District of Metchosin Climate Action Plan

Council and Staff Workshop

September 27, 2022
Pinna Sustainability

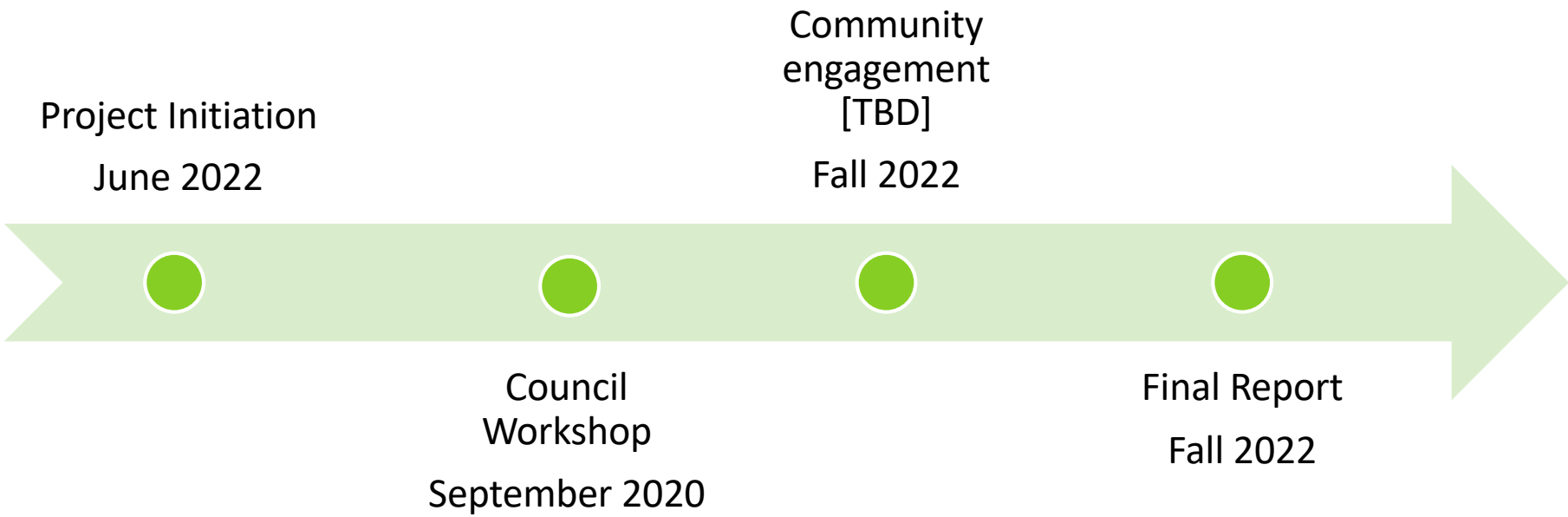
Introductions

- Facilitator: Steve Roddick

Agenda

- Setting the Context
  - Preliminary baseline and scope of emissions
  - Preliminary “business-as-usual” forecast
- Action planning
  - Review key areas of action and specific opportunities
  - Clarify and refine list of opportunities
  - Identify priority areas of action and implementation timelines
- Closing and Next Steps

