

# Energy & Climate Action: 2025 Program Initiatives

Community, Culture & Environment Advisory Committee

April 3, 2025

Engineering & Regional Utilities



# Agenda

- Purpose
- Context
- Discussion
- Questions



# Purpose

- To provide the Community, Culture & Environment Advisory Committee with an overview of the 2025 Energy & Climate Action team priority projects and initiatives.



# Context

Setting the path for energy and climate action: global to local scale



COP21 - CMP11  
**PARIS 2015**  
UN CLIMATE CHANGE CONFERENCE

**IPCC & Paris Agreement**  
(International)

PAN-CANADIAN FRAMEWORK



on Clean Growth  
and Climate Change

**Pan-Canadian Framework**  
(National)



**cleanBC**  
our nature. our power. our future.

**Climate Action Charter & CleanBC**  
(Provincial)



**Official Community Plan**  
(Municipal)



# Context

## Energy and climate action in the City

### Sustainability & GHG Reduction Policies in the OCP

Existing/Amended Plans & Strategies

Zoning Bylaw

Future Plans & Strategies

**IMPLEMENTATION:**  
(Capital Projects, Paying for Growth, Development Initiatives, Asset Management, Programs, etc.)

GHG Reduction Targets

20% reduction by 2025\*  
40% reduction by 2040\*

Green Buildings Framework

Green Fleet Strategy

\* Per capita, compared to 2007 levels

# Context

- 2022-2026 Strategic Plan



## **Principle 2: Sustainable and Safe City**

*“...We are committed to minimizing environmental impacts and addressing climate change in our community.”*



# Context

## 2025 ENERGY & CLIMATE ACTION PRIORITY AREAS

1. Resilience & Adaptation
2. High Performance Buildings
3. Zero Emissions Mobility
4. Strengthening Plans & Policies
5. Collaboration & Partnerships
6. Celebrating Progress





