

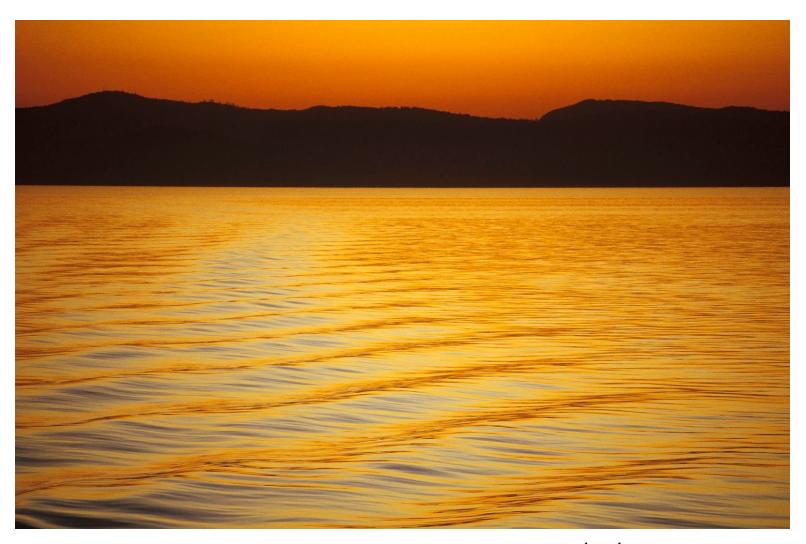
North Saanich Climate Change Select Committee Report to Mayor and Council

July 8, 2020

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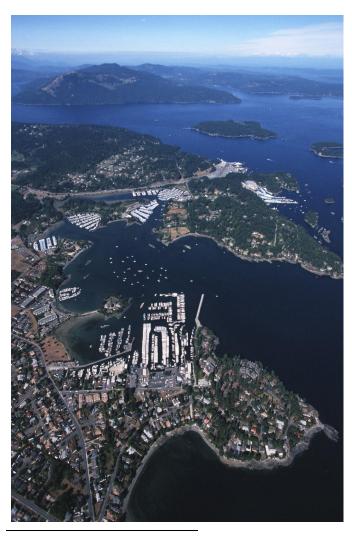
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## **Territorial Acknowledgement**



We are grateful to be living on the traditional territory of the WSÁNEĆ people. We are glad to be on a learning journey and look forward to working together to take action on climate change.

## **Executive Summary**



The District of North Saanich (DNS) is committed to taking action to address the climate change emergency and has targeted carbon neutrality by 2030. 1

The Climate Change Select Committee (CCSC)<sup>2</sup> was established in December 2019 to provide recommendations to the North Saanich Council on how the District could most effectively focus action to address climate change. Through in-person and virtual meetings, the committee: developed a work plan; generated an extensive, but by no means exhaustive, list of potential actions; assessed the actions against agreed criteria<sup>3</sup> to prioritize them; and developed this report.

The CCSC focused on actions that:

- are practical;
- are within DNS jurisdiction to implement;
- take into consideration Council's competing priorities;
- make the best use of staff time;
- greatly reduce greenhouse gas emissions (GHGs) and;
- capture atmospheric GHGs.

We have identified the most promising pathways forward, and some of the actions that North Saanich should prioritize. Due to time limitations we are unable to currently provide detailed project descriptions. As a committee, we are ready to provide more input to support Council's decisions around immediate actions and during climate action plan development.

<sup>&</sup>lt;sup>1</sup> See Appendix 1 for definitions of climate change, climate change emergency, and carbon neutral. See Appendix 2 for the District's climate action history.

<sup>&</sup>lt;sup>2</sup> See Appendix 3 for further background on the CCSC mandate and activities.

<sup>&</sup>lt;sup>3</sup> See Appendix 4 for the evaluation criteria and guiding principles used during action development and assessment.

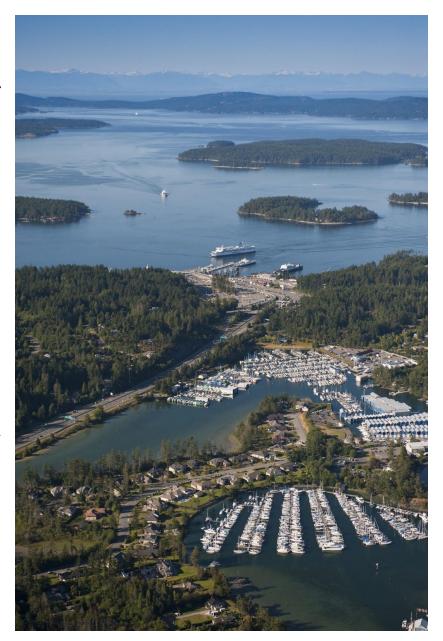
## **Taking Action on Climate Change**

While the COVID-19 pandemic presented an organizational challenge to the CCSC, it also served as a demonstration of society's ability to take decisive action when needed to prevent a serious problem from becoming worse. Climate change is a slower moving problem, but one with an even larger impact. There is a temptation on the part of many people to wait and see whether climate change really is as big a problem as scientists say it will be. If that same attitude predominated with COVID-19, society's actions would have been too late to prevent much greater illness and death.

When the CCSC considered the scale of GHG emission reductions necessary to achieve carbon neutrality in both corporate and community emissions by 2030, it became clear that these reductions will largely need to come from the choices made by individual residents and businesses.

North Saanich municipal operations are directly responsible for a very small percentage of emissions, mainly through the buildings, equipment, and vehicles the District operates. While Council needs to show leadership by reducing emissions from its operations, these reductions will be a small percentage of the total needed.

The District's bylaws and policies on matters such as land use, buildings and tree protection need to reflect our carbon neutral goal. This work will indirectly but meaningfully reduce emissions by residents and businesses over time. A clear vision and direction from Council is key for how North Saanich, both as a municipality and a community, is taking action on climate change.



### **Key Recommendations**

Our recommendations fall into the following five categories and are elaborated upon in this report.<sup>4</sup> We have identified below what we believe to be the most important recommendations among many we propose in each category:

## o <u>Municipal Operations</u>

- Apply a "climate lens" to all Council and staff decisions to ensure that policies, plans, bylaws and activities incorporate climate change and climate justice considerations.
- Hire a climate action specialist, on staff.

### o Community Engagement

- A 10-year community engagement strategy is required in order to achieve climate neutrality by 2030, in both corporate and community emissions.
- Use DNS communication mechanisms to share climate change information, resources and opportunities with residents.

## o <u>Transportation</u>

- Amend affordable housing policy to limit new secondary suites, laneway houses and higher density housing to areas well-served by transit and close to services and job centres.
- Participate in regional efforts to expand the EV charging network and encourage EV infrastructure retrofits for existing residential and commercial buildings by collaborating with BC Hydro and the provincial government to create incentives.



## o <u>Buildings</u>

• Update the Official Community Plan (OCP) and zoning bylaws to encourage or require climate friendly development.

#### Natural Asset Management

Map ecosystem services within DNS lands and coast to assess and enhance carbon capture potential.

<sup>&</sup>lt;sup>4</sup> Rationale or background for numerous recommended actions marked with an asterisk are provided in Appendix 5.

### **Next Steps**

The CCSC supports North Saanich Council's intention to develop a climate plan — a significant project that will require staff and Council time for research and consultation. It is unlikely that a climate action plan will be completed in 2020; however, it is critical that Council not wait until the climate action plan is completed before taking action.

The CCSC has identified three immediate actions that can be undertaken prior to the adoption of a climate action plan. Understanding that the District's annual strategic plan is already set, taking these actions as soon as possible is consistent with the urgency of the issue, and would demonstrate Council's commitment to climate action. Immediate actions include:

- Using a climate lens for all Council and staff decisions;
- Hiring a climate specialist; and
- Reviewing the list of recommendations and additional actions to determine if there are any items that could be incorporated into staff's current work plan.

The mandate of CCSC was fairly narrow: to provide advice on how to reduce emissions. Therefore, our recommendations focused on mitigation rather than adaptation measures. We recognize that mitigation and adaptation measures are complementary

and necessary to create a climate resilient province. It was clear to the committee that climate change is inextricably linked to the broader issues of "community resilience" and "community sustainability".

While the narrow mandate and six month timeframe were appropriate for advising Council on how to move forward on climate change, further engaging the CCSC can include ongoing advice and support. The CCSC recommends that Council create a Community Climate Change Committee. <sup>5</sup> Lastly, while the CCSC considered staff time, resources and costs associated, we had limited access to some information to make a fulsome assessment and therefore made some assumptions. The CCSC recommends that Council ask staff to review and report back on the feasibility and resources needed to implement the 19 recommendations.

<sup>&</sup>lt;sup>5</sup> See Appendix 6 for a sample terms of reference for a community climate change committee.

## **MAIN REPORT**



How can 11,249 North Saanich residents rise to the challenge of reversing global warming?

