

THE CLIMATE CRISIS IS HERE

MILLIONS OF CANADIANS ARE TAKING ACTION

HERE'S HOW YOU CAN HELP



Nanaimo Climate Pledge

Encouraging Household Climate Action

Prepared by: Michelle Hak Hepburn, UBC Sustainability Scholar, 2022

Prepared for: Whelm King, Program Manager, Nanaimo Climate Pledge

March 2023

This report was produced as part of the UBC Sustainability Scholars Program, a partnership between the University of British Columbia and various local governments and organisations in support of providing graduate students with opportunities to do applied research on projects that advance sustainability across the region.

This project was conducted under the mentorship of Nanaimo Climate Pledge staff. The opinions and recommendations in this report and any errors are those of the author and do not necessarily reflect the views of the Nanaimo Climate Pledge or the University of British Columbia.

Acknowledgements

The author acknowledges that the work for this project took place on the unceded ancestral lands of the xwməθkwəyəm (Musqueam), Skwxwú7mesh (Squamish), Stó:lō and Səlílwətaʔ/Selilwitulh (Tsleil- Waututh) Nations.

Nanaimo Climate Pledge team members, and including the people committing to participate in actions to reduce their carbon footprint, are located on the unceded, ancestral, and traditional territories of Snuneymuxw, Snaw-naw-as, and Stzuminus people. Some team members and pledge-takers extend across so-called Vancouver Island into the unceded, ancestral, and traditional territories of Hupacasath and Tseshaht First Nations.

The author would like to thank Whelm King and the members of the Nanaimo Climate Pledge team for their support throughout this project.

Cover photo is the front page of the Nanaimo Climate Pledge Brochure.

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Executive Summary

The Nanaimo Climate Pledge (NCP) is a simple, online pledge targeting household climate action. The Pledge includes a list of 13 actions, carefully chosen to be accessible and either high-impact, high-frequency, or both. Actions include reducing or eliminating meat consumption, and additional outreach actions such as joining a climate change organization. In the first phase of the project (November 2022 – March 2023), over 180 people have completed the online pledge. Individuals and households can commit to as many of the actions as they choose. The goal of NCP is to motivate climate change, and especially to evaluate effective strategies to encourage climate action among people who believe in climate change but are not currently taking action.

Excluding duplicates and pledges from people that are not located on Eastern Vancouver Island, there are a total of 161 pledges (data collected March 1, 2023). Most households who have taken the pledge are located in urban centers, and are concentrated around the City of Nanaimo. Many people who completed the online pledge are also above the age of 55; however, due to the small sample size this difference is not statistically significant.

The most popular pledged actions are dietary actions. Dietary actions are reducing or eliminating: beef (95 pledged action, 4 skipped action, 61 already do not eat beef); dairy (103 pledged action, 28 skipped action, 29 already do not consume dairy); pork (81 pledged action, 15 skipped action, and 58 already do not eat pork); and/or chicken (87 pledged action, 17 skipped action, 32 already do not eat chicken). Other popular actions including reducing use of gas or diesel vehicles and limiting flying.

The most effective outreach strategy is through Climate Connectors. This is not surprising, because social networks and social capital can be mobilized to encourage climate action. Strategies which promoted the Nanaimo Climate Pledge, but did not include a personal connection, were not effective (including mailed brochures and advertising).

However, so far in Phase One, the NCP has failed to reach households that are not already interested and committed to taking climate action. It is to be expected that early adopters of the pledge will primarily be those who are already engaged in reducing their personal greenhouse gas emissions. Only three households marked that they were not already doing at least one of the 13 actions. Most of the people who completed the pledge are already engaged in several of the listed actions. Of those who completed a follow-up survey, every person considered themselves at least somewhat knowledgeable of effective actions and were already committed to climate action *before* taking the Pledge.

There are several household climate action projects. Many aim to increase awareness and foster dialogue around climate change. There is limited data available on who these projects are reaching. It is not readily apparent whether existing household and individual climate action projects collect data on whether the people participating in the projects were already engaged in climate actions prior to their participation.

For Phase Two of the NCP, it may be useful to evaluate door-to-door canvassing as well as partnering with neighbourhood associations of well-organized neighbourhoods. Simplification of a Climate Connector report may be useful to improve future evaluation and direction of Climate Connectors. Alternate communication strategies could also include targeting misinformation and misconceptions about what are effective climate actions (for example, the importance of recycling).

Introduction

Addressing climate change inaction is a crucial problem. While governments have the power to regulate large emitters, households can directly influence up to 27% of needed emissions savings through lifestyle changes.¹ Many people believe in climate change, but there is a disconnect between concern about climate change and behavioural shifts. The Nanaimo Climate Pledge aims to encourage households to reduce their personal greenhouse gas emissions, and play their part in meeting global and Canadian emissions targets. The short list of actions are attainable and effective in reducing personal emissions, and in encouraging others to do so as well.

Population Overview

The Nanaimo Regional District has a population of 170,367 people. The median household income in Nanaimo Regional District is \$76,000 per year. People tend to commute to work by vehicle (87.5% of workers travel by car to work), and only 9.7% of workers either bike, transit, or walk to their place of work – even though 43.2% of workers only have a 15-minute commute or less. Most of the population in Nanaimo Regional District own their homes (73.3% of homes are privately-owned). There are 47,635 single detached homes in the Nanaimo Regional District, accounting for 63.3% of homes; the remainder of occupied dwellings include apartments and condos. Since most people own their homes, and many of those homes are detached houses, the majority of households in the Nanaimo Regional District have the capacity to make decisions about their homes and how they are managed.²

What Motivates Climate Action?

The Nanaimo Climate Pledge was designed to motivate climate action, and to assess the effectiveness of outreach strategies in encouraging climate action. The NCP has a detailed website and is completed through a short, simple online survey. A full list of the actions, with their additional background information, are included in Appendix A. The NCP also has a physical brochure which details the actions. In particular, the brochure, its messaging, and actions themselves were carefully chosen to try and encourage effective household climate action on Eastern Vancouver Island.

¹ The JUMP, *Power of the People*.

² Statistics Canada, *2021 Census of Population*.

Designing the Pledge³

Target Group

The NCP target group was based around the theory that we could roughly divide our community (or any community, big or small) into three groups:

1. Those who have some level of awareness of the climate crisis and its impacts, current and predicted future, and crucially who have already begun taking personal action to lower their GHG emissions.
2. Those who have some level of awareness of the climate crisis and its impacts, current and predicted future, and crucially who have NOT already begun taking personal action to lower their GHG emissions.
3. Those who for one reason or another are unlikely to take personal action to lower their GHG emissions, including climate deniers.

We theorized that groups 1 and 3 each account for 10-20% of a population, leaving 60-80% who are aware of the crisis and its impacts to some degree, but haven't taken personal action to be part of the solution. We called this group "the middle majority" and assessing how to motivate them is the primary goal of the project.

The NCP did not target a specific age, race, sex, income level or nationality. Our materials were designed for all parameters. However, when we had the capacity we chose to prioritize those who are 55 and older for several reasons:

- Older people are statistically more likely to be larger polluters, thus more important to reach to reduce personal emissions.
- Older people are more likely to have the means to make a change, such as buying an electric car or switching to an electric heat pump.
- Older people are more likely to have free time to consider the issues and to take additional steps such as being one of our Community Climate Connectors.
- Older people are more likely to experience guilt at being the cause of the crisis, thus wanting to do something to remedy their previous actions.

³ The "Designing the Pledge" section of this report are written by Whelm King, Project Manager of the Nanaimo Climate Pledge.

Selected Actions

We chose to limit the proposed actions for two primary reasons: to not overwhelm people with information and choice, and because our printed brochure was limited in space. Our final list comprised thirteen actions that met one or both of the two conditions: high impact or frequency of occurrence in our community.

Examples:

- Switching from fossil fuel to electric house heating is low frequency (most houses in our community are already electric) but very high impact per action.
- Reducing or eliminating pork or chicken from a diet is high frequency (most people eat one or both) but lower impact per action.
- Reducing or eliminating beef is both high frequency and high impact.

We also wanted to include actions that were available to every member of our community, which meant they must be free. These actions were: switching from a bank to a credit union, sending a letter to your MP or MLA, voting for politicians who commit to climate action, and joining a climate organization.

Generalized vs Specific GHG Data

We opted not to use a carbon calculator for the project as we believed that the requirement to use one would be off-putting to many in the middle majority. We believed that calculators were more the domain of those already taking climate action. As a result, we opted to use generalized statistical data to demonstrate the average per person pollution for our recommended actions. We relied on the best data we could find and cited all sources and showed our calculations on our website.

Examples:

The average Canadian eats 25 kg of beef per year.

Each kg of beef causes 100 kg of CO₂e pollution.

= The average Canadian causes 2500 kg of CO₂e pollution per year from eating beef.

The average midsize car emits 0.2 kg of CO₂e per km driven.

The average BC driver drives 13,100 km per year.

= The average BC driver of a midsize car causes 2620 kg of CO₂e pollution from driving.

One of the primary objectives was to give people a quick, easy to understand comparison of the impacts of the actions they can take. The two examples above, for example, demonstrate that for an average midsize car driver and an average beef eater, eliminating either action (by giving up beef or stopping driving a fossil fuel powered car) has about the same climate impact.

CO₂e

We opted to use “CO₂e” throughout our materials. In all cases, we gave a clear and easy-to-find definition of the term.

Positive versus Negative Messaging

The question of using positive or negative messaging lies at the core of any climate project. Is it more effective to minimize the current realities and future probabilities so as to encourage hope and optimism (positive messaging), or is it more effective to focus on accurately portraying the recent and current effects of the climate crisis and the likelihood that such effects will increase in frequency and severity (negative messaging)?

The primary risk in positive messaging is that people can downplay the current and future severity of the issue. It does not force an individual confrontation with what is already happening and what is predicted to happen. The primary risks in negative messaging are that it can foster doomerism (the fatalistic belief that it’s too late or that our actions don’t matter), or it can simply overwhelm people with how catastrophic and large the issue is, causing a willful ignorance.

We based our direction in large part on the paper “Understanding (and Reducing) Inaction on Climate Change.”⁴ The paper contains a large section titled Understanding (and Overcoming) Inaction among Climate Change Believers, which aligns perfectly with our target group (see above). The paper’s conclusion on this topic is that “hope was higher in the optimistic condition, but motivation to engage in mitigation efforts was significantly lower,” and continues that “people saw optimistic messaging as a signal that they could ‘take their foot off the pedal’ when it came to mitigation efforts.”⁵ In other words, positive messaging succeeds in getting people to say they care about the issue, but negative messaging is more effective at spurring actual action.

Based on this we used messaging and images that leaned towards negative messaging. Once this was decided, we grappled for some time with the severity of the messaging. We will discuss this next.

⁴ Hornsey and Fielding, “Understanding (and Reducing) Inaction.”

⁵ Hornsey and Fielding, “Understanding (and Reducing) Inaction,” 24.

Messaging Structure

We implemented a three part structure for our messaging, including our printed brochure, our promo videos and public presentations.

Part One was the negative messaging. For this, we used images and videos portraying the effects of climate change, with an emphasis on effects as close to our community as possible. For the front page of our brochure, often the first thing people encountered of our project, we opted for two images: a forest fire near Kelowna, BC in August 2021, and the flooding in Merritt, BC in November 2021. Both photos were dated to make the location and recent nature of them clear. We chose these photos as both specifically showed threat to human communities, but neither photo was horrific, such as a photo we considered of a woman in a gas mask holding a dog in front of a huge forest fire in Greece.

Part Two is what we call “the turn.” The turn is something, usually a phrase, that takes the urgency of the negative messaging and redirects it towards optimism that something can be done about it. The three phrases we used most commonly for the turn:

It’s not too late to act.

Together, we can make a difference.

Millions of Canadians are taking action.

These phrases were often also used at the end of a piece of material or public presentation, as a final encouragement.

Part Three is based around taking action, with the encouragement that taking action is needed, effective and timely. Part three is, in

The average Canadian produces 14,200 kg of CO₂e* per year
Here's how you can be part of the solution

WHAT CAN I DO?	WHY IS IT IMPORTANT?	BENEFITS	CO ₂ e* SAVINGS
Hold a meeting to make a climate action plan		Talking with your family, household or friends is often the first step in being part of the climate solution. Together, you can build a sense of commitment and support each other, especially if you have climate anxiety.	
Switch from oil or gas to an electric heat pump to heat your home	Heating produces 16% of Nanaimo's CO ₂ e* almost all of which comes from oil and gas heating.	Up to \$11,000 in rebates. Save money with lower heat bills. AC cooling in summer.	3900 kg per year
Reduce beef The average Canadian eats 25 kg of beef each year	Beef produces 41% of all livestock CO ₂ e* (16% of global CO ₂ e*)	Save money (meat is expensive). Discover tasty vegetarian recipes.	100 kg per kg of beef
Reduce dairy The average Canadian drinks 64 litres of milk and eats 13 kg of cheese each year	Dairy from cows produces 20% of all livestock CO ₂ e* (9% of global CO ₂ e*)	More than 50% of British Columbians are lactose intolerant. Discover tasty milk substitutes.	3 kg per liter of milk 54 kg per kg of cheese
Reduce pork and chicken The average Canadian eats 23 kg of pork and 39 kg of chicken each year	Chickens and pigs produce 8% and 9% of all livestock CO ₂ e* (1.2% and 1.5% of global CO ₂ e*)	Save money (meat is expensive). Discover tasty vegetarian recipes.	12 kg per kg of pork 10 kg per kg of chicken
Buy less new clothing , especially fast fashion items	Clothing produces 10% of global CO ₂ e* and 20% of global wastewater	Wearing clothing 9 months longer can reduce its CO ₂ e* by 30%	30 kg per pair of jeans 8 kg per polyester shirt 2 kg per cotton shirt

*CO₂e (Carbon dioxide equivalent) is the standard unit for measuring carbon footprints. It accounts for all warming gases causing climate change. Carbon dioxide (CO₂) is the most common warming gas, but there are many others. Methane, for example, causes 84 times more warming than CO₂.

