



# Saanich One Planet Sustainability Scan

MAY 2019

---

## Contents

Background .....	2
ONE PLANET LIVING.....	2
ONE PLANET SAANICH.....	3
ABOUT SAANICH.....	3
REPORT OVERVIEW.....	3
ONE PLANET SUSTAINABILITY SCAN .....	4
SAANICH'S ECOLOGICAL FOOTPRINT .....	4
HEALTH AND HAPPINESS .....	11
EQUITY AND LOCAL ECONOMY .....	14
CULTURE AND COMMUNITY.....	16
LAND AND NATURE .....	18
SUSTAINABLE WATER .....	20
LOCAL AND SUSTAINABLE FOOD .....	22
TRAVEL AND TRANSPORT .....	24
MATERIALS AND PRODUCTS .....	27
ZERO WASTE .....	29
ZERO CARBON ENERGY .....	31
A Focus on Synergies – a Ten-Piece Sustainable Community Orchestra.....	34
Appendix A: Resources for a One Planet Region .....	36
Appendix B: Reference Materials .....	44

This document was prepared by members of the One Planet Saanich Team: Cora Hallsworth, Stephanie Rathwell, Ryan Mackie, Ted Sheldon, Eleri Davies, and Dagmar Timmer. Input was provided by stakeholders, resource people, and key partners. The authors would like to acknowledge contributions by the District of Saanich and the Capital Regional District, in particular.

## Background

### ONE PLANET LIVING

We only have one Planet Earth, but as a global society we're living as if we have several planets and consuming in ways which cannot be sustained. That means that a lot of things have to change. But we also know that if we work together we can enjoy just as much comfort, more security and better health, while living lives that are enriching, fulfilling and sustainable.

One Planet Living sets out to make this transition. It is a framework and an initiative which grew out of the experience of developing the pioneering BedZED eco-village in south London, UK in the early 2000s. Today there are One Planet Communities, Businesses and Destinations in Europe, North America, Africa and Australia.

It is a simple framework which enables everyone to collaborate on a sustainability strategy drawing on everyone's insights, skills and experience. It is based on ten guiding principles of sustainability which we can use to create holistic, joined-up solutions:

	<b>Health and happiness</b>	Encouraging active, social, meaningful lives to promote good health and wellbeing
	<b>Equity and local economy</b>	Creating safe, equitable places to live and work which support local prosperity and international fair trade
	<b>Culture and community</b>	Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living
	<b>Land and nature</b>	Protecting and restoring land for the benefit of people and wildlife
	<b>Sustainable water</b>	Using water efficiently, protecting local water resources and reducing flooding and drought
	<b>Local and sustainable food</b>	Promoting sustainable humane farming and healthy diets high in local, seasonal organic food and vegetable protein
	<b>Travel and transport</b>	Reducing the need to travel, encouraging walking, cycling and low carbon transport
	<b>Materials and products</b>	Using materials from sustainable sources and promoting products which help people reduce consumption.
	<b>Zero waste</b>	Reducing consumption, re-using and recycling to achieve zero waste and zero pollution
	<b>Zero carbon energy</b>	Making buildings and manufacturing energy efficient and supplying all energy with renewables

## **ONE PLANET SAANICH**

In 2018, Bioregional UK invited Saanich to join the international One Planet Cities project, funded by the KR Foundation. This project brings together municipalities, businesses, schools and community groups in Canada (Saanich), Denmark (Elsinore), South Africa (Durban), Tarusa (Russia) and the UK (Oxfordshire). These organizations are creating their own One Planet Action Plans to contribute to community-wide sustainability. Through the work we are building a local and international network to share ideas, support each other and learn together.

One Planet Saanich is being led locally by One Earth. Saanich participants include: District of Saanich; four Secondary Schools - Reynolds, Claremont (Institute for Global Solutions), Mount Douglas, Artemis Place Society; Camosun College; Haliburton Farm; Creatively United for the Planet; First Unitarian Church of Victoria; Uptown Shopping Centre; BEESPOT Neighbourhoods; Vancity Credit Union; Bumblebee Electric; and GardenWorks. More detail is available on the project website at: [www.oneplanetsaanich.org](http://www.oneplanetsaanich.org)

## **ABOUT SAANICH**

The District of Saanich expands across an area of about 110 km<sup>2</sup> (11,000 hectares) near the southern tip of Vancouver Island, and is within the Victoria Census Metropolitan Region. About half of its total area consists of urban development and the other half is rural, much of which is used for agricultural purposes. With a population of 114,000, Saanich has the largest population of the municipalities comprising the greater Victoria region (the region has a total population of 368,000).<sup>i</sup> Saanich is a transportation hub to neighbouring areas with both major highways of the region passing through its borders.

Saanich hosts the region's two largest institutions, Camosun College and a portion of the University of Victoria. Annually, the university enrolls 20,000 students.<sup>ii</sup> Other major economical contributors in the region are the tourism industry (\$1.19 billion), advanced technology industry (\$317 million), agriculture, government, oceans and marine space through the Victoria shipyard, construction, retail, and healthcare and retirement.

## **REPORT OVERVIEW**

This report provides a snapshot of Saanich's current performance with respect to each of the One Planet Living Principles. It is intended to serve as guidance to stakeholders as they develop their sustainability initiatives, including their One Planet Action Plans. It contains:

1. Highlights of Saanich's Ecological Footprint assessment.
2. An assessment of Saanich's current performance and future opportunities relating to each of the One Planet Principles.
3. A list of resources to support action on each of the Principles.

---

## ONE PLANET SUSTAINABILITY SCAN

This report provides a snapshot of Saanich's current performance relative to each of the One Planet Living Principles and summarizes results of Saanich's community-wide ecological footprint. One Planet Living uses the ecological footprint as a key indicator of environmental sustainability.

**Ecological footprinting** is a way of accounting for a wide range of our demands on the Earth's productive land and sea. It includes the impact of our **carbon footprint** but goes beyond to address our broader impact on ecological resources. Globally the world's population is consuming resources and polluting the planet at a rate 50% higher than what the earth can replenish or absorb.

*A brief summary of Saanich's ecological footprint is presented below and more detail on the ecological footprint and Saanich's carbon footprint can be found in the report [District of Saanich Summary Report: ecoCity Footprint Tool Pilot \(2018\)](#). (Available at [www.oneplanetsaanich.org](http://www.oneplanetsaanich.org))*

### SAANICH'S ECOLOGICAL FOOTPRINT<sup>1</sup>

We have limited biocapacity on the planet. Only about a quarter of our planet's surface is currently ecologically productive, and each inhabitant's 'fair earth share' is 1.7 global hectares per capita. Meanwhile, the average Canadian is using about 8 global hectares, which would require 4 planet earths if everyone consumed like a Canadian. We are doing a bit better in Saanich, but we would still need 3 planet earths to support a global population living like we do. At the same time global levels of biodiversity are falling with the Living Planet Index declining by over 50% between 1970 and 2014.<sup>2</sup>

**Looking at what makes up Saanich's footprint (see Figure 1) we see that consumption of food is the largest contributor at nearly half of the footprint, followed by transportation (27%), buildings (15%), and consumables and waste (9%).**

---

<sup>1</sup> Results presented here are based on the study conducted as part of the ecoCity Footprint Tool pilot. Full results are presented in 'ecoCity Footprint Tool Pilot Summary Report', District of Saanich, 2018, prepared by BCIT and Cora Hallsworth Consulting. See: [https://www.oneplanetsaanich.org/uploads/1/1/9/3/119346756/saanich\\_ecocity\\_summary\\_report\\_rev\\_june\\_2018.pdf](https://www.oneplanetsaanich.org/uploads/1/1/9/3/119346756/saanich_ecocity_summary_report_rev_june_2018.pdf) However, this scan presents new updated results, which may vary from what was presented in the report.

<sup>2</sup> See Living Planet Index at:

[http://www.livingplanetindex.org/projects?main\\_page\\_project=LivingPlanetReport&home\\_flag=1](http://www.livingplanetindex.org/projects?main_page_project=LivingPlanetReport&home_flag=1)

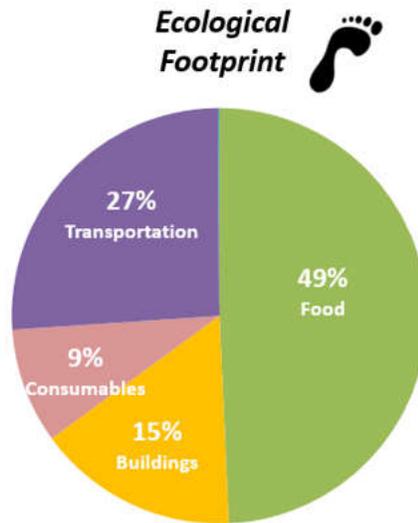


Figure 1: Saanich's Ecological Footprint



## FOOD

Looking at food, we see that the majority of this component of the footprint is due to the consumption of animal products. This is because of the land intensity of meat production and the energy intensity of dairy production, particularly cheese. These impacts overshadow the impact of food miles, which represent only 2% of the food footprint. Therefore, although it is important to support local food systems to build local resilience, from a footprint perspective it is also important to look at shifting diets towards more plant-based foods.

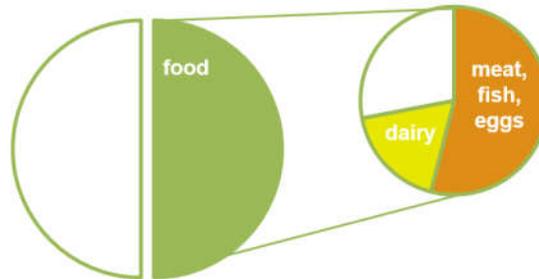


Figure 2: Break-down of Saanich's Food Footprint



### BUILDINGS

Looking at buildings we see that nearly three quarters of footprint impacts are due to operating energy (electricity and fuel used for heating). The remaining quarter is due to embodied energy and materials (the energy and materials that are used to construct the buildings). As a result, as we continue to make advances in reducing operating energy, embodied energy impacts will be of growing significance. This shows us that we must also consider the size of our homes and the building materials we are using.

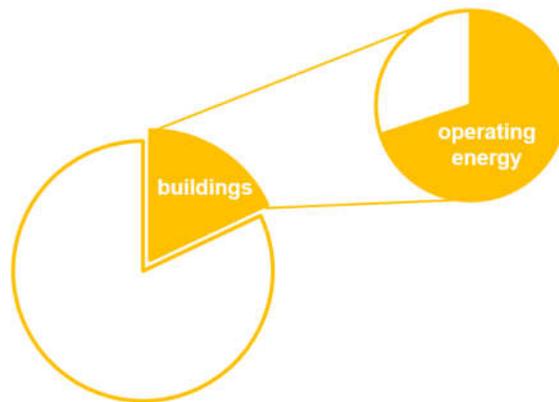


Figure 3: Break-down of Saanich's Buildings Footprint



### CONSUMABLES (GOODS)

Looking at the consumables footprint (these are our clothes, electronics, paper, plastics, etc.), we see that the energy and materials that go into producing the goods that we are using have a much greater impact on the footprint than the disposal of the goods. So, we need to focus more on reducing consumption, rather than just focusing on recycling and handling our waste properly.

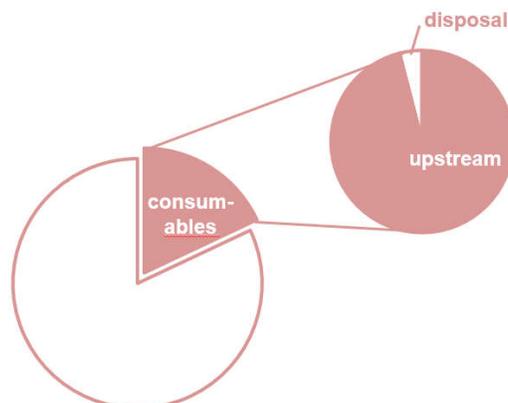


Figure 4: Break-down of Saanich's Consumables Footprint

## TRANSPORTATION



And finally, similar to typical greenhouse gas inventories, private vehicle impacts dominate our transportation footprint. This reinforces the need to create complete, compact communities that reduce reliance on automobiles and support active modes of transportation.