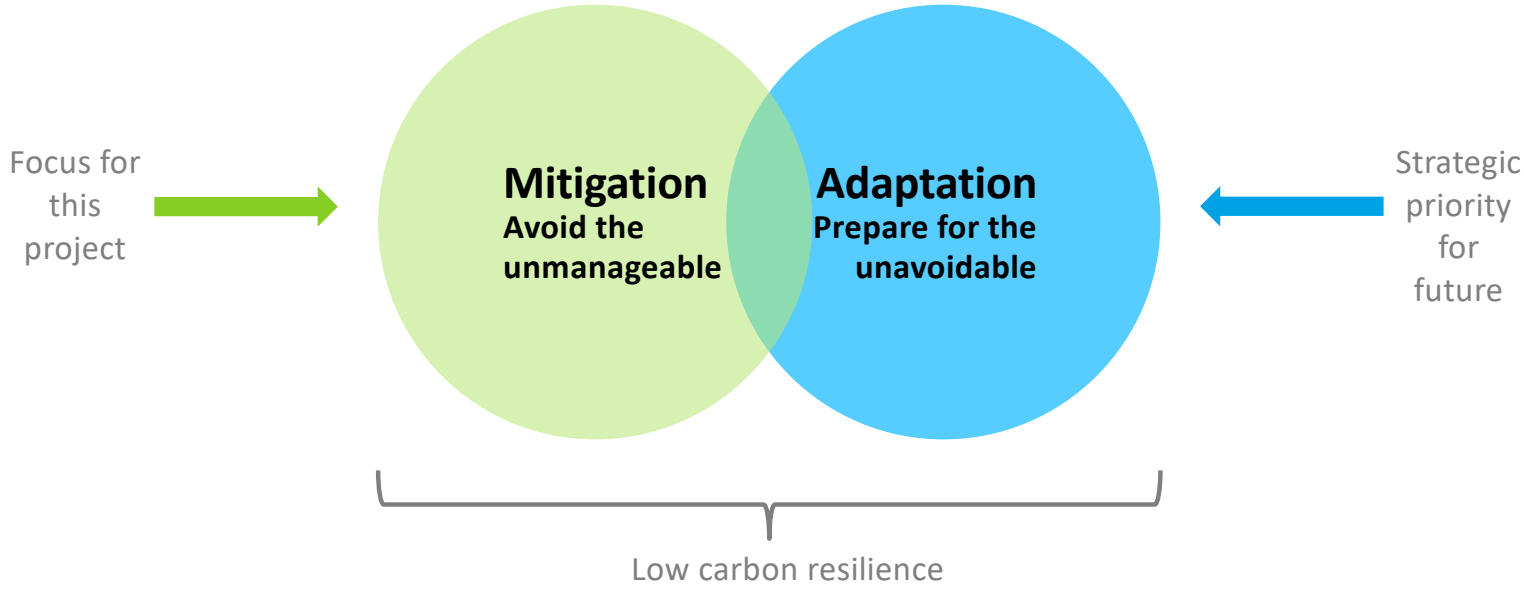
Project timeline



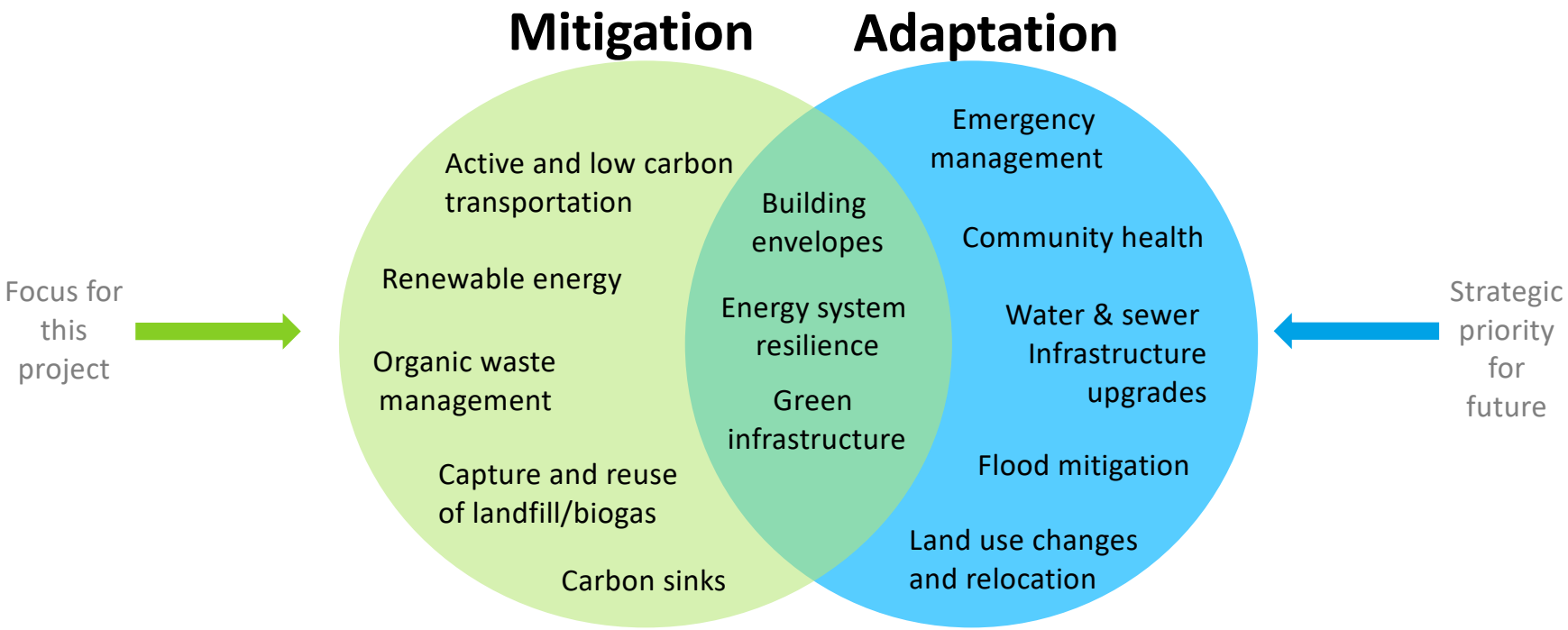
Setting the Context: Global, federal, provincial

Mitigation vs adaptation

- Mitigation – Opportunities to reduce greenhouse gas emissions
- Adaptation – Identification of local climate risks and preparing for those risks



Example synergies





Keep global temperature rise this century to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase even further to 1.5°C.

Federal and provincial context

- Federal:
  - *Canadian Net-Zero Emissions Accountability Act*
    - -40 to -45% by 2030, from 2005