# Discussion

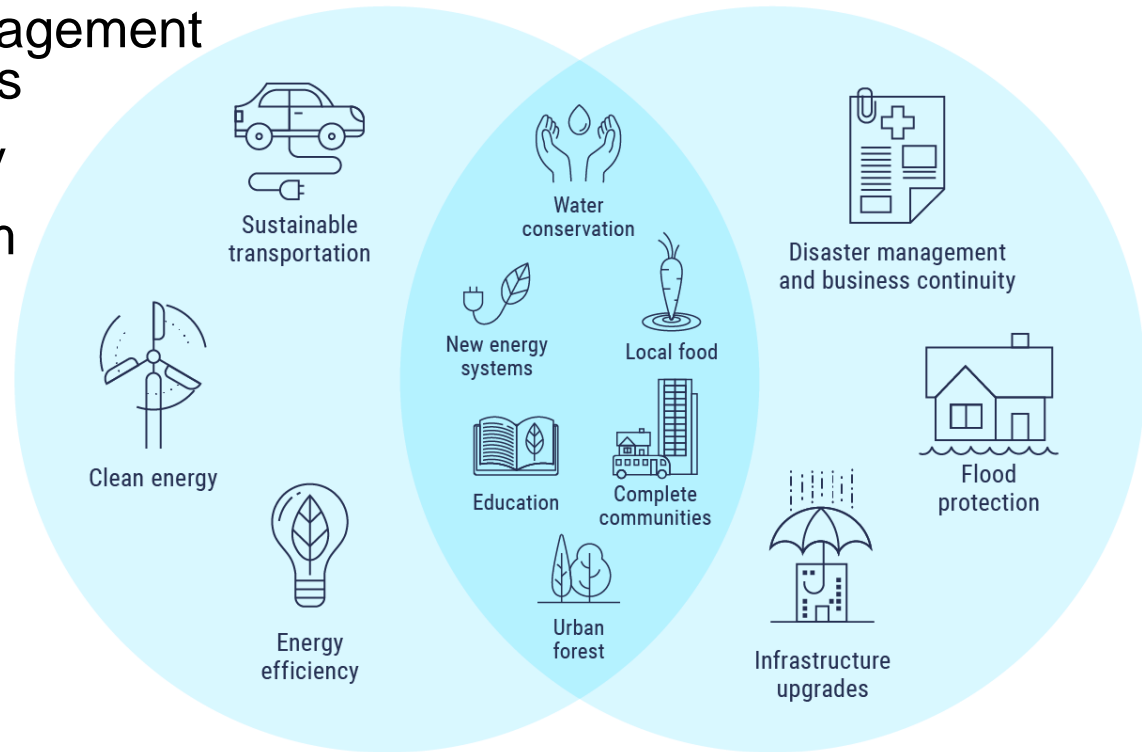
RESILIENCE & ADAPTATION

## CLIMATE RESILIENCE STRATEGY



- 2022-2026 Strategic Plan Priority Action
- High-level strategy to support the City in planning for and responding to the impacts of climate change
- Consider implications of Emergency & Disaster Management Act, including Indigenous Engagement Requirements
- Update to Community Energy & Emissions Inventory
- Stewarded by an interdepartmental staff project team
- Utilize a Low Carbon Resilience (LCR) lens

**Climate Resilience definition\*:**  
*The capacity of individuals, communities, institutions, businesses and systems to thrive and succeed in spite of extreme weather events, rising sea levels and changing climatic conditions.*



\*Building British Columbia's Climate Resilience, Province of BC, Climate Action Secretariat






# Discussion

RESILIENCE &  
ADAPTATION

## CLIMATE RESILIENCE STRATEGY

- Key Project Approach Considerations
  - Recognize and celebrate progress to date
  - Build off City work already completed or underway
  - Consult and engage internal & external audiences
- Timeline
  -  Stage 1: Background Research & Key Findings – Q2 2025
  - Stage 2: Exploring Options – Q3 2025
  - Stage 3: Draft Strategy – Q4 2025
  - Stage 4: Final Strategy – Q4 2025



# Discussion

HIGH PERFORMANCE BUILDINGS

## ARC HEAT RECOVERY & OPTIMIZATION (HeRO) PROJECT

- Install localized heat recovery for aquatic centre and arena, integrate buildings systems, and improve accessibility
- \$10.1M project cost – July 2023
  - Offset by \$4.46M Federal grant (Notified of success in 2022)
- Provide clear and timely patron communications
- Timeline
  - Project launched – Q3 2023
  - Accessibility improvements completed – Q4 2023
  - Design completed – Q4 2024
  - Construction – in progress
  - Anticipated project completion – Q4 2025





# Discussion

HIGH PERFORMANCE BUILDINGS

## STRATEGIC ENERGY MANAGEMENT INITIATIVES

### *SPORTS FIELD LIGHTING STUDY*

- Replace end-of-life Metal Halide lamps with LEDs
- Up to 50,000 kWh reduction in energy consumption
- Collaboration with Parks staff; alignment with Sports Field Strategy



Exhibition Park

### *WATER PUMP INFRASTRUCTURE STUDY*

- Up to 125,000 kWh reduction in energy consumption
- Potential implementation: High-efficiency pumps, demand response program participation, battery storage
- Collaboration with Water Infrastructure team, BC Hydro



Bevan Wells Water Treatment Facility



Bradner Reservoir



# Discussion

## STRATEGIC ENERGY MANAGEMENT INITIATIVES

HIGH PERFORMANCE  
BUILDINGS

### *BUNDLED ENERGY AUDITS & STUDIES*

- Integrated Energy Audit: 3 buildings (Marshall Road Office Building, MSA Arena, City Hall)
- Portfolio energy study: 8 buildings, will suggest decarbonization pathways, emphasis on GHG reduction





# Discussion

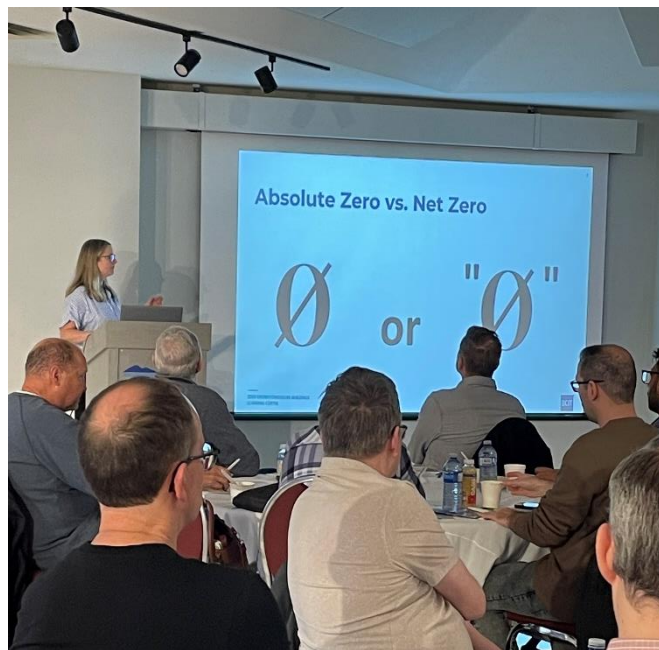
## STEP CODE EDUCATION & OUTREACH

HIGH  
PERFORMANCE  
BUILDINGS

- Provide in-person learning for buildings and development professionals
- Offerings in collaboration with city and community partners
- 3 workshop series on Zero Carbon Step Code – Q1 2025 (COMPLETE)
- 3 workshop series on Airtightness – Q2 2025
- Funded by BC Hydro and FortisBC



