



Municipal Perspectives: Colchester

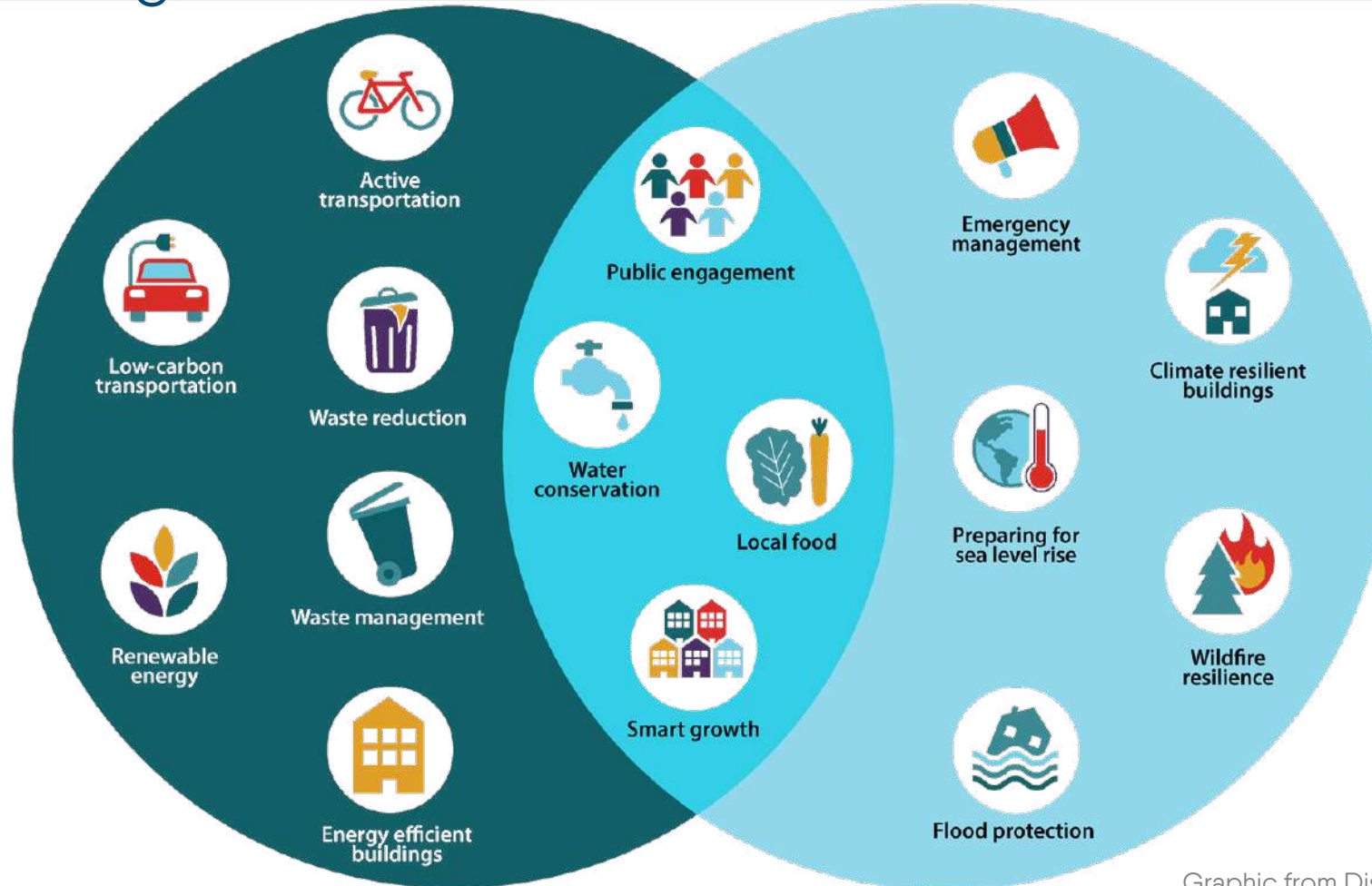
Joanna Burris, Sustainability Planner

Divert NS Climate Summit – March 25, 2024

Municipal Climate Action

Mitigation

Adaptation



Graphic from District of Squamish.