### **The Broad Context**

The most recent Intergovernmental Panel on Climate Change (IPCC) report estimates that we have an eight year window to reduce emissions from human activity enough to restore atmospheric balance. Such a major shift in a short period would require an extreme amount of resources and significant support from all levels of government, sectors of industry, and individual citizens.

Under the Paris Agreement, Canada's federal government committed to reducing the country's GHG emissions by 30% below 2005 levels by 2030.<sup>6</sup> The Auditors General of Canada found that seven out of 12 provinces and territories did not have an overall target for reducing GHG emissions by 2020, and only New Brunswick and Nova Scotia were on track to meet their targets with current actions.<sup>7</sup> They reported that there was limited coordination between governments, potentially resulting in decreased capacity for effective policy and action.

The BC Auditor General reports that the province has not fully assessed the risks from climate change. It underscores the need for both adaptation and mitigation to create a climate resilient province.

Only 50 local governments in BC reported being carbon neutral in their corporate emissions in 2018  $^8$  even though 187 municipalities signed The *British Columbia Climate Action Charter* in 2007 committing to:

- Becoming carbon neutral in their corporate operations;9
- Measuring and reporting their community's GHG emissions through the Climate Action Revenue Incentive Program (CARIP);
- Creating complete, compact, more energy efficient communities.



 $<sup>\</sup>frac{6}{\text{https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/progress-towards-canada-greenhouse-gas-emissions-reduction-target.html}$ 

 $<sup>^7 \</sup> https://www.oag-bvg.gc.ca/internet/English/parl_otp_201803\_e\_42883.html$ 

https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/local-governments/planning-land-use/carip\_2018\_summary.pdf

<sup>&</sup>lt;sup>9</sup> In 2014, the Green Communities Committee created the Becoming Carbon Neutral Guide to help local governments on measuring and taking climate action https://www.toolkit.bc.ca/sites/default/files/BecomingCarbonNeutralGuideV3.pdf

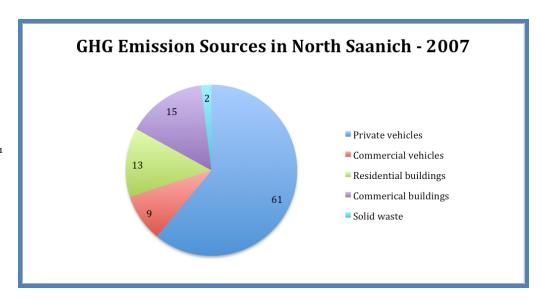
### The North Saanich Context

When it comes to how communities can best deal with climate change, "one size does not fit all". Climate actions need to be tailored to reflect the specific characteristics of DNS.

#### **Emissions Data**<sup>10</sup>

According to the District of North Saanich's *Community Energy and Emissions Inventory* (CEEI) data for 2007—the most recent year for which transportation emissions data is available—transportation accounts for 32,672 tonnes of the community's total 46,464 tonnes of GHG emissions, or 70% of the overall emissions.<sup>11</sup>

In its 2018 CARIP report, DNS reported 228 tonnes of CO<sub>2</sub> equivalent for its 2018 municipal emissions, a minor fraction of the overall community emissions.



## **Population and Geography**

- In 2016, the population of North Saanich was 11,249, which was an increase of 1.4% from 2011. North Saanich is growing slowly compared to the provincial average of 5.6% growth and the national average of 5%. <sup>12</sup>
- Our average age is 50. North Saanich residents are on average older than residents of the CRD, BC and Canada.
- 81% of our homes are single-family detached. "Single-family homes are... more difficult to service with public transit as they are dispersed and residents are more likely to drive as opposed to walk, cycle or take transit." <sup>13</sup>
- In 2015, the median income of households in North Saanich was \$103,296. Residents who have higher than average incomes often have lifestyles with higher carbon footprints. Conversely, more disposable income may be available for individual climate actions (e.g., home retrofits, low/zero emissions vehicles, offsetting, charitable donations).

 $\frac{\text{https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E\&Geo1=CSD\&Code1=5917005\&Geo2=CD\&Code2=5917\&SearchText=north%20saanich\&SearchType=Begins\&SearchPR=01\&B1=All\&TABID=1\&type=0$ 

<sup>&</sup>lt;sup>10</sup> See Appendix 7 for additional metrics for DNS and opportunities for measurement.

<sup>&</sup>lt;sup>11</sup> CEEI data 2012, North Saanich Climate Change Action plan. See Appendix 9 for reference and link.

<sup>&</sup>lt;sup>12</sup> Census statistics in this section are taken from:

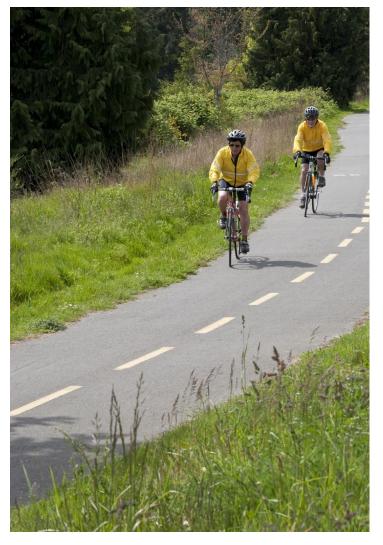
<sup>&</sup>lt;sup>13</sup> CEEI data 2012, North Saanich Climate Change Action Plan

- We tend to be highly educated, with a majority of the population attaining post-secondary education.
- Most of our community emissions, 62%, come from extensive single-occupancy private vehicle use. Local travel and interest in aging-in-place means that better access to flexible modes of transportation and service delivery is desired. North Saanich residents have a higher rate of cycling trips than Sooke, Parksville, Central Saanich, and Colwood.<sup>14</sup>
- While most of our travel by car is local, our higher income means that we travel by air too, leading to higher footprints.
- Most residents and businesses already heat with clean, sustainable electricity, so while energy retrofits should be encouraged, they provide less opportunity to reduce emissions than in other communities.
- There is limited commercial activity within North Saanich, with the exception of the Victoria International Airport.
- As a semi-rural community with significant agricultural, forest and coastal ecosystems, we can capture CO<sub>2</sub> and other GHGs while supporting local food systems.

The CCSC considered many of the above characteristics when developing and reviewing options for potential climate actions, and identifying those that are the most appropriate and promising.

Our relatively large per capita "carbon footprint" compared to many communities, also comes with purchasing power for "green lifestyle" choices. Similarly, while North Saanich may not be able to reduce emissions through strategic residential densification, its semi-rural nature and its agricultural, forest and marine ecosystems play important roles in

dealing with climate change, from increasing food security to pulling carbon out of the atmosphere.



<sup>&</sup>lt;sup>14</sup> CEEI data 2012, North Saanich Climate Change Action Plan

## **Recommendations**

It should be no surprise, based on the above, that the CCSC concluded that community engagement is key to addressing climate change. North Saanich Council is in a position to engage and motivate residents and businesses, and to work with our First Nations and neighbouring governments, towards a shared vision. Farmers, larger corporations, and our youth are examples of important allies and partners. <sup>15</sup>

Given that most of our emissions are from transportation and buildings, this should remain a key focus for our actions. Enhancing our natural areas will make us more resilient to potential impacts of climate change and amplify our ability to capture GHGs while providing multiple additional benefits.

From an extensive list of potential climate change actions that the CCSC developed, we have compiled and categorized a refined list of recommendations to Council. The committee's time was limited and focused on the areas we felt would have the greatest impact.

The key recommendations are in bold, with other recommendations following. <u>Additional ideas</u> are actions raised by the group, some of which could have significant impact and should be considered. Given the lack of current GHG emission data, the CCSC used estimates available in credible research to evaluate ideas and strategies.

Further context for numerous actions noted below with an \* is provided in Appendix 5.



<sup>&</sup>lt;sup>15</sup> Tseycum and Pauquachin Reserves are not under municipal authority and the Victoria International Airport, and the BC Ferries terminal are under limited municipal jurisdiction; however, collaboration with these authorities can lead to significant actions to address climate change.

## **Municipal Operations**

The District should demonstrate leadership in climate action by pursuing emissions reductions in its operations and developing institutional capacity for ongoing attention to climate change.

- 1.1 Apply a climate lens to all Council and Staff decisions to ensure that policies, plans, bylaws, and activities incorporate climate change and climate justice considerations. \*
- 1.2 Hire a climate action specialist, on staff. \*
- 1.3 Review DNS financial plans and ensure that the funding of community climate action initiatives matches the urgency of the climate emergency.
- 1.4 Maintain CCSC as an advisory body, and ensure it includes youth representation.<sup>16</sup>

#### **Additional Ideas**

- 1.5 Partner with a Gold Standard offset provider, to ensure that DNS is carbon neutral in terms of its municipal operations. This action can be taken immediately. \*
- 1.6 Bring household waste collection under DNS, including landfill, yard and food waste. \*
- 1.7 Assess municipal operations for solar and wind suitability.
- 1.8 Develop plan to phase out use of fossil fuels in municipal vehicles (e.g., zero emissions vehicles, renewable diesel). \*
- 1.9 Phase out use of fossil-fuel powered small equipment (e.g., mowers, leaf blowers). \*
- 1.10 Identify climate change action and learning opportunities for staff.
- 1.11 Consider a socially responsible investment program (e.g., Impact GIC). \*
- 1.12 Post climate action resources for all community stakeholders (e.g., youth, farmers) on the DNS website, such as youth-led climate action groups based in schools and in the community.