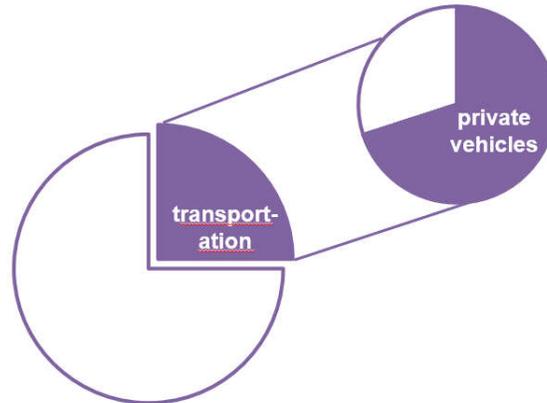


Figure 5: Break-down of Saanich's transportation footprint

## SUMMARY

Saanich's ecological footprint tells us we need to focus on:



- Reducing impact of **food** consumption by reducing food waste and increasing shift to plant-based diets. Examples: plan events and encourage restaurants to provide plant-rich menus and smaller portion sizes to minimize food waste and require rescue (e.g., direct to foodbanks or repurpose unsaleable food<sup>3</sup>) and composting; host vegetarian potlucks; profile popular vegetarian recipes.



- Reducing the energy consumed in our **buildings and infrastructure**. Examples: conducting energy audits and retrofits; shifting to on-site renewables, using low impact building materials; living/working in smaller spaces; supporting workspace/community space sharing.



- Reducing the overall consumption of stuff (**consumable goods**), by rethinking purchases, increasing sharing, reusing and repairing. Examples: hosting/participating in clothing or gear swaps, repair clinics, sharing clubs.



- Reducing dependence on fossil fuel-based **transportation**. Examples: adopting / promoting healthier and sustainable alternatives – cycling, walking, transit; joining/promoting car-share programs; switching to ZEV/hybrids; rethinking mobility needs and choose tele-work/tele-meetings/work from home.

<sup>3</sup> e.g., in some locations grain by-products from breweries are being used to make local bread; and unwanted fruit tree produce is being distributed to those in need.

**So, lets do this in a way that contributes to improving our performance with respect to all one planet Principles. The following explores how.**

### **Sustainability Scan Using the One Planet Principles**

The next section uses the One Planet Living Framework to communicate current activity and future opportunities using the One Planet Living framework as a lens. It also identifies potential sources of information and programs to support stakeholder action.

First, Saanich's strengths, challenges and opportunities at a glance are presented in the following table and the subsequent section provides greater detail. It should be noted that many of the noted strengths, challenges and opportunities are of regional significance.

In the detailed overview for each One Planet Principle you will find:

- A description of the Principle and supporting goals
- Current performance, support plans, policies, actions and targets
- Current challenges and potential opportunities, as gleaned through a review of reports and through stakeholder consultation through the One Planet Saanich initiative.

**Following the exploration of each principle this Scan also highlights some key opportunities that present great potential for advancing progress on multiple Principles simultaneously.**

**Saanich’s Performance at a Glance**

STRENGTHS	CHALLENGES	OPPORTUNITIES
<b>HEALTH AND HAPPINESS</b>		
<ul style="list-style-type: none"> <li>- Relatively high physical activity rates, low obesity, and low smoking levels in the region, compared to other Canadian locations.</li> </ul>	<ul style="list-style-type: none"> <li>- Growing health gap, inequalities, addiction rates</li> <li>- Changes in air quality as a result of climate change and pollution</li> </ul>	<ul style="list-style-type: none"> <li>- Dietary shifts towards more plant-based and healthier diets</li> <li>- Provide meaningful contribution opportunities for retirees and seniors</li> <li>- Work with all Greater Victoria communities to provide short-term support to the homeless/people at risk (e.g. Shelbourne Kitchen; shelters) and address longer-term systemic changes (e.g., developing affordable, compact, complete communities and addressing regional health care costs)</li> </ul>
<b>EQUITY AND LOCAL ECONOMY</b>		
<ul style="list-style-type: none"> <li>- Relatively diverse economy, and low unemployment in the region</li> <li>- Innovation and research at academic institutions</li> <li>- High #s of local entrepreneurs/small businesses</li> </ul>	<ul style="list-style-type: none"> <li>- High cost of living and housing</li> <li>- Growing equity gap</li> <li>- Low job opportunities for recent graduates</li> <li>- Inequality in economic opportunities among CRD member municipalities</li> </ul>	<ul style="list-style-type: none"> <li>- Social and local procurement policies</li> <li>- Support incubators and entrepreneurs, particularly those advancing One Planet Principles</li> <li>- Increase affordable housing options (e.g., through garden suites/ infill/ accessory buildings / multi-family buildings; social housing)</li> <li>- Expand multi-cultural programs and activities</li> <li>- Focus on inclusivity for all, particularly indigenous peoples, LGBTQ2+, those with disabilities and new Canadians</li> </ul>
<b>CULTURE AND COMMUNITY</b>		
<ul style="list-style-type: none"> <li>- Relatively active citizenship</li> <li>- Rich arts and culture community/ opportunities</li> <li>- Substantive social capital</li> </ul>	<ul style="list-style-type: none"> <li>- Dis-connectivity between Indigenous and non-Indigenous cultures</li> <li>- Lack of inter-generational engagement</li> </ul>	<ul style="list-style-type: none"> <li>- Commit to Reconciliation</li> <li>- Enhance traditional land uses</li> <li>- Enhance participatory democracy/ diversity in participation</li> <li>- Encourage/participate in community volunteer work</li> <li>- Encourage a sharing culture</li> </ul>
<b>LAND AND NATURE</b>		
<ul style="list-style-type: none"> <li>- Diverse rural/urban land uses</li> <li>- High proportion of natural ecosystems and species</li> <li>- High proportion of city parks</li> <li>- Urban containment boundary/ Agricultural Land Reserve (ALR)</li> </ul>	<ul style="list-style-type: none"> <li>- Aquatic and terrestrial pollution: oil tanks, untreated sewage, roadway runoff, pesticide use</li> <li>- Inequality in distribution and accessibility</li> <li>- Encroachment on ALR, invasive species, impact of climate change</li> </ul>	<ul style="list-style-type: none"> <li>- Increase native plants/decrease invasive plants in public and private spaces</li> <li>- Eliminate use of pesticides</li> <li>- Increase connectivity between areas</li> <li>- Implement Biodiversity Conservation Strategy</li> <li>- Continued protection of ALR</li> <li>- Increase community resilience: nature and agriculture interface; natural assets (MNAI - swales, etc); drought-resistant plants; percentage of pervious land surface</li> </ul>

STRENGTHS	CHALLENGES	OPPORTUNITIES
<b>SUSTAINABLE WATER</b>		
<ul style="list-style-type: none"> <li>- Abundant freshwater sources</li> </ul>	<ul style="list-style-type: none"> <li>- High water consumption/capita</li> <li>- Extreme weather impact on water levels</li> </ul>	<ul style="list-style-type: none"> <li>- Green infrastructure approaches</li> <li>- Water conservation measures (e.g., low flow fixtures, native plant gardening, rainwater collection and utilization)</li> </ul>
<b>LOCAL AND SUSTAINABLE FOOD</b>		
<ul style="list-style-type: none"> <li>- Strong support for local produced food</li> <li>- ALR</li> <li>- Active network of local food organizations</li> </ul>	<ul style="list-style-type: none"> <li>- ALR rezoning</li> <li>- Lack of opportunities for new farmers</li> <li>- High dependency on food imports</li> <li>- Climate impacts on crops</li> </ul>	<ul style="list-style-type: none"> <li>- Increase urban/community gardening</li> <li>- Provide education for established and new agricultural operators</li> <li>- Support local agriculture organizations</li> <li>- Re-purpose unwanted/unused but saleable/usable food</li> <li>- Adopt 'One Planet' catering menus</li> </ul>
<b>TRAVEL AND TRANSPORT</b>		
<ul style="list-style-type: none"> <li>- Growing network of active transportation infrastructure</li> <li>- EV rebates and incentives</li> </ul>	<ul style="list-style-type: none"> <li>- High dependence on automobile transportation/ regional sprawl</li> <li>- Disconnected bicycle/walking infrastructure</li> <li>- Lack of regional coordination</li> <li>- Encouraging behaviour change</li> </ul>	<ul style="list-style-type: none"> <li>- Establish Regional Transportation Associations/Authority</li> <li>- Encourage sustainable transportation (including interconnectedness) through infrastructure upgrades, provide incentives and dis-incentives to encourage a behavior shift in transportation, develop by-laws to support ZEVs, and implement existing policies</li> </ul>
<b>MATERIALS AND PRODUCTS</b>		
<ul style="list-style-type: none"> <li>- Increasing opportunities to advance 'share, reuse, repair'</li> </ul>	<ul style="list-style-type: none"> <li>- Consumer driven economy</li> <li>- High import of international products</li> </ul>	<ul style="list-style-type: none"> <li>- Purchasing policies to advance circular economy, local and sustainable suppliers</li> <li>- Showcase/promote sustainable business leaders</li> <li>- Promote/ support reuse, repurposing and sharing</li> </ul>
<b>Zero Waste</b>		
<ul style="list-style-type: none"> <li>- Comprehensive recycling and organic collection programs</li> <li>- Growth in zero waste initiatives</li> </ul>	<ul style="list-style-type: none"> <li>- Out-of-region composting and recycling processing</li> <li>- Increase in waste per capita since 2014</li> <li>- Limited opportunities for recycling for some product types</li> </ul>	<ul style="list-style-type: none"> <li>- Pursue Zero Waste Strategy / Circular Economy Strategy</li> <li>- Increase local sourcing</li> <li>- Promote informed consumer purchasing</li> <li>- Celebrate Zero Waste leaders</li> </ul>
<b>Zero Carbon Energy</b>		
<ul style="list-style-type: none"> <li>- Provincial commitments</li> <li>- Saanich Climate Action Plan/ 100% Renewable Energy commitment</li> </ul>	<ul style="list-style-type: none"> <li>- Need to reduce GHG emissions by 74% by 2030/2050?</li> </ul>	<ul style="list-style-type: none"> <li>- Retrofit and alternative energy incentives available to residents and businesses</li> <li>- Focus future land use planning and neighbourhood development towards infill, passive house standards and sustainable transportation corridors and exchange/interconnectedness zones</li> </ul>

## HEALTH AND HAPPINESS

*Encouraging active, sociable, meaningful lives to promote good health and wellbeing*



*Health and happiness are essential components of a sustainable lifestyle. Leading a healthy and happy life enables us to form more cohesive communities, to be more tolerant, more productive and to enjoy vibrant and fulfilling lives. Key factors which contribute to health and happiness include diet, exercise, inter-personal relationships, meaningful activities, involvement in community and civic life, a safe environment, levels of fuel and food poverty, interaction with nature, greater equity, opportunities to apply talent and creativity, and shared values. There are specific actions, which can be taken to promote all these factors, but health and happiness is also the outcome of many of the other One Planet Principles coming together.*

*One Planet Goals:*

- *To increase, or maintain high levels of physical, social, mental and emotional health*
- *To increase, or maintain high levels of life satisfaction by fostering good social and environmental conditions and a positive attitude among citizens*

### District of Saanich Plans, Policies and Actions

Relevant Plans & Policies:

- Official Community Plan
- Parks, Recreation and Culture Master Plan
- Active Aging Strategy
- Early Childhood Development Strategy
- Youth Development Strategy
- Active Transportation Plan
- Centennial Trails Master Plan
- Agriculture and Food Security Master Plan
- Saanich Local Food Procurement Policy and/or 2018 Agriculture and Food Security Plan
- Healthy Saanich Advisory Committee
- Housing affordability planning
- Citizen engagement opportunities (e.g., via Community Associations)

### Selected Targets

- **99%:** Percentage of citizens who rate the quality of life in Saanich as good or very good (Achieved). (Saanich [2017 Annual Report](#))<sup>4</sup>
- **82%:** Percentage of citizens who participated in physical activity 3 or more days per week (Achieved). (Saanich [2017 Annual Report](#))<sup>5</sup>

<sup>4</sup> See:

<https://www.saanich.ca/assets/Local~Government/Documents/Corporate~and~Annual~Reports/2017-Annual-Report-for-web.pdf>

<sup>5</sup> ibid

### How are we doing?

The 2017 Vital Signs Report<sup>6</sup> indicates that the region has a good quality of life and is doing well in providing opportunities for physical activity, recreation, high quality education and health care. The region has a mild climate, close proximity to nature and good air quality, which make for a pleasant environment with plenty of options for outdoor activity. Health metrics for the region include high life expectancy, high levels of physical activity, and low levels of obesity and smoking compared to the rest of Canada. There are low crimes rates in the region and good availability of support services, affordable nutritious food and employment opportunities. Furthermore, the region provides plenty of opportunities for civic engagement, diverse arts and culture, and residential choice between rural and urban living.