Take the CLIMATE PLEDGE today

WHAT CAN I DO?	WHY IS IT IMPORTANT?	BENEFITS	CO ₂ e* SAVINGS
Reduce your use of a gas or diesel vehicle		Save money. Improve Nanaimo's air quality. Bike or walk to exercise.	200 kg per 1000 km for a midsize car 300 kg per 1000 km for a larger vehicle
Switch to an electric vehicle	56% of Nanaimo's CO ₂ e* emissions come from personal vehicles	Up to \$9,000 in rebates. Save money on gas and maintenance. Improve Nanaimo's air quality.	2600 kg per year for a midsize car 3900 kg per year for a larger vehicle
Take fewer flights	Flying is often the #1 source of CO ₂ e* for people who fly frequently	Save money. Explore Vancouver Island and BC.	100 kg per 1000 km
Make your money climate-friendly	The five major Canadian banks are some of the biggest investors in oil and gas globally, financing almost \$1 trillion dollars since 2016. Switching to a local credit union and divesting from oil and gas can create pressure for huge climate savings.		
Send a letter to your MP or MLA to take urgent climate action	Our elected leaders hear from industry and business all the time, but it is we who elect them. MPs and MLAs say that receiving a letter influences the way they think. Make your voice heard today.		
Vote for politicians who commit to take urgent climate action	Our individual choices matter, as does electing leaders who prioritize climate action. We need leaders who take the climate crisis seriously. Voting for a climate champion can make a big difference.		
Join a climate action organization	Joining a climate group will magnify your efforts beyond your household. Consider joining us as a Climate Connector or signing up for the West Coast Climate Action Network's weekly newsletter.		

www.NanaimoClimatePledge.ca

Every action we take as individuals, households and communities impacts the severity of the climate crisis now and for future generations.

The **Nanaimo Climate Pledge** is a project of the Nanaimo Climate Action Unit. Our goal is to empower households to lower their personal greenhouse gas emissions and to learn what best motivates our community to take action. It is essential that we collect accurate data on what works and why. If we prove successful, we intend to launch the project across BC.

Go to our website to:
Take the Climate Pledge
See our full list of green prices
Learn more about each action you can take
Sign up to become a Climate Connector
Discover the facts about climate myths
Find links to available rebates
Review our data sources
Download the brochure

TAKE THE PLEDGE TODAY
www.NanaimoClimatePledge.ca

Grand Prizes generously donated by:

THIRTY FOODS, REUSABLE, WILDPLAY, WHOLE WATER

Everyone who takes the Pledge will be entered into a draw for many great prizes.

Funding for the project has been provided in part by the City of Nanaimo and the Royal Society for the Arts (UK), in partnership with the University of British Columbia.

Published by the Nanaimo Climate Action Unit
New materials by Green Project

Canada

Figure 1 Image of four pages of Nanaimo Climate Pledge brochure, including information on effective actions.

effect, the point of the project: to encourage people to take action to reduce their individual or household GHG emissions. We put extra emphasis on the assertion that taking climate action is the most effective method of reducing climate anxiety.

Following these three parts, the front page of our brochure (see cover page) contains three lines:

THE CLIMATE CRISIS IS HERE
MILLIONS OF CANADIANS ARE TAKING ACTION
HERE'S HOW YOU CAN HELP

Climate Change vs Climate Crisis

We opted to use “the climate crisis” rather than “climate change” in order to accurately convey the urgency of the issue. “Change” can represent many things, both in severity and time, whereas “crisis” denotes both urgency and severity.

Other Considerations in Understanding Climate Action

There are several factors that can influence a household’s climate action. These include: capacity to act, knowledge of climate change and its effects, perceived risk, past experience of climate hazard, financial incentive (and perceived financial benefits), social capital (social networks), and a belief in efficacy (believing that action will have impact).⁶ Although these factors are what are often tested and quantified in the literature, scholars also note that these alone are insufficient to explain climate action decisions.⁷ There is inconclusive evidence whether and how behaviours can be influenced to combat climate change.⁸ The NCP aims to consider these findings as potential factors when evaluating the effectiveness of outreach strategies and in refining efforts to encourage household behavioural change.

Along with the pledged actions themselves, the NCP online pledge collected some basic demographic information (age range, location (through postal code), and optionally household income). Location may be important because some coastal areas are projected to be at increased risks of coastal flooding associated with rising sea levels. Inland households may be concerned about the increased danger of forest fires. Capacity to make larger investments (for example,

⁶ González-Hernández *et al.*, “Role of Climate Change Perceptions.”; Porter, Dessaj and Tompkins, “UK Household Adaptation.”; Elrick-Barr *et al.*, “Coastal Households Responding?”; Sippel, Shaw, and Marshall, “Ten Key Principles.”

⁷ Elrick-Barr *et al.*, “Coastal Households Responding?”

⁸ Nisa *et al.*, “Meta-Analysis.”; van der Linden and Goldberg, “Alternative Meta-Analysis.”

building upgrades or switching to an electric vehicle) may be more accessible to higher-income families.

To understand whether the outreach was effective in motivating climate action, we need a follow-up survey and interviews with pledge takers. These follow-ups will collect additional information to contextualize a pledge-takers decision. The follow-up will also gather information as to whether pledge takers followed through with their actions (and why or why not). This second part is a key element to knowing whether the pledge itself is an effective tool to motivate climate action. Due to the short time frame, a full analysis of the follow-up survey is not included in this report, but the questions can be found in Appendix D.

Outreach methods

Beyond demographic details and the messaging materials, the Nanaimo Climate Pledge aims to evaluate different outreach methods to encourage climate action. These included: Climate Connectors; through organizations; mailed brochures; and advertising in social media and traditional, local media. There may be additional outreach methods in Phase Two, including door-to-door canvassing. Methods are detailed below (see, “Which outreach method is most effective?”).

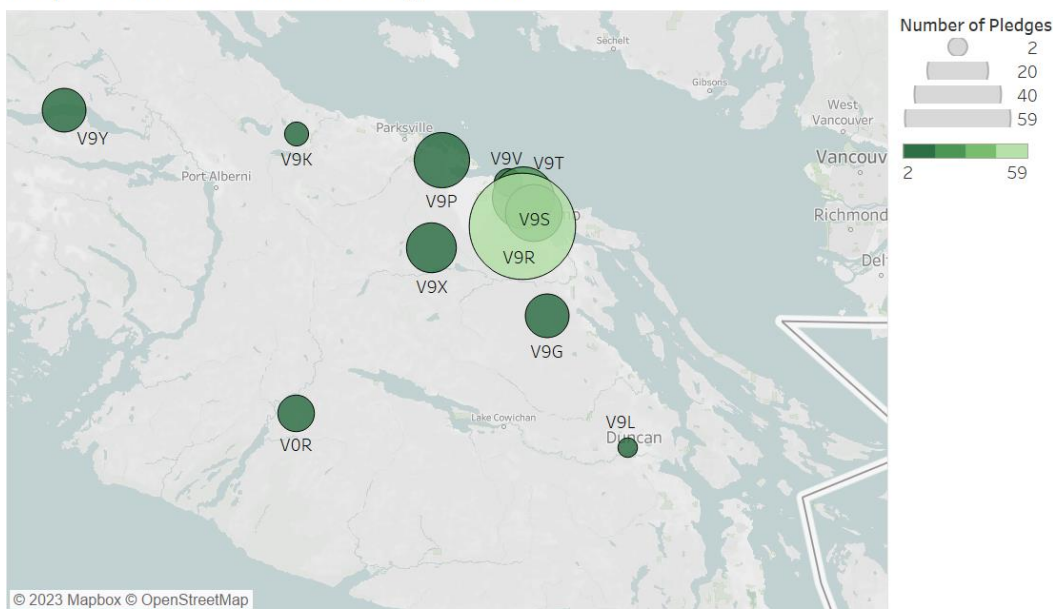
What can we learn from the Nanaimo Climate Pledge?

Four months after the launch of the Nanaimo Climate Pledge, over 180 people have completed the online survey to commit to one or more climate actions. After excluding data from those which included no location information, pledges from outside of Vancouver Island, and duplicates, the summaries below include information from 161 pledges. While more data is required to make some conclusions, patterns are beginning to emerge. These patterns can inform future directions of the Pledge and help identify where best to invest time and effort to effectively encourage household climate action. For additional details on methodology, please see Appendix B.

Who took the Nanaimo Climate Pledge?

The first households to take the Nanaimo Climate Pledge are primarily located in the City of Nanaimo and in other urban centers (including Parksville and Port Alberni). Some people across the Nanaimo Regional District and in surrounding areas, in much smaller numbers, also took the pledge. The distribution of pledges, organized by FSA (Forward Sorting Area, or the first three characters of postal codes), can be seen in Figure 2.

Map of Nanaimo Climate Pledge Takers



Map based on Longitude (generated) and Latitude (generated). Color shows sum of F2. Size shows sum of F2. The marks are labeled by F11.

Figure 2 Map of where people took the Nanaimo Climate Pledge, by FSA (first 3 characters of postal code).

The average household size of most people who took the Pledge is 2.02 people per household. This is comparable to the average household size of the area, which is 2.20 people per household.⁹ Most people who took the pledge were taking it as an individual (114 people, or 70.1%), rather than for their entire household (39 pledges, 24.2%) or for part of their household (8 pledges, 5.0%).

As anticipated, the majority of people who completed the Nanaimo Climate Pledge are above the age of 55. Although the age distribution is different than the age distribution of the general adult population of Eastern Vancouver Island, it is not a statistically significant difference. This is, in part, due to the small sample size. See Figure 3 for a distribution of the age range of people who completed the online pledge.

⁹ Calculated average from pledges and census data from FSA areas (V9Y, V9X, V9V, V9T, V9S, V9R, V9P, V9L, V9K and V9G). This excludes FSA V0R because V0R covers a large part of Vancouver Island, including areas not targeted by Pledge outreach. Average household size from all pledges is 2.04. Census data from Statistics Canada, *2021 Census of Population*.

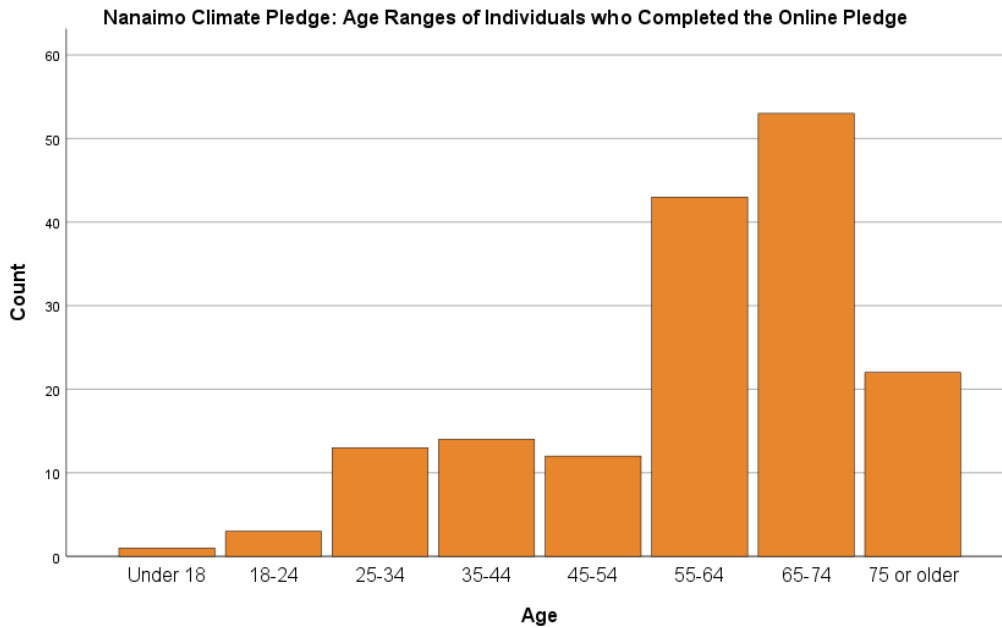


Figure 3 Age ranges of individuals who completed the Nanaimo Climate Pledge.

In the Pledge, there was an optional space to declare annual household income. Approximately half of respondents chose to include this information (52%, or 84 of 161 pledges). Most respondents earn between \$50,000- \$80,000 per year, as shown in Figure 4. The distribution is comparable to the census population (see Appendix C for supplementary graphics).

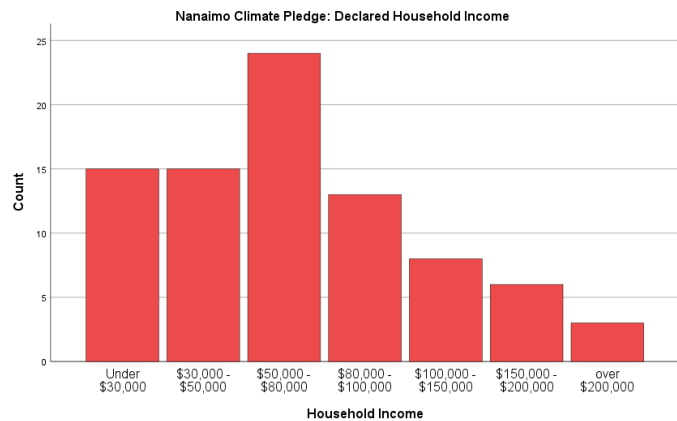


Figure 4 Distribution of declared annual household income, of people who took the Nanaimo Climate Pledge.