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taff.
act GIC). \*
e.g., youth, farmers) on the DNS website, such as mmunity.

<sup>&</sup>lt;sup>16</sup> See Appendix 6 for sample Terms of Reference

## **Community Engagement**

North Saanich can show leadership by reducing emissions from its own operations, however most of the emission reductions required to meet District targets will need to come from the choices made by individual residents and businesses. Engaging our residents, farmers, youth, Indigenous communities and businesses to take action is key to addressing climate change. They have expertise and ideas about what works best for them and how to move forward quickly.

- 2.1 A 10-year community engagement strategy is required in order to be fully climate neutral by 2030, in both corporate and community emissions.
- 2.2 Use regular DNS communication mechanisms to share climate change information, resources and opportunities with residents.\*
- 2.3 Partner with First Nations communities on land, sea and climate change projects. \*
- 2.4 Engage with large DNS corporations on climate action strategy and explore collaborative efforts (e.g., Thrifty's, Viking Air, VAA and BC Ferries).
- 2.5 Engage co-op students to conduct household emissions inventory to create a baseline to measure impact of future actions.



- 2.6 Identify group purchasing options for green power for neighbourhoods and share information with residents.
- 2.7 Create awareness/have a contest/tracking system regarding individual choices (e.g., international travel, car use, home energy use). \*
- 2.8 Engage residents and private contractors in a campaign to switch to battery-operated landscaping equipment.
- 2.9 Consider ways to mitigate roadside runoff and pollution from marine activity and maintenance.
- 2.10 Build partnerships with local climate action groups and schools to facilitate collaborative events and efforts.<sup>17</sup>
- 2.11 Identify demonstration projects and areas that feature climate action opportunities, learning and technology (e.g., use Sandown as a climate action learning venue).
- 2.12 Encourage the personal purchase of offsets to mitigate lifestyle emissions.
- 2.13 Engage small and medium businesses in climate action and waste optimization. \*
- 2.14 Engage residents in low emissions food consumption choices, food waste reduction opportunities, and local food procurement.
- 2.15 Engage and support the farming community on minimum-input, no tillage (MINT) crop production, organic farming and farming best management practices (e.g., fertilizer application, soil and tissue testing, precision agriculture). \*
- 2.16 Support capacity development for agricultural businesses to achieve climate friendly agricultural practices.



<sup>&</sup>lt;sup>17</sup> See Appendix 8 for a list of community and student groups with which to engage on climate change..

### **Transportation**

In North Saanich, close to 70% of the GHG emissions generated come from transportation of all types. This is the largest single source of GHG emissions for North Saanich, as it is for most jurisdictions in North America. Transportation emissions reduction is a necessary focus that DNS must support.

- 3.1 Amend affordable housing policy to limit new secondary suites, laneway houses, and higher density housing to areas well-served by transit and close to services and job centres. \*
- 3.2 Participate in regional efforts to expand the EV charging network and encourage EV infrastructure retrofits for existing residential and commercial buildings by collaborating with BC Hydro and the provincial government to create incentives.
- 3.3 Work with BC Transit to increase ridership of NS residents (e.g., creating additional routes, park and ride lots, on-demand transit, free passes). \*

- 3.4 Support strategies for zero emissions personal mobility (e.g., electric bikes), and recreational vehicles (e.g. boats).
- 3.5 Work with businesses in DNS to reduce emissions from fleets.
- 3.6 Adopt an anti-idling bylaw.



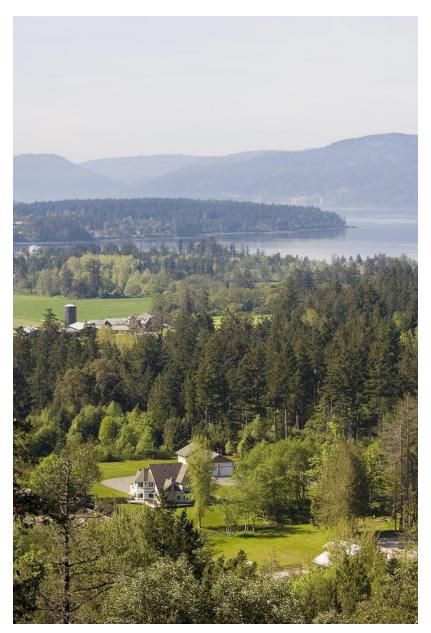
## **Buildings**

Close to 30% of the GHG emissions in North Saanich are generated from buildings. For this reason it is important to focus initiatives in the district on helping residents reduce their use of fossil fuels for home energy and increase efficiency in their homes.

## 4.1 Update OCP and zoning bylaws to encourage or require climate friendly development. \*

4.2 Increase energy efficiency of new and renovated buildings, by moving to the highest level of the "Step Code". In consideration of the building industry, this is best done region-wide, in coordination with all municipalities in the CRD.

- 4.3 Support building industry capacity development and homeowner awareness for achieving climate friendly buildings, through information sessions, etc.
- 4.4 Research residential homes energy upgrades financing options such as Property Assessed Clean Energy (PACE), Local Improvement Charge (LIC) financing and utility on-bill financing. \*



## **Natural Asset Management**

Our rural nature and strong coastal features endow us with considerable area for carbon capture both on land and in the ocean. BC's "blue carbon" stocks (e.g., eelgrass and other marine species) capture the equivalent of emissions from 200,000 cars every year.<sup>18</sup>

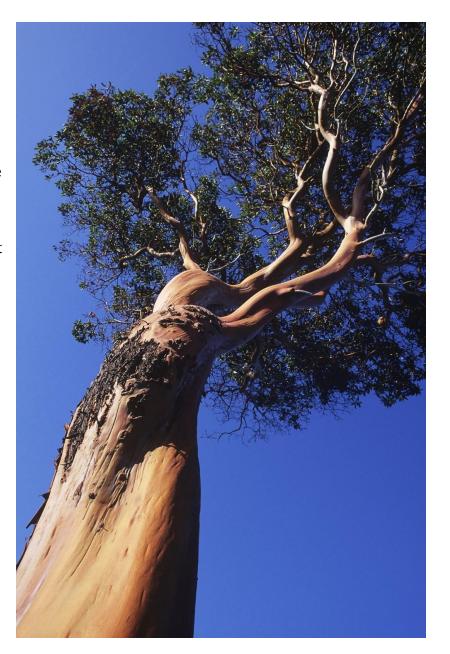
The Insurance Bureau of Canada 2018 report<sup>19</sup> on natural infrastructure underscores the need to restore and retain natural areas as they create resilience to natural disasters and have multiple additional benefits to communities. Maintaining and increasing forest carbon stocks could create the greatest mitigation benefits.<sup>20</sup>

## 5.1 Map ecosystem services within DNS lands and coast to assess for carbon capture potential. \*

- 5.2 Identify increased carbon capture opportunities for all municipally owned or controlled lands (e.g., forests, wetlands, shorelines, nearshore, soil, grasslands, gardens, agriculture). \*
- 5.3 Protect and plan for wild areas in DNS including the airport lands. \*
- 5.4 Expand development permit areas for promotion of energy and water conservation, cooling, reduction of GHG emissions and community resilience.
- 5.5 Revise the sustainability checklist for rezoning, development permits and OCP updates to account for the value of natural assets relative to natural infrastructure and community resilience in adapting to climate change.

  Develop a comparable checklist to provide advice for building permit applicants.

