

## Backgrounder

### Corporate Climate Plan Progress: Energy Performance Contract for City Buildings

The City of St. John's approved the [Corporate Climate Plan](#) in 2021. It provides a path forward to manage energy and reduce greenhouse gas (GHG) emissions from the corporate operations of the City of St. John's. This Plan responds to Council's declaration of a climate emergency in November 2019. The City of St. John's is committed to a 40% corporate GHG reduction by 2030, and to reaching net zero by 2050 at the latest.

#### Energy Performance Contract

The City and Honeywell worked together to complete a preliminary Opportunity Assessment (2020 to 2022), which benchmarked and identified City facilities with high energy use and preliminarily identified energy saving and GHG reducing opportunities.

Through a competitive RFP, [awarded in February 2022](#), Honeywell was contracted to develop and implement a 'self-funded' Energy Savings Performance Contract to improve energy efficiency and reduce GHGs. The work included assessing corporate facility energy use, identifying possible energy savings opportunities, implementing improvements, monitoring results and guaranteeing savings.

The project is 'self-funded' because the improvements and Honeywell's services are paid for by the resulting energy savings and grants over a 15-year time period.

In December 2022, Council agreed to move to implementation of the program, finalizing implementation and guarantee agreements, and securing the financing required to move ahead.

#### Infrastructure Upgrades and Timeline

The improvements will be implemented at 17 city-owned facilities and include replacing outdated assets and technologies, addressing deferred maintenance and modernizing the building portfolio.

- **Lighting LED Retrofits:** replacing fluorescent lighting with LED technology, improving lighting and energy use.
- **Air Infiltration Mitigation:** sealing roof/wall, door and other gaps to avoid cold air coming in and warm air leaving.
- **Recommissioning Building Systems:** calibrating and/or replacing sensors and bringing the systems back to efficient performance.
- **Fuel Switching:** installing electric boilers to replace heating from oil boilers.
- **Expand Controls:** enabling staff to better troubleshoot and operate equipment.
- **Continuous Commissioning Tool:** optimizing equipment operations every 15 minutes all year long.
- **Heat Recovery in MUAs:** collecting waste heat for use elsewhere in the facility.

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Facility	Lighting LED Retrofit	Air Infiltration Mitigation	Recommissioning Building Systems	Fuel Switching	Expand Controls	Continuous Commissioning Tool	Heat Recovery in make-up air units (MUA)
Public Works Depot	x	x	X	X (hybrid)		x	
City Hall	x	x	x				
City Hall Annex	x	x	x				
245 Freshwater Rd	x	x	x	x*	x		
Animal Care and Adoption Centre	x	x	x	x			
Central Fire Station	x	x	x				
West End Fire Station	x		x				
Paradise Fire Station	x		x				
Buckmaster Rec. Centre	x	x		x			
Winsor Lake Water Treatment Plant	x	x	x				
Bay Bulls Big Pond Water Treatment Plant	x	x					
Petty Harbour Water Treatment Plant	x						
Riverhead Wastewater Treatment Plant	x	x	x				x
Robin Hood Bay Waste Disposal Site	x	x					
Mary Brown's Centre	x	x					
St. John's Convention Centre	x	x					
Bowring Park Maintenance Building					x		

\*Note: this measure is dependent on confirmation from an additional grant application.