However, Vital Signs also indicates that improvements could be made in addressing the growing 'health gap', in particular a growing homeless population with high rates of addiction, as well as inequalities in health for lower income populations. Improvements are needed in terms of providing better mental health services, a greater number of family physicians, lower wait times for medical procedures, affordable housing options and a living wage.<sup>7</sup> There is also need to address climate related health impacts such as exposure to higher temperatures and smoke from wildfires in the summer months, particularly affecting the very young and elderly. Furthermore, much of Saanich is not actively farmed, yet 6% of households in Greater Victoria are considered "food insecure". This presents an opportunity to both increase local food production, local food security, and health outcomes.

### Opportunities

The following are opportunities for action that all individuals and organizations can play a role in advancing. Those actions that would be specifically led by the District are noted with a 'D' for District. However, even for District-led activities other stakeholders can advocate for them and support their implementation.

- Promote and adopt dietary shifts towards more plant-based and healthier diets, for example through establishing a Food Policy Council (D); and developing communications and education programs/campaigns.
- Collect data on life satisfaction, quality of life, and happiness via surveys to celebrate wins and highlight areas for improvement (in your workplace or in the community).
- Design and implement employee wellbeing schemes.
- Implement flexi-time policy so staff can easily fit social and exercise activities around work (i.e., happiness = a work-life balance).
- Participate in counselling, meditation, yoga or massage opportunities /set up workplace opportunities in larger businesses, or offer incentives for staff.

<sup>6</sup> Vital Signs is "an annual community check-up that measures the vitality of our region, identifies concerns, and supports action on issues that are critical to our quality of life". It is informed by community surveys as well as research from secondary sources.

<sup>7</sup> Victoria Foundation. (2017). Victoria's: Greater Victoria's 2017 Annual Check-up. P.28.

- Provide meaningful contribution opportunities for retirees and seniors: e.g. pairing retiring farmers with emerging farmers; at schools: parents and grandparents providing career coaching, etc.
- What about encouraging opportunities for greater levels of citizen engagement (neighbourhood watch; community associations; volunteering in community kitchens).

### **Stakeholder Action & Resources**

There are a number of organizations supporting advancement of Health and Happiness in Saanich, for example BC Healthy Communities and Island Health. Please see Appendix A for a comprehensive listing of these organizations and resources.

## EQUITY AND LOCAL ECONOMY

*Creating safe, equitable places to live and work which support local prosperity and international fair trade*



*One Planet Cities and Regions celebrate diversity and foster a sense of inclusion, recognizing the needs of local people including older people, younger people, people with disabilities, single people and families and people of all ethnicities and sexual orientations. They also promote a living wage for all workers and put in place policies and provide conditions fostering a happy, healthy and diverse workforce.*

### One Planet Goals

- *To promote diversity and equality of opportunity across gender, race, age and sexual orientation*
- *To create a vibrant, locally resilient economy where a significant proportion of money is spent locally*
- *To promote international trade that is conducted fairly, without exploitation and that support local sustainable economies around the world.*

## District of Saanich Plans, Policies and Actions

### Relevant Plans & Policies:

- Official Community Plan
- Strategic Plan
- Economic Development Strategy (upcoming)
- Adaptable Housing Strategy
- Agriculture and Food Security Master Plan
- Active Transportation Plan
- Garden Suite and Secondary Suite Master Plan
- Older Adults Strategy
- Early Childhood Development Strategy
- Youth Development Strategy
- Saanich Local Food Procurement Policy
- Development Cost Charge Bylaw

### Selected Targets

- **Below 35%:** percentage of renters using 30% or more of family income for housing. (44.5% actual in 2011.) (Saanich [Key Performance Indicators](#))
- **Over 85%:** percentage of existing local businesses perceiving Saanich as a good or very good place to operate a business. (Saanich [Key Performance Indicators](#))

### How are we doing?

The 2017 Vital Signs report indicates that the region is doing well in terms of diversifying the economy, maintaining low unemployment rates, and providing support for small business. There are diverse and long-standing economic pillars in the region such as provincial and federal government offices, universities and

colleges, tourism, and a rapidly growing technology sector. The regions' many academic institutions support innovation and research, and there is a high proportion of local entrepreneurs with a strong culture of supporting local business.

However, as noted in the discussion of health and happiness, there is an increasing rate of inequality in terms of the growth in homelessness, an increasingly high cost of living and low vacancy rates for housing. The Capital Region as a whole varies in distribution of economic policies among member municipalities (e.g. big box stores in one community can impact business in neighbouring communities). There is also room for improvement in terms of increasing job opportunities for new graduates (Vital Signs, P.22). This is an important factor for keeping a highly educated population in the region, beyond post secondary.

### Opportunities

The following are opportunities for action that all individuals and organizations can play a role in advancing. Those actions that would be specifically led by the District are noted with a 'D' for District. However, even for District-led activities other stakeholders can advocate for them and support their implementation.

- Adopt social procurement policy and increase local sourcing / assign 'champions' to create a supply list of local suppliers.
- Offer apprenticeships; placements; mock interviews.
- Promote Level Ground Trading to businesses, schools and community groups to educate and promote equitable, sustainable business practices and international fair trade.
- Support incubators and entrepreneurs, particularly those advancing One Planet Principles (with purchasing power, or by providing seed funding or space for start-ups).
- Support employment in the local agriculture sector (e.g., support/fund efforts of Haliburton Farm and a Farmland Trust).
- Evaluate Saanich's 'Gini coefficient' (which estimates the distribution of income among individuals or households, see: <http://hdr.undp.org/en/content/income-gini-coefficient>).
- Support/participate in the LBGTQ Advisory Sub-Committee.
- Work with CRD to increase requirements for affordable housing in new housing developments/re-developments. (D)
- Increase affordable housing options in existing housing (e.g., through densification by increasing allowances for garden suites/ infill/ accessory buildings / multi-family buildings). (D)

### Stakeholder Action & Resources

There are a number of organizations supporting advancement of Equity and Local Economy in Saanich, for example the South Island Prosperity Project and the MaRS Catalyst Fund. Please see Appendix A for a comprehensive listing of these organizations and resources.

## CULTURE AND COMMUNITY



*Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living*

*One Planet Cities and Regions support a vibrant culture and add value to existing and new communities. They encourage local people to get actively involved in local democracy and governance. Planning is responsive to local needs and sustainability is integrated into all decision making. They provide a sense of place and ensure that developments connect to local culture and natural heritage by using traditional construction materials, public art, vernacular design and native planting.*

*One Planet Goals:*

- *To foster a sense of place and belonging*
- *To enable social inclusion and encourage active citizenship*
- *To enhance local culture and heritage*
- *To nurture a new culture of sustainability*

### District of Saanich Plans, Policies and Actions

Relevant Plans & Policies:

- Arts and Culture Plan
- Official Community Plan
- Local Area Plans
- Agriculture and Food Security Master Plan
- Active Transportation Plan
- Parks Recreation and Culture Master Plan
- Older Adults Strategy
- Early Childhood Development Strategy
- Youth Development Strategy
- Public Art Policy
- Saanich Local Food Procurement Policy

### Selected Targets

- **41%** Percentage of citizens that spend 1 to 5 hours per week in activities or events involving the arts (Achieved). (Saanich [2017 Annual Report](#))<sup>8</sup>
- **31%**: Percentage of citizens that spend 1 to 5 hours per week in activities or events involving culture (Achieved). (Saanich [2017 Annual Report](#))<sup>9</sup>
- **85%**: Percentage of citizens who agree that Saanich welcomes citizen involvement (Achieved: 79%). (Saanich [2017 Annual Report](#))<sup>10</sup>

### How are we doing?

The 2017 Vital Signs report indicates that the region has a strong sense of community and high social capital with plenty of volunteer groups, community associations and opportunities to get involved. We also have a vibrant arts and culture community, with numerous festivals throughout the year. Neighbourhood

<sup>8</sup> See:

<https://www.saanich.ca/assets/Local~Government/Documents/Corporate~and~Annual~Reports/2017-Annual-Report-for-web.pdf>

<sup>9</sup> ibid

<sup>10</sup> ibid

Associations are also very active, hosting many community events throughout the district.

Vital Signs does however indicate room for improvement in terms of providing more affordable arts and culture opportunities, increasing awareness of public consultation events and increasing involvement of marginalized groups (Vital Signs, Pp. 18, 20). However, citizen engagement and political participation could benefit from improved diversity, particularly among different age and cultural groups. There is also room for improved connectivity between Indigenous and non-Indigenous communities, as well as intergenerational connections.

### Opportunities

The following are opportunities for action that all individuals and organizations can play a role in advancing. Those actions that would be specifically led by the District are noted with a 'D' for District. However, even for District-led activities other stakeholders can advocate for them and support their implementation.

- Support a volunteering project with a school, other local community group or a combination of groups.
  - Offer premises for local community events after hours.
  - Hold quarterly events for staff / students / community members to increase their understanding of sustainability.
  - Launch neighbourhood footprint reduction challenges, Block Parties focused on lighter living, or sector-specific (e.g., home retrofits) challenges Saanich-wide.
  - Plan inclusive events and foster diversity in participatory democracy (D) (e.g., focus on accessibility for all; provide play area and/or provide babysitting, employ digital engagement methods like apps, etc.).
  - Incorporate a lighter living approach into culture and community capacity building efforts (e.g., promote lighter living culture/options at community events, engagement and education opportunities).
- (D)
- Include reconciliation in policy development and planning (just as sustainability is a key aspect in many initiatives). (D)

### Stakeholder Action & Resources

There are a number of organizations supporting advancement of Culture and Community in Saanich, for example Canada Cultural Investment Fund and BC Alliance for Arts and Culture. Please see Appendix A for a comprehensive listing of these organizations and resources.

## LAND AND NATURE



*Protecting and restoring land for the benefit of people and wildlife*

*Land and nature provide essential services to people – such as food, water and protection from flooding or drought – as well as providing a home for wildlife. One Planet Cities and Regions protect and restore natural systems for the benefit of people, local wildlife and the biosphere.*

*One Planet Goals:*

- *To ensure a positive net contribution to local biodiversity*
- *To maximise carbon sequestration in the soil and biomass*
- *To maximise the synergies between agriculture, forestry, biodiversity and carbon storage*
- *To enhance 'ecosystem services' such as providing clean water and air*
- *To engage people in recognising the value of nature, including its value to people*

### District of Saanich Plans, Policies and Actions

Relevant Plans & Policies:

- Official Community Plan
- Local Area Plans
- Agriculture and Food Security Master Plan
- 2010 Climate Action Plan
- 2011 Climate Adaptation Plan
- Parks, Recreation and Culture Master Plan
- Saanich Natural State Covenants
- Saanich Tree Protection Bylaw
- Saanich Biodiversity Conservation Strategy (In Progress)
- Urban Forest Strategy
- Saanich Pesticide bylaw
- Covenants and Natural Areas Atlas
- Saanich Integrated Pest Management Policy (2010)
- Boulevard Regulation Bylaw and approved plants list

### Selected Targets

- **37.8% or more:** urban forest cover as percentage of total land in Saanich (no less than the baseline forest cover in 2009). (Saanich [Key Performance Indicators](#))
- **28% or more:** parks, natural areas and open spaces as a percentage of total land area in the municipality (more than 26.8% in 2011). (Saanich [Key Performance Indicators](#))

### How are we doing?

The 2017 Vital Signs report indicates that the region is doing well in terms of providing green spaces, walking paths, and generally good air and water quality. There are a high proportion of natural landscapes, ecosystems and forests, with plenty of parks. There is also a range of both urban and rural land development, providing residential choice between urban and rural lifestyles. Additionally, the

Saanich Annual Report<sup>11</sup> highlighted progress in a number of initiatives for watershed-based models, invasive species management and urban forest strategies.