Which actions are people most willing to take?

One of the goals of the Nanaimo Climate Pledge is to understand which climate actions households are most interested in taking. Figure 5 shows the total number of responses for each action, and whether an individual or household committed to the action, skipped it, or is already doing that particular action. Actions with various options are combined into a yes or no response

(for example, either reducing or eliminating beef is combined to reflect a “yes” to that action). Null responses are excluded; skipped actions (marked as “no”) were marked as such in the online pledge (with the exception of second-hand clothes, see below). Many actions are already being done by a significant majority of respondents, including: already using electric heating; already prioritizing second-hand clothing; already voting for climate action; and, to a lesser extent, already having “climate-friendly” money and already being part of a climate change organization. Here, the clothing action is focused exclusively on prioritizing second-hand clothing (because the “already” option focused on already prioritizing second-hand clothing). All 15 “no” responses” include people who commit to wearing their clothes for nine months longer. More people may already not eat chicken; the pork and chicken action are combined on the online survey, and several individuals only selected one option. Of these, nine people indicated that they already do not eat pork, but did not select anything for chicken (and two people noted they already do not eat chicken, but did not specify anything for pork).

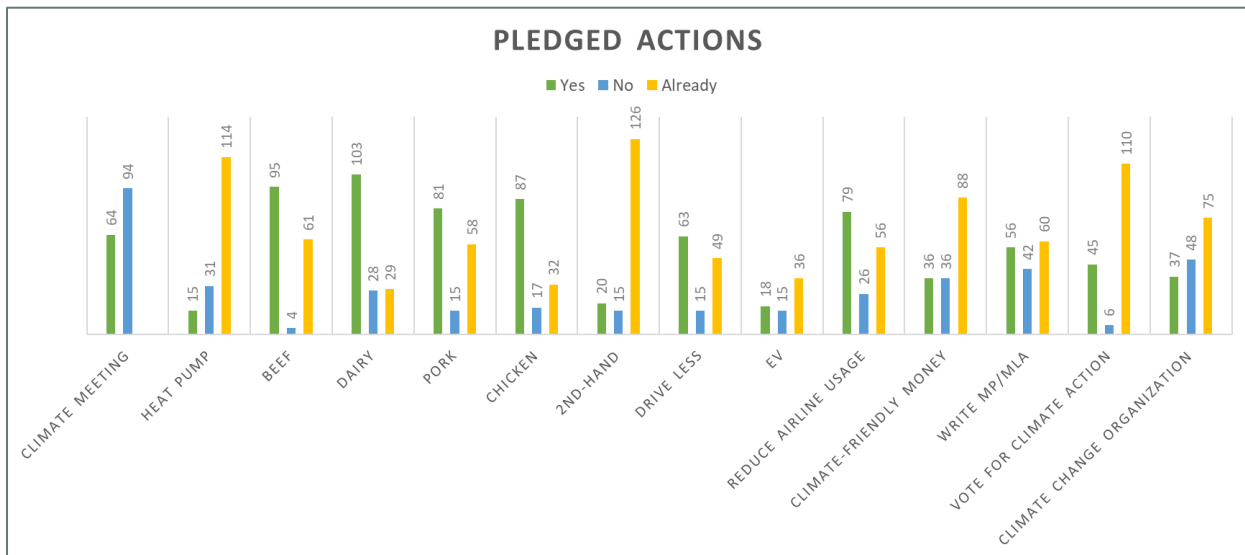


Figure 5 Total committed, skipped, and already completed actions from the Nanaimo Climate Pledge.

To better compare between the actions that are either being pledged or skipped, Figure 6 removes the actions marked as “already” by those who took the Pledge. Here, the clothing action has been collapsed to show any clothing action (either prioritizing second-hand clothing, or wearing clothes for longer). Most people are interested in dietary changes, especially in reducing meat and dairy consumption (versus eliminating it); see Appendix C for a visual breakdown of how people are pledging to change their diets as climate action. These are low-barrier actions

that do not require major lifestyle changes. They are also the potentially the actions that are most difficult to define and be accountable for taking. A majority of respondents also commit to driving their gas or diesel vehicles less, and to limit flying.

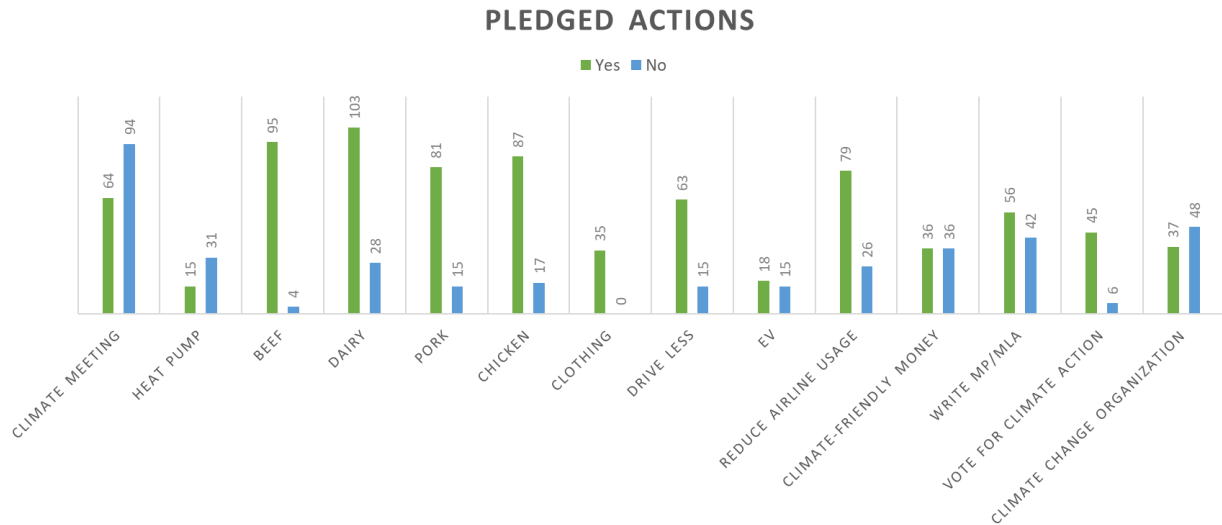


Figure 6 Comparing Total Pledged versus Skipped Actions

It can also be noted that people are more willing to commit to individual actions than to collective actions. Collective actions here refer to actions that require an individual or household to communicate with others about climate change, and to commit time to climate change organizations. For example, 59.5% (94 people, excluding 3 null responses) of pledge-takers choose not to hold a climate meeting with either their household or with friends. Less popular actions include: joining a climate change organization (48 choose not to, or 56.5%, compared to 37 who choose yes); climate-friendly money (50% each for yes and no); and building upgrades (31 opting not to switch to a heat pump, compared to only 15 pledging to take action).

Eighteen households are committing to switch to an electric vehicle, with many preferring to reduce their vehicle use. Only 15 people chose to skip any local transportation actions.

There is some correlation between individuals who are already part of a climate change organization and those who already communicate with their MP/MLA. Otherwise, there is no clear correlations between the actions people pledge to take. This may be difficult to determine at this time because of the overwhelming popularity of dietary and clothing actions, and because

of the high incidence of actions already being taken by those who have completed the Nanaimo Climate Pledge so far.

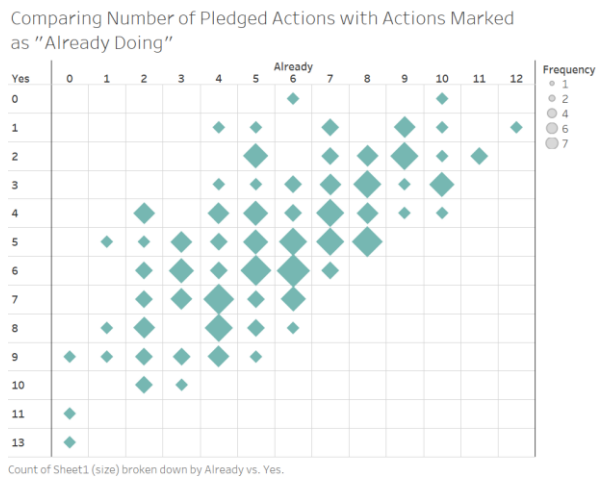


Figure 7 Comparing total number of pledged actions with number of actions marked already being taken, per pledge.

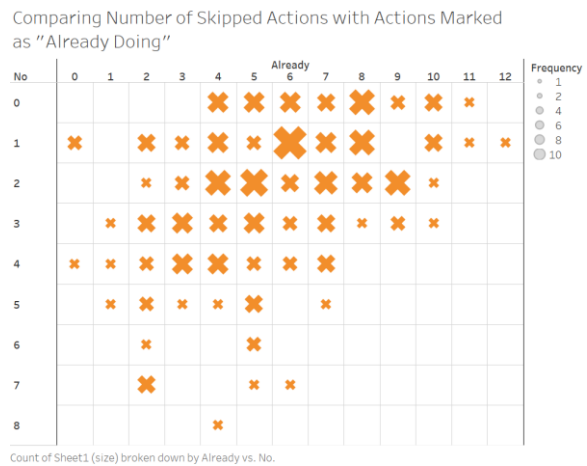


Figure 8 Comparing total number of skipped actions with number of actions marked as already being taken, per pledge.

Beyond which individual actions people as a whole are more willing to take, we can compare how many actions each household has committed to taking. In this way, we can see whether there is a relationship between the number of pledged actions per household and the method of outreach, for example. We can also see that many people who have committed to climate action through the Nanaimo Climate Pledge are already engaged in climate action. Only 3 out of 161 pledges did not mark any of the actions as already being done in their household. Figure 7 compares the total number of pledged actions with the number of actions marked as “already” by each household. The first column shows the three households who were not engaged in any of the actions of the Nanaimo Climate Pledge prior to completing the online survey. Of those three pledges, one has committed to 9 different actions, another has committed to 11, and one has committed to 13 actions.¹⁰ The first row of Figure 7 shows that two households have not committed to *any* additional actions in their online pledge. An additional nine households have only committed to one action in the Nanaimo Climate Pledge (the second row of Figure 7). Most

¹⁰ In this analysis, the actions include: (1) climate meeting; (2) installing a heat pump; (3) reducing or eliminating beef; (4) reducing or eliminating dairy; (5) reducing or eliminating pork; (6) reducing or eliminating chicken; (7) clothing actions; (8) local transportation actions (9) reducing airline usage; (10) climate-friendly money; (11) writing MP/MLA; (12) voting for climate action; (13) joining a climate change organization. Note that some have specified an additional action of both driving less *and* switching to an electric vehicle, which is included here as two pledged actions, but only one skipped action.

households fall in the middle, where they are committing to about half of the actions and are also already doing about half of the actions. There is no clear relationship between the number of pledges marked as already being completed and the number of skipped actions; although the tendency is for those who skip less actions are already doing several actions of the pledge (see Figure 8). A visual comparison between the number of pledged versus skipped actions is in Appendix C.

Which outreach method is most effective?

One of the goals of the Nanaimo Climate Pledge is to compare different outreach methods to determine which (if any) is most effective in motivating households and individuals to take action on climate change. The majority of the pledges are from Climate Connectors, as can be seen in Figure 9. The second most popular response is from an organization they belong to. Other methods were less effective, as detailed below (note that in the figures, “brochure” refers to a brochure received in the mail).

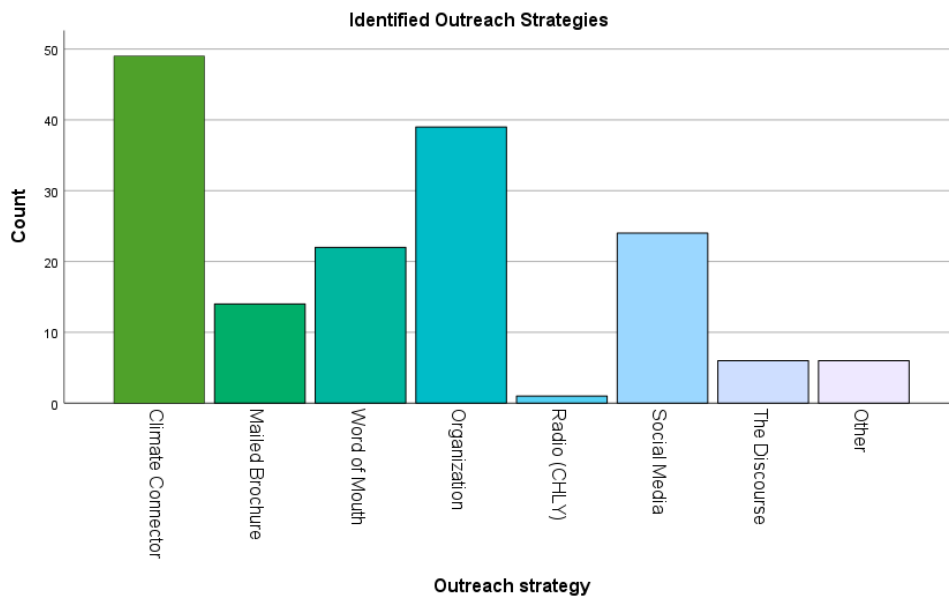


Figure 9 Total number of pledges by outreach strategy.

Figure 10 shows a weekly breakdown of how households identified that they heard about the pledge. This graph also marks key points in the timeline, including when brochures were mailed to homes (mid-November), and the week of the social media ad campaign. Most of the early pledges heard about Nanaimo Climate Pledge from Climate Connectors or from organizations

that people taking the pledge belong to. There is no correlation between the outreach method and the number of actions either pledged, skipped, or already completed per pledge (see Appendix C for visualizations of these comparisons).

