

Ottawa's Energy Evolution

Noons for Now

February 2, 2023



Thanks for this Opportunity!

1. What We Have Done:

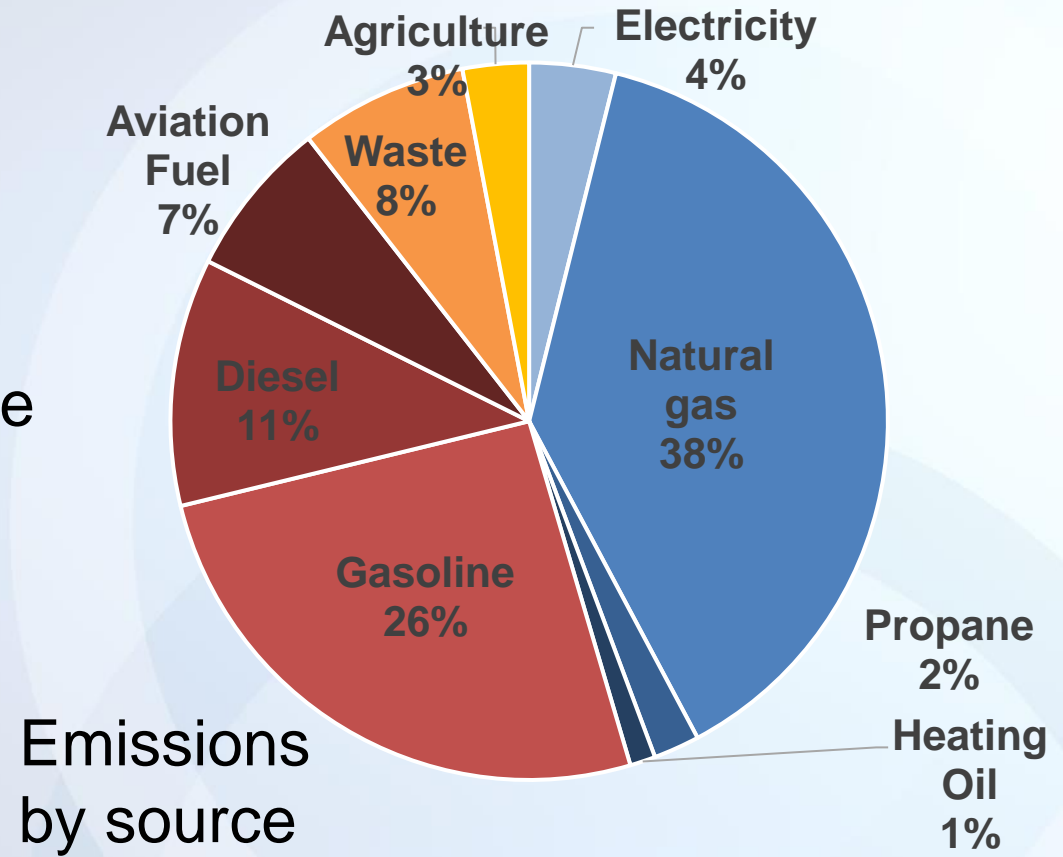
- Inventory
- Model
- Approval and Getting Moving on Projects

