morgan.henley@bankwatch.org	Email	Yes	Yes
United Vision info@united-vision.org	Email	No	No
Arnika arnika@arnika.org Maria Podracka maria.podracka@arnika.org	Email, Instagram DM	Yes	No
TaK Architects info@tak2002.cz	Email	No	No
Sylvie trevtnarova@oktours.cz	Email	No	No
Lucie Forkertova lucie.forkertova@ceskesvycarsko.cz	Email	No	No
Hnuti Duha info@hnutiduha.cz	Email	No	No
Extinction Rebellion ahoj@extinctionrebellion.cz	Email	No	No
Fakta o Klimatu	Email	No	No

info@faktaoklimatu.cz			
Amnesty International CZ amnesty@amnesty.cz	Email	Yes	No
Association for International Affairs (AMO) info@amo.cz	Email	No	No
Greenpeace Česká republika @greenpeaceczech Bara Sommers bsommers@greenpeace.org	Email, Instagram DM	No	No
Museum of Communism muzeum@muzeumkomunismu.cz	Email	No	No
Katerina Sritova Katerina.Sritova@vscht.cz	Email	No	No
Ján jan@krajc.cz	Email	No	No
Zoo Praha @zoopraha	Instagram DM	No	No
Visegrad for Sustainability @v4sdg	Instagram DM	No	No
Stephanie Suganami Shepherd @stepph_shep	Instagram DM	No	No
Fridays for Future Praha @fff_praha	Instagram DM	No	No
Fridays for Future Hradec Králové @fff_hrdeckralove		Yes	No
Kamea @greendreamerkamea	Instagram DM	No	No
Czech Coalition for Biodiversity Conservation (CCBC) @ccbc.cz	Instagram DM	Yes	No
Národní muzeum @narodnimuzeum	Instagram DM	No	No