2024 CHBAFV Industry Partner of the Year Award



**WORKSHOP DATES**  
JANUARY 14, 21 & 29, 2025

»»» \$25  
REGISTRATION  
FEE

**WORKSHOP 1**  
INTRODUCTION TO THE ZERO CARBON STEP CODE  
January 14, 2025

**WORKSHOP 2**  
ZERO CARBON STEP CODE IN PRACTICE  
January 21, 2025

**WORKSHOP 3**  
ZERO CARBON STEP CODE APPLIED TO YOUR PRACTICE  
January 29, 2025



# Discussion

HIGH  
PERFORMANCE  
BUILDINGS

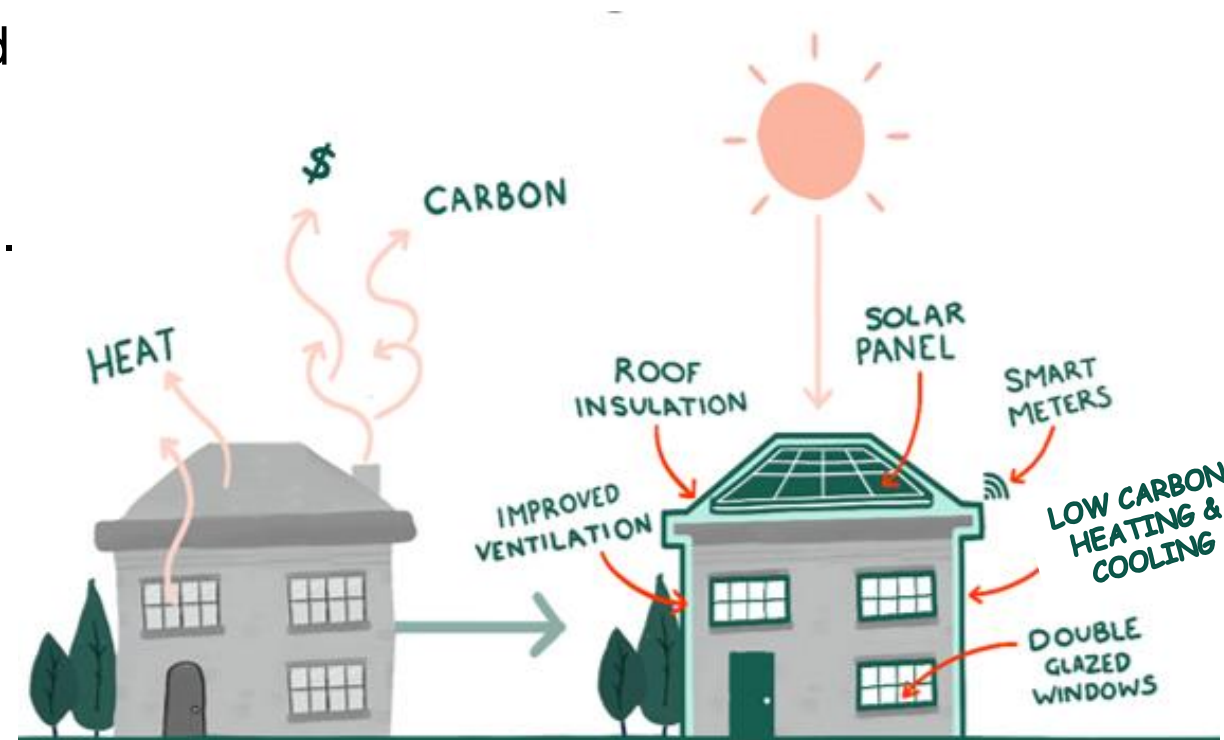
## RESIDENTIAL RETROFIT PROGRAM

- Goals

1. Increase climate-friendly residential retrofits that reduce community greenhouse gas emissions.
2. Increase the energy efficiency of Abbotsford households.
3. Support equitable access to home energy upgrades that reduce home operating costs.