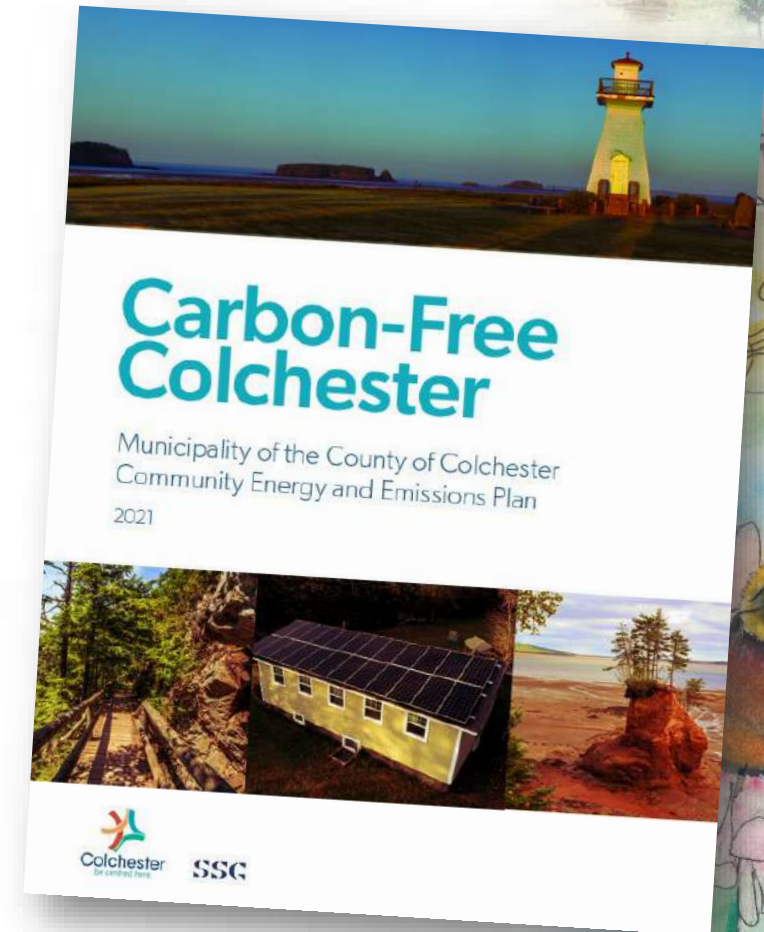
Community Energy & Emissions Plan

Provides a pathway to

- Reduce energy use
- Reduce greenhouse gas (GHG) emissions
- Transition to renewable energy

Sets a target for net-zero emissions by 2050.

Artwork by students from École acadienne de Truro.

