

Corporate and Community Energy Action Plan 2015-2025 Update

Governance and Priorities Committee

October 15, 2024



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Overall Targets



May 8, 2017

Adoption of Corporate and Community Energy Action Plan (CCEAP)

Legend:

-  In progress
-  Not completed

Corporate



Keep annual energy costs below the average of the preceding 5 years



Increase the share of renewable energy use from 50% to 70% by 2025



50% reduction of greenhouse gas (GHG) emissions by 2025

Community



30% reduction of GHG emissions from community sector by 2025



Increase the share of renewable energy use from 18% to 30% by 2025



Corporate Projects

Legend:
 Completed
 In progress
 Not completed



Before 2015

- Solar Panels Solid Waste Facility
- Hybrid Fleet Vehicle in-use



2016

- Solar Panels Fieldhouse



2018

- Multiplex Centralized Biomass Boiler



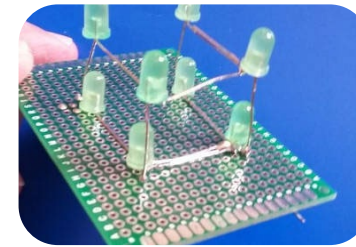
2019

- City Hall Centralized Boiler



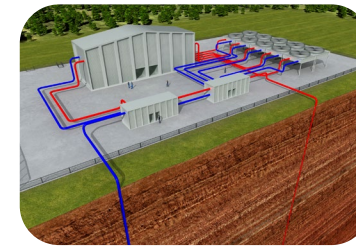
2021

- Building Envelope Upgrades for Baling Facility



2022

- LED installation in City facilities



2023

- Water Treatment Plant Heating System



N/A

- Air Source Heat Pumps
- Replacement of Existing Pellet Boilers
- Replacement of Hybrid vehicles
- City Fleet Monitoring

Overall GHG emissions
 Target: -2,000 tonnes CO₂e ↓
 Actual: -700 tonnes CO₂e ↓

Corporate – Successes and Opportunities

- Legend:**
- Completed
 - In progress
 - Not completed

- District Energy System wood pellet boilers work well if the goal is to replace fossil fuels

Biomass Boiler ✓



- Low return on investment
- Excess energy produced and wasted in summer; no energy produced in winter

Solar Panels ✗



- Project started but not completed – more resources needed

LED lighting ?



Community Projects

Legend:
Completed
In progress
Not completed



Transportation

- Reducing Vehicle Kilometres traveled
- Right Sizing Vehicles
- Reinforcing Anti-idling bylaw
- Infrastructure for Electric Cars (2018)
- Businesses Switch to Hybrid Vehicles
- Sustainable Transportation Plans
- **GHG emissions**
Target: -19,000 tonnes CO₂e ↓
Actual: -12,000 tonnes CO₂e ↓



Heating and Electricity

- Residential Energy Savings through Local Improvement Charge
- Implementation of the new Building Bylaw
- District Energy Policy
- Solar Panels for Residents
- **GHG emissions**
Target: -18,000 tonnes CO₂e ↓
Actual: -24,000 tonnes CO₂e ↓ (for residential properties)

Community Projects

Legend:
Completed
In progress
Not completed



Waste

- Residential Organics Collection
- Separation of Cardboard from Waste Streams
- **GHG emissions**
Target: -9,000 tonnes CO₂e ↓
Actual: +130 tonnes CO₂e ↑



Future Innovation


- **Assess Wind Energy Potential**
- **Electronically Commutated Motor (ECM) pumps**
- **Integrated Resource Management**
- **Education around Carbon Pricing**

Community – Successes and Opportunities

- Legend:**
- Completed
 - In progress
 - Not completed


- Building bylaw updates to match and exceed federal legislation have resulted in residential properties becoming more efficient