However, both reports indicated a need for improvement in wastewater treatment. The District of Saanich will continue to provide support to the CRD for the construction of the residuals treatment facility, conveyance line and attenuation tanks. Stakeholders identified a number of challenges including encroachment on Agricultural Land Reserves, the rescindment of the Environmental Development Permit Area, and the use of pesticides in park gardens. Invasive species and degradation of native habitats, such as the Garry Oak Ecosystem, were also noted as challenges within this Principle. Finally, pollution from roadway runoff and oil tank leakage were identified as sources of local habitat contamination.

### Opportunities

The following are opportunities for action that all individuals and organizations can play a role in advancing. Those actions that would be specifically led by the District are noted with a 'D' for District. However, even for District-led activities other stakeholders can advocate for them and support their implementation.

- Increase native plants / remove invasive species and support/participate in invasive plant removal events on private and public property.
- Install beehives and add pollinating plants to landscaping/gardens.
- Eliminate use of pesticides.
- Support/participate in community clean up events (e.g., Earth Day events).
- Replace heating oil tanks with safer, lower impact alternatives (e.g. heat pumps) to eliminate risk of habitat contamination.
- Engage in and support the upcoming Biodiversity Conservation Strategy.
- Require protection and enhancement of natural areas in future development. (D)
- Increase connectivity of natural areas; and connection between natural areas and agricultural activity. (D)
- Support/advance traditional utilization of land (i.e. wild harvesting, prescribed burns, cultural celebrations, etc.). (D)

### Stakeholder Action & Resources

There are a number of organizations supporting advancement of Land and Nature in Saanich, for example Habitat Acquisition Trust and The Land Conservancy. Please see Appendix A for a comprehensive listing of these organizations and resources.

---

<sup>11</sup> See:

<https://www.saanich.ca/assets/Local~Government/Documents/Corporate~and~Annual~Reports/2017-Annual-Report-for-web.pdf>

## SUSTAINABLE WATER

*Using water efficiently, protecting local water sources and reducing flooding and drought*



*Water is a very local issue. In many parts of the world, clean water is not an abundant resource, nor is it available to everyone. As climate change occurs and the earth's population increases, it is likely that even more areas will become more water stressed through drought and/or more prone to flooding. Global warming is also leading to sea level rise. The process of storing, treating and transporting water has a wide range of environmental impacts and if energy from fossil fuels is used in the process, the water will have a carbon footprint.*

*One Planet Goals:*

- *For everyone to have access to clean drinking water*
- *To use water efficiently and return it clean to the environment*
- *To contribute to sustainable water management and flood risk mitigation in the surrounding area*

### District of Saanich Plans, Policies and Actions

Relevant Plans & Policies:

- Official Community Plan
- Water Master Plan
- Stormwater Development Permit
- Subdivision Bylaw
- Building and Plumbing Bylaw
- Drainage Master Plan – In Progress
- Agriculture and Food Security Master Plan
- 2011 Climate Adaptation Plan
- Saanich Zoning Bylaw
- Saanich Biodiversity Conservation Strategy - In Progress
- Heating Oil Spill Response Procedures and Education
- Underground Services Maintenance Program
- Oil to Heat Pump Incentive Program
- Oil Burning Equipment and Flammable Liquid and Combustible Liquid Fuel Tank Bylaw (2014)
- Integrated Pest Management Program
- Pesticide Bylaw

### Selected Targets

- **Zero:** number of residences at risk of flooding (salt or freshwater) during a major storm event. (2015 actual is 400 residences.) (Saanich [2017 Annual Report](#))
- **250 Litres or less:** amount of potable water consumed on average by residents per day. (2016 average was 244L per person.) (Saanich [2017 Annual Report](#))

### How are we doing?

Saanich residents, as with most Canadians, are intensive users of water. Fortunately, we are presently blessed with abundant sources of freshwater. Yet, predictions show that the impacts of climate change may severely impact precipitation levels in the region. We may experience increased droughts in the summer months and flooding in the winter due to extreme rainfall events. Population growth will also place increasing demands on our water sources. In addition to issues of supply it is essential to consider water quality issues. Wastewater is currently disposed untreated into the ocean, potentially causing negative impact to our oceans and the life within them. Fortunately, the District of Saanich is working with the CRD on the new wastewater treatment project, which will reduce pollution resulting from sewage effluent discharge.

### Opportunities

The following are opportunities for action that all individuals and organizations can play a role in advancing. Those actions that would be specifically led by the District are noted with a 'D' for District. However, even for District-led activities other stakeholders can advocate for them and support their implementation.

- Increase permeable surfaces and green infrastructure, including disconnecting downspouts and using rain barrels.
- Install water meters that are visible / accessible.
- Make sure toilets and dishwashers are water-efficient.
- Monitor water consumption to reduce water waste.
- Choose outdoor (native) plants that don't need much watering.
- Participate in World Water Day activities.
- Work with the CRD to increase public awareness of water conservation.
- Create rainwater collection and greywater recycling incentives. (D)

### Stakeholder Action & Resources

There are a number of organizations supporting advancement of Sustainable Water in Saanich, for example CRD Water Conservation Program and Partnership for Water Sustainability in BC. Please see Appendix A for a comprehensive listing of these organizations and resources.

## LOCAL AND SUSTAINABLE FOOD

*Promoting sustainable humane farming and healthy diets in local, seasonal organic food and vegetable protein*



*Food and food growing has a huge impact on a range of issues including physical and mental health, culture, heritage, climate change, biodiversity and the local economy. It represents about one third of our ecological footprint globally. Food also contributes to greenhouse gas emissions through conversion of forests to pasture, methane emissions from cattle, the energy used to produce pesticides and fertilisers, nitrous oxide emissions from fertilisers, transporting food many miles and packaging food. A quarter of global greenhouse gas emissions come from agriculture.*

*One Planet Goals:*

- *To make it easy and attractive for people to enjoy fresh, local, seasonal, healthy produce*
- *To promote diets high in vegetable protein*
- *To promote sustainable farming which supports biodiversity and builds soil*
- *To promote humane farming*
- *To reduce or eliminate food waste*

## District of Saanich Plans, Policies and Actions

Relevant Plans & Policies:

- Official Community Plan
- Saanich Urban Containment Boundary
- Agriculture and Food Security Master Plan
- Saanich Local Food Procurement Policy
- Animals Bylaw (allows backyard chickens)
- Boulevard Bylaw (allows edible plants)
- Rural Saanich Local Area Plan
- 2010 Climate Action Plan
- Parks, Recreation and Culture Master Plan
- Saanich Zoning bylaw

## Selected Targets

- **410:** Number of properties that qualify for farm tax status in Saanich (Achieved in 2017: 398). (Saanich [2017 Annual Report](#))
- **60%:** Percentage of residents engaged in backyard vegetable gardening or poultry keeping. (Achieved 42% in 2015.) (Saanich [2017 Annual Report](#))
- **12 or more:** number of community gardens in Saanich (Achieved: 3 in 2015). (Saanich [2017 Annual Report](#))

## How are we doing?

The District of Saanich implemented an Urban Containment Boundary (UCB) in the late 1960s to protect agricultural/rural land. The UCB protects about 52% of Saanich's land area. Additionally, almost 20% of Saanich is designated by the Province as Agricultural Land Reserve (ALR). There are many organic food

producers in Saanich, and local restaurants and grocery stores that source locally. There are also a number of non-profit organizations with a mandate to support sustainable food systems in the region. Finally, the Agriculture and Food Security Plan was approved in September 2018, to provide a framework for agriculture and improved food security within the community. It highlights key objectives within seven theme areas, backed up by priority and ongoing actions to achieve those objectives.

Current challenges associated with local, sustainable food include encroachment upon or loss of Agricultural Land Reserve (ALR) land due to development and rezoning, conflicts between agriculture and residential land; and high dependency on food imports, including high footprint food sources such as meat and dairy. Climate impacts on agricultural production, such as drought, flooding, heat stress and soil fertility have increasingly become a challenge. Finally, a lack of operators, or a viable economic model for young/new operators to acquire land limits the ability to expand local agricultural production, and in fact to maintain current levels.

### Opportunities

The following are opportunities for action that all individuals and organizations can play a role in advancing. Those actions that would be specifically led by the District are noted with a 'D' for District. However, even for District-led activities other stakeholders can advocate for them and support their implementation.

- Develop a 'One Planet checklist' for event catering.
- Transform gardens into a food source with local plants.
- Offer gardening and cooking classes, focused on local/organic foods.
- Work with a local charity to redistribute unused food (e.g., FoodShare, Mustard Seed).
- Create a framework to guide and support people wanting to start a community garden or incubator farm.
- Support farmer training (e.g., through Haliburton Farm).
- Study possible new crop opportunities presented by climate change.
- Increase food production on public and private land (i.e. edible landscaping and community gardens, backyard gardens).
- Support the effort of local community organizations and local, organic food businesses like Haliburton Farm, CR-FAIR, FoodShare Network, the Young Agrarians, and Topsoil.
- Support low emissions food transportation vehicles for local food producers (e.g., provide funding).
- Accelerate the increase in land set aside for food production. (D)
- Create a committee similar to Victoria's Urban Food Table. (D)
- Create a policy or strategy to increase garden roofs. (D)

### Stakeholder Action & Resources

There are a number of organizations supporting advancement of Local and Sustainable Food in Saanich, for example Haliburton Farm and Capital Region Food and Agriculture Initiatives Roundtable (CRFAIR). Please see Appendix A for a comprehensive listing of these organizations and resources.

## TRAVEL AND TRANSPORT

*Reducing the need to travel, and encouraging walking, cycling and other low carbon transport*



An overly car-dependent society contributes to carbon emissions and local air pollution, takes up valuable land for roads and buildings, reduces the attractiveness and safety of the public realm and promotes obesity and respiratory illness. In many cities, commuting is one of the main contributors to reported unhappiness. Urban areas that are not dominated by cars are generally healthier, more neighbourly and more attractive.

*One Planet Goals:*

- *To reduce car dependence and the need for everyday travel*
- *To make it easy and attractive for people to walk and cycle*
- *To promote low carbon car sharing (including car clubs) and low carbon public transport*
- *To promote low/zero carbon vehicles including electric cars*
- *To raise awareness of the impacts of, and promote alternatives to, air travel*

### District of Saanich Plans, Policies and Actions

Relevant Plans & Policies:

- Official Community Plan
- Active Transportation Plan
- Electric Vehicle Strategy
- Trails Master Plan
- Street and Traffic Bylaw
- Parks, Recreation and Culture Master Plan
- Local Area Plans
- 2010 Climate Action Plan
- Saanich Zoning bylaw
- Boulevard Regulation Bylaw
- Shelbourne Valley Action Plan

### Selected Targets

- **50%** of trips in Saanich by active transportation by 2050 (e.g. walking, cycling, public transit) (Saanich [Active Transportation Plan](#))
- **Zero** traffic related fatalities or serious injuries. (Saanich [Active Transportation Plan](#))

### How are we doing?

The 2017 Vital Signs report indicates that the region is doing well in terms of providing walking and cycling opportunities including expanding cycling infrastructure and sidewalks. However, Saanich is not performing as well as the downtown core. Connectivity of Saanich cycling routes could be improved, particularly in less urban areas. There is also room for improvement in regional coordination of transit infrastructure, [service and affordability of] additions to the bus fleet, and a need for investment in rapid transit.

