

Halif**ACT** Acting on
Climate
Together



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**Divert Nova Scotia
Summit
March 25th, 2024
Chris & Claire**

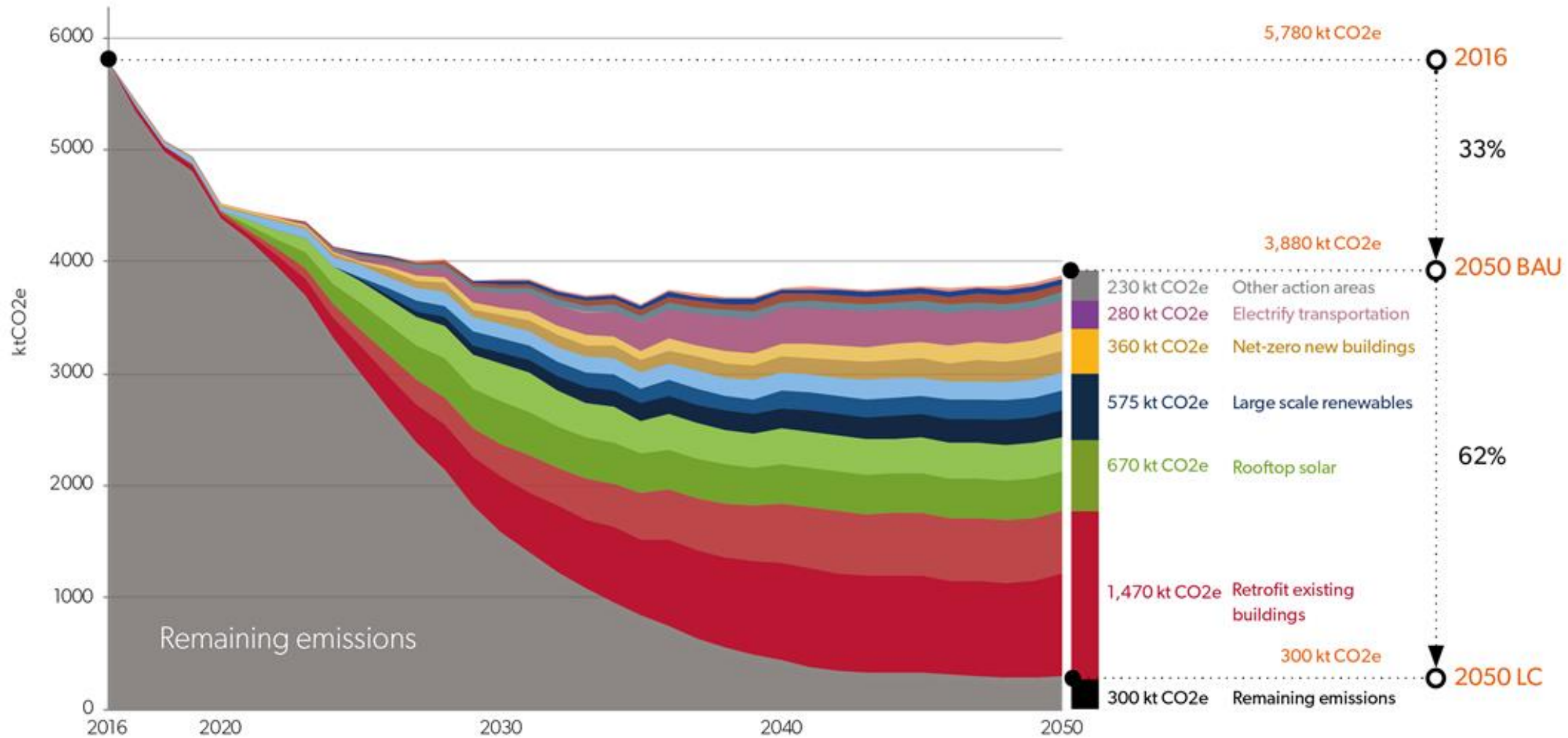
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Environment & Climate Change