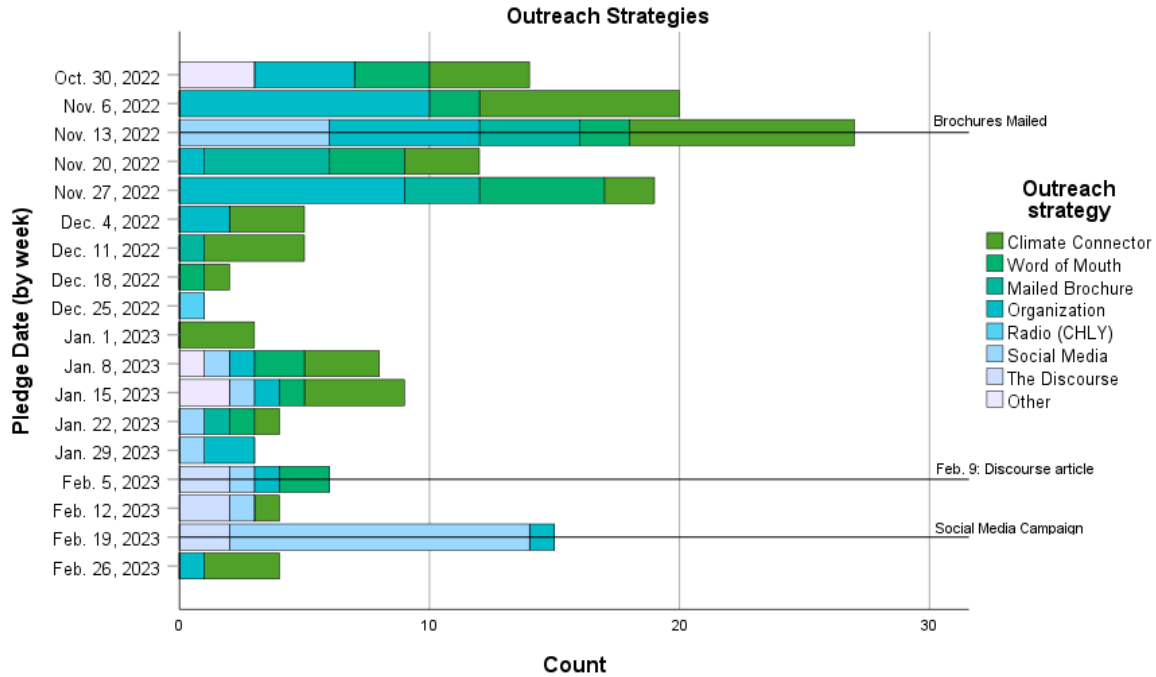


Figure 10 Number of pledges per outreach strategy over time (by week).

Climate Connectors

Climate Connectors, based on the data so far, is the most effective way to encourage households to take climate action. This is consistent with the literature, which suggests that social proximity and social pressure can have a role in encouraging climate action.¹¹ Some climate connectors completed reports after they spoke with people in their social network about the Nanaimo Climate Pledge. During these conversations, Climate Connectors personally distribute the NCP brochure. There are reports for 65 households reached (with an additional report for 12 unidentified people). Of these, 22 households (33.85%) have taken the Nanaimo Climate Pledge. Five people identified a different outreach method in their pledge, and this was manually corrected to coincide with the submitted Connector reports. However, this shows there is

¹¹ González-Hernández *et al.*, “Role of Climate Change Perceptions.”; Porter, Dessaj and Tompkins, “UK Household Adaptation.”; Elrick-Barr *et al.*, “Coastal Households Responding?”; Sippel, Shaw, and Marshall, “Ten Key Principles.”

inconsistency in how people identify how they heard about the Pledge. Reports do not exist for each conversation that Climate Connectors are having with potential pledge-takers. However, an additional 33 people, not identified in reports, mark “Climate Connectors” as the outreach strategy on their online pledge.

Organization

The Nanaimo Climate Pledge team reached out to several organizations in the Nanaimo Regional District and in Port Alberni, with the goal of giving a presentation to their members about the Pledge. Some of these messages remained unanswered. A lack of response may imply that the contacted organizations may be inactive, have a loose structure, or not be interested. There is a statistically significant correlation between those who identified that they are already active in a climate change organization, and those that identified that they heard about the Nanaimo Climate Pledge from an organization they belong to (see Figure 11). This suggests that those who hear about the pledge from organizations, heard about them from climate change organizations. If the Nanaimo Climate Pledge wants to primarily encourage household climate action from those who are *not already engaged in climate actions*, the correlation suggests that outreach through organizations may not be the most effective method (despite current high uptake from organizations in pledges so far).

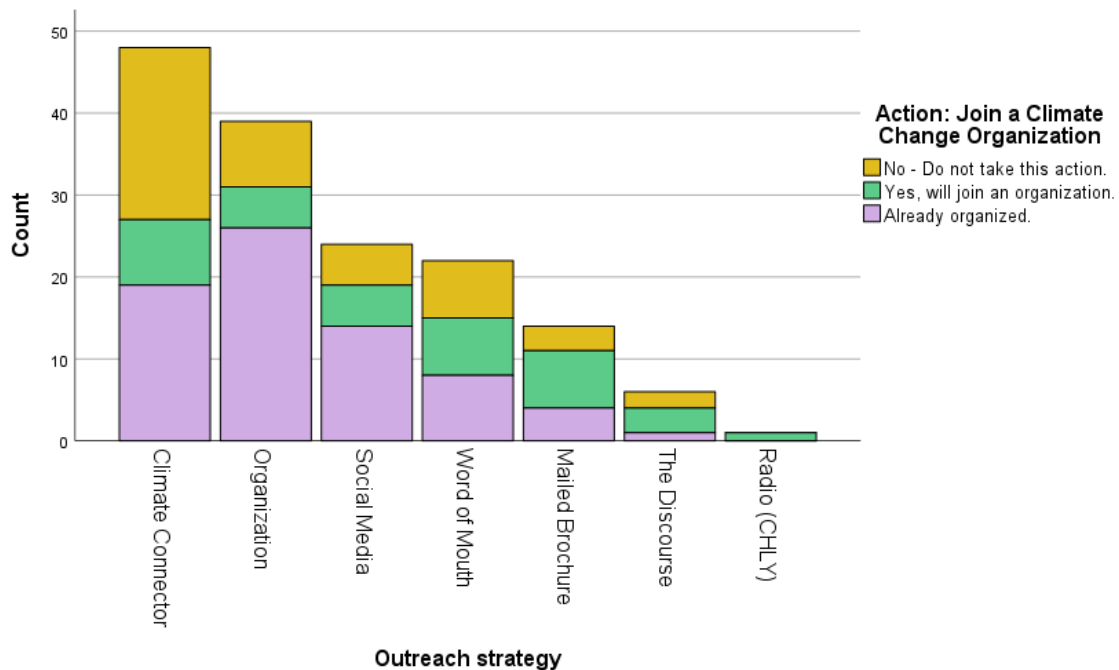


Figure 11 Responses to "Join a Climate Change Organization" according to outreach strategy.

Social Media

The third highest response for outreach method is social media. Some Nanaimo Climate Pledge team members shared details of the pledge on their personal social media pages, and there was an official Facebook advertisement campaign for one week at the end of February 2023. Based on Figure 10, social media is the primary method of outreach in new pledges in the last weeks of February 2023.

Focusing on the social media ad campaign, only 14 households completed the Nanaimo Climate Pledge and identified social media in February 2023. There were three simultaneous ads running on Facebook (a positive image, a negative image, and a short video). All three had approximately the same reach and generated the same number of clicks. However, from a total of 449 clicks to the website, only 14 people took the pledge. This suggests that advertising on social media is not effective.

Word of Mouth

Word of mouth was included in the online pledge to capture informal conversations and other informal outreach methods. Word of mouth may include conversations from Climate Connectors not identified in reports. It is difficult to identify how many people heard about the Nanaimo Climate Pledge through word of mouth, but that did not choose to complete the online pledge. It is therefore difficult to assess effectiveness.

Brochure (Mail-Out)

The Nanaimo Climate Pledge brochure was mailed to over 6000 households in the Regional District of Nanaimo. For details on how these routes were identified, see Appendix B. Out of 6,676 mailed brochures, only 14 people identified a brochure as the outreach method. This is an uptake of less than half a percent.

Local Media

The Nanaimo Climate Pledge ran advertisements on the local radio station (CHLY) and ran an article about the Pledge in the local paper (The Discourse). Radio advertising was not effective, generating only 1 pledge. After the article published online in the Discourse on February 9, there was minimal uptake (less than 10).

What motivates people to take the Pledge?

To help understand what motivates people to take the Nanaimo Climate Pledge, households received the invitation to complete a follow-up survey one to two months after committing to take climate action. Approximately 20% of people who received the invitation completed the follow-up survey (36 people, after excluding duplicates, test responses, and those who are not on Vancouver Island). Over half (19 people) identified they took the climate pledge because they “believe we all need to change our behaviours to avoid the worst effects of climate change.” Other responses included: “I feel responsible for my contribution to climate change and want to make a change.” (4 people); “Somebody I knew was also taking the pledge.” (5 people); and “I am worried about the effects of climate change.” (3 people). This suggests that, in addition to people being motivated by social ties, individuals need to believe that a larger behavioural shift is required, beyond industries and governments.

Because the follow-up survey is only distributed a minimum of one month after a household has completed the Nanaimo Climate Pledge, only those who have completed the pledge before January 10 have had the opportunity to complete it. At this stage, therefore, the survey primarily includes responses from early pledge adopters. Current results show that so far, the Pledge mostly includes people and households that were already concerned about climate change, already committed to climate action, and mostly already aware of effective actions they could take to address climate change.

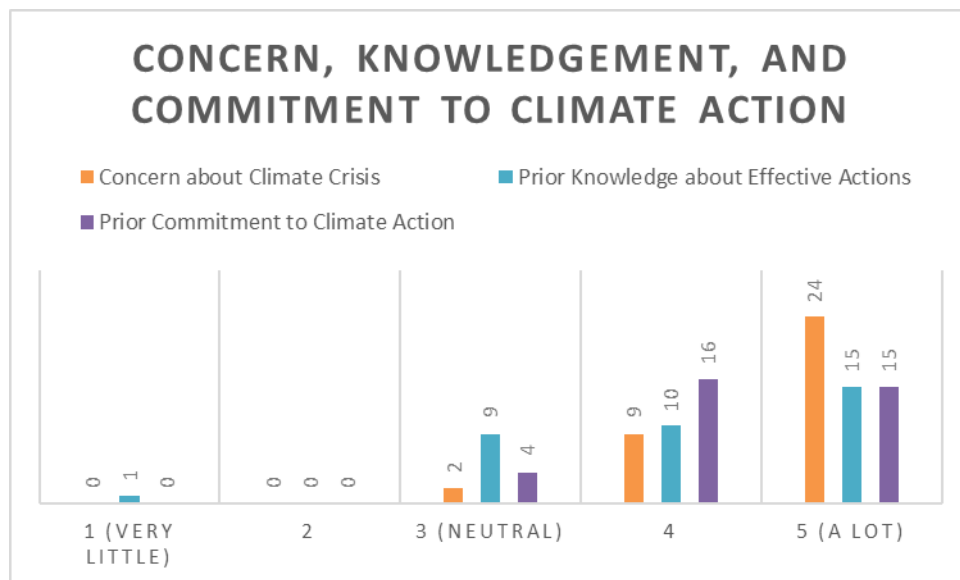


Figure 12 Respondents rating of climate crisis concern, prior knowledge and commitment to climate action.

In the follow-up survey, many of the background questions used likert scales ("on a scale from 1 to 5"), where 5 represented, for example, a greater concern, knowledge, or commitment. Figure X details how respondents rated, on a scale of 1 to 5, prior knowledge about effective action, prior commitment to climate action, and concern about the climate crisis. Almost all respondents (94%) are either very concerned or concerned about the climate crisis, and 86% of follow-up respondents already consider themselves committed to climate action. Most respondents also rated their prior knowledge of effective actions as "very knowledgeable" ("5"), although here there is a greater variation of response. For a visual comparison of how people responded to these three questions, see Figure 12.

To gain qualitative insight into people's motivations for taking climate action, attempts were made to speak directly with individuals who completed the Nanaimo Climate Pledge. Despite several people agreeing to a 15-minute telephone interview, emails remained unanswered and scheduled calls were often forgotten. Cold calling was also ineffective. This is potentially because many people receive a high number of spam calls, and people may not answer the phone to unknown numbers.

However, based on Climate Connector reports, limited telephone interviews, and open feedback on the online surveys, there are some indications for potential actions moving forward. For example, recycling is a recurrent issue. It may be beneficial to consider addressing misconceptions about what is considered effective and important climate actions. Phase One of the Nanaimo Climate Pledge did not consider prior beliefs and misconceptions about what constitutes effective individual climate action. In future phases of the project, addressing these ideas may prove to be an important aspect of messaging and other materials.

Lessons from Other Household Climate Action Projects

There are many projects around the world which target household and individual climate action. These include Neighbourhood Climate Chats, which is a model that is replicated in several places (including at the University of British Columbia). To gain insight into the effectiveness of household climate action projects, I reviewed project websites and materials to identify: their target audience; their promoted actions; monitoring and evaluation; and reported outcomes. I documented eight household climate action projects:

1. Climate Access
2. St. Francis Xavier University- Community Climate Change Engagement
3. Neighbourhood Climate Action Champions

4. Take the Jump
5. Toronto Environmental Alliance (TEA)
6. Pocket Change
7. Giki Zero
8. Climate Outreach

Some of these projects are focused on stakeholder engagement to inform municipal policies (Community Climate Change Engagement, Toronto Environmental Alliance). Several of these projects have published tips and suggestions for climate communication strategies (Climate Access, Take the Jump, Toronto Environmental Alliance, Climate Outreach). Some of these projects promote specific actions to reduce household carbon footprint: Take the Jump (similar to Nanaimo Climate Pledge), Pocket Change (primarily building upgrades), and Giki Zero (several actions, includes a carbon calculator and a personalized app). Many of these represent organizations that have several overlapping projects. An overview of these initiatives can be found in Appendix F.