2. What's Important and Where We're at:

- The Top 5
- Key Programs
- Example Projects

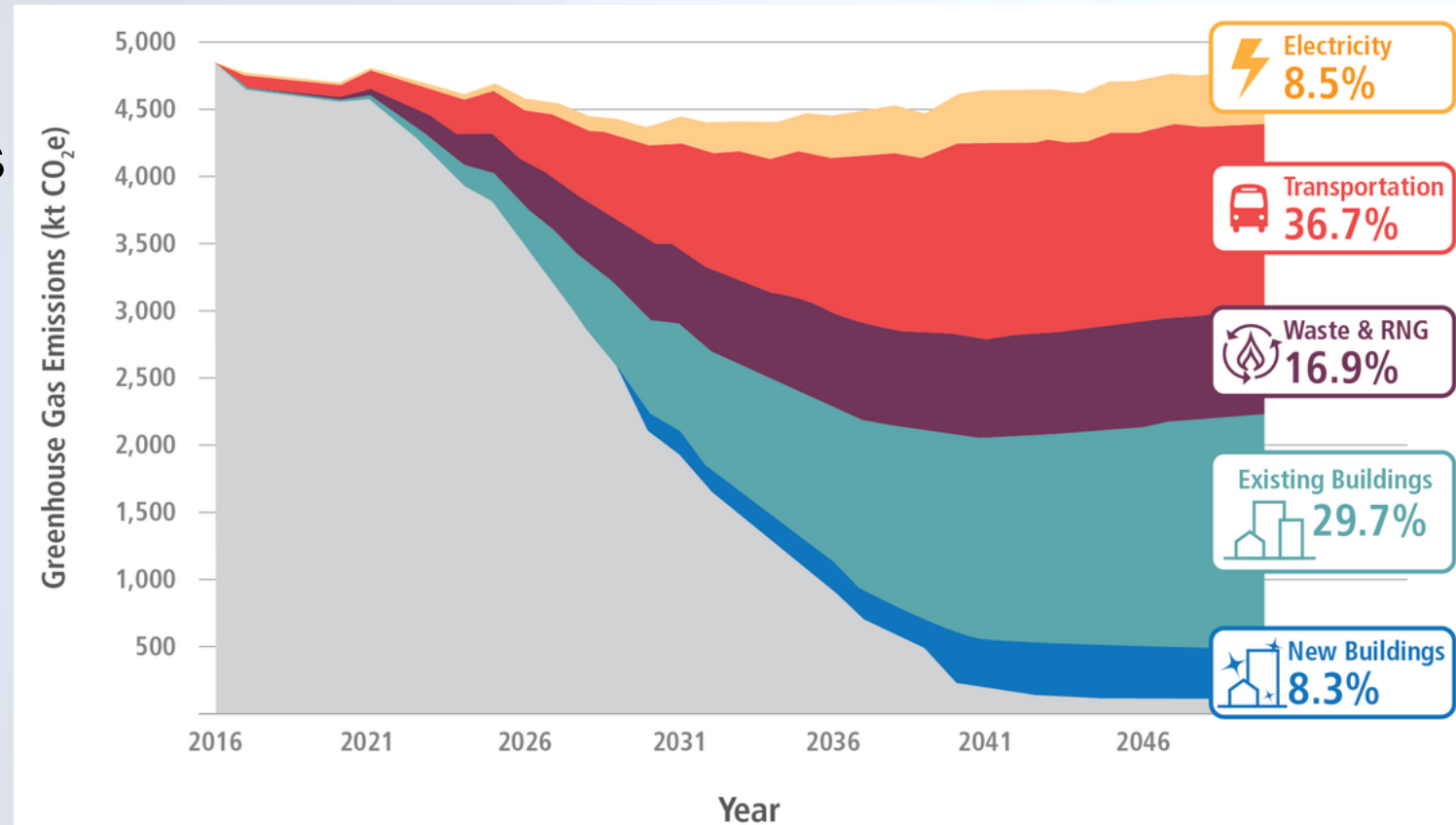
Sources of Our Emissions

We do annual emissions surveys from Hydro Ottawa, Hydro One, Enbridge and through fuel surveys



Energy Evolution Plan Targets

- Developed through an integrated model which figures out where all energy comes from and goes. It considered cost and practicality of measures
- The measures align with Ottawa as a community doing its part to avoid no more than 1.5°C of global heating
- **The top line is important!**