Sea Level Rise	Coastal & Overland Flooding	Stormwater Management	Water Quality Monitoring	Watershed Studies
LIDAR Acquisition	Land Use Vulnerability Mapping	HalifACT	GHG Inventories	Climate Adaptation Studies
Renewable & District Energy	Solar City Program	Energy Efficiency	Green & Blue Infrastructure	Urban Forest Master Plan
Halifax Green Network Plan	Emergency Preparedness	Resiliency	Environmental Risk Management	Invasive Species

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HRM Solid Waste Resources and HalifACTions

- HRM Solid Waste Community Emissions ~100 ktCO₂e/year
- Targets or objectives relating directly to Solid Waste Resources
 - Reduce waste generation 30% by 2050
 - 100% diversion by 2050
 - Achieve net-zero municipal operations by 2030
 - Monitor and report on climate action and impact

HRM Solid Waste Management Overview

- National leader in landfill diversion
- Disposal rate per capita of 383 kg (2016: half the national average)
 - Organics diversion
- 2022: SWR retained a consultant to review GHG emissions from its Solid Waste System
- Main GHG emission sources identified include:
 - Waste disposal (e.g., Otter Lake landfill, ICI waste disposal);
 - Closed Highway 101 landfill;
 - Waste collection fleet

Approximately 44,000 CO₂e/year could be avoided to support the 2030 HalifACT goals



Highway 101 Landfill, Photo: Tetra Tech

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SWR Terms of Reference (TOR)

- January 2023, Council approved TOR
 - How best to align HRM's Solid Waste System with HalifACT 2030 goals.
- Solid Waste Strategy review studies ongoing
- Key items of New Strategy review:
 - Meeting N.S. Environment and Climate Change (NSECC) 300 kg per capita disposal target
 - Evaluate opportunities for landfill gas at Otter Lake landfill (e.g., gas turbine electricity).
 - Implementing landfill gas treatment approach at the Highway 101 Landfill
 - Solar electricity at solid waste facilities (existing Ragged Lake and Highway 101 sites)
 - Review feasibility of zero emission vehicles
- Strategy Review to be completed in Spring 2025

Corporate Solar Installations

2.7MW installed or planned

- Recent
 - Sackville Library
 - Dartmouth North CC
 - Mackintosh Depot
 - Commons Aquatics Facility
- In Progress
 - Ragged Lake Transit Centre (~1MWDC)
 - Keshen Goodman (TBD 100's kW DC)
- Potential
 - Organics Facility – Early Stages



Sackville Library

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Large Scale Renewables

- Equitable access to residents
- Make use of unfavorable lands and rooftops
- Sackville Landfill
- Green Choice Program or Renewables to Retail



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Net-Zero Buildings

- Administrative Order for net-zero new construction
- Deep energy retrofits focused on fuel switching
- Woodside Ferry Terminal – 76% energy reduction without solar



Working with Efficiency Nova Scotia

Energy Manager(s) providing expert guidance

Example: New Ragged Lake Organics Facility
Anticipated savings (compared with baseline)

