



Item 12.1.1

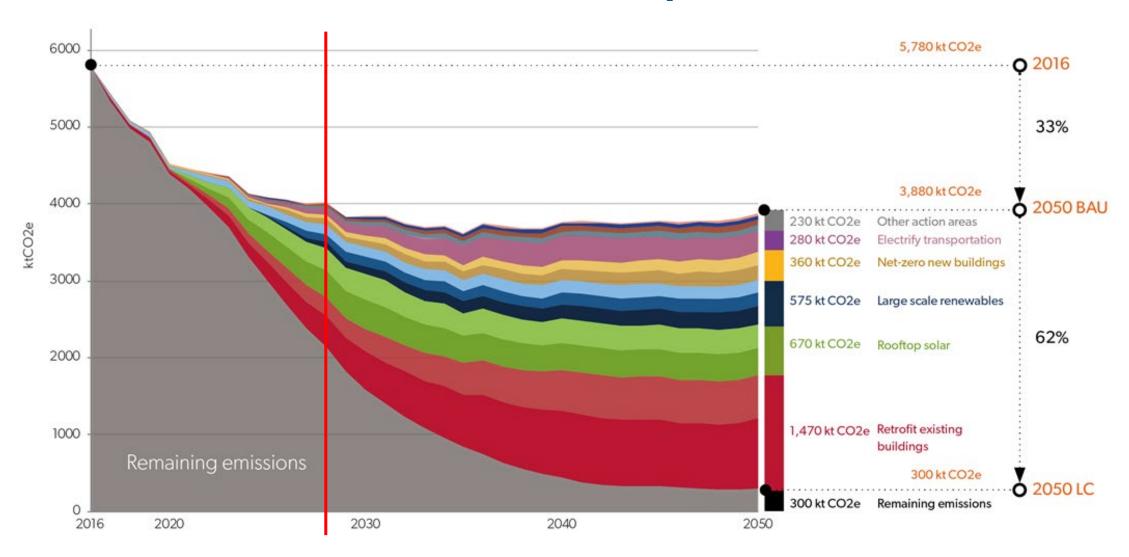
HALIFAX

First Annual Progress Report & Resource Plan

Environment & Sustainability
Standing Committee

December 15, 2021

The Reduction Required





- Authorize the direction contained in the HalifACT: Acting on Climate Together plan
- 2. Establish a target of net-zero municipal operations by the year 2030
- 3. Prioritize action in 7 critical core areas
- 4. Direct the CAO to return to Council with a resource plan for consideration in the 2021/2022 budget
- 5. Provide annual progress reports on the implementation of HalifACT





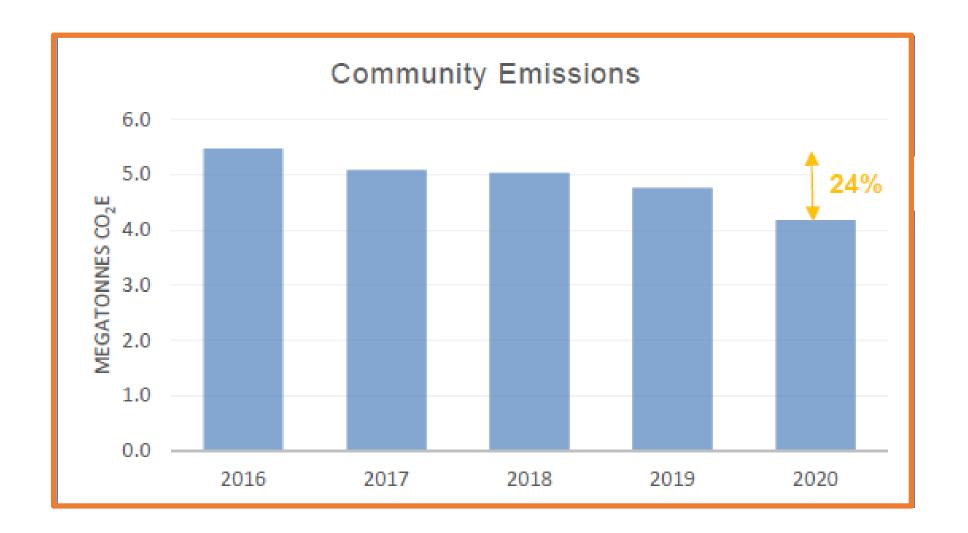
Greening Municipal Operations by 2030

- Mainstream climate thinking
- Retrofit buildings by 2030
- Net-zero new buildings upon plan adoption
- Electrify fleet by 2030
- Increase waste diversion
- Generate renewable energy in municipally-owned projects
- Purchase local zero-carbon electricity











Early Successes - Mitigation

✓ Funding:

- ✓ Net-zero Mill Cove ferry design, purchase of 60 e-buses and electrification of Ragged Lake Transit Facility expansion
- √ \$175,000 grant received from FCM to support retrofit program development
- ✓ Application for \$1M in matching funds submitted to the Zero Emission Vehicle Infrastructure Program for EV chargers

✓ Approvals:

- ✓ EV Strategy, Deep Energy Retrofit Pilot, Administrative Order mandating net-zero corporate builds all approved by Halifax Regional Council
- ✓ Halifax signed on to Cities Race to Zero







Early Successes - Mitigation

- ✓ Retrofits and Renewable Energy:
 - ✓ Expression of Interest submitted to NS Green Choice Program to purchase clean energy
 - √ \$18 million in solar energy systems installed through the Solar City Program
 - Dartmouth North Community Centre undergoing Deep Energy Retrofit and solar installation
 - ✓ Corporate Retrofit Roadmap under development
- ✓ Climate account funded e-bikes for parking services, electric ice resurfacer for community rinks, solar installations
- ✓ A third of the Regional Centre All Ages and Abilities Bike Network is completed.