Much of the most relevant information regarding project effectiveness (and in particular, information and data to determine the additionality of the projects) is not easily available on their websites. I contacted four of these projects to gather data on who these projects were reaching and how they measure effectiveness. Unfortunately a scheduled meeting with Take the Jump was indefinitely postponed. I was able to receive responses from two: Toronto Neighbourhood Climate Action Champions (a municipal project), and Pocket Change (a Toronto neighbourhood association).

There does not appear to be data about who is attending and who is being reached by climate action initiatives. However, in the case of Pocket Change, a close-knit neighbourhood, they are beginning to see more and more of their neighbours are interested in building upgrades. The local visibility of these actions and the social pressure may be an influencing factor. The first people to take on the upgrades were primarily recently-retired or older members of their neighbourhood: people who had time and disposable income to invest in making their homes more climate-friendly.

More research, including speaking directly with more projects, is required to determine whether climate action initiatives continue to reach only those already invested in climate action.

Conclusions and Next Steps

Understanding what motivates climate action includes knowing who is taking the pledge, how they heard about the pledge, and knowing whether they are already taking climate actions. Although Phase One of the Nanaimo Climate Pledge primarily included people already taking climate action, this was to be expected in the first few months of the project. Future efforts should prioritize personal connections to continue to see results. There is the possibility that targeting well-organized communities, including organized and active neighbourhood associations, may be an important part of encouraging climate action.

It is worthwhile to evaluate whether door-to-door canvassing is an effective method to reach individuals outside of the social networks of the people already involved in the project. The door-to-door canvassing can also generate additional information on people's perceptions of climate change. This could be important context in understanding how to motivate additional uptake of climate action. A short, 5-minute survey has been created and is included as Appendix E. This survey has been designed to be able to test whether people have misconceptions about effective climate actions they can take as individuals, as well as touching upon some of the factors that may influence climate action (concern about climate change, perception of climate risk).

The follow-up survey should continue to be sent to pledge-takers. This will also help evaluate whether people who committed to take climate action have followed through with their pledges. This can also serve as a reminder to people and to households of their commitments.

Additional research can focus on continuing to reach out directly to other climate action initiatives. It is important to understand whether and how other projects are evaluating their reach and their effectiveness. Many other initiatives appear to be parts of larger projects – perhaps the Nanaimo Climate Pledge could also include toolkits and step-by-step instructions to further facilitate households to follow through with the pledged actions.

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Appendices

Appendix A: List of NCP Actions

Appendix B: Methodological Details

Appendix C: Additional Data Visualizations

Appendix D: Follow-up Survey Questions

Appendix E: Door-to-door Survey

Appendix F: External Outreach Projects

Appendix A List of NCP Actions

The following is the list of the Nanaimo Climate Pledge's recommended actions. The explanatory text is the additional explanation included in the online pledge. There is further information available on the website.

Hold a Climate Meeting

For many people, the first step to taking climate action is to hold a meeting with your household, family or friends to discuss the climate crisis. Here you can share your feelings and concerns, make a list of your current household CO₂e emissions, and create a plan for how you can reduce your emissions. We recommend this as a first step.

I commit to holding a climate meeting.

Skip this action.

Switch to an Electric Heat Pump

In Nanaimo, 16% of our CO₂e emissions come from residential buildings, with almost all of this coming from households that use oil or gas as a heating source. Switching to an electric heat pump eliminates all of these emissions. A heat pump can provide you with high efficiency heating of up to 350%. This means you get up to 3.5 units of heat for each unit of power you pay for. Electric baseboards are 100% efficient, meaning you get 1 unit of heat for each unit of power you pay for. Heat pumps also provide AC cooling in the summer. Currently, you may be eligible for up to \$11,000 in rebates for the installation of a new heat pump.

CO₂e SAVINGS: The average BC household will save 3900 kg CO₂e every year.

I commit to switching my primary heating from oil or gas to an electric heat pump.

I already heat my house with an electric heat pump.

I already heat my house with electric baseboards.

I will contact my landlord or strata to discuss installing a heat pump.

Skip this action.

Reduce Beef Consumption

For the average consumer, reducing beef intake is the most important food-based action you can take to reduce CO₂e emissions. Food production accounts for about 26% of global CO₂e emissions. Beef production is by far the biggest overall food emitter, producing 6% of global CO₂e emissions.

CO₂e SAVINGS: 100 kg CO₂e per kg of beef. The average Canadian eats 25 kg of beef per year = 2500 kg CO₂e every year.

I commit to reducing my beef consumption.

I commit to eliminating beef from my diet.

I already do not eat beef.

Skip this action.

Reduce Dairy Consumption

Food production accounts for about 26% of global CO₂e emissions. Dairy production from cows produces 3% of global CO₂e emissions.

CO₂e SAVINGS: 3 kg CO₂e per liter of milk. The average British Columbian drinks 64 liters of milk per year = 192 kg CO₂e every year. 24 kg CO₂e per kg of cheese. The average Canadian eats 13.5 kg of cheese per year = 324 kg CO₂e every year.

I commit to reducing my dairy consumption.

I commit to eliminating dairy from my diet.

I already do not consume dairy.

Skip this action.

Reduce Pork and Chicken Consumption

Food production accounts for about 26% of global CO₂e emissions. Pork and chicken (for meat and eggs) produces 1.5% (pork) and 1.2% (chicken) of global CO₂e emissions.

CO₂e SAVINGS: 12 kg CO₂e per kg of pork. The average Canadian eats 23 kg of pork per year = 276 kg CO₂e every year. 10 kg CO₂e per kg of chicken (meat). The average Canadian eats 39 kg of chicken per year = 390 kg CO₂e every year. Please click up to two of the following boxes (one for pork, one for chicken), or you can "Skip these actions":

I commit to reducing my pork consumption.

I commit to eliminating pork from my diet.

I already do not eat pork.

I commit to reducing my chicken (meat) consumption.

I commit to eliminating chicken (meat) from my diet.

I already do not eat chicken (meat).

Skip these actions.

Buy Less New Clothing

The fashion industry accounts for about 10% of global CO₂e emissions and 20% of global wastewater. Today, the average consumer buys 60% more items of clothing than in the year 2000. Making better use of clothing is one of the easiest actions you can take to lower your CO₂e emissions.

CO₂e SAVINGS examples: 30 kg CO₂e per pair of jeans. 5 kg CO₂e per polyester t-shirt. 2 kg CO₂e per cotton t-shirt.

I commit to buying more second hand clothing.

I commit to wearing clothing for an additional nine months.

I already prioritize not buying new clothing.

Skip this action.

Reduce Vehicle Usage or Switch to an EV

56% of the total emissions in the Nanaimo area come from personal vehicles. For most people in Nanaimo, driving less or switching to an electric vehicle (EV) is one of the single biggest actions you can take to be part of the solution. Further emissions can be found in combining an increase in the use of public transport with active transport. CO₂e SAVINGS for reducing driving a gas or diesel vehicle: The average mid-size car emits 0.2 kg CO₂e per km. Larger vehicles can emit 50% or more emissions to drive the same distance. 200 kg CO₂e per 1000 km driven in a mid-size car. 300 kg CO₂e per 1000 km driven in a larger vehicle (eg. truck, larger SUV).

CO₂e SAVINGS for switching from a gas or diesel to an electric vehicle: The average British Columbian drives about 13,100 km per year. 2620 kg CO₂e every year for switching from a mid-size car. 3930 kg CO₂e every year for switching from a larger vehicle.

I commit to driving my gas or diesel vehicle less.

I commit to switching from a gas or diesel vehicle to an electric vehicle.

I already drive an electric vehicle.

I already prioritize using alternate transportation (eg. bus, cycle, walking).

Skip this action.

Reduce Airline Usage

While air travel only accounts for about 2% of global CO₂e emissions, for those who fly frequently, air travel is likely their single highest personal CO₂e source. Reducing flights is the

single most important action that most frequent flyers can take. More than one third of Canadians have reduced their frequency of flying to reduce climate impacts.

CO₂e SAVINGS: Flying produces an average of 100 kg CO₂e per 1000 km of air travel. Example flights:

Round trip Vancouver to Calgary: 174 kg CO₂e

Round trip Vancouver to Toronto (economy): 492 kg CO₂e

Round trip Vancouver to Toronto (business): 985 kg CO₂e

Round trip Vancouver to London, England (economy): 790 kg CO₂e

Round trip Vancouver to London, England (business): 1581 kg CO₂e

I commit to flying less.

I commit to taking no flights except for emergencies.

I already do not fly except for emergencies.

Skip this action.

Make your money more climate friendly

Canada's largest banks remain some of the biggest lenders to fossil fuel companies in the world. From 2016-2021, the five major Canadian banks funneled more than \$900 billion dollars into the fossil fuel industry, accounting for about 15% of total global financing. Notably, the major Canadian banks are actually increasing their investment in fossil fuels, despite their claims to be moving towards "net zero" by 2050.

There are two types of action you can take to reduce the CO₂e emissions of your money:

1. Move your money from a bank to a credit union. This includes money you have in accounts and any loans you have with the bank, including mortgages.
2. Divest from investments in heavily CO₂e polluting industries such as fossil fuel companies. This includes stocks, mutual funds, bonds and any other investment type.

I commit to moving my banked funds from a bank to a credit union.

I commit to divesting from investments in heavily CO₂e polluting industries.

I already do not have funds or loans with a major bank.

I already do not invest in CO₂e polluting industries.

Skip this action.

Send a letter to my MP or MLA

Letters are highly impactful on influencing elected leaders. The old adage is that a politician assumes that every letter they receive represents 1000 voters. Whatever the number actually is, leaders know that when someone takes the time to send them a letter, many more people share that opinion. This means when you write a letter to your MP or MLA (or both), your voice is greatly amplified.

I commit to writing a letter to my MP or MLA.

I already communicate with my MP or MLA.

Skip this action.

Vote for climate action

How we vote matters, municipally, provincially and federally. All levels of government have unique powers and capacities to take on the climate crisis, and all levels matter. Some politicians and parties won't even admit that climate change is real. Others make it their primary platform. By voting for a candidate or party that prioritizes climate action and makes it a core part of their platform, you are directly voting for systemic change and greatly magnifying the impact of your personal pledge actions. It is a crucial action on your part.

I commit to voting for individuals and parties that prioritize climate action.

I already vote for climate action.

Skip this action.

Join a climate action organization

Climate organizations, including ours, were started and are operated by people just like you, and the more of us who are actively promoting climate action the better. There are many ways you can use your time and skills to be part of bringing the urgency of the climate crisis and what we can do about it to the greater public. Within a climate organization, you will also find support, encouragement and friendship. What's the easiest way to join? Become a Climate Connector (see our website for details).

I commit to joining a climate action organization.

I am already part of a climate action organization.

Skip this action.

Appendix B Methodological Details

Brochure Mail-out

One of the NCP outreach methods was mailing brochures directly to households throughout the district. To determine which neighbourhoods would receive brochures, I used Canada Post’s Precision Mail targeting tool. Since one of the project funders is to support programs targeting adults aged 55 and over (and it is hypothesized by the NCP team that adults 55 and over will be most available and likely to take the online pledge), I used the Precision Mail tool to identify mailing routes primarily with adults aged 50+ and 60+ (selecting 50-59, 60-69, 70-79, and 80+). I did this for each postal code (the first three characters, or FSA) within the Nanaimo Regional District (V9G, V9K, V9P, V9R, V9T, V9S, V9V, and V0R). I chose at least one route from each of these postal codes, including inland and coastal routes. For coastal routes, routes in areas predicted to be susceptible to coastal flooding were prioritized (when coastal flood mapping was available for that area). Even though some routes were prioritized for including more adults over the age of 50, many of the routes included distributions that were roughly comparable to census populations. Attention was also paid to including both apartments and houses in the brochure mail-out. See Table 1 for a summary of the routes chosen.

Table 1 Details of routes chosen for brochure distribution, including FSA, total number of private residences in the route, percentage of route population over the age of 50, and additional details.

		TOTAL	6676			
FSA	Location	Route	Total	50+	60+	Notes
V9P	Parksville	SS0007	319	83.68%	75.97%	underwater, coastal
V9P	Parksville	SS0016	566	66.56%	50.96%	underwater, coastal
V0R	Gabriola	RR0006	156	77.11%	61.69%	island, coastal
V0R	Gabriola	RR0001	280	76.90%	62.02%	island, coastal
V9K	Qualicum Beach	RR0004	691	77.57%	67.15%	center of town, includes some apartments
V9V	Lantzville	SS0016	364	65.83%	51.00%	interesting because mostly apartments
V9V	Lantzville	SS0013	63	65.97%	54.28%	include with above
V9G	Ladysmith	SS0002	834	54.96%	40.49%	central ladysmith
V9R	Wellington	SS0018	543	50.12%		inland, rural
V9R	Nanaimo - Chase River	SS0001	493	60.94%	44.04%	coastal (risk unknown),
V9S	Nanaimo - Northfield	LC0019	759	55.76%	39.65%	Numbers comparable to census population - this one is south of postal code area, coastal

FSA	Location	Route	Total	50+	60+	Notes
V9T	north Nanaimo	LC0036	407	69.02%	58.07%	along highway - mostly houses
V9T	north Nanaimo	LC0043	602	66.27%	55.44%	along highway - mostly apartments
V9X	Cedar	SS0002	599	51.67%	34.66%	coastal (risk unknown),

Analyzing the Data

Data was pulled from the online pledge system on March 1, 2023. There were a total of 178 pledges. After cleaning the data (removing 10 because of no demographic or location information, excluding 5 cases from outside Vancouver Island, and removing duplicates and other potential anomalies), there were 161 cases.