About 80% of the region's public transportation is out of district travel with only 20% accounting for in-district travel. The majority of buses operating in the community are diesel-powered along with a few gas-powered buses. Plans are being developed to transition to a fully electric bus fleet by 2030.<sup>iii</sup> Currently, walking and biking make up 11% of total travel trips. The District of Saanich is aiming to increase combined walking and cycling trips to 22% by 2036 and to increase total trips on public transit from 7% to 14%.<sup>iv</sup>

Saanich is a relatively dispersed, car-dependent suburban community with high per capita land consumption. This results in high per capita fuel, vehicle, road and parking costs; traffic fatality rates; GHG emissions; and sedentary living. Additionally, there is a significant amount of freight transport, air travel, and diesel-based ferry travel.

Many transportation issues require coordination beyond Saanich, such as commuting distances, limited options and capacity of the regional transit system, gaps in the bicycle network, and increased electric vehicle uptake. Finally, traffic congestion is exacerbated by the combination of housing being more affordable in the West Shore communities, while most employment opportunities are in the core area.

### Opportunities

The following are opportunities for action that all individuals and organizations can play a role in advancing. Those actions that would be specifically led by the District are noted with a 'D' for District. However, even for District-led activities other stakeholders can advocate for them and support their implementation.

- Promote decrease in vehicle dependence, particularly fossil-based transport options: re-think travel needs; increase use of car sharing/bike-sharing; choose active modes of transport.
  - Workplaces can provide annual bus passes for staff; install secure bike parking lockers; track emissions from business travel; hold an annual staff commuting survey.
  - Participate in and support Active and Safe Routes to School Program/ encourage parents to use active modes of transportation to bring children to school.
  - Participate in Bike to Work Week (October) and Car Free Day (June).
- Support and advocate for implementation of Shelbourne Valley Action Plan, and efforts in similar planning into other 'corridors'.
- Take advantage of provincial rebates for EV's and charging stations.
- Expand the number and extent of 'village centres' across Saanich to facilitate walking and cycling, and to enable efficient transit. (D)
- Use Walk-Score, heat mapping tools and/or neighbourhood GHG profiles to inform active transportation-friendly urban neighbourhood development opportunities. (D)
- Increase active transportation infrastructure and combine incentives to promote mode shift, with disincentives for automobile-dependent areas. (D)
- Consider parking policy reforms to reduce unnecessary parking options and prepare for electric and autonomous vehicles. (D)
- Use multimodal transport planning and evaluation tools to inform transport budget investments. (D)

- 
- Develop bylaws for EV charging in new buildings, and strategic plan targets for sidewalks and bus amenities. (D)
  - Expand EV and/or alternative fuel for Saanich fleet, and throughout the Saanich community. (D)
  - Work with the CRD and others to: (D)
    - Create a regional transportation plan, including an active transportation plan (e.g., connecting bike routes with Victoria).
    - Establish Transportation Management Associations (TMAs) in major centers.
    - Establish common commute trip reduction, school transport, and freight transport programs.
    - Create a plan for other high-density rapid transit corridors beyond BC Transit's Douglas Corridor.
    - Influence air and ferry travel.

### **Stakeholder Action & Resources**

There are a number of organizations supporting advancement of Travel and Transport in Saanich, for example Clean Energy Vehicle Program and BikeBC Cycling Infrastructure Funding. Please see Appendix A for a comprehensive listing of these organizations and resources.

## MATERIALS AND PRODUCTS



*Using materials from sustainable sources and promoting products which help people reduce consumption*

*One Planet Cities and Regions support a circular, collaborative, sharing economy. Prioritise materials and products with a low environmental impact across their lifecycle, and promote those that have positive social and environmental impacts, such as sustainable timber, which stores carbon.*

*One Planet Goals:*

- *To promote sustainable living by making it easy to share and reduce consumption of natural materials*
- *To carefully consider every material and product, selecting them for their positive social and environmental benefit or for reducing negative impact*
- *To promote materials and products that are not toxic to humans or wildlife at any stage in their lifecycle from raw material, through manufacturing, use and end-of-life*

### District of Saanich Plans, Policies and Actions

Relevant Plans & Policies:

- Official Community Plan
- Climate Plan Backgrounder
- Sustainable Purchasing Checklist
- Sustainable Procurement Guidelines
- Declaration of Social and Environmental Practices (For Saanich suppliers in RFPs and Tender responses)
- Building requirements:
  - Using local, durable and eco-friendly building materials
  - LEED Silver or equivalent
  - Energy efficiency
  - Encouraging sustainable development practices, including efficient use of resources during construction

### Selected Target

- **Zero:** waste generated in Saanich (where all outputs, currently referred to as “waste”, are used as inputs for another process. (Saanich [Official Community Plan](#)).
- **34.5% or more:** waste diverted relative to waste generated in Saanich per year by 2020 (Achieved: 40% diversion in 2017). (Saanich [2017 Annual Report](#))

### How are we doing?

Our consumption of goods and the way we manage our waste generates significant impacts on the environment, including greenhouse gas emissions. The District of Saanich participated in the ecoCity Footprint Tool pilot project in 2017, through which a Consumption Based Emissions Inventory (CBEI) was conducted. The CBEI evaluated the climate impacts of the District’s consumption of goods. It was determined that consumables and waste represent 9% of the total. The largest impact was found to be due to textiles. Furthermore, it highlighted that

most of the emissions associated with our consumption of goods occurs during the production of the goods, rather than during disposal. Therefore, it is most important to reduce the overall consumption so that we can reduce the upstream (production) impacts as well as waste management impacts. (For more information see: [District of Saanich Summary Report: ecoCity Footprint Tool Pilot \(2018\).](#))

The most significant impact areas are (ibid, fig.10, p.15):

- 43% from textiles
- 32% from paper
- 11% from plastic
- 6% from household hygiene

Furthermore, the majority of consumables come from outside of Canada, many with limited or unknown product standards. These products are difficult to control and regulate.

The share, reuse, repair culture and opportunities are growing in the region, with the availability of sharing schemes such as car shares, bike shares, tool libraries, and clothing making workshops such as the Make House. Repair clinics are also being offered through the library system and occasional pop-up clinics.

### Opportunities:

The following are opportunities for action that all individuals and organizations can play a role in advancing. Those actions that would be specifically led by the District are noted with a 'D' for District. However, even for District-led activities other stakeholders can advocate for them and support their implementation.

- Adopt and promote purchasing policies that support a circular economy.
- Advance circular economy opportunities by participating in local circular initiatives (e.g., Project Zero initiative and potential plans for a local National Industrial Symbiosis Program), and by support of new circular business opportunities (e.g., funding, providing access to space to start-ups, etc.)
- Work with academic institutions to showcase and research local solutions (leverage student energy).
- Further celebrate and showcase business leaders (i.e. Saanich Environmental Awards, EcoStar Awards, etc.).
- Promote and support reuse, repurposing and sharing opportunities like tool libraries and repair cafes.
- Educate on and encourage reduced consumption (for ideas see the One Earth Sustainable Lifestyles report at <http://www.oneplanetnetwork.org/resource/sustainable-lifestyles-options-and-opportunities>).
- Accelerate adoption of single use product bans (e.g., plastic bags). (D)

### Stakeholder Action & Resources

There are a number of organizations supporting advancement of Materials and Products in Saanich, for example Habitat for Humanity ReStore and The Make House. Please see Appendix A for a comprehensive listing of these organizations and resources.

## ZERO WASTE

*Reducing consumption, reusing and recycling to achieve zero waste and zero pollution*



*Waste can be considered a resource and can be part of the circular economy, so One Planet Cities and Regions promote the waste hierarchy to:*

- 1) *Reduce consumption*
- 2) *Prevent waste*
- 3) *Reuse materials and products*
- 4) *Recycle and compost*
- 5) *Recover energy from waste*
- 6) *Dispose to landfill*

*One Planet Goals:*

- *To reduce wasteful consumption*
- *To maximise upcycling, re-use and recycling*
- *To aim for zero waste to landfill*

### District of Saanich Plans, Policies and Actions

Relevant Plans & Policies:

- Official Community Plan
- 2010 Climate Action Plan
- Saanich Garbage Collection and Disposal Bylaw

### Selected Targets

- **34.5% or more:** waste diverted relative to waste generated in Saanich per year by 2020 (we are already at 40% diversion in 2016). (Saanich [2017 Annual Report](#))

### How are we doing?

Currently residents in the region generate 407kg of waste per person, which is lower than the provincial total of 472kg per person, but significantly higher than BC's target of 350kg per person. Waste per capita has continued to increase, with organics being the highest proportion of solid waste, followed by wood, paper and plastics respectively (Vital Signs, P.25).

Meanwhile, a growing number of municipalities globally are adopting zero waste targets acknowledging that disposing any amount of material in landfill represents a wasted resource.

While there is strong local knowledge and support networks to improve waste management efforts, challenges arise because recycling programs are managed provincially. Current challenges associated with the current system include limited opportunities for polystyrene and soft plastics recycling; disaggregation and confusing disposal of non-blue bin materials; and the fact that recyclables are shipped elsewhere, representing a loss of resource inputs. There are also excessive single-use plastic items, straining waste management systems and

impacting the environment. There are also significant opportunities for reducing, reusing and recycling construction and demolition waste.

Hartland Landfill's end of life is fast approaching, which represents an opportunity by necessity.

### **Opportunities**

The following are opportunities for action that all individuals and organizations can play a role in advancing. Those actions that would be specifically led by the District are noted with a 'D' for District. However, even for District-led activities other stakeholders can advocate for them and support their implementation.

- Conduct and support waste audits to see where improvements can be made.
- Eliminate supply of plastic bottled water and other single use items.
- Raise awareness of high consumption rates and associated impacts; the benefits of sourcing goods and services locally; the advantages of lighter living; and celebrate leaders and promote best practices (for ideas see the One Earth Sustainable Lifestyles report at <http://www.oneplanetnetwork.org/resource/sustainable-lifestyles-options-and-opportunities>).
- Promote existing programs for recycling and reuse for high-impact materials such as textiles that are currently being landfilled. A list of opportunities for recycling items not currently accepted in the blue box, including unusable textiles, electronics, etc, is available at [myrecyclopedia.ca](http://myrecyclopedia.ca).
- Participate in and learn from Victoria's development of a Zero Waste Strategy.
- Advocate for a Zero Waste Strategy for Saanich, this could include circular economy principles to promote beneficial use of waste products and achieve economic advantages in doing so.

### **Stakeholder Action & Resources**

There are a number of organizations supporting advancement of Zero Waste in Saanich, for example the Compost Education Centre and CRD's MyRecyclopedia. Please see Appendix A for a comprehensive listing of these organizations and resources.

## ZERO CARBON ENERGY

*Making buildings and manufacturing energy efficient and supplying all energy with renewables*



*The energy we use has a big impact on the carbon emissions of buildings, manufacturing and agriculture. Cities and regions have an important role to play in increasing the efficiency of buildings and operations and promoting renewables, helping both citizens and business owners in Saanich reduce their carbon footprint.*

*One Planet Goals:*

- *Buildings are energy efficient compared to a stated local or national benchmark or a recognised standard*
- *100% of energy consumed is supplied by non-polluting renewable energy generated on-site or off-site*

### District of Saanich Plans, Policies and Actions

Relevant Plans & Policies:

- Official Community Plan
- 2010 Climate Action Plan
- Council 2050 targets of 100% Renewable Energy and 80% reduction in GHG emissions from 2007 levels
- Active Transportation Plan
- Sustainability Statement for Subdivision Applications
- Strategic Facilities Master Plan
- Oil Burning Equipment and Flammable Liquid and Combustible Liquid Fuel Tank Bylaw (2014)
- Geothermal Heat Exchangers in Saanich
- Freshwater Ecosystems Policy (2008)
- Saanich Green Buildings Policy (2010)
- Step Code adoption
- Electric Vehicle Strategy
- Shelbourne Valley Action Plan (SVAP)

### Selected Target

- **100%** renewable energy by 2050 for the community as well as District of Saanich operations. (Council Resolution [2 October 2017](#))
- **80%** greenhouse gas (GHG) reduction by 2050 below 2007 levels (Council Resolution [2 October 2017](#))

### How are we doing?

As of yet, Saanich is not meeting its 2020 targets, which were set in 2008. Community emissions are up by 0.7% and corporate emissions are down by 9% as of 2017. GHG emissions need to be reduced by 74% in order to meet the Paris agreement, so there is still significant room for improvement.