    - Net-zero emissions by 2050

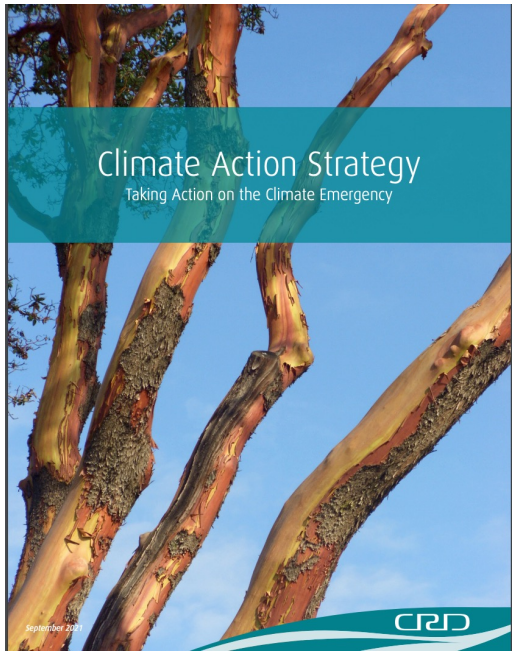




- Provincial:
  - *Climate Change Accountability Act*
    - -40% by 2030 and -60% by 2040, from 2007
  - Implementation of CleanBC Roadmap
    - An *accelerated zero-emission vehicle law* (26% of new light-duty vehicles by 2026, 90% by 2030, 100% by 2035)
    - After 2030, all new space/water heating equipment sold or installed in B.C. will be at least 100% efficient
    - *BC Building Code*: Carbon pollution standards introduced for new buildings in 2024, zero-carbon new construction by 2030