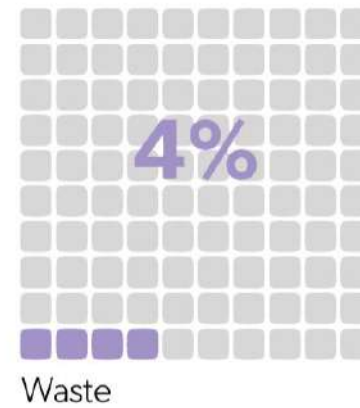
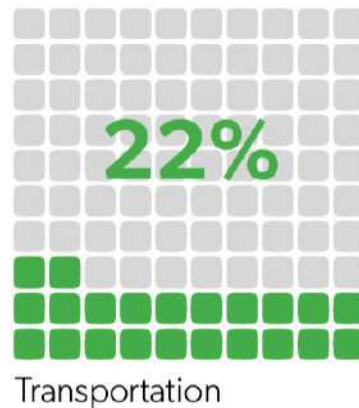
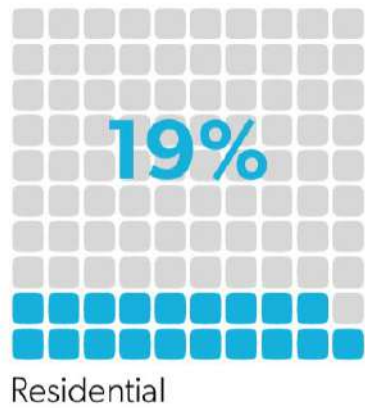
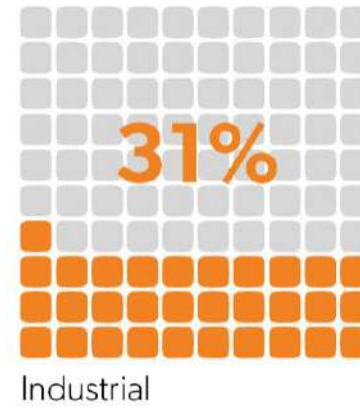
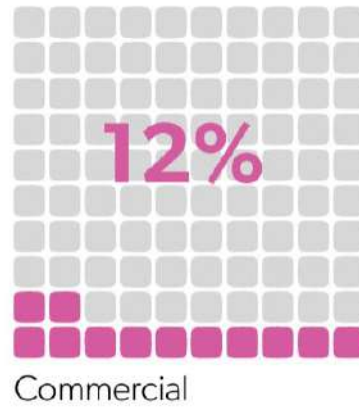
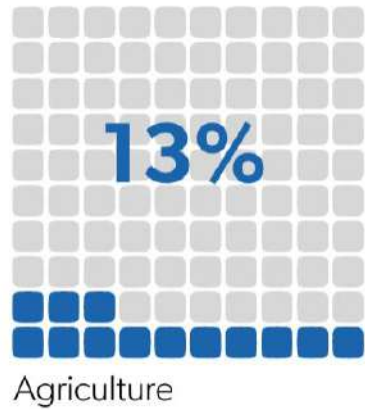


Community Energy & Emissions Plan

Theory of change:

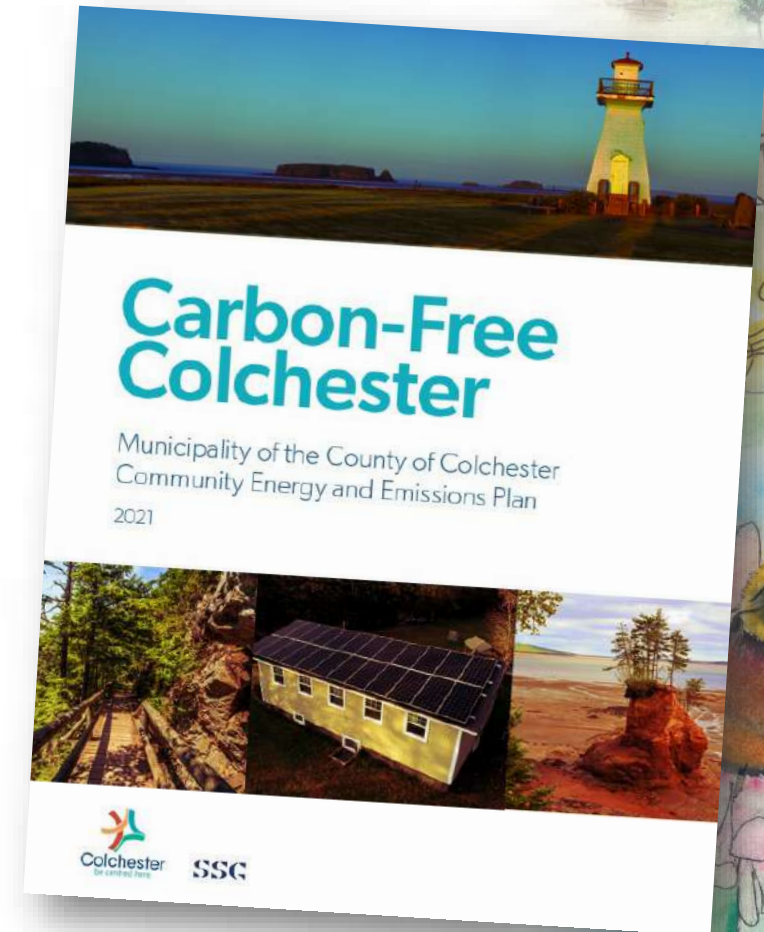


Community Energy & Emissions Plan



Community Energy & Emissions Plan

1. Land Use
2. Buildings
3. Zero Emission Energy
4. Zero Emission Travel
5. Water & Waste
6. Other



Land Use



Targets:

80% of new residential development and

100% of new non-residential development to be in
“development zones”

Actions:

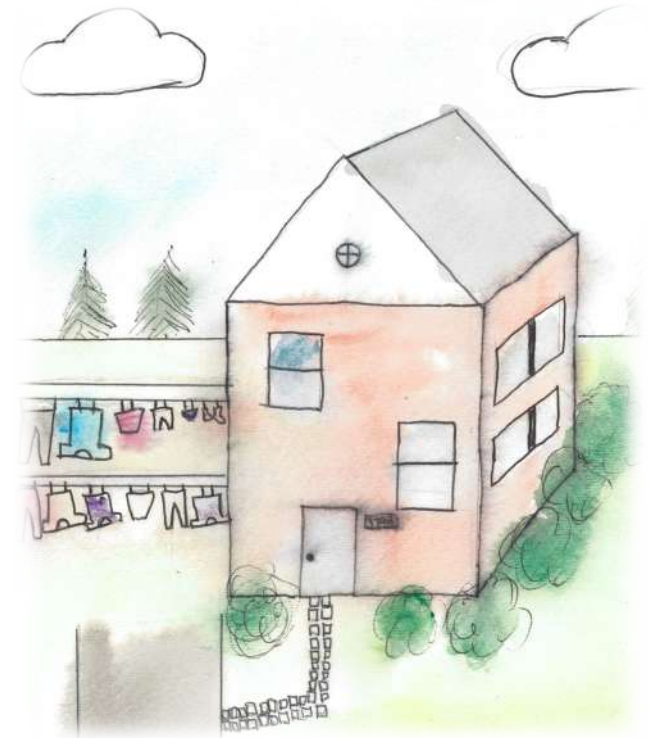
Integrate targets into new county-wide Municipality Planning
Strategy



Buildings

Targets:

- 100% of municipal buildings are retrofit to net-zero by 2035
- 100% of new buildings are net-zero by 2030
- 80% of existing buildings are retrofit by 2040



Buildings

Actions Completed or In Progress:

- Offer low-interest financing to homeowners for efficiency upgrades
- Conduct energy audits & working with Efficiency NS Roving Municipal Energy Manager
- Apply for grants to partially fund retrofits to municipal buildings



Buildings

Planned Actions:

- Help to build capacity in the net-zero construction industry
- Expand loan programs



Left & right photos from Saltwire, March 17, 2022.

Buildings

Planned Actions:

- Develop an “embodied carbon” policy.

About Embodied Carbon

- Total life-cycle emissions of a building or material.
- Up to 50% of carbon is emitted before buildings are operational.
- Cement production accounts for about 8% of global GHG emissions.
- Can have positive implications for C & D waste.



Zero-Emission Energy

Targets:

- 90% of new buildings have solar PV installed by 2050
- All existing buildings have solar PV installed by 2050
- 10MW of ground-mount solar is installed by 2045
- Add 2MW of wind generation per year until 2050.