In 2017, Saanich committed to becoming a 100% renewable energy community and to reducing GHG emissions by 80% by 2050, compared to 2007 levels. The

District is currently working on updating its 2010 Climate Action Plan, which will be completed in 2019. The plan will outline the actions needed to become a 100% renewable and resilient community (AR, P.29). Implementation highlights to-date include: strong commitments for renewable energy and GHG reductions; the establishment of the Carbon Fund; and continuing retrofits of Saanich facilities.

One of the key challenges identified by stakeholders is that the transformational change needed is inhibited by a dependency on fossil fuels and our locked-in car-centric neighbourhood design and infrastructure. Furthermore, renewables and related green infrastructure is not yet well-established, intermittent, and often with higher capital costs (e.g., for electric vehicles, hydrogen fuel cells, air source heat pumps, wind and ocean energy).

It was also noted that greater inter-jurisdictional coordination (regionally, provincially, nationally and internationally) is needed to tackle global issues and to benefit from economies of scale. This would support the deployment of investments in renewable energy; collectively identify viable and applicable clean energy technologies; and educate the broader public regarding behaviour change and future quality of life.

Provincially, electricity is predominantly hydropower, a renewable energy source. The introduction and adoption of the BC Energy Step Code and Passive House standards will support the transition to making buildings Net Zero Energy ready by 2032. There are also numerous resources and rebates available through the BC Home Energy Coach and Efficiency BC.

### Opportunities

The following are opportunities for action that all individuals and organizations can play a role in advancing. Those actions that would be specifically led by the District are noted with a 'D' for District. However, even for District-led activities other stakeholders can advocate for them and support their implementation.

- Promote and take advantage of various retrofit and alternative energy incentives available to residents and businesses (see: [www.EfficiencyBC.ca](http://www.EfficiencyBC.ca)).
- Replace all residential and commercial oil tanks (and secondarily natural gas furnaces) with air or ground-source heat pumps.
- Adopt energy saving technologies/practises: install LED lighting (instead of CFL or incandescent); set up HVAC system to operate only when the building is in use; etc (for more ideas see: <https://www.citygreen.ca/tips>).
- Adopt Climate Responsive Landscaping - use deciduous trees for seasonal shading in appropriate locations.
- Focus future Saanich-wide land use planning and neighbourhood development towards: (D)
  - Infill in recognized Villages and centres, with compact, energy-efficient neighbourhood design; with new developments emphasizing walkability/transit orientation.
  - Meeting and incentivizing Step Code and Passive House design in all new residential and commercial development.
- Accelerate adoption of Step Code 5 and Passive House design. (D)
- Explore additional decentralized energy and net-zero energy opportunities (e.g., waste-to-energy; biomass district energy; residential solar power; biofuels for vehicles and off-road equipment). (D)

Note: additional actions are being considered as part of the update of Saanich's Climate Action Plan - potential actions are presented in Saanich's consultation reports available on the District website [here](#).

### **Stakeholder Action & Resources**

There are a number of organizations supporting advancement of Zero Carbon Energy in Saanich, for example BC Hydro Power Smart and the Province's Community Energy Leadership Program. Please see Appendix A for a comprehensive listing of these organizations and resources.

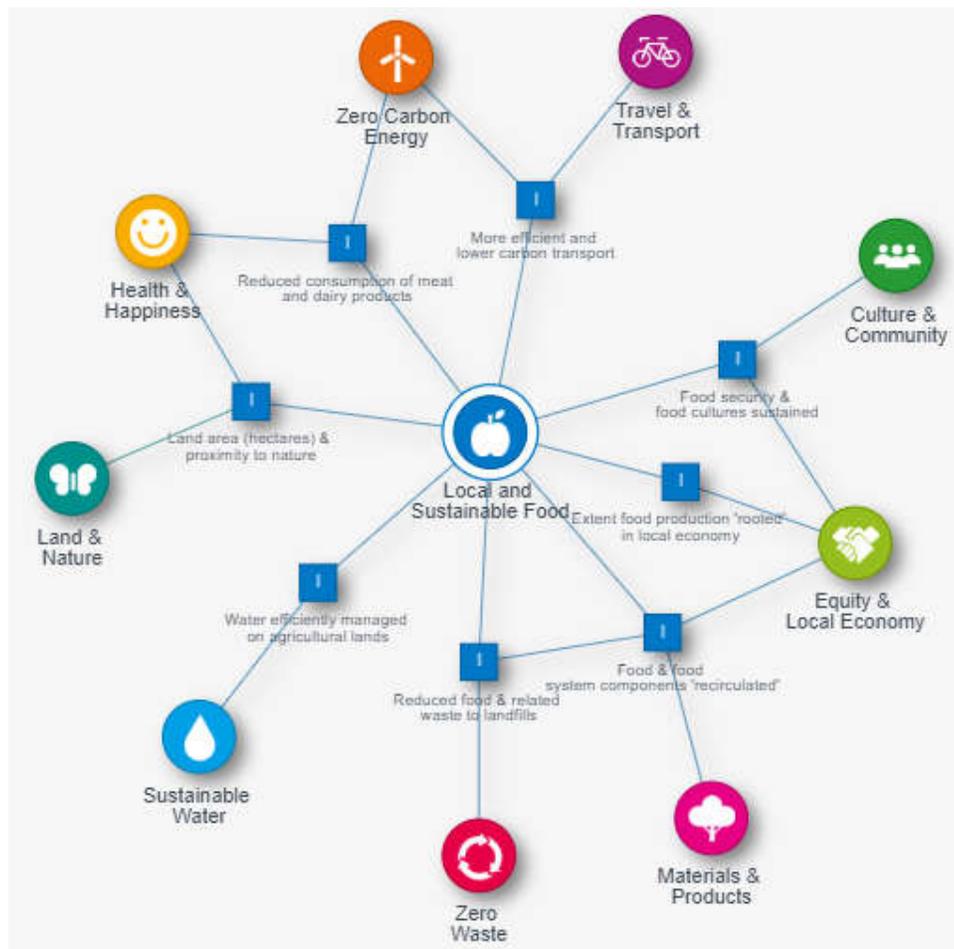
## A Focus on Synergies – a Ten-Piece Sustainable Community Orchestra

The 10 One Planet Living Principles can guide individual organizations and the District itself in ensuring that no one or no key social, environmental, economic and cultural elements are left behind as the community strives to 'live within its means'.

The One Planet Living framework uses a systems approach, in which we should:

1. Aim to prioritize those actions that support the advancement of multiple principles simultaneously.
2. Consider how we can improve upon an action by considering all the principles and adjusting the action so that it maximizes co-benefits and minimizes any potential co-harms.

The following is an illustrative example of how outcomes for each of the 10 One Planet Principles can be interconnected when adopting an holistic One Planet Living approach. In this example, Local and Sustainable Food is the central driver.



A focus on local and sustainable food: One of the core findings from the ecological footprint and consumption-based inventory was the impact of meat and dairy consumption on hectares used and GHGs emitted. Reducing meat and dairy

consumption and localizing sustainable, organic food production in Saanich can have a positive impact on the other 9 One Planet Principles:

- Health & Happiness – Dietary shifts toward organic, plant-based and local foods can yield health benefits.
- Land & Nature - Meat production is land and resource intensive. The more plant-based (non-meat or dairy) production, particularly where agricultural land is in close proximity and harmony with nature (pollinators, water retention, integrated ecosystem), the better.
- Equity & Local Economy - Local food sustainability includes increasing production and uptake of meat and dairy alternatives that are less expensive to the consumer, and that can build the local circular economy, provide fair jobs and fair access to food across the demographic spectrum, including building new local upstream suppliers and downstream distributors. This can also include developing new businesses to re-purpose food waste.
- Culture & Community – Increasing local food production (including meat and dairy alternatives) can advance community independence by establishing local food self-sufficiency, supporting production of alternatives locally, stimulating socially-interactive food gardens, and accommodating 'food cultures', particularly those of indigenous communities.
- Sustainable Water - Sustainable agricultural practices can reduce potable water consumption (e.g., rain barrels, bioswales, biochar), with resilient practices that will help to address the increasing numbers and extent of extreme weather events (e.g., droughts and floods).
- Travel & Transport - Local food production reduces 'food miles', and using lower carbon farm and transport vehicles can reduce the carbon footprint of the entire local food production, transportation and supply chain. Care must be taken that local practices are not more energy intensive than those for imported food.
- Zero Waste – Local and sustainable food can also be about providing education regarding the harmful impacts of food waste that is generated along the supply chain and during consumption.
- Materials & Products – Food can play a big role in the 'circular economy' - both food and the materials used to produce and distribute food can be recovered rather than landfilled, via re-distribution of consumable food or for the production of new food items (i.e., enhancing soil quality).
- Zero Carbon Energy – Sustainable production practices and shifting to more plant-based diets can yield significant reductions in greenhouse gas emissions.

Each organization's approach to One Planet Living will be different, and some may start with One Planet Action Plans that use only a small number of Outcomes to pursue. At the city-wide level, it will be relatively easy to identify Outcomes for each of the One Planet Principles, and to show the synergies between them. With all comprehensive One Planet Action Plans (OPAPs), there are multiple synergies between multiple Outcomes and/or Actions.

## Appendix A: Resources for a One Planet Region

The following is a list of local resources available to support One Planet Saanich Stakeholders in their efforts to build and implement their One Planet Action Plans. Resources include funding sources, information sources, and other program offerings.

In addition, there are a few overarching funding opportunities, including:

- The Vancity Lighter Living focused Enviro Fund (<https://www.vancity.com/AboutVancity/InvestingInCommunities/Grants/enviroFund/>)
- For non-profit organizations: The Victoria Foundation (<https://victoriafoundation.bc.ca/grants-funding/grants/>)
- A comprehensive list of other funding sources available locally is available at: <https://victoriafoundation.bc.ca/grants-funding/other-funding-sources/>

	Organization/ Program	Description	Weblink
<b>HEALTH AND HAPPINESS</b>			
<b>PUBLIC</b>	<b>Island Health Community wellness grant program</b>	Provides funding for projects relating to: <ul style="list-style-type: none"> <li>• Healthy Aging</li> <li>• Positive Mental Health</li> <li>• Social Connectedness/Family Connectedness (healthy early childhood development)</li> <li>• Healthy Eating</li> <li>• Physical Activity</li> </ul>	<a href="http://communitygrants.islandhealth.ca">http://communitygrants.islandhealth.ca</a>
	<b>Public Health Agency of Canada</b>	Information and resources to promote healthy living	<a href="https://www.canada.ca/en/public-health/services/health-promotion/healthy-living.html">https://www.canada.ca/en/public-health/services/health-promotion/healthy-living.html</a>
	<b>Act Now BC: Healthy Living Tips</b>	Provincial strategy to promote health and wellbeing at every stage of life.	<a href="https://www.healthyfamiliesbc.ca">https://www.healthyfamiliesbc.ca</a>
	<b>CRD</b>	The CRD Community Map was created to help identify where diverse populations live in the region and what their level of access is to important community assets, including affordable transportation modes and community facilities. Local residents may be most interested in community facilities and transportation routes.	<a href="https://www.crd.bc.ca/project/community-health-wellbeing">https://www.crd.bc.ca/project/community-health-wellbeing</a>
		Clean Air Bylaw (no smoking/vaping) & signage template	<a href="https://www.crd.bc.ca/project/clean-air-bylaw">https://www.crd.bc.ca/project/clean-air-bylaw</a>
<b>NGO</b>	<b>Island Sexual Health Society</b>	Offers pro-choice and comprehensive sexual health clinics, education programs and products for all genders, orientations and abilities. Including the Youth Ambassador Program	<a href="https://www.islandsexualhealth.org">https://www.islandsexualhealth.org</a>