Ottawa's GHG emission reduction targets

Community

2012 baseline

2025

43%

2030

68%

2040

96%

2050

100%

Corporate

2012 baseline

2025

30%

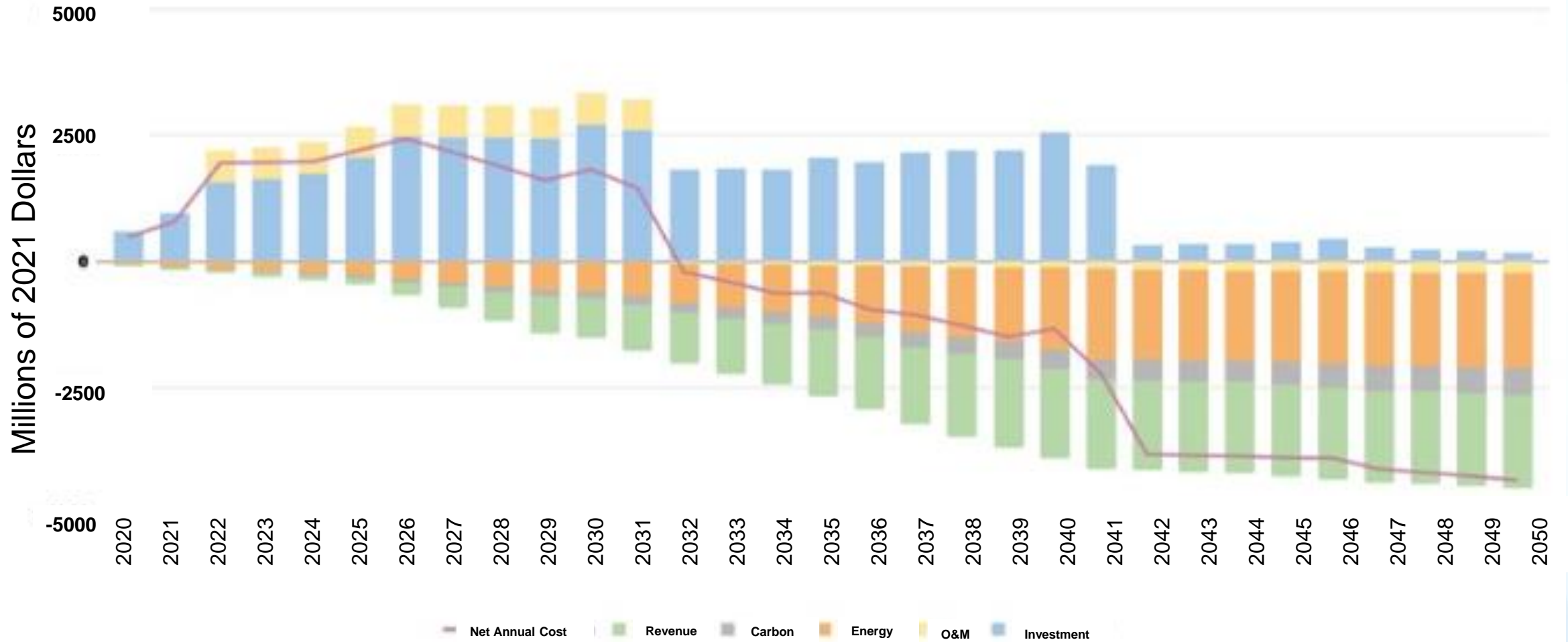
2030

50%

2040

100%

Year-over-year Investment and Returns



Top 5 Actions Which Reduce GHG's



1. ELECTRIFY PERSONAL VEHICLES



2. RETROFIT EXISTING RESIDENTIAL BUILDINGS



3. DIVERT ORGANICS AND CREATE RENEWABLE NATURAL GAS



4. RETROFIT EXISTING COMMERCIAL BUILDINGS



5. TRANSITION TO ZERO EMISSION COMMERCIAL FLEETS

Actions for the Top 5

Personal EV's

- Investments in public charging

Residence

- Better Homes Ottawa, Gas conservation and Integrated Resource Programs
- District Energy

Renewable Natural Gas

- Work at Ottawa's waste water treatment plant and with source separated organics