Regional context

- **CRD** developed a regional climate action strategy in 2021
- **Colwood**: participated in climate adaptation project with ICLEI Canada (2018-2020)
- **Highlands**: Developed District Climate Action Plan in 2020
- **Sooke**: currently developing a 2030 Climate Action Plan



Setting the Context: Metchosin

District climate policies and actions to date

Review and Discussion: District Policies

	Existing District Policies and Initiatives

Planning	• **2018 Regional Growth Strategy (RGS)**: Participation in CRD regional growth strategy;
	• **Official Community Plan (OCP)**: Includes commitment to develop GHG reduction strategy to achieve 33% emissions reduction (from 2007) by 2020.
	• **District planning priorities** largely focused on:
	  • maintenance of rural character,
	  • support for local agriculture, and
	  • preservation of green spaces and valued marine and forest ecosystems

Buildings & Bylaws	• **Secondary and Detached Suites**

Review and Discussion: District Policies

	Existing District Policies and Initiatives

Corporate Policy & Sustainability	• **Environmental Advisory Select Committee**
	  • Green and Blue Spaces Strategy (2007)
	  • Sustainability Report (2010)

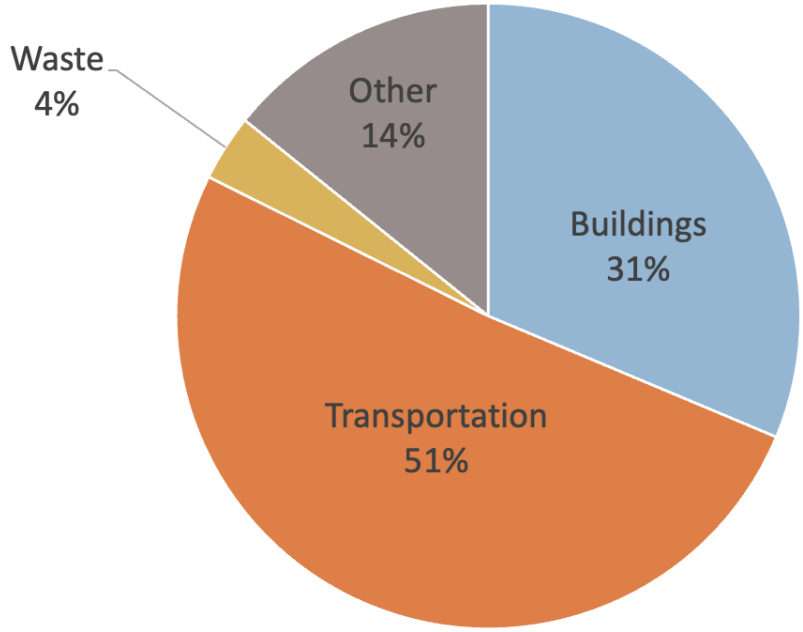
Food & Agriculture	• **Agricultural Advisory Select Committee** • **Metchosin Farmers Market,** operated by the Metchosin Producers Association

Review and Discussion: District Policies

	Existing District Policies and Initiatives
Transportation	• **Electric vehicle charging station**: The District has installed two public electric vehicle charging stations, • **The Victoria Regional Transit System** provides transit service to Metchosin through three routes, • Metchosin also has a **Park & Ride service area** available to residents who are seeking or offering transportation in private vehicles.
Other?	• ??? *What else is missing from this list?*