Building Bylaw ✓




- Implemented successfully in several City facilities' and residential homes

ECM pumps ✓

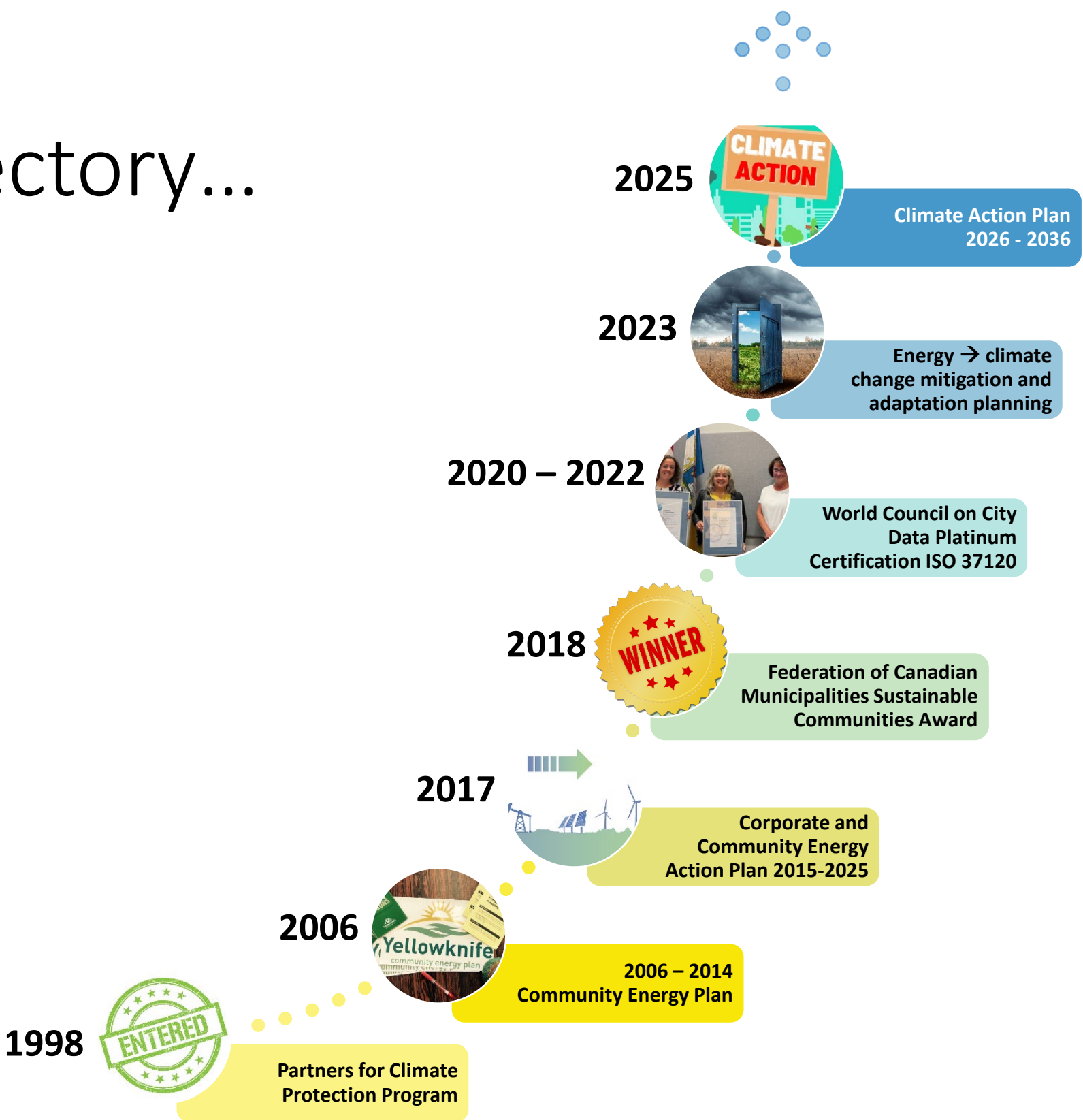


- GHG emissions savings were minimal; purchase and operation costly; resource-intensive
- Hybrid vehicles are a better option

Electric vehicles ✗



Our trajectory...



Thank you!

Questions?



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