Distributions of available demographic attributes of people who took the Nanaimo Climate Pledge (age distribution, income distribution, household size) were compared to the census populations according to the FSA totals (V9G, V9K, V9L, V9P, V9R, V9S, V9T, V9V, V9X, V9Y). The FSA V0R was excluded, even though it includes areas in Eastern Vancouver Island (Gabriola Island, Lantzville, etc.), because it also includes all rural areas in southern Vancouver Island, including the western coast.

Nominal logistic regression was done to review the relationships between demographic information and between the individual committed actions. The most important correlation for evaluating the effectiveness of the Nanaimo Climate Pledge is included below (“Effect of Climate Change Organizations”). There are also indications of some effect between already belonging to a climate change organization, already communicating with an MP or MLA, and already voting. This suggests individuals and households that are actively engaged with climate change issues are also already engaged citizens.

Effect of Climate Change Organizations

Table 2 Results of multinomial logistic regression in SPSS.

		Parameter Estimates					95% Confidence Interval for Exp (B)		
CC Organization ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
	Intercept	-15.889	1065.741	.000	1	.988			
	[Outreach strategy=-]	34.576	1065.742	.001	1	.974	1.038E+15	.000	b
	[Outreach strategy=Brochure]	-.524	1747.764	.000	1	1.000	.592	.000	b
	[Outreach strategy=CHLY 101.7 FM]	-1.871	7265.473	.000	1	1.000	.154	.000	b
	[Outreach strategy=Climate Connector]	13.809	1065.742	.000	1	.990	993828.775	.000	b
	[Outreach strategy=Organization]	.885	1338.592	.000	1	.999	2.424	.000	b
	[Outreach strategy=Social media.]	.424	1475.268	.000	1	1.000	1.528	.000	b
	[Outreach strategy=The Discourse.]	-.560	2403.229	.000	1	1.000	.571	.000	b
	[Outreach strategy=Word of mouth.]	0 ^c	.	.	.	0	.	.	.
Already organized.	Intercept	.134	.518	.067	1	.796			
	[Outreach strategy=-]	19.652	1.049	350.712	1	<.001	342574999.82	43805132.128	2679084043.4
	[Outreach strategy=Brochure]	-.693	.813	.727	1	.394	.500	.102	2.460
	[Outreach strategy=CHLY 101.7 FM]	-14.269	1173.614	.000	1	.990	6.353e-7	.000	b
	[Outreach strategy=Climate Connector]	.731	.667	1.201	1	.273	2.078	.562	7.688
	[Outreach strategy=Organization]	1.515	.712	4.534	1	.033	4.550	1.128	18.352
	[Outreach strategy=Social media.]	.896	.734	1.489	1	.222	2.450	.581	10.334
	[Outreach strategy=The Discourse.]	-1.232	1.265	.948	1	.330	.292	.024	3.483
	[Outreach strategy=Word of mouth.]	0 ^c	.	.	.	0	.	.	.
No organization.	Intercept	.000	.535	.000	1	1.000			
	[Outreach strategy=-]	19.380	.000	.	1	.	261009523.67	261009523.67	261009523.67
	[Outreach strategy=Brochure]	-.847	.873	.942	1	.332	.429	.077	2.371
	[Outreach strategy=CHLY 101.7 FM]	-14.582	1467.017	.000	1	.992	4.647e-7	.000	b
	[Outreach strategy=Climate Connector]	.965	.677	2.032	1	.154	2.625	.696	9.895
	[Outreach strategy=Organization]	.470	.781	.362	1	.548	1.600	.346	7.401
	[Outreach strategy=Social media.]	.000	.828	.000	1	1.000	1.000	.197	5.068
	[Outreach strategy=The Discourse.]	-.405	1.058	.147	1	.702	.667	.084	5.301
	[Outreach strategy=Word of mouth.]	0 ^c	.	.	.	0	.	.	.

a. The reference category is: YES join organization..

b. Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.

c. This parameter is set to zero because it is redundant.

The above table shows the results of the nominal logistic regression to understand whether the outreach method has a correlation with whether an individual or household will pledge to take the specific action “Join a climate change organization”. While the method itself cannot predict whether an individual will choose to take this particular action, the outreach method “through an organization I belong to” has a statistically significant correlation with the response “Already organized,” with a p-value of 0.033.

Appendix C Additional Data Visualizations

Included here are additional graphs to visually display other data comparisons, as mentioned in main text of report.

Comparing Household Income Distribution to FSA Household Income Distribution

Considers the total distribution of household income for the following FSAs: V9G, V9K, V9L, V9P, V9R, V9S, V9T, V9V, V9X, V9Y.

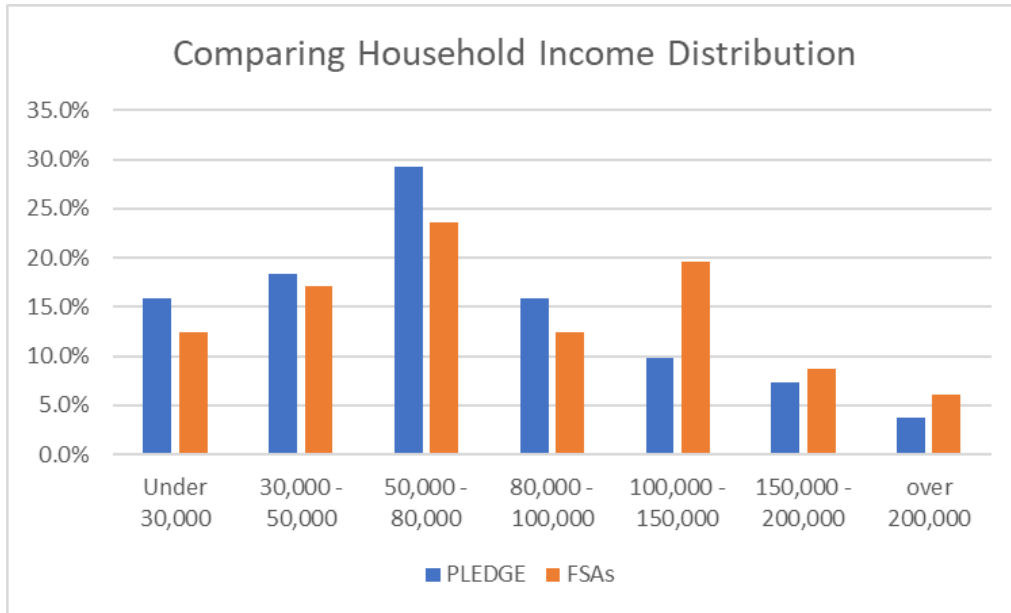


Figure 13 Comparative distributions of household income between NCP pledge households and census population.

Breakdown of Committed Dietary Actions

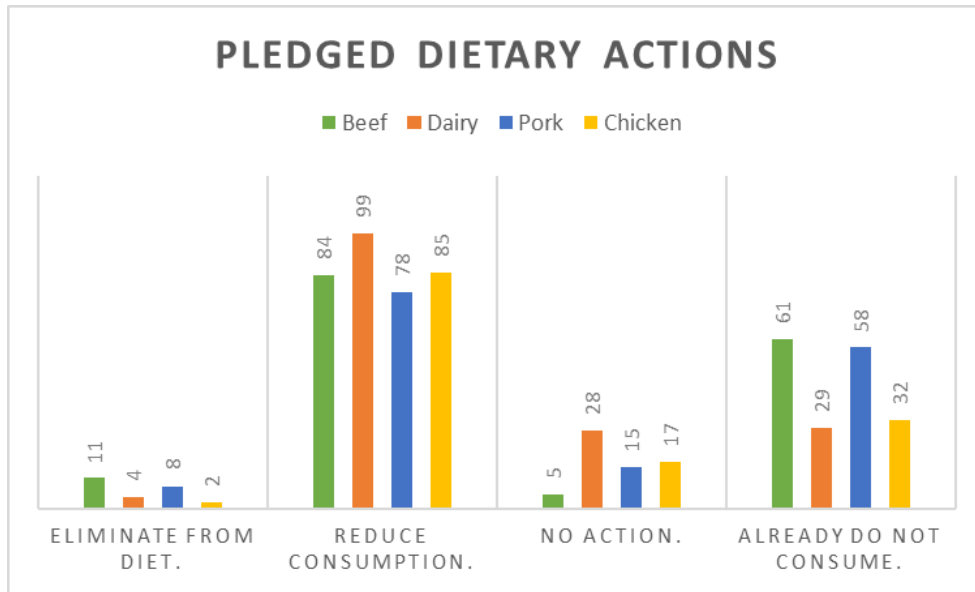
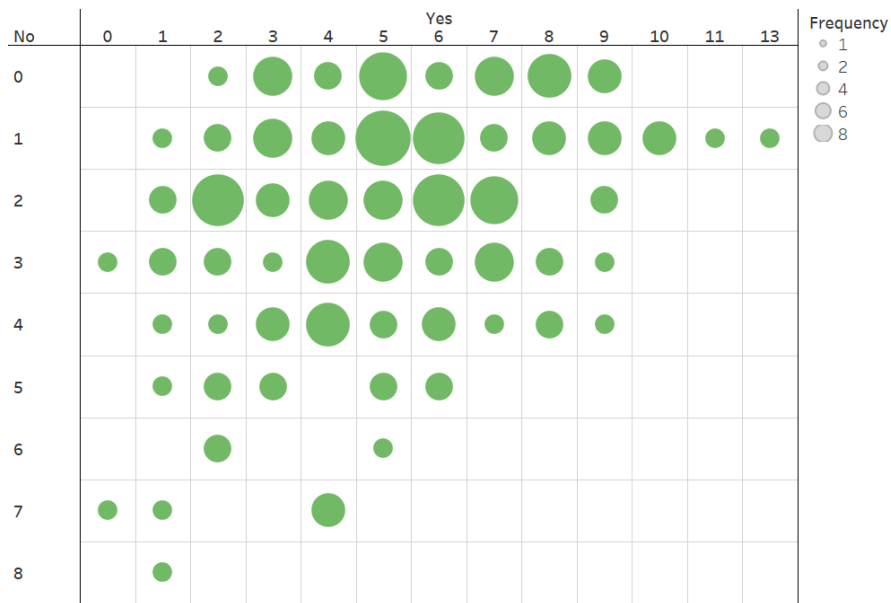


Figure 14 Chart showing most popular dietary action are reductions (rather than eliminating beef, dairy, pork or chicken).

Distribution of Total Number of Pledged and Total Number of Skipped Actions, per pledge

Comparing Number of Pledged and Skipped Actions, per Pledge



Count of Sheet1 (size) broken down by Yes vs. No.

Figure 15 Comparing total number of skipped and pledged actions per household pledge.

Distribution of Total Number of Pledged, Skipped, and Actions Already Completed, Compared by Outreach Strategy

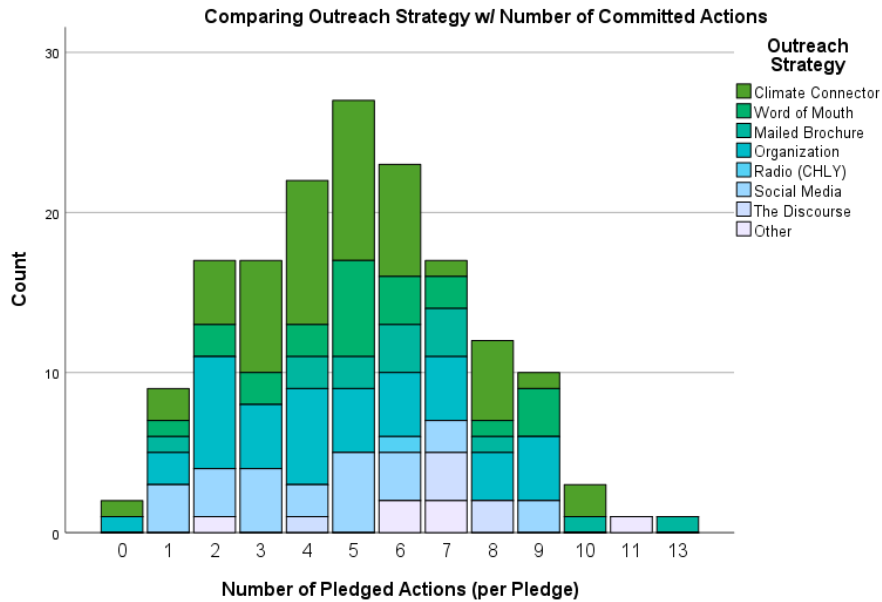


Figure 16 Detailing total number of pledged actions (per pledge) according to outreach strategy.