Metchosin 2020 GHG Inventory

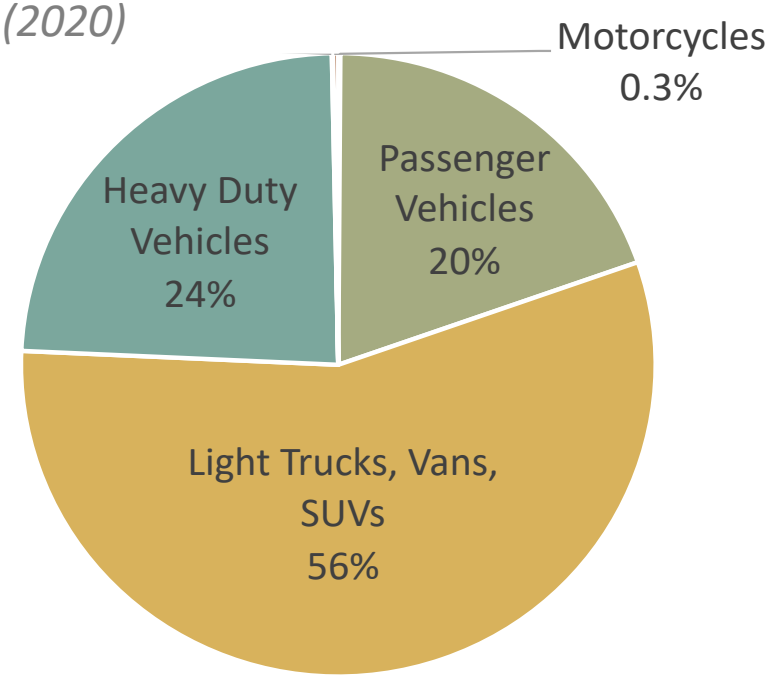
Sector	GHG Emissions (tCO2e)
Transportation	10,520
Buildings	6,460
Solid Waste	709
Other	2,936
Total	**20,624**
Land Use: Emissions Sequestered	*-12,971*



Community Inventory Data: CRD 2020

Transportation indicators for Metchosin

Transportation Emissions Breakdown (2020)



CRD Origin-Destination Survey (2017)

- ~12,700 people travel in and out of Metchosin every day
- Most trips are for work, recreation/social/, shopping, or returning home

Key Take-Aways

- Almost all (96%) of inter-district trips are by automobile
- Most trips are by single-occupant vehicles (avg. vehicle occupancy: 1.27)
- Over ¾ of transportation emissions are from light duty vehicles

Buildings indicators for Metchosin

Key Take-Aways

- 23% of Metchosin households spend 6%+ of household income on heat.
- 33% of Metchosin households are primarily wood heated.
- If all Metchosin homes underwent…
  - **'Standard' retrofit = 43%** reduction in residential GHGs (-2,220 tCO2)
  - **'Fuel switch' retrofit to heat pump = 66%** reduction in GHGs (-3,466 tCO2)