<sup>&</sup>lt;sup>20</sup> https://pics.uvic.ca/sites/default/files/uploads/publications/WP\_Forestry\_November2008.pdf



https://thetyee.ca/News/2012/07/05/BCCarbonMapLessons/ https://sierraclub.bc.ca/wp-content/uploads/2015/08/Blue-Carbon-British-Columbia-Report.pdf

<sup>19</sup> http://assets.ibc.ca/Documents/Resources/IBC-Natural-Infrastructure-Report-2018.pdf

- 5.6 Investigate regional ecosystem services mapping and the sharing of a municipal ecologist.
- 5.7 Maximize shoreline setbacks where possible to facilitate marine carbon capture (i.e., blue carbon), protect properties, and support the marine food chain with beaches that promote forage fish and therefore tourism values. \*
- 5.8 Create a climate cooling strategy and revise the tree protection bylaw to support it. Double the rate of trees planted to enhance the urban forest.
- 5.9 Adopt policy on grassland height to maximize carbon drawdown. \*
- 5.10 Work with the CRD and provincial government to reduce/eliminate the use of harmful fertilizers and pesticides. \*
- 5.11 Incentivize planting of effective carbon sequestering native species on private property.
- 5.12 Encourage residents to keep and expand hedgerows, both for carbon capture and native species habitat. \*
- 5.13 Create policy that affirms the Right of Nature. \*



#### **Continue Current Actions**

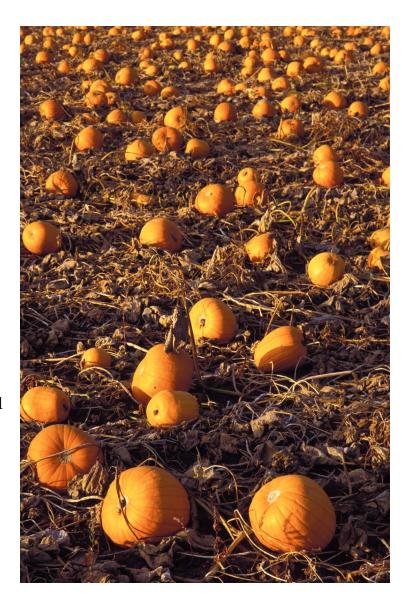
The District of North Saanich Council has taken, and is currently taking, action to address climate change. The CCSC recommends that Council continue taking the following actions:

- Form partnerships to focus on building affordable and higher density housing in areas already identified;
- Top up provincial grants for homeowner energy efficiency efforts;
- Implement the climate-related actions found in the Whole Community Agricultural Strategy Implementation Plan;
- Consider ways to grow and capitalize on the Climate Neutral Reserve fund currently at \$68,000;
- Ban or significantly reduce backyard burning and create opportunity for processing yard waste to reduce methane and CO<sub>2</sub> emissions; and
- Update tree protection bylaw to reflect ecosystem services.

## **Actions Requiring Additional Authority**

The CCSC limited its recommended actions to those that were within the current jurisdiction of municipalities in BC. There are a number of actions that would be helpful but could not be undertaken unless current provincial and federal legislation was changed to give North Saanich, and other local governments, additional authority. These actions are listed here so that Council can consider whether it wishes to work with other local governments, through the Union of BC Municipalities, to lobby the provincial and federal governments for expanded powers.

- Create incentive for battery-operated home landscaping equipment;
- Ban sale of invasive plant species;
- Ban single use plastics; \*
- Ban the use of wood stoves for heating in new homes;
- Phase out oil and non-renewable natural gas heating;
- Create an incentive/tax break on locally sourced products & materials.



## **Next Steps**

The best time to take urgent action on climate change was decades ago. The next best time is now.

The CCSC supports the North Saanich Council's intention to develop a climate plan. Such a plan will provide a valuable process for consultation with the community on climate issues, goals and actions. When completed, the plan will serve as the long-term vision for how Council and the community can address the climate challenge. The plan should include a climate change risk assessment, a greenhouse gas emissions inventory, specific goals and actions, and an explanation of how progress will be monitored and reported.

The reality is that a climate plan requires research and considerable consultation, and it will take a year or more to complete. Therefore, the CCSC has identified some actions that can and should be taken immediately, or in the very short term, before the climate plan is completed. Some of these actions will have a significant impact and can also help ensure that the climate plan process is successful. These include:

- hiring a climate specialist; and
- using a climate lens for all Council and staff decisions.

Demonstrating early action, or "walking the talk", is particularly important because North Saanich will need to rely primarily on community buy-in to reduce emissions.

The CCSC is ready to provide ongoing advice and support as the District takes its next steps. Initially, we feel it would be beneficial for the CCSC to present its work to Council.



## **APPENDICES**



## **Appendix 1: Definitions**

#### **Carbon Neutral**

Having achieved a state in which the net amount of human-caused carbon dioxide or other carbon compounds emitted into the atmosphere is reduced to zero because it is balanced or offset with an equivalent amount of human-caused carbon emission removals over a specific period of time by actions to reduce or offset these emissions.<sup>21</sup>

## **Climate Change**

In general, climate change refers to the overall warming of the atmosphere around the planet. Average temperatures rise due to high levels of carbon dioxide, methane and nitrous oxide (greenhouse gases) released from the combustion of fossil fuels (coal, oil, and natural gas), agricultural activities, changes in land use, and natural sources.

A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in averages and/or variability, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings such as modulations of the solar cycles, volcanic eruptions and persistent human-caused changes in the composition of the atmosphere or in land use. Note that the United Nations Framework Convention on Climate Change (UNFCCC), in its Article 1, defines climate change as: a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.<sup>22</sup>

<sup>&</sup>lt;sup>21</sup> https://www.dictionary.com/browse/carbon--neutral and District of North Vancouver: https://www.dnv.org/programs-services/community-energy-and-emissions-plan-ceep

<sup>22</sup> https://www.ipcc.ch/sr15/chapter/glossary/

### **Climate Emergency**

As a global community, we may be able to avert runaway global warming if we can keep the atmospheric temperature rise below 2°C by 2050. "While there will still be serious climate impacts at 1.5°C, this is the level scientists say is associated with less devastating impacts than higher levels of global warming. Every fraction of additional warming beyond 1.5°C will bring worse impacts, threatening lives, livelihoods and economies:

- At 1.5°C, over 70% of coral reefs will die, but at 2°C, over 99% of reefs will be lost.
- Insects, vital for pollination of crops and plants, are likely to lose half their habitat at 1.5°C but this becomes almost twice as likely at 2°C.
- The Arctic Ocean being completely bare of sea ice in summer would be a once per century likelihood at 1.5°C but this leaps to a once a decade likelihood at 2°C.
- Over 6 million people currently live in coastal areas vulnerable to sea level rise at 1.5°C degrees. At 2°C this would affect 10 million more people by 2100.
- Sea-level rise will be 100 centimeters higher at 2°C than at 1.5°C.
- The frequency and intensity of droughts, storms and extreme weather events are increasingly likely above 1.5°C."<sup>23</sup>

Climate scientists have pointed to troubling and unprecedented changes to biospheric and atmospheric conditions that are indications of impactful climate change. An emergency connotes danger or instability and that immediate action is required, or disastrous consequences will occur. There is urgency for global action.

On June 17, 2019, the District of North Saanich declared a climate emergency and set a goal of achieving carbon neutrality by 2030.

"The acknowledged crisis-state of the environment has sparked activity at the local level, where municipalities, including the three on the Saanich Peninsula, as well as the Capital Regional District, have entertained (some have passed) motions declaring a Climate Emergency. Reaction at the municipal and regional level is highly appropriate given most of our country's infrastructure is controlled by these levels of government and they/we have much to lose economically, environmentally, and from a community health perspective were damage resulting from climate breakdown to occur. Think of the devastation wrought by forest fires and flooding." - Saanich Peninsula Chamber of Commerce<sup>24</sup>

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<sup>&</sup>lt;sup>23</sup> https://www.unenvironment.org/explore-topics/climate-change/facts-about-climate-emergency

<sup>&</sup>lt;sup>24</sup> Act like the house is on fire; Saanich Peninsula Chamber of Commerce.

## **Appendix 2: DNS Climate Action History**

"In 2010, the District of North Saanich adopted Bylaw No. 1231, which amends the Official Community Plan to establish greenhouse gas reduction policies, targets and actions to meet the requirements of the Local Government Act. The District set ambitious targets to reduce community GHG from 2007 levels by: 8.5% by 2015, 25% by 2020, and 45% by 2040." <sup>25</sup>

The district's regional context statement (RCS 18.7) states that North Saanich will "Decrease community GHG emissions by 33% from 2007 levels by 2020, and 61% by 2038."

In 2012, the District engaged the Sustainability Solutions Group Workers Cooperative to develop The Climate Change Action Plan (CCAP). There is no record of endorsement of the plan by the District. This plan focused on six areas:

- 1. Rebating building permit fees that meet Built Green Gold standard;
- 2. Assessing the District's Community Energy and Emissions Inventory;
- 3. Assessing costs and viability of promoting low-emission vehicles use;
- 4. Updating the municipal organic waste diversion program;
- 5. Developing the terms of reference for a municipal Climate Change/Energy Committee; and
- 6. Keeping the content of these focus areas appropriate and meaningful for a rural/agricultural community.

The District of North Saanich website<sup>26</sup> lists a number of Climate Action Initiatives it has undertaken since 2012, including:

- Replaced three aging fleet vehicles with electric vehicles and installed a public charging station
- Installed 40 solar panels at the Municipal Hall, which generate 15,000 kWh annually
- Introduced the implementation of the Provincial Energy Step Code Regulations
- Incentivize residents to switch fossil fuel heating systems to energy efficient systems with the CleanBC rebate top up
- Upgrades to the Municipal Hall

Mitigating climate change impacts was one of council's strategic priorities in 2019. In June of 2019, North Saanich Council declared a climate emergency, set an ambitious target of being carbon neutral by 2030, and established the CCSC to provide recommendations to mitigate GHG emissions ahead of a climate change plan in 2020.