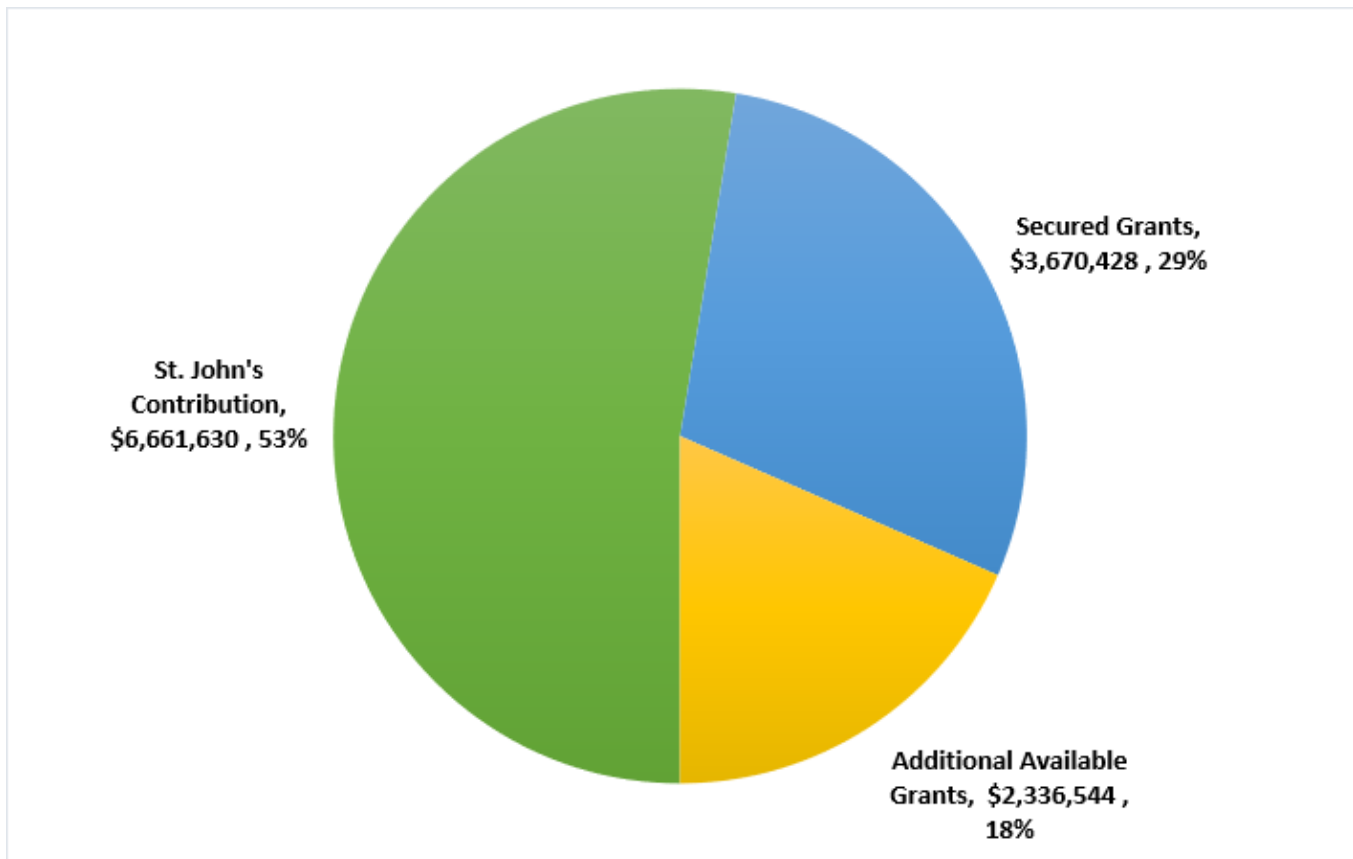
Construction is scheduled to be complete within approximately two years.

### Cost and Funding Agreements

Secured grants support the project implementation to ensure it is cost-neutral for the City within the 15-year payback period.

- Total Project Cost is \$12,552,601
- Secured Grants (Federal and Provincial Gov., and takeCHARGE): \$3,670,428
- Additional Available Grants applied but not confirmed: \$2,336,544
- City of St. John's Contribution: \$6,661,630

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### Results and Progress

The Energy Performance Contract will see infrastructure upgrades to 17 city-owned buildings that will achieve \$517,914 in energy maintenance savings per year.

This contract will reduce the City's greenhouse gas emissions by 1,118 tonnes CO<sub>2</sub>et which is a 11% direct reduction of Corporate GHG emission from our 2018 baseline. For example, this means reducing the City's oil consumption for heating by 346,667 liters per year, which is equivalent to removing approximately 124 homes from oil heating, while adding only 26 homes with electricity.

This project, along with other ongoing improvements to the City's buildings and the provincial efforts to implement a low-carbon electricity grid, sets the City on track to achieve over 70% of its Corporate 2030 target before 2025.

### Next Steps

Construction is beginning now and is anticipated to be complete in approximately two years. An application is being drafted to secure the amounts identified as additional available grants.