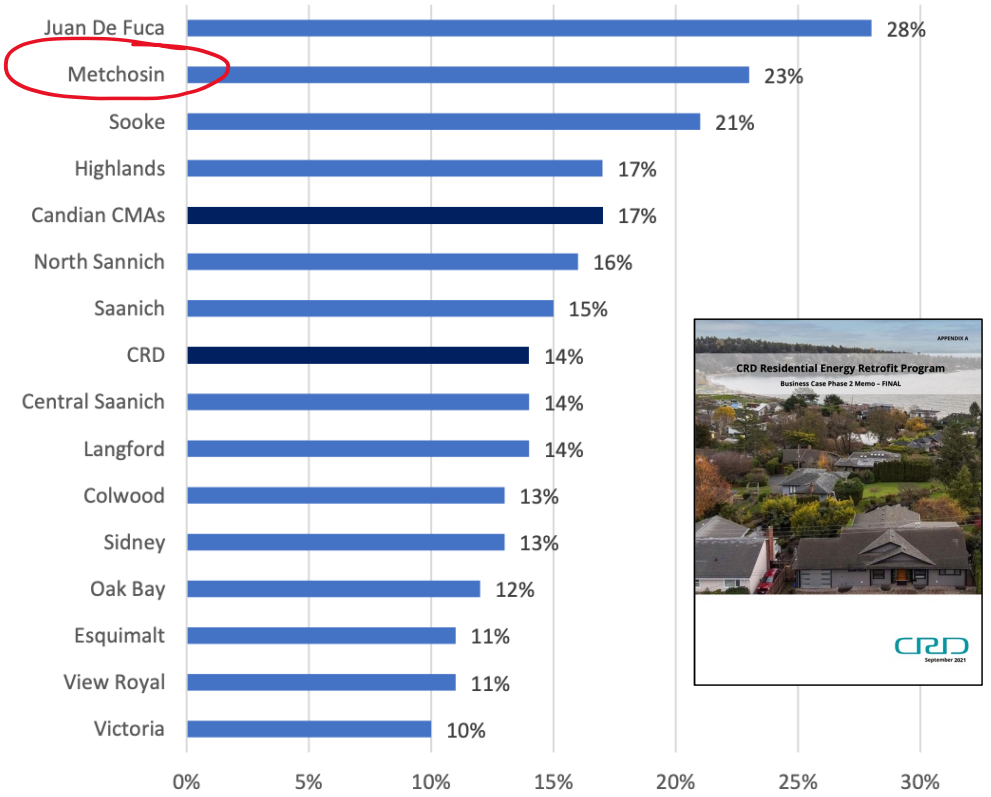
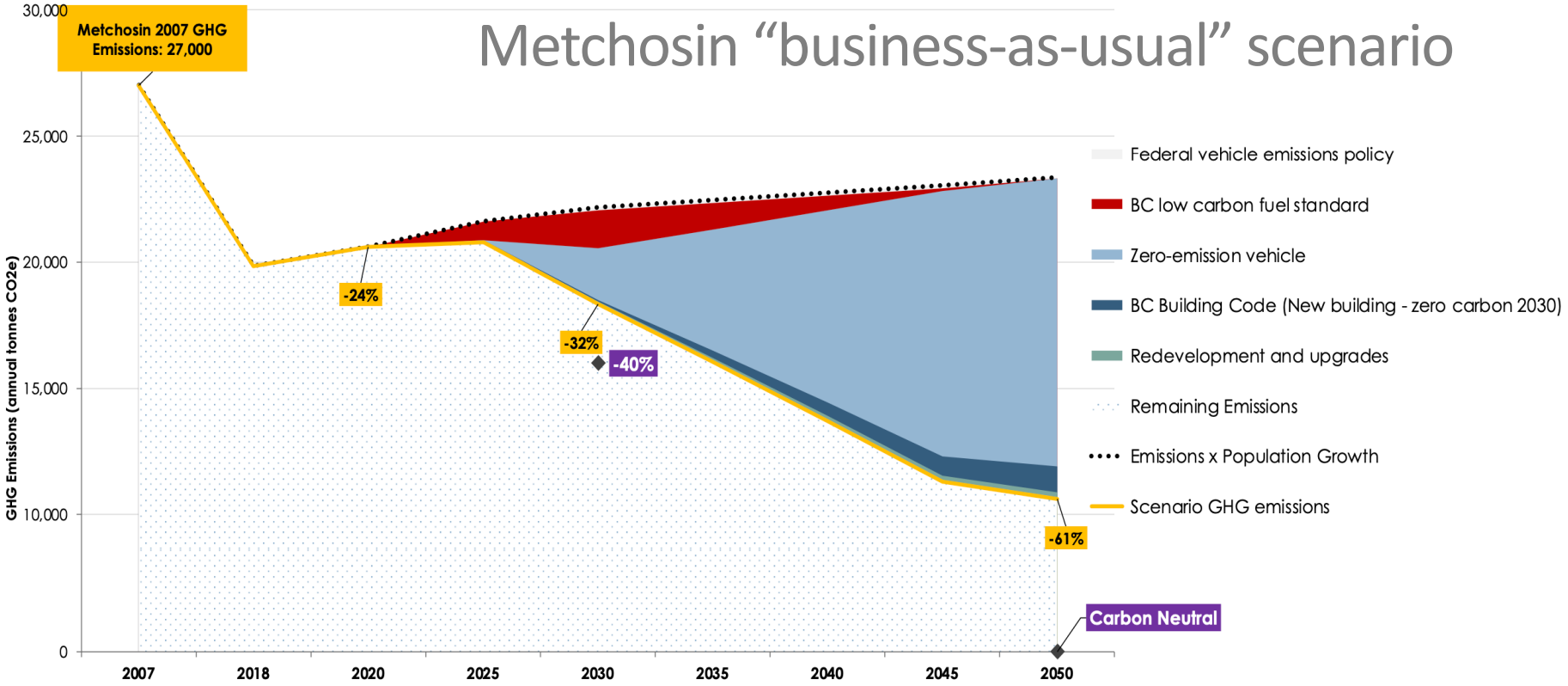