<sup>&</sup>lt;sup>25</sup> https://sites.google.com/a/sustainabilitysolutions.ca/north-saanich-project-pages/home

<sup>&</sup>lt;sup>26</sup> https://northsaanich.ca/your-community/environment/climate-action-initiatives/

## **Appendix 3: The Climate Change Select Committee**

## **Recruitment, Selection and Establishment**

In October 2020, the District of North Saanich issued a call on its website and in the *Peninsula News Review* newspaper for applications to the CCSC. Council conducted interviews with selected applicants and invited six applicants to serve on the CCSC. Councilors Pearson and Weisenberger offered to serve as Council's representatives on the CCSC. Upon the request of Councilor Pearson to gain student representation, outreach to Parkland High School resulted in the addition of two students to the CCSC.

The CCSC was established in December 2019 and will exist until June 30, 2020.

#### Committee members:

- Patricia Pearson (Chair)
- Murray Weisenberger (Councillor)
- Nancy Balcom
- Mark Brownlie
- Jeff Daines
- Anne-Marie Daniel
- Anna Hulbert (Student)
- Alan Osborne
- Aimee Roberts (Student)
- Jack Thornburgh

#### **Mandate**

The purpose of the CCSC is to provide recommendations on climate change issues referred by Council, which may include but are not limited to:

- Providing background information for staff's Climate Action Strategy work in 2020;
- Identifying possible projects to reduce North Saanich's carbon footprint;
- Providing advice on where North Saanich can most effectively concentrate resources to help with climate change.

The CCSC was asked to provide a report by June 2020. Additionally, in December 2019 Council directed the CCSC to provide a work plan to Council in late January 2020.

## **Meetings**

The CCSC met on a monthly basis from December 2019 through March 2020, at which point in-person meetings were no longer possible due to COVID-19 restrictions. The CCSC held several small working group teleconference calls starting in late March. In-person meetings resumed in June 2020, with the last meeting taking place on June 30th, 2020. All in-person meetings were attended by DNS staff in a non-voting capacity to provide background information, clarity and guidance, and to record the proceedings.

#### **Work Plan**

The CCSC developed a work plan and shared it with Council in late January 2020. The work plan included the following elements:

- Provide a brief overview of relevant data (e.g., census, household, environment).
- Identify guiding principles to influence our research and focus of potential actions.
- Develop evaluation criteria to assess the strength and success of potential actions.
- Research efforts of other jurisdictions and bring together relevant information.
- Develop a "Big Moves" (i.e., high impact) list of actions based on evaluation criteria.
- Develop detailed projects based on a short list of focus areas.
- Designate recommended actions as easy/medium/hard and as short-/medium-/long-term.

### **Idea Generation and Assessment**

Many committee members came to the group with extensive climate change experience. Initially, CCSC members conducted independent research to identify promising actions undertaken by other municipalities, provincial and federal initiatives, best practices identified by NGOs, and community and youth based initiatives. Ideas were also gathered from informal conversations with other North Saanich residents. Two actions were referred to the committee by Council.

The CCSC then broke into three groups to assess a long list of potential actions against the previously agreed evaluation criteria. This was refined to a shortlist of actions that were practical, within the District's jurisdiction, and had the greatest potential to reduce and/or capture GHGs. The recommendations were then recategorized to best suit types of actions (municipal vs. community) and general topics (such as transportation, buildings, etc).

There is limited hard data to evaluate the impact of potential climate actions and only high level data as a general profile of emissions in each municipality. Timeframes and resources to accomplish various actions are rough estimates. We identified the most promising pathways forward based on logic and proven track record in light of DNS priorities.

#### Referrals

The CCSC received two referrals from Council during their term.

- Request to review the opportunity for using renewable fuel for fleet vehicles. The CCSC is recommending as part of the *Municipal Operations* actions that DNS consider the use of renewable diesel in an effort to transition to a zero emissions fleet. See 1.8 *Develop plan to phase out use of fossil fuels in municipal vehicles* in Appendix 5 for related resources.
- Request to review letter from Saanich Mayor Haynes regarding the Global Covenant of Mayors for Climate & Energy Change. The CCSC is recommending this be reviewed at a later date by the Climate Specialist, a new role recommended by the committee. There are many possible initiatives and groups for the DNS to join or commit to, and the committee felt it would be best for the person in this new position to make any related recommendations.

## **Appendix 4: Evaluation Criteria and Guiding Principles**

#### **Evaluation Criteria**

The following evaluation criteria were developed and considered by the CCSC:

- Jurisdiction
- Impact measurability<sup>27</sup>
- Time frame
- Cost to North Saanich
- Resource availability
- Community support
- Co-benefits to other functions in the District
- Connectivity of natural areas to amplify function
- Confidence level

## **Guiding Principles**

### An Emergency is not Business as Usual

Taking meaningful action on the current climate emergency will require substantial change and the overcoming of significant barriers. North Saanich has many worthwhile objectives, however they are not all of equal weight, and the actions required to deal with climate will in many cases, by necessity, need to outweigh other objectives and priorities.

#### **A Climate Lens on all Decisions**

Many day-to-day decisions have climate implications. All future decisions made by Council need to incorporate climate impacts, both mitigation and adaptation. Questions on how potential decisions affect climate need to be incorporated into all staff reports to Council. Once a climate lens is developed it should also be applied to significant past decisions of Council that have yet to be fully implemented, to determine whether a "course correction" may be required to address climate considerations.

### **Jurisdiction**

North Saanich has direct control over a relatively small portion of greenhouse gas emissions that are generated within its

<sup>&</sup>lt;sup>27</sup> There is limited hard data to evaluate the impact of potential climate actions. Consequently, our review against this criterion was qualitative in nature. The committee also determined that timeframes and resources to accomplish various actions were difficult to assess, and would require staff input.

boundaries but has some influence over a much larger portion. To be clear on jurisdiction, proposed actions need to acknowledge whether North Saanich has the current legal authority or whether the proposal requires action by another jurisdiction, inter-jurisdictional cooperation or that North Saanich needs additional legal authority to implement the action.

### **Feasibility**

Proposed climate actions ultimately need to be achievable given the financial and staff resources of North Saanich. However, given that climate is an emergency, it can be expected that additional and reallocated resources will be required.

### **Incremental and Transformative Change**

Change does not only come as significant disruption. We should celebrate the many small actions that citizens and organizations can take, but also focus on actions that translate into transformative progress.

## Measurable, Credible and Logical

Ideally the outcomes of proposed actions will be measurable with accessible, credible data that will give assurance that the expected impact will be achieved. Where credible data is not available, potential actions need to be evaluated based on their logical outcomes. Measurements should follow an accepted global standard.

## **Transparency and Accountability**

North Saanich residents should be kept informed of progress on achieving the plan elements. Regular public reporting that includes performance data and progress on targets will help to keep the District accountable on promised actions.

## **Building on Success**

While North Saanich and other communities have already taken action on climate, much more needs to be done. Proposed actions should build on actions that have proven to be effective in North Saanich and other communities. It should be recognized that actions that have been successful in other communities, will not necessarily work here; they need to be considered in the unique local circumstances of North Saanich.

## **Public Buy-in and Acceptance**

Addressing the climate emergency will require significant changes, some of which will be disruptive or at least inconvenient to residents and businesses, and the burden will not necessarily be equally shared. To increase public support, all proposed actions need to be explained as to why they are necessary and why alternative actions were not chosen.

### **Outreach and Involvement**

Public participation in every facet of the climate plan is essential to its success. Residents will support action if they haven't taken part in developing the plan. Outreach should be frequent.

## **Alliances and Partnerships**

When considering potential actions it will be important to consider which individuals or organizations can assist in its success, and what alliances or partnerships could be established to increase the success. We will go further together than apart.

## **Appendix 5: Additional Context on Select Listed Actions**

Rationale or background for numerous recommended actions marked in the main report with an asterisk are provided in this section.

1.1 Apply a "climate lens" to all Council and staff decisions to ensure that policies, plans, bylaws and activities incorporate climate change and climate justice considerations.

A climate lens would prompt the following questions:

- o Will it decrease the use of fossil fuels?
- o Will it help us to capture greenhouse gases?
- o Are there partnerships and/or programs we can leverage to increase impact?
- o Does it consider the full lifecycle of infrastructure?
- o Does it hinder or enable equity and access for all?

A climate lens should be applied to:

- o Reports to Council;
- o Strategic Plan and Financial Plan;
- o New and revised Official Community Plan, other bylaws and policies;
- o Infrastructure projects and procurement of goods and services; and
- o Lifecycle costing for major expenditures.<sup>28, 29</sup>
- **Hire a climate action specialist, on staff.** This person would support Council and staff in using the climate lens, research where other local governments have been successful, ensure North Saanich is taking full advantage of grants, information and data related to climate change, coordinate community engagement, and other initiatives. Establish cross departmental climate action working groups and professional development to support them.