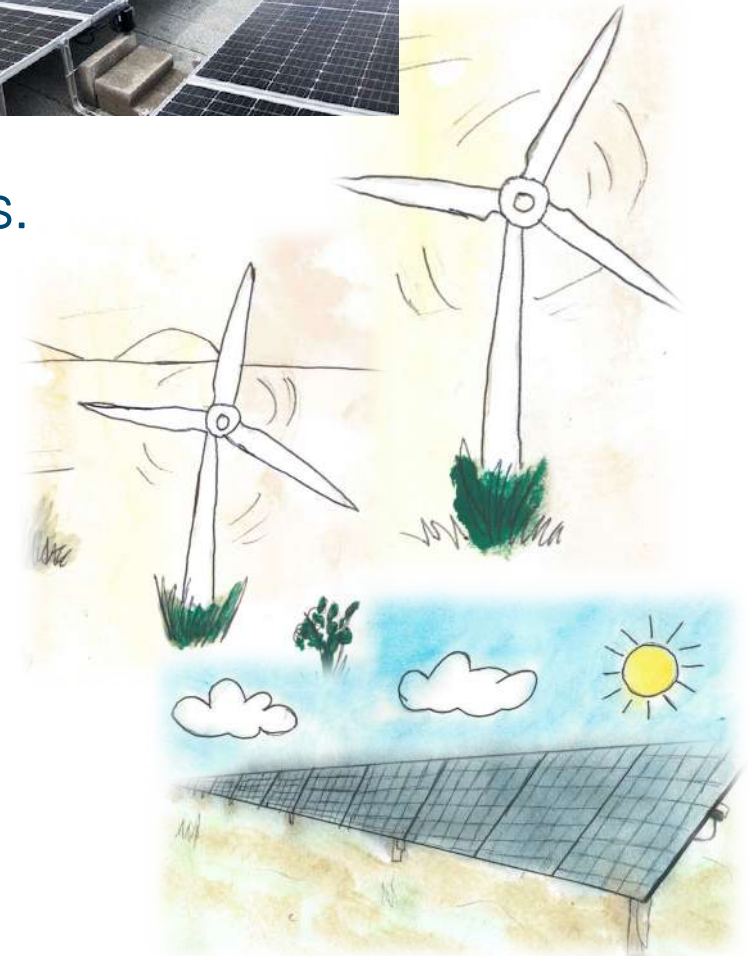
Zero-Emission Energy

Actions Completed or In Progress:

- Installed wind turbines at the Balefill.
- Install solar at municipal facilities and community centres.
- Offer low-interest loans for residential solar.

Planned Actions:

- Build solar farm at wastewater treatment plant.
- Explore opportunities for Community Solar through provincial program.



Zero-Emission Travel

Targets

- All municipal vehicles are net-zero by 2035
- 100% of vehicles are electric or zero-emission by 2040
- Expand & improve active transportation infrastructure
- Expand public transit



Zero-Emission Travel

Actions Completed or In Progress

- Install electric vehicle (EV) charging stations.
- Build the Fundy Discovery Site Pedestrian Bridge.
- Implement Active Transportation Strategy.

Funding granted to design new pedestrian bridge over Salmon River

Colchester County Mayor Christine Blair says it is a big step to a greener future

Fram, Dinshaw | Posted: Jan. 30, 2020, 5 p.m. | Updated: Jan. 31, 2020, 9:02 a.m. | 2 Min Read



Top photo from Saltwire, January 30, 2020.

Zero-Emission Travel

Planned Actions:

- Develop an electric municipal fleet policy.
- Apply for federal funding to transition to a zero-emissions fleet.
- Commission a public transit feasibility study in partnership with the Town of Truro.



Water & Waste

Targets:

- Per capita waste is reduced by 30% by 2050
- 100% of waste is diverted by 2050
- Install biogas capture at Balefill to produce renewable natural gas



Water & Waste

Actions Completed or In Progress:

- Education and enforcement
- *Colchester Environmental Diversion Ambassadors (CEDA) youth volunteer program*
- Continue to find new markets and expand range of materials that can be recycled.
- Work with Dr. Price at Dalhousie University and the *Innovative Waste Management Research Program*
- Ambient landfill gas analysis study with St. FX.



Climate Change Adaptation

- It is important to embed future climate projections (versus historic climate data) and climate impacts into decisions and operations.
- **For example:**
 - Upgrade hard infrastructure to be climate resilient
 - Revise engineering design specs
 - Increase budget for emergency response
 - Increase contingency budget for natural disasters

Every \$1 spent on adaptation results in \$13-\$15 in benefits and avoided costs (Canadian Climate Institute, 2022).



Climate Change Adaptation

Hurricane Fiona and Colchester Solid Waste

- \$500,000 spent on County-wide debris clean-up
- \$1.1 million in insurance claims for composting facility



Lessons Learned

- Apply for funding! There is lots of money available.
- Participate in capacity-building programs.
- Emphasize the cost savings.
- Integrate climate change mitigation and adaptation.
- Don't reinvent the wheel.
- Join communities of practice.
- Talk to your colleagues about climate change.



THANK YOU!

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