Figure 16: Energy poverty across the capital region (data source did not include Gulf Islands)

Metchosin "business-as-usual" scenario



Local government actions…

- Continued climate action to achieve Net Zero reductions by 2050
  - Active transportation and transit improvements
  - BC Energy Step Code
  - Building retrofit incentive programs
  - Programs to reduce food waste and divert organics from landfills

- 100% Renewable energy by 2050
  - City of Nelson
  - Regional District of Central Kootenay
  - Districts of Central Saanich and Saanich
  - City of Victoria

District of Saanich

- Established climate action targets
  - 36% all vehicles to produce zero emissions by 2030
  - Convert all oil heating to renewable by 2030
  - 40% homes and businesses on natural gas switch to renewables by 2030
- Identified actions to achieve targets:
  - Energy upgrades
  - Double the number of trees planted
  - Support community actions

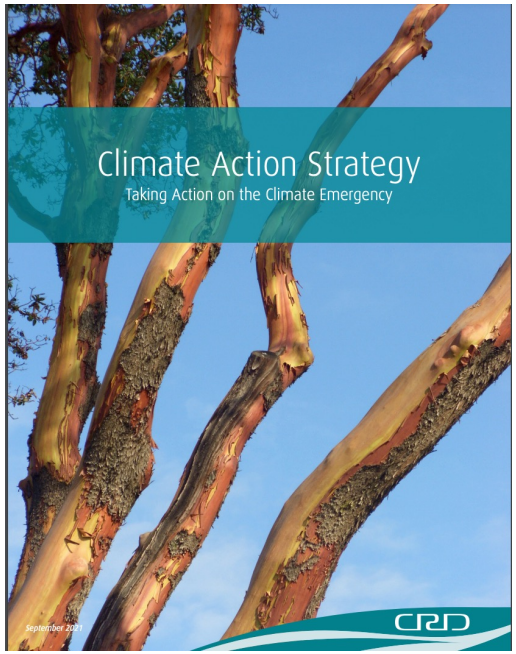
City of Nicolet, QB

- Rural community of 8,200
- Joined SAUVéR, an electric car sharing service, and purchased two electric vehicles
  - Loans to organizations and employees
  - Plans to begin loaning to residents
- Provided tax credits of up to $11,600 over three to five years to residents who want to construct new LEED-certified homes
- Plans to provide long-term loans for energy-efficient retrofits

Opportunities for regional action?

Making a difference...together

- Capital Regional District –
  - Regional approach to transportation demand management
  - Support a public electric vehicle charging network and encourage uptake of zero emission vehicles
  - Implement a Regional Energy Retrofit Program



What should we do?

Options for Action

Review and Discuss: Opportunities for Action – Transportation

Action Area	Specific Opportunities
Reduce emissions from commuting by increasing awareness of public transit services and carpooling opportunities	• Develop a carpooling public education and marketing campaign to promote and encourage commuter carpooling. • Engage in targeted advocacy with BC Transit to improve local transit services and infrastructure (bus shelters, secure bike storage, park & ride parking).
Improve pedestrian and non-motorized corridors (trails) by constructing bike lanes and trails where applicable and when funding permits;	• Develop an active transportation strategy – include bike lanes and trails; coordinate with neighbouring municipalities to enhance and facilitate regional travel.