<sup>28</sup> 

https://www.crd.bc.ca/docs/default-source/crd-document-library/plans-reports/climate/corporateclimateactionstrategy.pdf?sfvrsn=e2372bca 4#:~:text=The%20CRD%20will%20pr ovide%20a%20climate%20lens%20for%20Board%20decision%2Dmaking.&text=Accelerate%20corporate%20climate%20adaptation%20activities,emissions%20for%20new%20fleet%20vehicles

<sup>&</sup>lt;sup>29</sup>https://www.infrastructure.gc.ca/pub/other-autre/cl-occ-eng.html#1.1

## 1.5 Partner with a Gold Standard offset provider, to ensure that DNS is carbon neutral in terms of its municipal operations.

- o To achieve carbon neutrality and meet our commitment under the 2007 BC Climate Action Charter, a local government must balance its total corporate greenhouse gas emissions each year. The easiest way to do this is to buy a carbon offset. A carbon offset is a credit for emissions reductions achieved by one party that can be sold to another party to compensate for its emissions. DNS could meet its commitment immediately through the purchase of carbon offsets for the current year.
- o The Gold Standard for offsets ensures that key environmental criteria have been met by energy efficiency and renewable energy projects. San Ramon, Costa Rica has expressed interest in partnering as a sister city to offset North Saanich's emissions. <a href="mailto:srcarbono@hotmail.com">srcarbono@hotmail.com</a> <a href="http://www.sanramon-carbononeutral.org/">http://www.sanramon-carbononeutral.org/</a>
- o In subsequent years, climate actions taken by the District and residents would reduce the total emissions as well as create offsets through initiatives within the community and therefore reduce the cost of buying offsets.

### 1.6 Bring household waste collection under DNS, including landfill, yard and food waste.

- o Reduces emissions from multiple collection companies' trucks traveling around
- o Will increase proper disposal of kitchen scraps (methane reduction)
- o In general, increases overall compliance with waste separation
- o Creates a potential solution to yard waste hauling as this could be included in the service
- o Municipality has more control over various aspects of the service: could require low emission vehicles as part of its RFQ, can control the end treatment of the waste and where it is treated

## 1.8 Develop plan to phase out use of fossil fuels in municipal vehicles (e.g., zero emissions vehicles, renewable diesel).

City of Vancouver renewable diesel program <a href="https://vancouver.ca/green-vancouver/green-fleets.aspx">https://vancouver.ca/green-vancouver/green-fleets.aspx</a>.
 Contact: Evan Dacey, P.Eng, Equipment Manager, 604.326.4786

## 1.9 Phase out use of fossil-fuel powered small equipment (e.g., mowers, leaf blowers).

- Virtually all yard equipment suppliers have battery options widely available. In addition to reducing GHG emissions, battery powered equipment will reduce noise and create the possibility of using solar energy to recharge the batteries.
- The City of Vancouver passed the following motion: <u>https://parkboardmeetings.vancouver.ca/2019/20190128/DECISION-RenewalStrategy-LandscapeEquipment-TowardsEmissionFreeReality-20190128.pdf</u>

### 1.11 Consider a socially responsible investment program (e.g., Impact GIC by Canaccord Genuity).

• According to Stephnie Munro, Director of Financial Services, IMPACT GICs go through both positive and negative screening. Negative screening encompasses 10 categories in activities that must be avoided such as fossil fuels, fast fashion, and institutions with poor human rights as examples. Positive screening ensures that funds are loaned out in a sustainable way to meet, at minimum 1 of the 17 SDGs. <a href="http://cgcashgroup.ca/institutional/socially-responsible-investing">http://cgcashgroup.ca/institutional/socially-responsible-investing</a>

## 2.2 Use regular DNS communication mechanisms to share climate change information, resources and opportunities with residents.

- Share educational resources on renewable energy rebates, grants, and retrofit programs with residents;
- Feature rebates on zero emission vehicles;
- o Inform residents of zoning, OCP and other changes that are made specifically to address climate change; and
- o Promote community and student events related to climate change.

### 2.3 Partner with First Nations communities on land, sea and climate change projects.

- Understanding what Pauquachin and Tseycum First Nations need in order to support the resilience of their communities is very important. Leveraging the climate actions we take to reduce emissions, capture GHGs, offset emissions, transition to renewable energy and address sea level rise should support overall ecosystem health and community wellbeing for everyone.
- o If we assess the potential for renewable energy and GHG capture on the peninsula, we can look for collaborative opportunities that bring economic as well as environmental benefits to all communities. Federal funding is available for economic diversification for communities transitioning from fossil fuels and a call for proposals under the Disaster Mitigation and Adaptation Fund to address the impacts of climate change, adjusting the program as required to ensure that the most impactful projects are supported, including those related to natural infrastructure, whether they are from small, rural and Indigenous communities or large urban centres.

https://pm.gc.ca/en/mandate-letters/2019/12/13/minister-infrastructure-and-communities-mandate-letter

## 2.7 Create awareness/have a contest/tracking system regarding individual choices (e.g., international travel, car use, home energy use).

- Personal carbon calculator: <u>https://www.saanich.ca/EN/main/community/sustainable-saanich/climate-change/carbon-fund-calculator.</u>
   html
- Climate Action Guidebook: https://www.saanich.ca/EN/main/community/sustainable-saanich/climate-action-guidebook.html

### 2.13 Engage small and medium businesses in climate action and waste optimization.

• Film showing (e.g., WWF – Our Planet, Our Business) followed by discussion https://www.wwf.org.uk/our-planet-our-business

# 2.15 Engage and support the farming community on minimum-input, no tillage (MINT) crop production, organic farming and farming best management practices (e.g., fertilizer application, soil and tissue testing, precision agriculture).

- After reviewing the literature, the committee determined that farming methods, and food consumption and waste account for the greatest amount of greenhouse gas emissions. The committee felt that many actions were already covered well in the Whole Community Agricultural Strategy and Implementation Plan, so we did not create a separate agriculture section for this report.
- The National Farmers Union report outlining the climate change issues in farming practices is an excellent source: <a href="https://www.nfu.ca/publications/tackling-the-farm-crisis-and-the-climate-crisis/">https://www.nfu.ca/publications/tackling-the-farm-crisis-and-the-climate-crisis/</a>

## 3.1 Amend affordable housing policy to limit new secondary suites, laneway houses, and higher density housing to areas well-served by transit and close to services and job centres.

- Allowing these housing options throughout the municipality results in extra vehicles on the road, and car dependence puts pressure on the family budget.
- https://www.renewablecities.ca/op-ed/op-ed-hidden-solutions-to-affordability-and-climate-c hange

## 3.3 Work with BC Transit to increase ridership of NS residents (e.g., creating additional routes, park and ride lots, on-demand transit, free passes).

- Transit use will be increased if park and ride facilities were provided at various points on the peninsula, including near Wain Rd. and Land's End Rd.
- Having a clear understanding of what levels of transit would be provided if the municipality implemented certain densities and zoning would help plan areas with the potential to have a higher level of transit service.

Examples of 'On Demand Transit' systems that would be helpful for DNS: Belleville - <a href="https://www.citybuildinginstitute.ca/portfolio/odt-data-analysis/">https://www.citybuildinginstitute.ca/portfolio/odt-data-analysis/</a>, Calgary: <a href="https://www.calgarytransit.com/news/calgary-transit-demand">https://www.calgarytransit.com/news/calgary-transit-demand</a>

## 4.1 Update OCP and zoning bylaws to encourage or require climate friendly development.

- This includes using development permit areas and density bonuses for: EV charging for multi-family and commercial buildings; solar orientation; zero-emissions heating and cooling; permeable driveways and parking surfaces; drought-resistant plantings; etc. It also includes updating zoning measures such as setbacks from the sea.
- The OCP should recognize that the climate change contributions of a largely rural, agricultural and heavily
  forested community are very important but also very different from more urbanized areas. The plan should
  include a comprehensive set of actions to reduce emissions and should also identify actions to make the
  community more resilient to climate change.

## 4.4 Research residential home energy upgrades financing options such as Property Assessed Clean Energy (PACE), Local Improvement Charge (LIC) financing and utility on-bill financing.

- The Federation of Canadian Municipalities' Community Efficiency Financing program is offering funding to Plan, implement and scale up innovative financing models for residential energy projects. <a href="https://fcm.ca/en/programs/green-municipal-fund/community-efficiency-financing">https://fcm.ca/en/programs/green-municipal-fund/community-efficiency-financing</a>
- PACE is a financing tool that allows residential and commercial owners to put a lien on their municipal property tax to finance energy efficiency and/or clean energy retrofits. <a href="https://www.pacebc.ca/">https://www.pacebc.ca/</a>

## 5.1 Map ecosystem services within DNS lands and coast to assess for carbon capture potential.

- Assign values to "natural assets" on the municipal balance sheet including carbon capture, natural stormwater infrastructure, air and water filtration, cooling, biodiversity, etc. Identify the key corridors and gaps in connectivity.
- What are Municipal Natural Assets: Defining and Scoping Municipal Natural Assets Decision-Maker Summary <a href="https://mnai.ca/media/2019/07/SP\_MNAI\_Report-1">https://mnai.ca/media/2019/07/SP\_MNAI\_Report-1</a>- June2019-2.pdf
- o https://www.bcauditor.com/pubs/2018/managing-climate-change-risks-independent-audit
- $\circ \quad \underline{\text{http://www.ibc.ca/on/resources/studies/natural-infrastructure-is-an-underutilized-option}\\$
- https://ourtrust.org/wp-content/uploads/downloads/2015-11 Trust ClimateResilience OCPResourceGuide.pdf
- Ecosystem Services Toolkit <a href="https://biodivcanada.chm-cbd.net/documents/ecosystem-services-toolkit">https://biodivcanada.chm-cbd.net/documents/ecosystem-services-toolkit</a>

## 5.2 Identify increased carbon capture opportunities for all municipally owned or controlled lands (e.g., forests, wetlands, shorelines, nearshore, soil, grasslands, gardens, agriculture).

o The municipality owns the land occupied by District Hall and the public works yard, numerous parks and the recently acquired Sandown property. All of these lands have the potential to be used in a way that pulls more carbon out of the atmosphere (e.g., through planting of trees and other carbon absorbing vegetation, and through the preservation of wetlands).