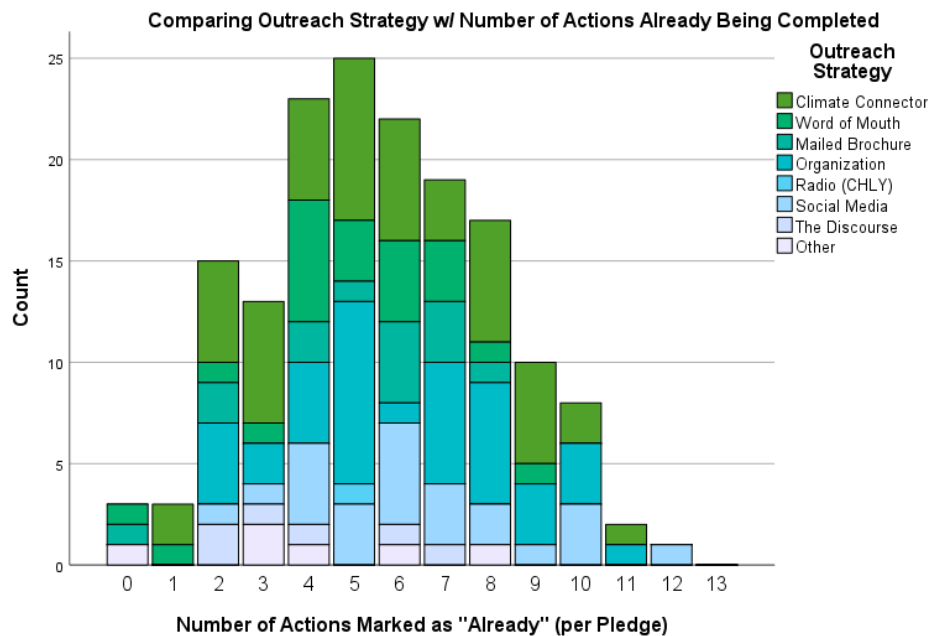


Figure 17 Detailing total number of actions already being taken, per pledge, according to outreach strategy.

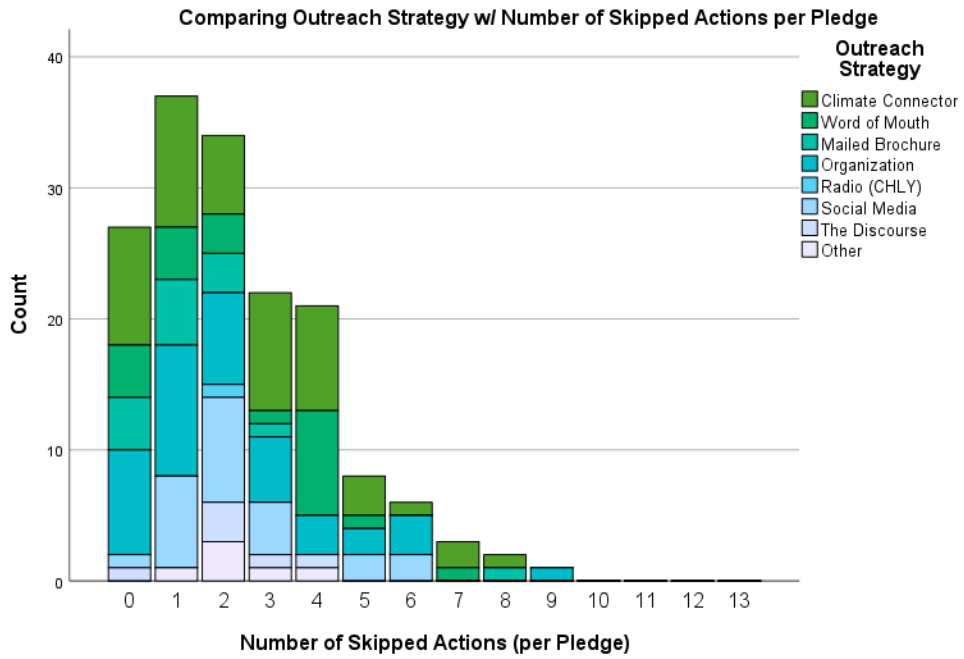


Figure 18 Detailing total number of skipped actions per pledge, according to outreach strategy.

Appendix D Follow-up Survey Questions

The questions in this first section address concern about climate change and the climate crisis, previous commitment and knowledge of effective climate action, and information about motivations and social network. These questions were posed to each respondent who completed the follow-up survey.

1. 1. Before taking the Nanaimo Climate Pledge, how concerned were you about the climate crisis?

Please rate on a scale from 1 (Not at all concerned) to 5 (Very concerned).

1. 2. Which effects of the climate crisis are you most concerned about?

- Excessive heat
- Drought
- Sea level rise
- Forest fires
- Flooding
- More intense storms
- None of the above
- Other

1. 3. Have you directly experienced the effects of the climate crisis?

Select the best response.

- Never
- Yes, 1-2 times
- Yes, 3-5 times
- Yes, 6+ times

1. 4. Do you think you will directly experience effects of the climate crisis...

Rate likelihood from 1 (Not at all likely) to 5 (Very likely)

	1 (Not at all likely)	2 (Somewhat unlikely)	3 (Neutral)	4 (Likely)	5 (Very likely)
...in the next 1-2 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...in the next 2-5 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...in the next 5-10 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

1. 5. To achieve global climate goals, which group(s) should take action?

Select all that apply.

- National government
- Provincial government
- Local government
- Multi-national corporations
- Individuals
- All of the above
- None of the above
- Other (specify)

1. 6. Before taking the Nanaimo Climate Pledge, how knowledgeable were you of effective actions you can take as an individual or household to reduce your CO₂e emissions?

Rate from 1 (No knowledge) to 5 (Very knowledgeable)

1. 7. What motivated you to take the Nanaimo Climate Pledge?

Please select the best answer.

- Somebody I knew was also taking the pledge.
- I am worried about the effects of climate change.
- I believe we all need to change our behaviours to avoid the worst effects of climate change.
- I feel responsible for my contribution to climate change and want to make a change.
- Prefer not to answer.
- Other

1. 8. Before taking the Nanaimo Climate Pledge, please rate your commitment to taking individual climate action.

Rate your commitment level from 1 (Took no actions) to 5 (Very committed)

1. 9. How many people do you know personally who took the Nanaimo Climate Pledge?

Please provide a rough estimate.

1. 10. How many other people (neighbours, co-workers, family) have you talked to about taking the Nanaimo Climate Pledge?

In section 2 in the follow-up survey, the questions are determined based on individual responses in their Nanaimo Climate Pledge. For example, questions about progress on specific actions would only appear if the person had committed to that specific action. If an action was skipped, the question asking why they skipped that action would appear instead. If an action was marked as “already being done,” a respondent would have no questions related to that action in the follow-up survey.

2. 1. Have you held or planned your climate meeting?

Please select the best answer.

- Yes, I held my climate meeting.
- Yes, I planned my climate meeting (but it has not happened yet).
- I have not yet had or planned my climate meeting.
- I am no longer able to hold a climate meeting.
- Other

2. 2. Why did you decide not to hold a climate meeting at this time?

Please select the best answer.

- Family/friends not interested.
- No time to hold a meeting.
- My friends/family already talk about what we can do for climate change; we don't need a special meeting.
- Prefer not to answer.
- Other

2. 3. Why did you decide to not commit to switching to an electric heat pump?

Please select the best answer.

- Cannot afford an upgrade right now.
- Currently renting or live in a strata that does not allow it.
- We heat our home using an alternative sustainable heating method.
- Prefer not to answer.
- Other

2. 4. How is your progress on your commitment to switch to an electric heat pump?

Please select the best answer.

- I have researched options.
- I have installation estimates.
- I have booked the installation.
- The heat pump is already installed.
- Other

2. 5. Have you been able to discuss switching to a heat pump with your strata or landlord?

Please select the best answer.

- Yes- with a positive response.
- Yes- we have started an ongoing conversation.
- We have discussed it but so far they are less receptive to the idea.
- I have not yet had the opportunity, but I will soon.
- We have scheduled a meeting but it hasn't happened yet.
- I am no longer able to discuss switching to a heat pump with my strata or landlord.
- Other

2. 6. How is your experience eliminating beef from your diet?

Please select the best answer.

- I no longer eat any beef.
- I have successfully reduced my beef consumption, and plan to eliminate it.
- I am finding it difficult to eliminate beef from my diet.
- I already rarely ate beef and have now eliminated it from my diet.
- Other

2. 7. How is your experience eliminating dairy from your diet?

Please select the best answer.

- I no longer consume dairy.
- I have successfully reduced my dairy consumption, and plan to eliminate it.
- I am finding it difficult to eliminate dairy from my diet.
- I already rarely consumed dairy and have now eliminated it from my diet.
- Other

2. 8. How is your experience eliminating pork from your diet?

Please select the best answer.

- I no longer eat any pork.
- I have successfully reduced my pork consumption, and plan to eliminate it.
- I am finding it difficult to eliminate pork from my diet.
- I already rarely ate pork and have now eliminated it from my diet.
- Other

2. 9. How is your experience eliminating chicken from your diet?

Please select the best answer.

- I no longer eat any chicken.
- I have successfully reduced my chicken consumption, and plan to eliminate it.
- I am finding it difficult to eliminate chicken from my diet.
- I already rarely ate chicken and have now eliminated it from my diet.
- Other

2. 10. Before taking the Nanaimo Climate Pledge, how many times did you eat beef per week on average?

Please select the best answer.

- 1 time every 2 weeks
- 1-2 times per week
- 3-4 times per week
- 5 or more times per week

2. 11. Since taking the Nanaimo Climate Pledge, how many times have you eaten beef per week, on average?

- Less than 1 time every two weeks
- 1 time every two weeks
- 1-2 times per week
- 3-4 times per week
- 5 or more times per week
- I have not changed my diet yet

2. 12. Before taking the Nanaimo Climate Pledge, how many times did you eat pork per week, on average?

Please select the best answer.

- Less than 1 time per week
- 1-2 times per week
- 3-4 times per week
- 5 or more times per week

2. 13. Since taking the Nanaimo Climate Pledge, how many times have you eaten pork per week, on average?

Please select the best answer.

- Less than 1 time every two weeks

- Less than 1 time per week
- 1-2 times per week
- 3-4 times per week
- 5 or more times per week
- I have not changed my diet yet

2. 14. Before taking the Nanaimo Climate Pledge, how many times did you eat chicken per week?

Please select the best answer.

- 1 time per week
- 2-3 times per week
- 4-5 times per week
- 6 or more times per week

2. 15. Since taking the Nanaimo Climate Pledge, how many times have you eaten chicken per week, on average?

Please select the best answer.

- Less than 1 time per week
- 1 time per week
- 2-3 times per week
- 4-5 times per week
- 6 or more times per week
- I have not changed my diet yet

2. 16. Before taking the Nanaimo Climate Pledge, how many times did you consume dairy per week?

Please select the best answer. If you drink coffee or tea with milk or cream, consider 4 or 5 coffees as 1 time. Specialty coffees with dairy (ex. latte) should be considered 1 time.

- 1-3 times per week
- 4-7 times per week

- 8-12 times per week
- 13 or more times per week

2. 17. Since taking the Nanaimo Climate Pledge, on average how many times per week did you consume dairy?

Please select the best answer. If you drink coffee or tea with milk or cream, consider 4 or 5 coffees as 1 time. Specialty coffees with dairy (ex. latte) should be considered 1 time.

- 1-3 times per week
- 4-7 times per week
- 8- times per week
- 13 or more times per week
- I have not changed my diet yet

2. 18. Why did you decide not to reduce or eliminate beef from your diet as part of your Nanaimo Climate Pledge?

Please select the best answer.

- I already eat very little beef.
- I grew up eating beef and it is an important part of my diet.
- My lifestyle requires a high-protein diet.
- Prefer not to answer.
- Other

2. 19. Why did you decide not to reduce or eliminate dairy from your diet as part of your pledge?

Please select the best answer.

- I already consume very little dairy.
- I rely on dairy as a protein source.
- I am allergic to (or do not like) many alternative sources of milk and vegan cheeses.
- Prefer not to answer.
- Other

2. 20. Why did you decide not to reduce or eliminate pork from your diet as part of your pledge?

Please select the best answer.

- I already eat very little pork.
- I grew up eating pork and it is an important part of my diet.
- My lifestyle requires a high-protein diet.
- Prefer not to answer.
- Other

2. 21. Why did you decide not to reduce or eliminate chicken from your diet as part of your pledge?

Please select the best answer.

- I already eat very little chicken.
- I grew up eating chicken and it is an important part of my diet.
- I keep eating chicken as a source of protein to eat a varied diet.
- Prefer not to answer.
- Other

2. 22. Why did you decide not to commit to prioritizing second-hand clothing?

Please select the best answer.

- Finding quality second-hand clothing takes longer (and I don't have the time).
- I rarely buy clothing.
- I do not know where to find second-hand clothing.
- Prefer not to answer.
- Other

2. 23. Before taking the Nanaimo Climate Pledge, how far did you drive your gas/diesel vehicle per week, on average?

Please select the answer that best reflects an estimate of the average weekly distance.

- 0- 75 km per week
- 75- 150 km per week
- 150- 225 km per week
- 225- 300 km per week
- More than 300 km per week

2. 24. Since taking the Nanaimo Climate Pledge, how many kilometers do you drive your gas/diesel vehicle per week, on average?

Please select the answer that best reflects an estimate of the average weekly distance.

- 0- 50 km per week
- 50- 100 km per week
- 100- 150 km per week
- 150- 200 km per week
- More than 200 km per week

2. 25. How is your progress on your commitment to switch to an electric vehicle?

Please select the best answer.

- I have researched makes and models.
- I have decided on a make/model.
- I am actively looking for used EVs.
- I am on a waitlist for an EV.

- I have purchased or put a deposit on an EV.
- Other

2. 26. Why did you decide not to switch to an electric vehicle at this time?

Please select the best answer.

- I do not own a vehicle.
- I cannot afford an EV at this time.
- I intend to purchase an EV in the future, but not near-term.
- I do not have access to charging stations.
- Prefer not to answer.
- Other

2. 27. Why did you decide not to commit to flying less?

Please select the best answer.

- I need to fly for work.
- I need to fly to be able to visit family.
- I really want to be able to travel, and I am reducing my impact elsewhere.
- I prefer to focus on off-setting my air travel (by purchasing offsets, for example).
- Prefer not to answer.
- Other

2. 28. How is your progress on switching away from major banks?

Please select the best answer.

- I have switched banks.
- I have taken steps to move my money away from major banks.
- I have decided I am no longer able to switch banks.