Commercial Buildings

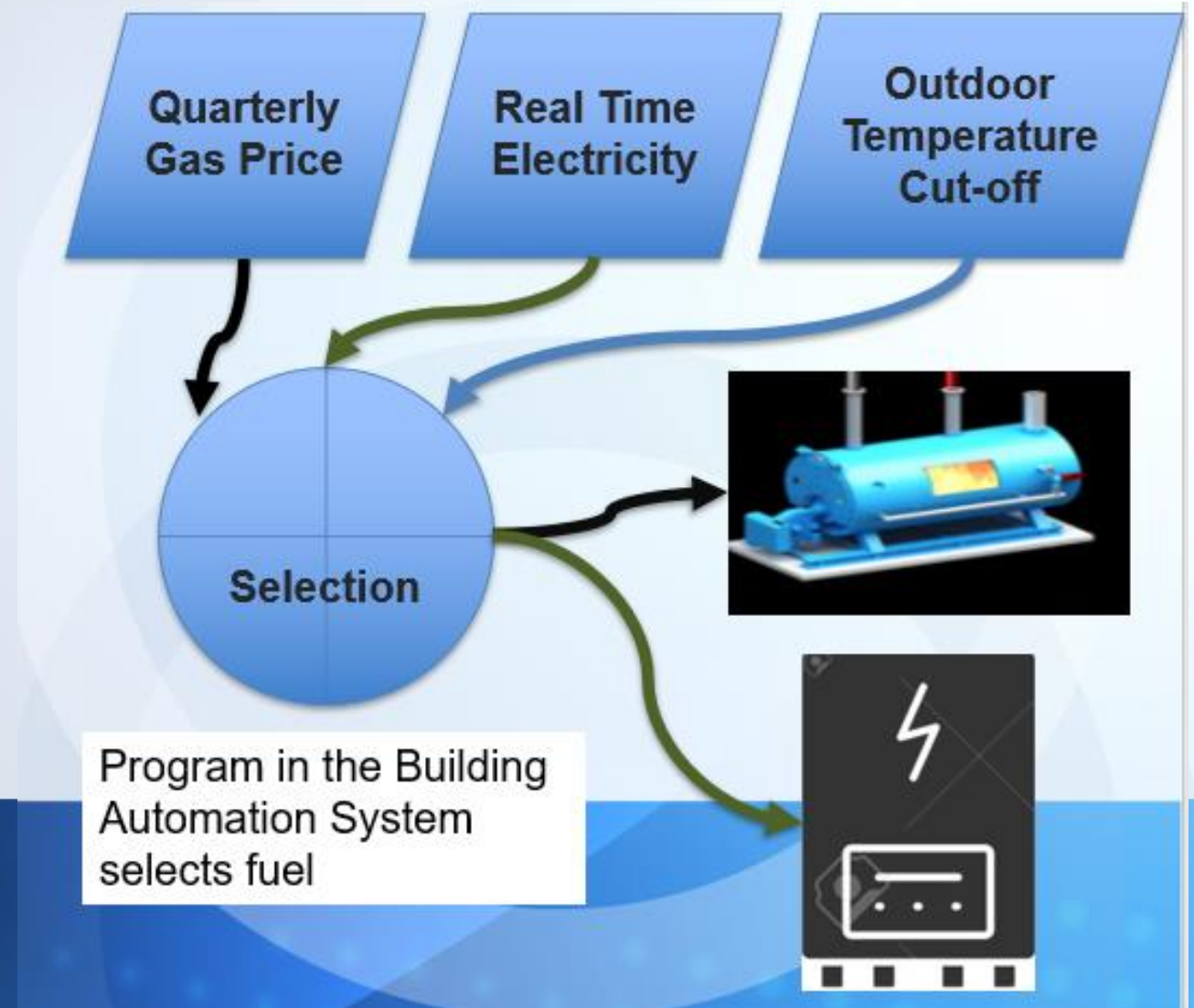
- Better Buildings Ottawa, Gas conservation and IRP programs
- District Energy

Commercial Fleet

- OC Fleet will be a good example, Green fleet initiatives
- Watching developments (garbage trucks)

Projects Started: Heating

- We try to go for the best ground source heating solution we can make work
- We have done some gas electric / hybrid heating but this is not typically on model



The Role of District Energy

- We need district energy nodes. For this we need a good ~ 1,000 square meter development
- Barriers:
 - Intercepting or anticipating developments
 - A place for the district energy node
 - Making Existing Nodes GHG Neutral



City Programs to Get it Done

- **Better Buildings Ottawa**
 - Municipal strategy aimed at catalyzing & directly supporting deep energy retrofits
 - Targeting commercial (esp. office), Multi-Unit Residential, institutional & industrial
 - Starting with municipal Benchmarking program (ottawa.ca/energybenchmarking)
 - Eventual energy performance regulations & commercial retrofit financial support program

BetterBuildings
OTTAWA