- ~ Energy: 3,000,000 kWh/year
- ~ Demand: 300 kW
- ~ Rebate: \$200,000

Derek Peters - Business Development Manager
dpeters@efficiencyns.ca



New Ragged Lake Organics Facility,
Photo: HCR

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Electric Vehicle Strategy

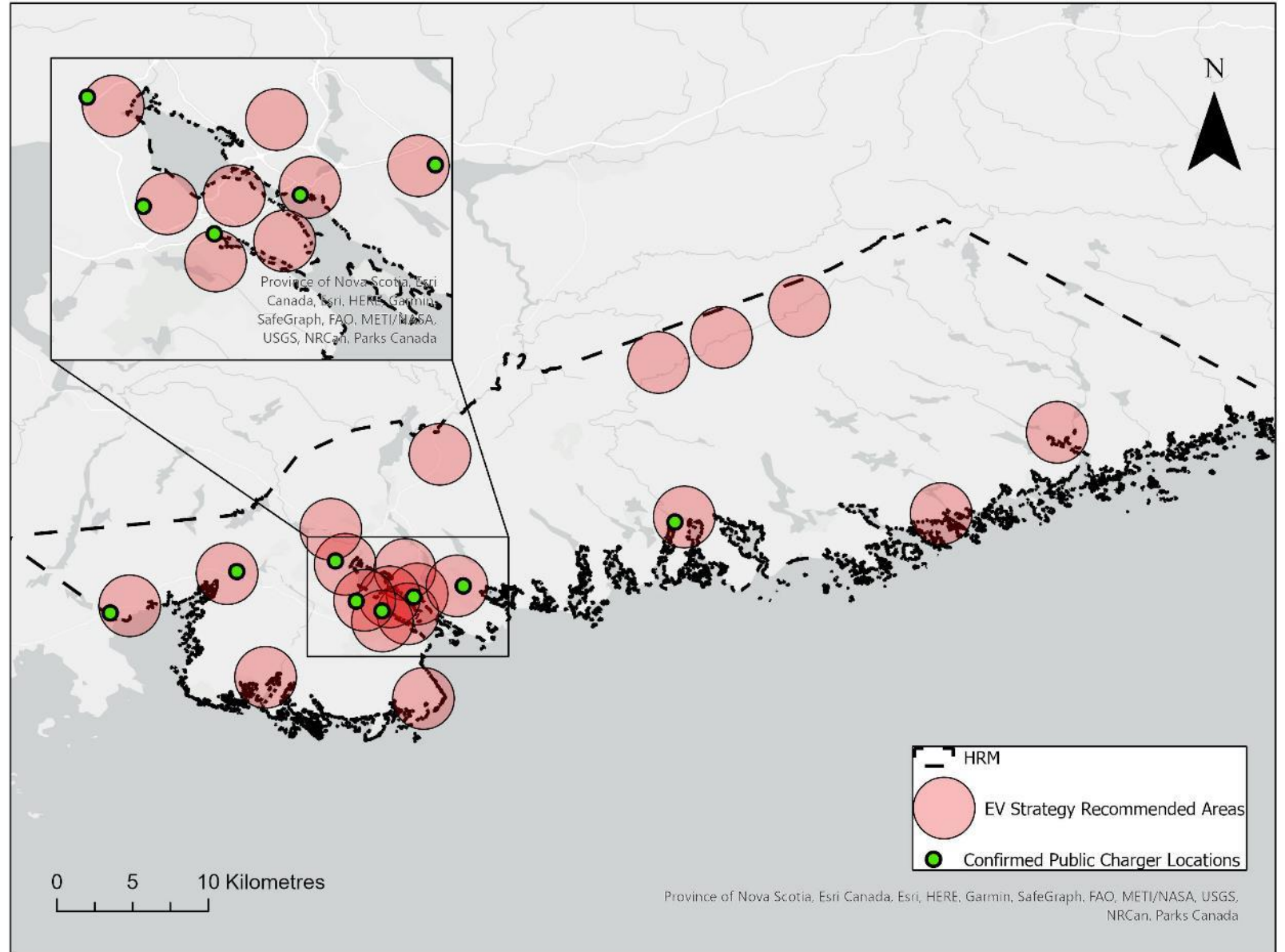
- Public charging infrastructure
- Multi-year contract for chargers recently awarded.
- Most sites to include one 175kW level 3 fast chargers and two 7.2kW level 2 chargers.



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Public Charging Infrastructure

- 40 Alderney Drive
- Cole Harbour Place
- Musquodoboit Harbour Library
- JD Shatford Memorial Library
- St Margaret's Centre
- Bedford Park and Ride
- Armdale Rotary ROW
- Canada Games Centre
- RBC Centre



Municipal Fleet Electrification

- Starting with light duty vehicles
- Lessons learned
- Switch focus to heavy duty as technology becomes more readily available



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HRM E-Bike Program

- Alternative to vehicles
- Free to book from HRM offices
- Great for site visits and inter-office travel
- Nick, SWR Diversion Planning Officer site visits



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Thank You

Claire Morley Junior Environmental Professional - Community Energy
claire.morley@halifax.ca
902-580-0202

Chris Bernard – Clean Energy Specialist
bernarc@halifax.ca
902.237.4765

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www.halifax.ca/climate

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