Review and Discuss: Opportunities for Action – Transportation

Action Area	Specific Opportunities
Reduce emissions from Metchosin's corporate fleet by encouraging and enabling the purchase of low-emissions vehicles.	• Develop a municipal fleet purchasing policy to ensure that EVs are purchased wherever ICE vehicles are not required to meet service requirements.
Continue to support the maintenance and expansion of electrical vehicle charging infrastructure.	• Develop an EV service and maintenance plan to clarify EV charging station servicing roles and responsibilities with charging station owners and keep charging stations functional and online. • Identify and apply for external funds to purchase and install additional public EV charging stations.

Review and Discuss: Opportunities for Action – Buildings

Action Area	Specific Opportunities
Encourage and explore opportunities to support property-owners to enhance the energy-efficiency of their homes, businesses, and facilitates.	• Encourage home energy audits, a first step to help inform home and business owners on their options when considering energy efficiency upgrades (such as sealing window and door drafts). • Increase awareness of and promote participation in the CRD's regional home retrofit and fuel switching program. • Promote existing incentive programs that encourage fuel switching (e.g. replace heating oil with lower carbon heating sources). • Consider providing a retrofit top-up incentive from the District, as is currently provided in other CRD municipalities.

Review and Discuss: Opportunities for Action – Buildings

Action Area	Specific Opportunities
Encourage new residential, commercial, and industrial buildings to be constructed to be built to a net zero energy standard.	• Provide resources and information to promote the voluntary adoption of the BC Energy step code, and prepare local trades for meeting net-zero energy standards coming soon.
Investigate ways in which the District might support property-owners with renewable energy installations.	• Track the development of a property assessed clean energy (PACE) program provincially, and when available, investigate implementation in Metchosin.

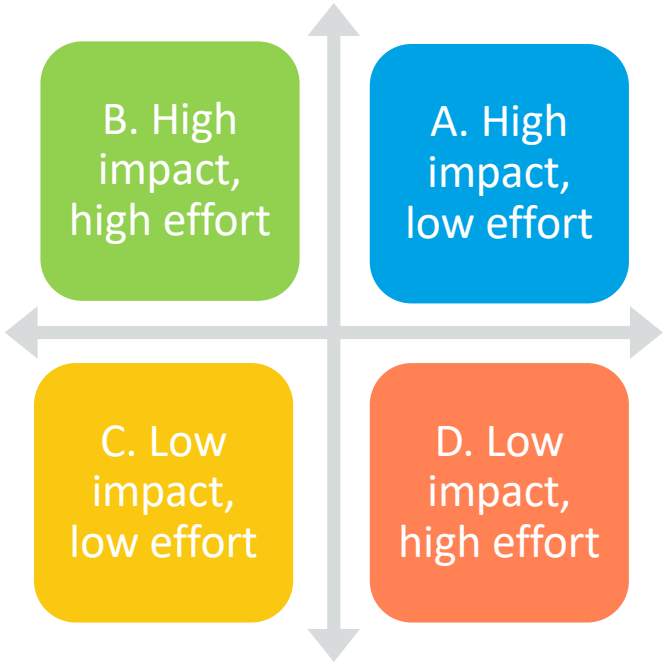
Review and Discuss: Opportunities for Action – Other Areas

Action Area	Specific Opportunities
Solid Waste – Increase diversion of biodegradable waste	Investigate the development of a municipal compost yard.
Other – ???	• ???

→ What else are we missing from this list?

Considerations for Implementation

1. Timeline
2. Capacity
3. Criteria for priority setting
   i. Level of impact
   ii. Level of effort



Next steps

- Summarize and distribute updated actions from today's session
- TBD: conduct a community survey, interviews, or further analysis
- Draft plan for review in Fall 2022
- Final plan for Fall 2022

Thank you

Pinna Sustainability

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