	Organization/ Program	Description	Weblink
	<b>BC Healthy Communities</b>	Services, programs and support for community groups and local governments to build capacity for community health & well-being	<a href="http://bchealthyclmmunities.ca/home">http://bchealthyclmmunities.ca/home</a>
	<b>Newcomer Sport for Life Program</b>	A collaboration between Sport for Life, The Inter-cultural Association of Victoria and SportFit to provide quality sporting opportunities for immigrant and refugee children.	
	<b>BC Alliance for Healthy Living</b>	Research and advocacy for health-promoting policies, environments, programs and services in BC	<a href="https://www.bchealthyliving.ca">https://www.bchealthyliving.ca</a>
<b>EQUITY AND LOCAL ECONOMY</b>			
<b>PUBLIC</b>	<b>Government of Canada Social Enterprise Guide</b>	Business planning resources	<a href="https://canadabusiness.ca/startng/start-and-grow-a-social-enterprise/">https://canadabusiness.ca/startng/start-and-grow-a-social-enterprise/</a>
<b>NGO/Private</b>	<b>South Island Prosperity Project</b>	Economic development organization providing information, networking and mentoring for local businesses	<a href="http://www.southislandprosperity.ca">http://www.southislandprosperity.ca</a>
	<b>Vancouver Island Green Business Certification</b>	Developed by Synergy Sustainability Institute, this certification recognizes businesses that are reducing their environmental impact, using internal assessments and on-site verification	<a href="http://www.vigbc.ca/">http://www.vigbc.ca/</a>
	<b>MaRS Catalyst Fund</b>	Provides funding and support to Canadian companies pursuing social and environmental outcomes with business models that scale	<a href="https://impactinvesting.marsrd.com/mars-catalyst-fund/">https://impactinvesting.marsrd.com/mars-catalyst-fund/</a>
	<b>Innoweave</b>	Helps community organizations implement new tools to generate greater impact through assessment, training, coaching and funding for social enterprise	<a href="http://innoweave.ca">http://innoweave.ca</a>
	<b>Mitacs</b>	Works with universities, businesses and provincial governments to deliver internships, research collaborations and training programs that support social innovation in Canada	<a href="https://www.mitacs.ca/en">https://www.mitacs.ca/en</a>
<b>CULTURE AND COMMUNITY</b>			
<b>PUBLIC</b>	<b>Building Communities Through Arts and Heritage</b>	Provides funding for local festivals, community anniversaries and capital projects aimed at restoring, renovating or transforming community heritage assets.	<a href="https://www.canada.ca/en/canadian-heritage/services/funding/building-communities.html">https://www.canada.ca/en/canadian-heritage/services/funding/building-communities.html</a>
	<b>Canada Cultural Investment Fund</b>	Endowment incentives, strategic initiatives and support for arts organizations.	<a href="https://www.canada.ca/en/canadian-heritage/services/funding/cultural-investment-fund.html">https://www.canada.ca/en/canadian-heritage/services/funding/cultural-investment-fund.html</a>
	<b>CRD Arts Development</b>	Provides funding for non-profit organizations that produce Arts & Culture programming, initiatives and events in the Capital Region.	<a href="https://www.crd.bc.ca/service/arts-funding">https://www.crd.bc.ca/service/arts-funding</a>
<b>NGO</b>	<b>Greater Victoria Placemaking Network</b>	Volunteer non-profit dedicated inspire people, neighbourhoods and communities to create	<a href="https://victoriaplacemaking.ca/placemaking/">https://victoriaplacemaking.ca/placemaking/</a>

	Organization/ Program	Description	Weblink
		vibrant public places that promote health, happiness and wellbeing.	
	<b>Intercultural Association of Greater Victoria</b>	Advocates intercultural awareness, sensitivity and inclusion. Provides services and resources for immigrant and refugee newcomers.	<a href="http://www.icavictoria.org">http://www.icavictoria.org</a>
	<b>First Peoples Cultural Council</b>	Supports the revitalization of Indigenous language, arts, culture and heritage in BC.	<a href="http://www.fpcc.ca">http://www.fpcc.ca</a>
	<b>BC Alliance for Arts and Culture</b>	Provincial non-profit that works to advocate, inform, connect and serve BC's creative community.	<a href="https://www.allianceforarts.com">https://www.allianceforarts.com</a>
	<b>Arts BC</b>	Provincial arts service organization that provides tools and support to excel in arts and culture leadership.	<a href="https://artsbc.org">https://artsbc.org</a>
<b>LAND AND NATURE</b>			
	<b>CRD</b>	Information on green infrastructure (low impact development).	<a href="https://www.crd.bc.ca/education/green-stormwater-infrastructure">https://www.crd.bc.ca/education/green-stormwater-infrastructure</a>
		Regional Climate Modelling - an analysis of projected changes in temperature, precipitation, and indices of extremes due to climate change in the 2050s and the 2080s.	<a href="https://www.crd.bc.ca/about/data/climate-change">https://www.crd.bc.ca/about/data/climate-change</a>
		CRD hosts numerous all ages nature outings and events throughout the year, led by skilled naturalists. These events foster appreciation and stewardship for Saanich's natural environment.	<a href="https://www.crd.bc.ca/about/events">https://www.crd.bc.ca/about/events</a>
	<b>Capital Region Invasive Species Partnership (CRISP)</b>	CRISP is a collaborative partnership of local governments, working alongside the Invasive Species Council of BC to provide invasive species management in the Capital Region.	<a href="http://crispinvasives.ca/">http://crispinvasives.ca/</a>
<b>NGO</b>	<b>Habitat Acquisition Trust</b>	Regional Land Trust that conserves nature on South Vancouver Island.	<a href="https://www.hat.bc.ca">https://www.hat.bc.ca</a>
	<b>The Land Conservancy</b>	Charitable Land Trust, working throughout BC to protect important habitats and properties with ecological, historical, cultural, scientific or recreational value.	<a href="http://conservancy.bc.ca">http://conservancy.bc.ca</a>
	<b>Sea Change Society</b>	Terrestrial and marine ecosystem conservation, restoration and education.	<a href="https://seachangesociety.com">https://seachangesociety.com</a>
	<b>Garry Oak Ecosystem Recovery Team</b>	Works to protect and restore Garry Oak and associated ecosystems and species at risk.	<a href="http://www.goert.ca/index.php">http://www.goert.ca/index.php</a>
	<b>Island Pollinator Initiative</b>	A coalition of groups working to protect pollinators on Vancouver Island and the Gulf Islands. Provides a platform for information sharing, coordination, and planning to support vital pollination work in the Capital Region. It is a collaboration between the Peninsula and Area Agricultural Commission and the Pollinator Partnership Canada.	<a href="https://islandpollinatorinitiative.ca/">https://islandpollinatorinitiative.ca/</a>
	<b>Vancouver Island Surf Rider Foundation</b>	Volunteer non-profit dedicated to marine conservation and restoration through various programs and campaigns.	<a href="https://vancouverisland.surfriider.org">https://vancouverisland.surfriider.org</a>
A thorough listing of community partners and agencies that are working to protect the natural environment in Saanich is available on the District website at: <a href="http://www.saanich.ca/EN/main/community/natural-environment/community-partners-agencies.html">http://www.saanich.ca/EN/main/community/natural-environment/community-partners-agencies.html</a>			

	Organization/ Program	Description	Weblink
<b>SUSTAINABLE WATER</b>			
<b>PUBLIC</b>	<b>CRD</b>	Greater Victoria Water Supply Area and Facilities tours, facts and figures.	<a href="https://www.crd.bc.ca/service/public-tours/watershed-tours">https://www.crd.bc.ca/service/public-tours/watershed-tours</a>
		Information, maps and resources linked to local watersheds and stewardship committees	<a href="https://www.crd.bc.ca/education/our-environment/watersheds">https://www.crd.bc.ca/education/our-environment/watersheds</a>
	<b>CRD Water Conservation Program</b>	This program includes residential and commercial offerings. The Residential Program is focused on education, outreach, research, water conservation bylaws, partnerships and professional training. The Industrial, Commercial and Institutional (ICI) program includes water audits and technical services, rebates, industry education, research and reports	<a href="http://www.crd.bc.ca/education/water-conservation">www.crd.bc.ca/education/water-conservation</a> <a href="https://www.crd.bc.ca/education/natural-gardening">https://www.crd.bc.ca/education/natural-gardening</a>
<b>NGO/PRIVATE</b>	<b>POLIS Water Sustainability Project</b>	Research and action to increase awareness of freshwater issues, drive law, policy and governance reform to generate change toward a sustainable freshwater future.	<a href="http://polisproject.org/project/watersustainability">http://polisproject.org/project/watersustainability</a>
	<b>Partnership for Water Sustainability in BC</b>	A hub for a "convening for action" network in the local government setting, is responsible for delivering the Water Sustainability Action Plan program through partnerships and collaboration	<a href="http://waterbucket.ca/">http://waterbucket.ca/</a>
	<b>Partnership for Water Sustainability in BC</b>	Working to promote and advance the protection and management of natural and engineered water resources in BC.	<a href="http://waterbucket.ca">http://waterbucket.ca</a>
<b>LOCAL AND SUSTAINABLE FOOD</b>			
<b>Public</b>	<b>CRD</b>	Growing Solutions Calendar for Southern Vancouver Island. Help determines when local fresh foods are available.	<a href="https://www.crd.bc.ca/docs/default-source/corporate-communications-pdf/campaigns/growing-solutions-fresh-food-calendar.pdf?sfvrsn=9b7b8cc9_2">https://www.crd.bc.ca/docs/default-source/corporate-communications-pdf/campaigns/growing-solutions-fresh-food-calendar.pdf?sfvrsn=9b7b8cc9_2</a>
		The Regional Food & Agriculture Strategy (RFAS) is an in-depth exploration of regional food and agriculture objectives, issues and opportunities to guide action and foster leadership.	<a href="https://www.crd.bc.ca/project/food-agriculture">https://www.crd.bc.ca/project/food-agriculture</a>
<b>NGO</b>	<b>LifeCycles Project</b>	Collects unwanted fruit from private and public land for redistribution.	<a href="http://lifecyclesproject.ca">http://lifecyclesproject.ca</a>
	<b>Urban Learning Garden</b>	A collaboration between the LifeCycles Project Society and the Food Eco District, this project is an outdoor classroom and garden situated in the courtyard of the Central Branch of the Greater Victoria Public Library. The purpose of the Urban Learning Garden is to provide food education about saving seeds, identifying native plants and their uses, and growing food in urban spaces.	