- Timeline

- Framework completed – Q2 2023
- Program design completed – Q1 2024
- Assess pilot program options – Q2 2025
- Share results with Council – Q3 2025



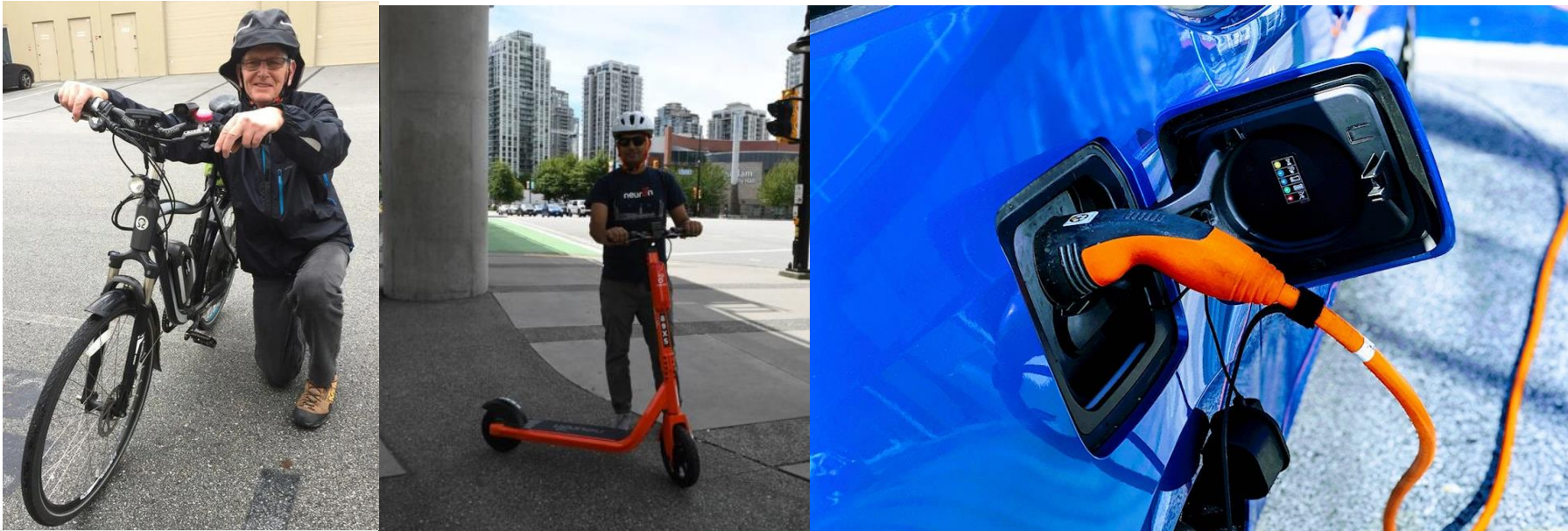


# Discussion

ZERO  
EMISSIONS  
MOBILITY

## FRASER VALLEY ZERO EMISSIONS MOBILITY STRATEGY

- Regional scope; working with FVRD and City of Chilliwack
- Secured \$75,000 in BC Hydro matching funding (January 2025)
- High-level roadmap for supporting zero emissions mobility in the Fraser Valley, to encourage the uptake of light-duty Zero Emissions (ZE) Vehicles, and consider ZE micro-mobility technologies (e-bikes and e-scooters).
- Explore medium and heavy-duty ZE vehicle transitions over the longer-term.





# Discussion

ZERO  
EMISSIONS  
MOBILITY

## EV INFRASTRUCTURE AGREEMENT SCOPING

- Explore partnerships to add/expand public EV charging stations to key locations in the City
- Level 2 and Level 3 (DC) chargers
- Key considerations:
  - Reliable service/charger uptime
  - Accessible to all EV makes/models
  - Barrier-free EV stalls
  - Customer service
  - Fair rates

## NON-RESIDENTIAL EV READY REQUIREMENTS

- Complementary to residential EV ready requirements adopted in 2022
- Ensure new non-residential developments able to install EV charging infrastructure
- Consultant engaged to support drafting requirements for Zoning Bylaw amendment