- Other

2. 29. Why did you decide not to commit to switching away from major banks?

Please select the best answer.

- I need the capabilities of a larger bank.
- I am happy with my existing banking.
- I prefer a bank which has multiple locations and offers easy access even while away from home.
- Prefer not to answer.
- I am prioritizing divestment from CO2e polluting industries to make my money climate friendly.
- Other

2. 30. How is your progress on divesting from CO2e polluting industries?

Please select the best answer.

- I have divested from CO2e polluting industries.
- I have taken steps to move my money away from CO2e polluting industries.
- I have an appointment with a financial advisor to discuss climate-friendly investment options.
- I have not yet changed my investments, but I will do so in the near future.
- Other

2. 31. Why did you decide not to commit to moving your investments away from CO2e polluting industries?

Please select the best answer.

- I do not have large investments.
- I am not aware of alternatives.

- The alternatives that I am aware of do not offer good returns.
- Prefer not to answer.
- I am prioritizing switching to a local credit union to make my money climate friendly.
- Other

2. 32. Have you written a letter to your MP or MLA?

Please select the best answer.

- Yes, I have sent a letter to my MP and/or my MLA, with a positive response.
- Yes, I have sent a letter to my MP and/or my MLA, but have not yet received a response.
- I have drafted a letter to MP/MLA.
- I have not yet started a letter to my MP/MLA.
- Other

2. 33. Why did you decide not to send a letter to your MP/MLA?

Please select the best answer.

- I don't have time to send a letter.
- I don't know what to say.
- I don't know how to best communicate with my representative.
- I don't believe my MP/MLA will read it or take action.
- Prefer not to answer.
- Other

2. 34. How is your progress on your commitment to join a climate action organization?

Please select the best answer.

- I have identified local climate action organizations.
- I have not been able to find local climate action organizations.
- I have reached out to a climate action organization to get involved.

- I have participated in climate events.
- Other

2. 35. Why did you decide not to join a local climate organization?

Please select the best answer.

- I don't have time to join an action organization.
- I don't know any climate organizations in my area.
- I already volunteer my time for other issues that are also important to me.
- Prefer not to answer.
- Other

This last, optional question was also given to all respondents.

3. Is there anything else you would like to share about why you decided to take the Nanaimo Climate Pledge, or about your progress so far?

Please share!

Appendix E Door-to-door Survey

Do you have 5 minutes to share your thoughts on climate change?

1. On a scale of 1 to 5, how concerned are you about the climate crisis? 1 being not at all concerned and 5 being very concerned?

2. Have you already experienced the effects of the climate crisis? What did you experience?

3. a) To achieve global climate goals and avoid the worst effects of climate change, which group(s) should take action? I will read out each group, and you can respond yes or no.

National government? Yes/no
Provincial government? Yes/no
Local government? Yes/no
Multi-national or large corporations? Yes/no
Small or local businesses? Yes/No
Individuals or households? Yes/no

b) Is there a group that you think needs to act that I didn't mention?
c) Of the groups mentioned, is one group's actions more important than others? Which?
d) Of the groups mentioned, is one group's actions the least important? Which?

4. How knowledgeable do you consider yourself to be of effective actions that individuals can take to reduce their carbon and greenhouse gas emissions, on a scale of 1 to 5, where 1 is no knowledge and 5 is very knowledgeable?

5. What are three important things you can do, as an individual, to help address the climate crisis and reduce your personal greenhouse gas emissions?
6. What are your biggest obstacles or challenges to taking personal action on climate action?
7. Would you be willing to consider taking a pledge to commit to the actions which are feasible for you and your lifestyle?
8. Would it be helpful to have a list of clear, simple actions that outline how you could reduce your personal greenhouse gas emissions?

Appendix F External Outreach Projects

Climate Access

Stated Objective

- "nonprofit organization focused on building political and public support for climate and clean energy solutions by developing and promoting effective communication and engagement approaches"

Target Audience and Area

- United States
- non-profit and government agencies (and networks)

Strategies and Promoted Actions

1. resource and training center
2. "strategic framing and narrative development" (strategic guidance aka lobbying)
3. activation and engagement (Community outreach)

Additional Outreach/Strategy Details

- Strategy 1: "runs a resource and training center for more than 3,600 members from nonprofits, government agencies and academic institutions; breaks down polarization and motivates action through strategic framing and narrative development; and creates activation and engagement models that involve a diverse range of community members in creating and implementing climate action plans and programs"
- Strategy 3: VR to show possible futures; engage stakeholders/ community members in local climate action legislation (sometimes those most affected by climate change)

Monitoring and Outcomes

- feedback from members to adapt program components
- "We use social science, polling, best practices from the field and stakeholder interviews to inform the design of outreach strategies and work with our partners to implement and test the approach"
- an example project: City of Boston (Greenovate Community Leaders)

Links and Published Resources

- [Impact Report 2019](#)

St. Francis Xavier University – Community Climate Change Engagement

Stated Objective

- to develop a Local Climate Action Plan (municipal policy)

Target Audience and Area

- New Glasgow, Nova Scotia

Strategies and Promoted Actions

- funding the community outreach/engagement to develop municipal policy

Additional Outreach/Strategy Details

- N/A

Monitoring and Outcomes

- Is ongoing (funded March 2021), no further details

Links and Published Resources

- [Action Research Project Page](#)
- [Project Description Document](#)

Neighbourhood Climate Action Champions

Stated Objective

- Equip and empower residents with skills and capacities to take on climate projects and encourage others to do so in their neighbourhoods;
- Part of Toronto's Climate Action plan/strategy

Target Audience and Area

- Toronto residents, over 18

Strategies and Promoted Actions

- Communicate, collaborate, connect, contribute
- "After the training, participants will engage with their neighbours in discussions about climate change and develop innovative neighbourhood-focused climate action projects. With the help of a toolkit, participants will identify specific greenhouse gas reduction goals for the neighbourhood and develop a plan to reach these goals within the community."
- Funds **several** projects

Additional Outreach/Strategy Details

- have a toolkit to give step-by-step communication instructions to neighbourhood climate action champions

Monitoring and Outcomes

- Projects include:
 - i. Agincourt loves cycling (promoting biking w workshops etc)
 - ii. Asphalt painting (eco paints and challenges to get to paint more)
 - iii. Ecobuddies (sustainable action friend)
 - iv. Engage, Learn, and Transform Woburn (equipment sharing)
 - Wild About Pollinators (example garden workshops)
 - v. Pocket Change Mural and Sustainable Energy Education
 - vi. Soupalicious in-the-Park (soup and workshop event)

Links and Published Resources

- [Website](#)

Take the Jump

Stated Objective

- to encourage action on climate change

Target Audience and Area

- UK, individuals anywhere

Strategies and Promoted Actions

- encouraging people to take the 6 actions, or whatever they are able, according to their capacity;
- they have "ambassadors" trainings

Additional Outreach/Strategy Details

1. end clutter (keep items 7 years)
2. travel- no personal vehicles
3. plant-based diet
4. max 3 new clothing items per year
5. one flight every 3 years
6. "life shift" to help change system

Monitoring and Outcomes

- No information, seems to have started in 2021.

Links and Published Resources

- [Website](#)
- [Report](#): Individuals have direct influence over about 25-27% of needed reductions
- No evaluation of project itself

Toronto Environmental Alliance (TEA)

Stated Objective

- Organization's objective: advocating for a "green, healthy and equitable city" and act as a watchdog at City Hall

Target Audience and Area

- Toronto
- Sowing seeds guide: targets "organizations and individuals undertaking work to engage residents on climate change issues"

Strategies and Promoted Actions

- lobby government and engage public
- CC focus: "To help reduce greenhouse gas pollution and get Toronto ready for climate change, TEA:
 - (a) works with local, provincial and national environmental organizations to reduce climate change gases
 - (b) advocates for policies at City Hall that will prepare Toronto for the changing climate"
- developed engagement principles and then tested them.

Additional Outreach/Strategy Details

- Used a "Connected Communities Approach" (detailed in TEA-sowing the seeds doc)
- ALSO partnered with community hubs, see below for 4 case studies

Monitoring and Outcomes

- Some information in case study reports. See in particular feasibility study.

Key Insights

(from engagement guide)

1. Identify and build relationships with leaders ready to act
2. Participatory design and execution
3. Co-explore risks and responses (visualizations and potential future scenarios, for ex)
4. Localize it
5. Focus the ask and be bold
6. Values-based framing (community well-being issues)
7. Creativity and competition (art, incentivizing success)

Links and Published Resources

- [Website](#)
- Guide: [Engagement Principles](#)
- Guide: [Sowing the Seeds for Local Climate Leadership](#)
- [Community Hubs](#) case studies:
 1. [Climate Ambassador Training](#) (TEA + Bathurst-Finch Unison Hub)
 2. [Climate Justice Circles](#) (TEA + Parkdale Activity-Recreation Centre)
 3. [Solar-powered community hubs](#) (TEA + Bathurst-Finch Unison Hub)
 4. [Mutual Aid Network](#) (TEA + Parkdale Activity recreation Centre)
- also has a [FEASIBILITY assessment](#) for working with community hubs

Pocket Change

Stated Objective

- "to reduce individual and collective carbon footprints" and get to net-zero

Target Audience and Area

- Neighbours of the Toronto Neighbourhood "The Pocket" (east Danforth area of Toronto)

Strategies and Promoted Actions

- "retrofit our houses, make the switch to more sustainable transportation options, green our yards and public spaces, and others"

Additional Outreach/Strategy Details

- have an executive committee
- hold neighbourhood events (potlucks, etc)
- educational webinars

- RETROFIT COORDINATION SERVICE
- also has a transportation committee (and advocates for charging stations, etc), working on a "charge share" initiative

Monitoring and Outcomes

- ONLY RETROFITS: Progress as of January 2022:
22 total Changemakers;
22 energy audits complete; 19 Retrofit Roadmaps done; 10 electric air source heat pumps installed, the most significant step towards reducing a home's emissions;
10 homes with significant improvements to their building envelopes, with new widow and insulation upgrades;
4 homes where solar panels have been installed, producing clean electricity;
11 deep retrofits planned, underway, or complete;
6 retrofits complete;
2 homes completely off "natural" gas

Links and Published Resources

- [Website](#)

Giki Zero

Stated Objective

- reduce carbon footprint, uses a carbon calculator and has an app

Target Audience and Area

- based in UK
- Has info for: Australia, Canada, France, Germany, India, Ireland, Italy, Netherlands, Spain, United Kingdom, United States, Global
- individuals, small businesses, and large companies (charge for companies)--- even though they have a company platform, based on PERSONAL footprints, not company ones

Strategies and Promoted Actions

- "With a few simple questions we can estimate your carbon footprint. You can then choose from over 150 steps to find ways to reduce it."- uses a personalized carbon calculator
- Actions are varied, include turning off lights, dietary changes, clothing changes, etc.

Additional Outreach/Strategy Details

- Targets climate change and other environmental issues; idea is to provide simple steps to get started on taking action.

Monitoring and Outcomes

- "We measure the amount of carbon, water and single use plastic that we're helping people save as well as the number of steps that they are taking."
- December 2021: "over 13million kg of carbon, 300 million litres of water and 800,000 pieces of single use plastic"
- has very specific calculations about their own emissions and corporate footprint
- earliest blog post is from May 2018

Facts

- "At the moment the average carbon footprint in high income countries is around 10 tonnes and by 2030 this needs to be 2.5 tonnes."

Links and Published Resources

- [10 ways to cut a tonne](#)

Climate Outreach

Stated Objective

- bridging research and practitioners/public; "reveals how to – and how not to – communicate effectively about climate change."
"1. significantly build and sustain cross-societal support for climate action in nations critical for global decarbonisation
2. overcome political polarisation in countries where it is impeding action on climate change
3. turn concern into action on key behaviours, policies and corporate responsibility"

Target Audience and Area

- registered in UK and in Europe /but also work in other places in the world (includes ex. "fisherman in Egypt"

Strategies and Promoted Actions

1. Communities (including more varied narratives)
2. Lifestyle changes
3. Policy and just transition
4. Impacts and adaptation
5. Visuals and media
6. Science communicators

Additional Outreach/Strategy Details

1. driving climate conversations across society;
2. finding ways to talk about climate change across the political spectrum;
3. changing the way millions of people see climate change;
4. accelerating understanding of how to mainstream low-carbon lifestyles;
5. working with local partners in countries around the world; and
6. working to ensure a just transition is at the heart of our path to net zero

Monitoring and Outcomes

- 2004- began as COIN (Climate Outreach Information Network); became Climate Outreach in 2015
- Some monitoring / outcome info available in numerous reports.

Key Insights

1. "Meaningful and long-lasting changes to the way we live require government-led policies, but also shifts in social and cultural norms driven by citizens."
2. "Talking about climate change with the people around us is a crucial part of making change. Campaigns should encourage peer-to-peer communications."
3. "Campaigns that focus on the motivations and values that underpin behaviours are therefore more likely to be successful." (not coercion)
4. "craft messages about behaviour change that focus on intrinsic values (such as compassion and community cohesion) rather than extrinsic values (such as wealth, power and social status)"
5. "Encouraging people to consciously think about adopting low-carbon behaviours is a crucial element of campaigns that successfully promote low-carbon lifestyles. This is in contrast to seeking to nudge behaviour change by, for example, highlighting incentives or offering 'opt out' rather than 'opt in' schemes."
6. "Behaviour change campaigns should build people's confidence and belief they can make a difference – known as 'self-efficacy'"

7. "It is important to focus on the audiences and behaviours where intervention can make the most difference, and acknowledge people's differing levels of responsibility and capacity to make changes."

Links and Published Resources

- [Website](#)
- Report: [Climate Outreach Theory of Change](#)