Carbon Sequestration in BC's Forests

https://pics.uvic.ca/sites/default/files/uploads/publications/WP\_Forestry\_November2008.pdf Carbon at Risk

https://sierraclub.bc.ca/wp-content/uploads/2015/08/Old-Growth-and-Carbon-report low-res-final1.pdf

O Currently, the setback from the natural boundary line under the DNS zoning bylaws is 15 metres. In new developments, redevelopments and forward planning setback distances from the shoreline of 30 metres from the natural boundary line, would prevent the need for future shoreline armouring to protect building structures. Additionally, the 30 metre setback will maximize natural shoreline function. Natural shorelines tend to provide a buffering effect from climate events (storm surge and other high water events) because riparian vegetation dissipates wave energy, while water can flood the top of armoured shorelines and the wave energy can dig out the material around the base of the seawall, which can result in it eventually collapsing. Additionally, natural erosion provides the material for forage fish to spawn in the beach and provides the type of beaches that humans enjoy being on.

Saanich Inlet and Peninsula Atlas of Shorelines

https://seachangesociety.com/wp-content/uploads/2015/10/SIPAS-Technical-Report.pdf

Nearshore Eelgrass Inventory 2012

http://www.islandstrust.bc.ca/media/232133/eelgrass%20inventory%20report.pdf

Blue Carbon Seagrass Mapping in Canada ....Developing an Algorithm and Quantifying Eelgrass Extent <a href="http://www3.cec.org/islandora/en/item/11725-blue-carbon-seagrass-mapping-in-canada-and-united-states-british-columbia">http://www3.cec.org/islandora/en/item/11725-blue-carbon-seagrass-mapping-in-canada-and-united-states-british-columbia</a>

o "Urban Forests: A Climate Adaptation Guide" is one source of ideas and best practices.

### 5.3 Protect and plan for wild areas in DNS including the airport lands.

• See MOU with VAA re: commitment to retain stand of trees on the southwest (east Saanich/Willingdon Road) approach to the airport. See also Community Stewardship Commission and Planning Commission

recommendations regarding protection of Airport Lands in 2016. Based on the information in the Pacific Institute for Climate Solutions Report - 1 hectare of second growth Pacific Maritime forest captures 375 non-renewable tonnes of CO2 per year. As federal lands these areas also must comply with the Species at Risk Act.https://pics.uvic.ca/sites/default/files/uploads/publications/WP Forestry November2008.pdf

## 5.9 Adopt policy on grassland height to maximize carbon drawdown.

 A North Saanich resident referred to this interview with former Lieutenant Governor The Honourable Judith Guichon about maximizing carbon storage in the soil by managing the height of grasslands. <a href="https://issuu.com/barbara.risto/docs/inspired\_senior\_living\_magazine\_jul">https://issuu.com/barbara.risto/docs/inspired\_senior\_living\_magazine\_jul</a>

## 5.10 Work with the CRD and provincial government to reduce/eliminate the use of harmful fertilizers and pesticides.

- https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/plant-health/pesticides-agriculture/using-pesticides/pesticides-urban-interface
- o <a href="https://www.crd.bc.ca/education/natural-gardening/pure">https://www.crd.bc.ca/education/natural-gardening/pure</a>

## Ban single use plastics

o GHG reduction is not the only goal or benefit of climate action. The chemistry of pollution from volatile organic compounds, particulate matter, contaminants, and waste including plastic must also be addressed if we want to support a quality of life locally and globally.

## 5.12 Encourage residents to keep and expand hedgerows, both for carbon capture and native species habitat.

- https://hedgerowsurvey.ptes.org/biodiversity
- o http://saanichnativeplants.com/uploads/Designing and Planting Hedgerows.pdf

## 5.13 Create policy that affirms the Right of Nature.

- https://therightsofnature.org/
- https://celdf.org/advancing-community-rights/rights-of-nature/
- https://ecwpress.com/products/rights-of-nature

## **Appendix 6: Sample Terms of Reference for a Community Climate Change Committee**

Council hereby establishes a committee pursuant to section 142 of the B.C. Community Charter, to be known as the North Saanich Community Climate Change Committee.

#### **Mandate**

- 1) The mandate of the Climate Change Committee is to provide advice and recommendations on climate change issues referred by Council, which may include but are not limited to:
  - a) ways in which the District of North Saanich can achieve carbon neutrality in corporate operations;
  - b) existing or proposed bylaws, policies and plans related to energy efficiency, carbon neutrality, climate adaptation, and the reduction of GHG emissions;
  - c) existing or proposed initiatives, pilot projects, and activities the District could participate in to promote energy efficiency, the reduction of GHG emissions, climate adaptation, and achieve carbon neutrality;
  - d) climate change community engagement activities; and
  - e) other areas identified by the Committee for approval by Council.

## **Membership**

- 1) The Climate Change Committee shall be appointed and constituted by Council as follows:
  - a) Two (2) members of North Saanich Council, one to act as Chair;
  - b) Up to six (6) residents or owners of property in North Saanich;
  - c) Up to two (2) students
- 2) Members shall be appointed for a term of (2) years, and may be reappointed for up to two (2) consecutive two-year terms. Appointments for community representatives shall be staggered such that half (1/2) of community representatives are appointed each year:
  - a) 2020
    - Half of community representatives appointed for one-year terms; and
    - Half of community representatives were appointed for two-year terms.
  - b) Subsequent Years

Half of community representatives were appointed for two-year terms.

- 3) Appointments will be made in accordance with the Council Committee System Policy.
- 4) A member who fails to attend three consecutive meetings, except for reasons of illness or with the leave of Council, will be deemed to have resigned their membership.

#### **Procedures**

- 1) The Committee will, at their organizational meeting each year, determine their monthly meeting dates and times, and will meet as required, or at the call of the Chair.
- 2) At the September meeting of each year, the Committee shall assign members as liaisons to other municipal committees as deemed appropriate by the Committee. Liaisons will attend the assigned committees' regular meetings.
- 3) A majority of the members appointed at any one time constitutes a quorum. Student members appointed shall not be used to determine quorum.
- 4) All matters that may come before the Committee shall be decided by a majority of those members present at a meeting, including the Chair. Negative votes will be recorded.
- 5) The Committee may hear and consider representations by any individual, organization, or delegation of citizens on matters referred by Council.
- 6) The Chief Administrative Officer will appoint a recording secretary for the Committee who will provide agendas and cause minutes of all meetings to be kept. The Chief Administrative Officer may also designate other municipal staff members to attend meetings as non-voting members.
- 7) The minutes shall include only such detail as is necessary to record the topics discussed at the meeting and the Committee's resolutions.

### Reporting

1) The Chair will present a copy of meeting minutes and a verbal report to Council.

## **Appendix 7: District of North Saanich Metrics and Opportunities for Measurement**

CEEI was developed to assist local governments in the implementation of Bill 27, the Green Communities Act, <sup>30</sup> which requires municipalities to have targets, policies and actions to reduce GHG emissions. The CEEI reports contain data on energy and GHG emission estimates in three primary sectors (buildings, on-road transportation and solid waste), and five "supporting indicators" (housing type, residential density, mode of commute to work, commute distance, and green space). CEEI data was released in 2007, 2010, and 2012.

According to the District of North Saanich's CEEI data for 2007, transportation accounts for 32,672 tonnes of the community's total 46,464 tonnes of GHG emissions, or 70% of the overall emissions. Of the 46,464 tonnes, small passenger cars account for 7,279 tonnes, large passenger cars account for 5,709 tonnes and light trucks, vans and SUVs account for 15,170 tonnes. There are 1.8 vehicles per household in North Saanich, with a vehicle mix that consists of 56% cars with the remainder being light trucks, vans and SUVs.

Public transit is provided by BC Transit for all of the CRD, with connections between North Saanich and the other municipalities in the CRD. BC Transit provides service to the two regional transportation hubs located in North Saanich, the BC Ferries Terminal at Swartz Bay and the Victoria International Airport. Ridership on the peninsula was 7,625 rides daily in 2009 as compared to 80,140 daily rides in the core region (Victoria, Saanich, Oak Bay, Esquimalt and View Royal) (BC Transit, 2011). The average public transit trip length in 2006 originating in North Saanich was 22.6 km; for destinations in North Saanich, it was 19.0 km.