Early Successes - Adaptation

- ✓ Climate account funded a refrigerated truck to support vulnerable communities during emergencies, Prince Albert Road rain garden, and \$275,000 worth of trees for the UFMP
- ✓ Application for Natural Infrastructure Funding to improve the resilience of Shore Road in Eastern Passage – \$5M project
- ✓ Acquisition of 1.25 acres of land in addition to providing \$750,000 for the Blue Mountain Birch Cove Lakes land acquisition







Early Successes - Adaptation

- ✓ Centre Plan was approved, extending the vertical coastal setback requirements to commercial and industrial use
- ✓ Contract issued to localize new global climate predictions and begin creating climate hazard maps for flood risks
- ✓ Emergency back-up generators were installed at four community locations to provide emergency comfort centres during extreme weather events
- ✓ Natural asset inventory complete in partnership with MNAI







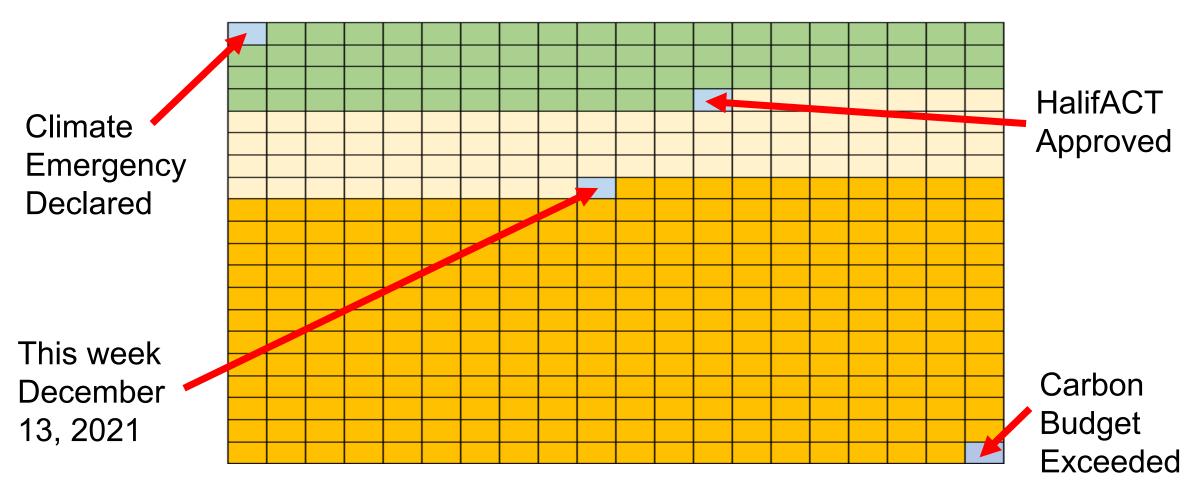
Progress To-Date

- While we can be proud of our accomplishments to-date, they do not meet the scale and speed required to achieve our 2030 and 2050 targets.
- HalifACT is 20% on track and 14% adequately resourced
- Requires further resources, major systems change, mainstreaming climate action, education & awareness, collective action by all.



Carbon Budget

- 150 weeks since Regional Council declared a Climate Emergency
- 264 weeks until we surpass our Carbon Budget in BAU scenario



Critical Next Steps for Success

- Shared accountability across Business Units
 - Roles & responsibilities
- Mainstream climate thinking & action
- Include climate action in Budget & Business Planning Processes
- Resources Required
 - Staff
 - Sustained Financing



3-Year Resource Plan

Core Action Areas	FTEs	Compensation	Operating	Capital
Core Area 1	4	\$400,000	\$1,000,000	
Core Area 2	1	\$100,000		\$35,780,000
Core Area 3	1	\$100,000		\$15,950,000
Core Area 4	2*	\$200,000	\$200,000	
Core Area 5	4	\$400,000		\$20,600,000
Core Area 6	5	\$500,000	\$1,650,000	
Core Area 7	3	\$300,000	\$400,000	
Enabling Actions	5	\$500,000	\$200,000	\$6,000,000
Total	25	\$2,500,000	\$3,450,000	\$78,330,000



Resources Required – Sustained Funding

- Upfront significant financial investment is needed
 - Implementing HalifACT will save the organization, stakeholders and residents money in the long term
 - Committed funds can be leveraged for greater impact
- Sustained financing is required
 - One-off projects and piecemeal funding won't achieve targets
 - New financing mechanisms needed
 - Need committed capital and operating each year to 2050

CLIMATE ADAPTATION MEASURES

\$1 saves **\$6**

Spent in preparation

In future impact costs

EMISSION REDUCTION MEASURES

22B = 41.9B

Spent on emission reduction

In avoided energy-related costs



Economic Opportunity

- A low carbon future is a lower cost future
 - Investments generate financial returns
 - Net benefit of 22 Billion over 30 years
- Mitigation savings from:
 - Avoided energy costs, O&M costs
 - Avoided carbon pricing costs
 - Increased energy generation revenues
- Adaptation savings:
 - Every \$1 spent saves \$6 in future impact costs
- Economic recovery from COVID-19 pandemic
 - A unique opportunity to do things differently
 - Funding opportunities for a green transition





Urgent & Transformative Action Needed

- We are still acting in Business-As-Usual mode
- Lots of great work & dedicated staff but not enough to achieve targets on time and at scale
- There is a return on investment if we act now
- Success requires action across the organization, by other stakeholders and the public
- Financial tools available to support
- Acting now will save money, prevent loss, prepare communities and improve wellbeing