# Discussion

STRENGTHENING  
PLANS & POLICIES

OCP UPDATE

TOWARDS BETTER DATA:  
*IMPROVING ENERGY &  
EMISSIONS DATA FOR  
LOCAL GOVERNMENTS*

ASSET  
MANAGEMENT  
PROGRAM

ENERGY & CLIMATE  
ACTION RESERVE FUND  
POLICY UPDATES



# Discussion

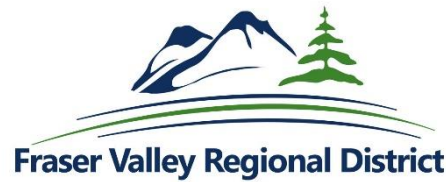
COLLABORATION  
& PARTNERSHIPS

- UTILITIES – partnership agreements, funding supports



NEW Climate Action  
Co-op position

- LOCAL GOVERNMENTS – collaborative initiative delivery, knowledge-sharing



- IN THE COMMUNITY – stakeholder engagement, industry education and outreach





# Discussion

- Reporting
- Partner updates

**CELEBRATING  
PROGRESS**

CITY OF ABBOTSFORD | LCGAP  
Survey Report 2023



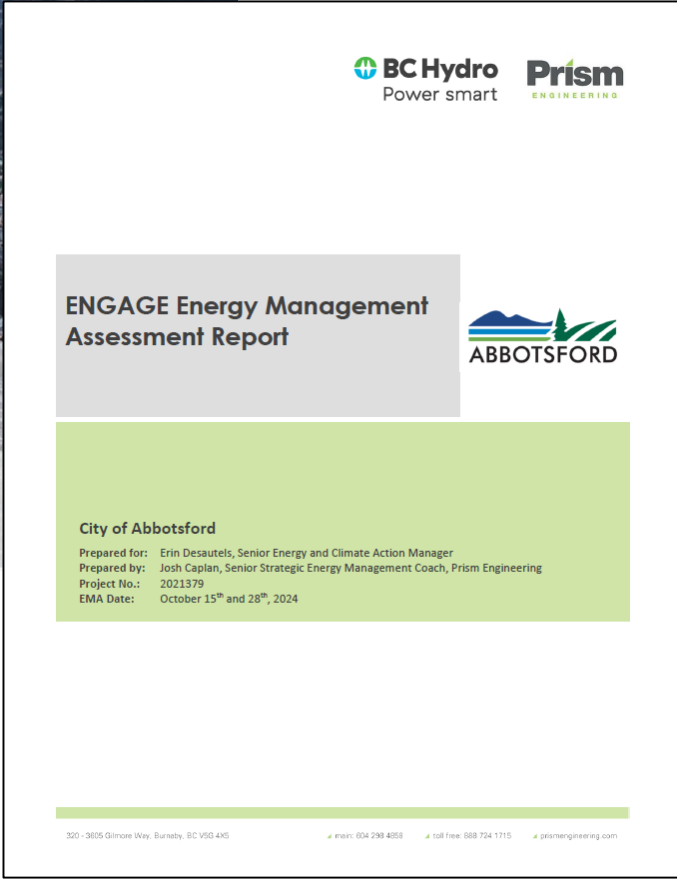
ABBOTSFORD  
**2023**  
SUSTAINABILITY  
**REPORT**  
August 2023



**BC Hydro Sustainable Communities  
Community Energy Manager Update  
(Y2Q3&4)**  
January 2025  
Erin Desautels  
Senior Energy & Climate Action Manager

HUB of the fraser valley

ABBOTSFORD



BC Hydro Power smart Prism ENGINEERING

**ENGAGE Energy Management  
Assessment Report**

ABBOTSFORD

City of Abbotsford

Prepared for: Erin Desautels, Senior Energy and Climate Action Manager  
Prepared by: Josh Caplan, Senior Strategic Energy Management Coach, Prism Engineering  
Project No.: 2021379  
EMA Date: October 15<sup>th</sup> and 28<sup>th</sup>, 2024

300 - 3605 Gilmore Way, Burnaby, BC V5D 4X5 | email: 604.298.4553 | toll free: 888.724.1715 | prismengineering.com



# Financial Implications

- Climate Action Reserve Fund (CARF)
  - Purpose: Implementing carbon neutrality objectives and projects
  - Fund investment and monitoring guided by the Climate Action Reserve Fund Management Policy
  - Balance of \$4.38M (as of December 2024), earmarked for upcoming corporate and community initiatives



# Questions

Of the initiatives discussed:

- Are there any you are particularly interested in?
- Are there alignments with other work in the community you'd like to draw attention to?



**Thank you.**