	Organization/ Program	Description	Weblink
	<b>Capital Region Food and Agriculture Initiatives Roundtable (CRFAIR)</b>	Works to mobilize and connect efforts to develop healthy, equitable and sustainable food systems in the Capital Region.	<a href="http://www.crfair.ca">http://www.crfair.ca</a>
	<b>Food Share Network</b>	Umbrella organization enhancing food security in the Capital Region through collaboration among food retailers, food banks, community centres, donors, etc. Also lists funding sources to support sustainable food initiatives.	<a href="http://www.foodsharenetwork.com">http://www.foodsharenetwork.com</a>
	<b>Topsoil</b>	Converts underutilized urban spaces into productive growing areas (currently active in Victoria).	<a href="https://www.topsoileatlocal.com">https://www.topsoileatlocal.com</a>
	<b>Mason St Farm</b>	Local urban farm that provides education and training in sustainable food cultivation.	<a href="http://masonstreetfarm.com/mission/">http://masonstreetfarm.com/mission/</a>
	<b>The BC Farmers' Market Trail</b>	A directory of farmers' markets in BC	<a href="https://bcfarmersmarkettrail.com/">https://bcfarmersmarkettrail.com/</a>
	<b>Island Farm Fresh</b>	A local farm directory	<a href="https://islandfarmfresh.com/">https://islandfarmfresh.com/</a>
	<b>Haliburton Farm</b>	A community supported certified organic educational farm. The farm practices and promotes sustainable farming practices; involves the community in sustainable food production; demonstrate the viability of small-scale cooperative community farming and educates community members about agroecology.	<a href="https://haliburtonfarm.org/">https://haliburtonfarm.org/</a>
	<b>Victoria's Food Eco District</b>	An urban district of sustainable food and edible gardens in partnership with local restaurants.	<a href="https://www.get-fed.ca">https://www.get-fed.ca</a>
<b>TRAVEL AND TRANSPORT</b>			
<b>PUBLIC</b>	<b>BikeBC Cycling Infrastructure Funding</b>	Provides cost sharing cycling infrastructure projects with local governments	<a href="https://www2.gov.bc.ca/gov/content/transportation/funding-engagement-permits/funding-grants/cycling-infrastructure-funding">https://www2.gov.bc.ca/gov/content/transportation/funding-engagement-permits/funding-grants/cycling-infrastructure-funding</a>
	<b>Clean Energy Vehicle Program</b>	Electric vehicle incentive program through affordability, infrastructure, research and economic development	<a href="https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/transportation-energies/clean-transportation-policies-programs/clean-energy-vehicle-program">https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/transportation-energies/clean-transportation-policies-programs/clean-energy-vehicle-program</a>
	<b>CRD</b>	Walk and Wheel to School Week- October event to promote active school travel. Schools sign up for resources and prizes	
The CRD bike map encourages everyone to pick up a bike and ride - to work, the grocery store or to get their kids from school. (new map anticipated 2019)			<a href="https://www.crd.bc.ca/project/regional-transportation/pedestrian-cycling-master-plan/bike-maps">https://www.crd.bc.ca/project/regional-transportation/pedestrian-cycling-master-plan/bike-maps</a>
<b>NGO/PRIVATE</b>	<b>Bike Share</b>	Bike share options e.g. U-bicycle, IsleShare Cycle,	<a href="https://www.u-bicycle.ca">https://www.u-bicycle.ca</a> <a href="http://www.islesharecycle.com">www.islesharecycle.com</a>
	<b>Car Share</b>	Car sharing options e.g. Modo, Zipcar	<a href="https://www.modocoop">https://www.modocoop</a> <a href="https://www.zipcar.ca">https://www.zipcar.ca</a>
	<b>GoByBikeBC &amp; Greater Victoria</b>	Cycling skills and workshops. Organizes Bike to Work and School Week locally.	<a href="https://www.biketowork.ca/victoria">https://www.biketowork.ca/victoria</a>

	Organization/ Program	Description	Weblink
	<b>Bike to Work Society</b>		
	<b>Greater Victoria Cycling Coalition</b>	Advocacy for improved bikeways in the capital region. Organizes special themed bike rides throughout the year.	<a href="http://gvcc.bc.ca">gvcc.bc.ca</a>
	<b>Victoria Transport Policy Institute</b>	An independent research organization dedicated to developing innovative solutions to transport problems.	<a href="http://www.vtppi.org">http://www.vtppi.org</a>
<b>MATERIALS AND PRODUCTS</b>			
<b>NGO/Private</b>	<b>Women in Need Resale Shops</b>	Second hand stores for gently used goods. The donation centre recycles goods that are not suitable for resale. The cooperative provides programs and resources for women in transition.	<a href="http://www.womeninneed.ca/win-resale-shop-locations">http://www.womeninneed.ca/win-resale-shop-locations</a>
	<b>Habitat for Humanity ReStore</b>	Home and building supply stores that accept and resell used hardware, furniture, appliances and home accessories.	<a href="https://www.habitatvictoria.com/restore.html">https://www.habitatvictoria.com/restore.html</a>
	<b>Victoria Tool Library</b>	Tool library for greater Victoria.	<a href="http://victoriatoollibrary.org">http://victoriatoollibrary.org</a>
	<b>The Make House</b>	A local sewing studio, library and fabric store, the Make House provides sewing classes, workshops, sew-by-the-hour, meet-ups and parties. They emphasize up-cycling used materials and learning how to make your own clothes in order to reduce the consumption of globally produced textiles.	
	<b>Recyclistas</b>	A bicycle repair shop, recycling depot and educational work space, Recyclistas hosts regular bicycle maintenance and repair classes. They divert waste by accepting used bikes and parts by donation and rebuilding and selling reconditioned bikes.	
	<b>The Soap Exchange</b>	Biodegradable household products sold bulk in reusable packaging.	<a href="http://www.victoriasoapexchange.com">http://www.victoriasoapexchange.com</a>
	<b>The Soap Exchange</b>	Biodegradable household products sold bulk in reusable packaging.	<a href="http://www.victoriasoapexchange.com">http://www.victoriasoapexchange.com</a>
<b>ZERO WASTE</b>			
<b>PUBLIC</b>	<b>CRD</b>	Hartland Landfill and recycling facility tours, facts and figures.	<a href="https://www.crd.bc.ca/service/public-tours/landfill-recycling-tours">https://www.crd.bc.ca/service/public-tours/landfill-recycling-tours</a>
		Waste, compost and recycling information for the capital region.	<a href="https://www.crd.bc.ca/service/waste-recycling">https://www.crd.bc.ca/service/waste-recycling</a>
		The CRD Community Clean-Up Assistance Program supports groups that make visible environmental improvements to their community through organized clean-ups.	<a href="https://www.crd.bc.ca/service/community-clean-up-assistance-program/community-clean-up-assistance-program">https://www.crd.bc.ca/service/community-clean-up-assistance-program/community-clean-up-assistance-program</a>

	Organization/ Program	Description	Weblink
		MyRecyclopedia: A search engine for where and how to recycle different materials.	<a href="http://myrecyclopedia.ca">myrecyclopedia.ca</a>
	<b>RecycleBC</b>	Tools, resources and apps for recycling (provincial)	<a href="https://recyclebc.ca/">https://recyclebc.ca/</a>
<b>NGO/PRIVATE</b>	<b>Compost Education Centre</b>	Promotes composting, organic gardening, conservation, local food production, and urban sustainability through: public education programs, demonstration site, volunteer programs, etc.	<a href="https://www.compost.bc.ca">https://www.compost.bc.ca</a>
	<b>Pedal to Petal</b>	Bicycle powered kitchen scrap pick-up.	<a href="http://pedaltopetal.com">http://pedaltopetal.com</a>
	<b>RCBC Retailer Take Back Program</b>	Recycling hotline, recyclopedia, smart phone app, and Road to Zero Waste School Program	
	<b>reFuse Resource Recovery</b>	Residential, commercial and event compost, garbage and recycling.	<a href="http://refuse.ca">http://refuse.ca</a>
	<b>reFuse Resource Recovery</b>	Residential, commercial and event compost, garbage and recycling.	<a href="http://refuse.ca">http://refuse.ca</a>
	<b>One Earth</b>	Nonprofit 'think and do' tank aimed at transforming production and consumption patterns to be sustainable, healthy, and just within the limits of living systems. For ideas on lighter living actions see the One Earth Sustainable Lifestyles report.	<a href="http://www.oneplanetnetwork.org/resource/sustainable-lifestyles-options-and-opportunities">http://www.oneplanetnetwork.org/resource/sustainable-lifestyles-options-and-opportunities</a>
<b>ZERO CARBON ENERGY</b>			
<b>PUBLIC</b>	<b>Natural Resources Canada</b>	Service organizations that help plan energy-efficient renovations in new homes.	<a href="http://oee.nrcan.gc.ca/residential/personal/home-improvement/service/contact-advisors.cfm">http://oee.nrcan.gc.ca/residential/personal/home-improvement/service/contact-advisors.cfm</a>
	<b>Community Energy Leadership Program</b>	Supports local government and First Nations investment in energy efficiency and clean energy projects.	<a href="https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/community-energy-solutions/community-energy-leadership-program">https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/community-energy-solutions/community-energy-leadership-program</a>
	<b>BC NRCan ISO 5001 Implementation Incentive</b>	Provides funding for industrial companies to implement energy management systems.	<a href="https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/innovative-clean-energy-solutions/iso-5001-implementation-incentive">https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/innovative-clean-energy-solutions/iso-5001-implementation-incentive</a>
	<b>BC Hydro Power Smart</b>	Tips, advice and rebates to improve home energy efficiency.	<a href="https://www.bchydro.com/power-smart.html">https://www.bchydro.com/power-smart.html</a>
	<b>CRD</b>	Provides a list of solar hot water installers	<a href="https://www.crd.bc.ca/education/campaigns/list-of-past-campaigns/solar-crd/registered-installers">https://www.crd.bc.ca/education/campaigns/list-of-past-campaigns/solar-crd/registered-installers</a>

	Organization/ Program	Description	Weblink
		Climate Action To-Go Kits: tools to help take action on climate change at home - available through the Greater Victoria Public Library, Salt Spring Island Public Library, Vancouver Island Regional Library and Camosun College Library.	<a href="https://www.crd.bc.ca/education/climate-action/at-home/climate-action-to-go-kits">https://www.crd.bc.ca/education/climate-action/at-home/climate-action-to-go-kits</a>
	<b>BC Home Energy Coach</b>	Provides information about the options and opportunities to improve residential energy efficiency. Including a list of energy advisors.	<a href="https://bcenergycoach.ca">https://bcenergycoach.ca</a>
NGO/PRIVATE	<b>City Green Solutions</b>	Provides tools, resources and services for energy efficiency of homes and buildings in BC.	<a href="https://www.citygreen.ca">https://www.citygreen.ca</a>
	<b>Better Business Bureau</b>	Provides a list of solar energy system designers, system suppliers and installers	<a href="https://www.bbb.org/en/ca/bc/victoria/category/solar-energy-design">https://www.bbb.org/en/ca/bc/victoria/category/solar-energy-design</a>  <a href="https://www.bbb.org/en/ca/bc/victoria/category/solar-energy-equipment">https://www.bbb.org/en/ca/bc/victoria/category/solar-energy-equipment</a>  <a href="https://www.bbb.org/en/ca/bc/victoria/category/solar-energy-contractors">https://www.bbb.org/en/ca/bc/victoria/category/solar-energy-contractors</a>

## Appendix B: Reference Materials

British Columbia Institute of Technology, Cora Hallsworth Consulting. (2018). ecoCity Footprint Tool Pilot Summary Report: District of Saanich.

Capital Regional District, Water Conservation in the Region  
<https://www.crd.bc.ca/service/drinking-water/water-conservation>

City of Victoria, Good Jobs + Good Business = Better Community  
[https://www.victoria.ca/assets/City~Hall/Mayor~Council/Documents/SESP%20Action%20Plan\\_e.pdf](https://www.victoria.ca/assets/City~Hall/Mayor~Council/Documents/SESP%20Action%20Plan_e.pdf)

District of Saanich. (2017). Annual Report  
<https://www.saanich.ca/assets/Local~Government/Documents/Corporate~and~Annual~Reports/2017-Annual-Report-for-web.pdf>

District of Saanich. (n.d.). Climate Plan Backgrounder

District of Saanich, Garbage and Organics FAQs  
<http://www.saanich.ca/EN/main/community/utilities-garbage/garbage-organics-recycling/faqs.html#faq-2335>

District of Saanich. (2008). Official Community Plan

District of Saanich, Water Conservation  
<http://www.saanich.ca/EN/main/community/utilities-garbage/water/water-conservation.html>

Victoria Foundation. (2017). Victoria's: Greater Victoria's 2017 Annual Check-up.

---

<sup>i</sup> Stat Canada. Retrieved from <http://www.saanich.ca/EN/main/community/community-planning/stats-and-data.html>

<sup>ii</sup> District of Saanich. (2013). *POPULATION PROJECTIONS, TREND & CAPACITY BUILD-OUT ANALYSIS*. Retrieved from

[http://www.saanich.ca/assets/Community/Documents/FINAL%20REPORT\\_Sept%2030%202013.pdf](http://www.saanich.ca/assets/Community/Documents/FINAL%20REPORT_Sept%2030%202013.pdf)

<sup>iii</sup> BC Local News. (Dec. 12, 2017). *Victoria hopes to have a fully electric bus fleet by 2030*. Retrieved from <https://www.bccommercial.com/news/victoria-hopes-to-have-a-fully-electric-bus-fleet-by-2030/>

<sup>iv</sup> District of Saanich. (July 2017). *Future Directions Report*. Retrieved from <http://www.saanich.ca/assets/Local~Government/Images/Engineering/Future%20Directions%20Report.pdf>