North Saanich does not have a tool for accurately measuring GHGs. Estimates provided by other municipalities, the CRD, the provincial and federal government and international bodies such as the IPCC will guide the adoption of tools and measurement systems.

The CEEI recommends DNS track additional data on GHGs in the following areas:

- The GHG reductions associated with the production of local agriculture, as opposed to imported agriculture, enable the municipality to track the GHG emissions reductions associated with its efforts to encourage local agriculture.
- The GHG emissions associated with loss (or gain) of forest area can provide an incentive to increase forest cover.

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<sup>30</sup> https://www.leg.bc.ca/pages/bclass-legacy.aspx#/content/legacy/web/38th4th/1st\_read/gov27-1.htm

## **Appendix 8: Contact Information for Groups to Engage**

## **North Saanich Community Associations**

Organization	Contact	Email Address
North Saanich Residents Association	John Kafka: President	nsramembers@gmail.com or John@cornerplan.com
Dean Park Residents Association	Peter Jones: President	peterjones@carmanahconsulting.ca
PROW	David Tonken: President	tonken@icrossroads.com
Friends of Shoal Harbour	Bob Peart	bobpeart@shaw.ca
Saanich Peninsula Environmental Coalition	Bob Peart	bobpeart@shaw.ca
Friends of Dominion Brook Park	Ian Cameron: President	contactus@dominionbrookpark.ca
Peninsula Streams	Ian Bruce: Executive Coordinator	PeninsulaStreams@gmail.com
Friends of Dean Park	Maureen Dale	FriendsofJohnDeanPark@gmail.com
Friends of North Saanich Parks	Sharon Hope	sharonhope@shaw.ca
Saanich Inlet Protection Society	Michael Simmons	simmonsm@telus.net

Draft prepared by North Saanich Residents Association; March 2020

## **Local Youth Groups and Schools**

#### • Climate Strike Victoria (Our Earth, Our Future)

Group of youth who organize climate strikes on the first Friday of every month at the BC Legislature. They are a part of the nationwide network Climate Strike Canada. Core demands include a just transition to sustainable energy by ensuring opportunities for fossil fuel workers, the right to a healthy environment, conservation of biodiversity, the rights of indigenous peoples, and net GHG emission reductions of 75% over 2005 levels by 2030.

Link: <a href="https://www.ourearthourfuturevictoria.com">https://www.ourearthourfuturevictoria.com</a> Climate Stike Canada <a href="https://climatestrikecanada.org/">https://climatestrikecanada.org/</a> Email info@ourearthourfuturevictoria.com

#### • Climate Justice Victoria

Local organizers and youth on the Peninsula fighting for climate justice and a Green New Deal. They lead and advocate for local initiatives, such as a fare-free transit pass for youth in the Victoria region. Their "End LNG" campaign seeks to "mobilize pressure" on the BC government and transition from fracking and LNG extraction to renewable energy sources.

Link: <a href="https://www.climatejusticevictoria.ca/">https://www.climatejusticevictoria.ca/</a> Phone (778) 977-7565 Email info@climatejusticevictoria.ca

## • Climate Change Action Committee - Parkland Secondary School

A group dedicated to taking action and leading environmental initiatives within the school.

Link: https://parkland.sd63.bc.ca/ Phone (250) 655-2700 Email lchicanot@sd63.bc.ca

## • Go Green! Club - Stelly's Secondary

Open to all grades, this club is an environment awareness and action group.

Link: <a href="https://stellys.sd63.bc.ca/course/view.php?id=87">https://stellys.sd63.bc.ca/course/view.php?id=87</a>
<a href="mailto:Emailto:

#### • North Saanich Middle School

NSMS values sustainability, has a thriving greenhouse and recycling program, and is a great representation of functional green design, including solar collectors and reclaiming rainwater for components of their sewage system.

Link: https://northsaanich.sd63.bc.ca/ Phone (250) 656-1129

## • KELSET Elementary

KELSET Elementary has a recycling program and was built following the guidelines of the Canada Green Building Council.

## • Deep Cove Elementary

Deep Cove Planet Protectors have been competing in the BC green games since 2008. Link to their latest video: <a href="https://vimeo.com/343406971">https://vimeo.com/343406971</a> They have completed waste, transportation and energy audits.

## • South Island Climate Action Network (SI-CAN)

A network of South Island individuals from municipal and other climate action organizations. SI-CAN meets monthly to discuss activities relevant to the region on various climate action topics. *Email* Jane Devonshire <a href="mailto:janedev.lee@gmail.com">janedev.lee@gmail.com</a>

## **Appendix 9: Important Resources and Links**

#### 2020 Climate Plan - 100% Renewable and Resilient Saanich

https://www.saanich.ca/assets/Community/Documents/Planning/sustainability/2020-climate-plan-web-v13.0.pdf This is a complete plan to achieve stated goals. Describes focus areas, 130 actions, and strategies to achieve success. It appears to be a good model for North Saanich's use.

#### **BC Climate Action Toolkit**

(http://www.toolkit.bc.ca/success-stories)

- 1. An example: Zoning how to change zoning bylaws to encourage densification, transit oriented development, to protect agricultural lands, to encourage low carbon buildings (<a href="https://www.toolkit.bc.ca/tool/zoning-bylaw">https://www.toolkit.bc.ca/tool/zoning-bylaw</a>)
- 2. There are too many to detail here, but other tools address:
  - a. Fleet management
  - b. Car sharing
  - c. Municipal administration planning and development, building maintenance, infrastructure design and maintenance, energy use
- 3. Organics management
- 4. Recycling/waste management
- 5. Water conservation
- 6. Becoming Carbon Neutral: <a href="https://www.toolkit.bc.ca/sites/default/files/BecomingCarbonNeutralGuideV3.pdf">https://www.toolkit.bc.ca/sites/default/files/BecomingCarbonNeutralGuideV3.pdf</a>

#### **Best Practices and Resources on Climate Resilient Natural Infrastructure**

(https://www.ccme.ca/files/Resources/climate\_change/Natural\_Infrastructure\_Report\_EN.pdf)
A 2018 report focusing on mitigation of climate hazards by implementing and protecting natural infrastructure.

## **CARIP Annual Summary Reports**

(https://www2.gov.bc.ca/gov/content/governments/local-governments/grants-transfers/climate-action-revenue-incentiv e-program-carip) Each year features local government climate action highlights/examples.

## **Climate Projections for the Capital Region**

https://www.crd.bc.ca/docs/default-source/climate-action-pdf/reports/2017-07-17\_climateprojectionsforthecapitalregio n\_final.pdf This document is intended to support decision making throughout the region and to help community partners better understand how their work may be affected by our changing climate.

## Federation of Canadian Municipalities Resource Library

(https://fcm.ca/en/resources?f%5Bo%5D=filter\_by\_topic%3AClimate%2ochange)

- 1. Case studies on actions by smaller communities
- 2. Integrating climate considerations into operations, planning and decisions
- 3. Addressing adaptation
- 4. Tools to assess program maturity, pursue financing

#### **ICLEI**

(https://icleicanada.org/our-work/mitigation/) Includes case studies of several municipal climate action plans.

## North Saanich Climate Change Action Plan 2012, Sustainability Solutions Group

https://sites.google.com/a/sustainabilitysolutions.ca/north-saanich-project-pages/home

Presentation: <a href="https://northsaanich.ca.granicus.com/MetaViewer.php?view\_id=2&clip\_id=306&meta\_id=14366">https://northsaanich.ca.granicus.com/MetaViewer.php?view\_id=2&clip\_id=306&meta\_id=14366</a>

Plan includes a review of CEEI data and other emissions data as well as recommendations for appropriate actions.

## **Retooling for Climate Change (Fraser Basin Council)**

(https://www.retooling.ca)

Climate change adaptation – tools and resources for BC local governments, covering:

- 1. Coastal management
- 2. Hazard management
- 3. Infrastructure
- 4. Water
- 5. Environmentally sensitive areas
- 6. Agriculture, Mining, Forestry

## **Stewardship Centre for British Columbia - Green Shores for Homes**

(<a href="https://stewardshipcentrebc.ca/green-shores-home/gs-programs/green-shores-for-homes/">https://stewardshipcentrebc.ca/green-shores-home/gs-programs/green-shores-for-homes/</a>) A voluntary incentive-based rating program focused on reducing the impact of residential development on shoreline ecosystems by restoring natural shorelines.

We would like to thank the following artists for capturing these images of North Saanich:

- 1. Great Blue Heron: Colin Franks
- 2. Photos of North Saanich: All Canada Photos Chris Cheadle

Thank you to the Mayor and Council for engaging the Climate Change Select Committee in making recommendations for immediate action on the climate emergency.

We appreciate your attention to our collective future.

