



## COUNCIL REPORT

To: Mayor and Council

Date: April 22, 2025

From: Ron Bowles, Chief Administrative Officer

File No: 0890-04

Subject: **Energy Retrofits Update – Royal LePage Place**

Report Prepared by: Erin Goodwin, Facilities and Recreation Manager

Report Reviewed by: Warren Everton, Director of Finance/Chief Financial Officer

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### RECOMMENDATION:

**THAT** Council approve the following four (4) recommended energy retrofit projects for Royal LePage Place:

- 1) ECM-2: Controls Optimization;
- 2) ECM-4: Optimization of Dehumidifier Operation;
- 3) ECM-5A: 100 Ton Heat Pump; and
- 4) ECM-7: Desuperheater

as identified in the report titled “Energy Retrofits Update – Royal LePage Place” from the Facilities and Recreation Manager, dated April 22, 2025;

**AND THAT** the Mayor and Corporate Officer be authorized to execute the updated Fortis BC Implementation Letter dated March 13, 2025 to receive approximately \$540,428 for completing the four (4) energy retrofit projects;

**AND FURTHER THAT** Council approve a budget amendment of an additional \$246,500, to increase the budget from \$1,153,260 to \$1,400,000, for the four (4) energy retrofit projects at a net cost of approximately \$859,572 to be funded through the finance strategy identified in this report.

### STRATEGIC AREA(S) OF FOCUS

**Invest in Infrastructure** – We will invest in building, improving and maintaining infrastructure to meet the needs of, and to provide a high quality of life for, current and future generations.

## BACKGROUND

In 2023, the City completed a Corporate Climate Action Plan in parallel with a Fortis BC energy study of Royal LePage Place (RLP). According to the Climate Action Plan, 40% of all CWK corporate greenhouse gas (GHG) emissions come from the Mt Boucherie Complex. The Fortis BC energy study identified a series of projects that could reduce the GHG emissions of this facility by 54%. The City’s Corporate Climate Action Plan has an emission reduction target of 30% of 2021 emissions by 2030.

On March 12, 2024 staff brought forward a report identifying five (5) projects in the Fortis BC Energy Study that the City should consider. It was reported that completing these five (5) projects would reduce the City’s corporate emissions by 22%, reduce energy costs by \$44,000 per year, and upwards of \$50,000 per year in carbon tax savings.

Council approved the recommendation in the March 12, 2024 report and since then, staff has been working with a consultant to draft and release a tender for the project.

Tender pricing for this project came in substantially over budget. As a result, staff are presenting an alternative option for Council’s consideration based on updated pricing received and the consultant’s recommendation to maximize the Fortis BC incentive program.

The City is required to sign the updated project commitment letter with Fortis BC within 60 days of it being received (May 13, 2025) and will have 18 months to complete the work from the date the commitment letter is signed.

## DISCUSSION

Below is a summary of the four (4) projects associated with the alternative option being presented for Council’s consideration.

**Table 1 – Energy Conservation Measures (ECM) Cost Performance and Energy Summary**

ECM	Description	Annual Gas Savings (GJ / Yr)	Annual Electricity Savings (kWh / yr)	Energy Cost Savings (\$ / yr)	Updated ECM Cost	Incentive	Net Cost
2	Controls Optimization	310	4,777	\$4,099	\$15,625	\$9,300	\$6,325
4	Dehumidifier Optimization	194	4,615	\$2,668	\$6,250	\$4,688	\$1,563
5a	100 Ton Heat Pump (RLP)	3,445	(202,250)	\$29,931	\$1,157,861	\$475,410	\$682,451
7	Desuperheater	567	N/A	\$6,956	\$85,000	\$51,040	\$33,970
<b>Total</b>		<b>4,516</b>	<b>(192,854)</b>	<b>\$43,664*</b>	<b>\$1,264,736</b>	<b>\$540,428</b>	<b>\$724,309</b>

\* By 2030, the City is anticipated to see an additional savings in carbon tax of about \$14,000 per year for a total estimated \$58,000 per year in energy cost savings.

**ECM Projects Deleted** (not being recommended)

5b	30 Ton Heat Pump (JLA)	784	(49,716)	\$6,700	\$656,139	\$108,192	\$547,947
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ECM 2: Control Optimization

Recommend completing this work to maximize the efficiency of the equipment. Estimated payback on investment is less than two (2) years.

ECM 4: Dehumidifier Optimization

Recommend completing this work to maximize the efficiency of the equipment. Estimated payback on investment is less than one (1) year.

ECM 5a: 100 Ton Heat Pump

In 2024, the existing 20 year old heat pump inside Royal LePage Place (RLP) failed and cannot be repaired. This heat pump acts as the primary heating source for the building with gas fired boilers used as backup. ECM 5a would replace this failed heat pump. Until this failed heat pump can be replaced, primary heating for the building will be done by way of the gas fired boilers.

Recommend completing this work to replace the failing equipment and to help significantly reduce corporate GHG emissions.

ECM 7: Desuperheater

This is a key piece of equipment that works in conjunction with ECM 5a. It is essential in collecting heat that is discharged inside the arena refrigeration plant. This heat then becomes the primary heat source for the building and is distributed by way of the heat pump identified in ECM 5a. As a result, staff are recommending to complete the project.

ECM 5b: 30 Ton Heat Pump

Staff is not recommending ECM 5b due to the high costs and low payback. Estimated payback on investment is more than 80 years.

Below is a summary of the net impact between what was reported on March 12, 2024 and what is being recommended in this staff report.

<b>RLP Energy Retrofit Net Impact Summary</b>			
	<b>March 12, 2024</b>	<b>April 22, 2025</b>	<b>Net Difference</b>
Total Project Cost	\$1,153,500	\$1,400,000	\$246,500
Total Incentives	\$480,240	\$540,428	\$60,188
Net City Costs	\$673,260	\$859,572	\$186,312
Annual Energy Savings (2026)	\$72,000 per year	\$44,000 per year	\$28,000 per year
Annual Energy Savings (2030)	\$94,000 per year	\$58,000 per year	\$36,000 per year
Corporate GHG Reduction	22%	17%	5%
Estimated Payback	8 years	14 years	6 years

## FINANCIAL IMPLICATIONS

Fortis BC will reimburse the City the incentive amount, after the project has been completed. As a result, the City is responsible to fund all costs upfront. Therefore, staff is proposing a budget amendment to increase the budget from \$1,153,500 to \$1,400,000 to complete the project. The Fortis BC incentives will fund \$540,428 of the project with the remaining \$859,572 to be financed through MFA equipment financing over 5 years.

Proposed Budget:	\$1,400,000
Total Incentives:	\$540,428
Net City Cost:	\$859,572
Previously Approved Budget:	\$1,153,500
Previously Approved Incentives:	\$480,240
Previously Approved Net Cost:	\$673,260
Net City Cost Difference	\$186,312

## COUNCIL REPORT / RESOLUTION HISTORY

<b>Date</b>	<b>Report Topic / Resolution</b>	<b>Resolution No.</b>
March 12, 2024	Fortis BC Energy Retrofits – Royal LePage Place  It was moved and seconded <b>THAT</b> Council approve the five (5) recommended energy retrofit projects for Royal LePage Place as identified in the report titled “Fortis BC Energy Retrofits – Royal LePage Place” from the Facilities and Recreation Manager, dated March 12, 2024;	Resolution No. C092/24

**AND THAT** the Mayor and Corporate Officer be authorized to execute the Fortis BC Implementation Letter to receive approximately \$480,240 for completing the five (5) projects identified in this report;

**AND THAT** Council approve a budget amount of \$1,153,500 for the five (5) projects identified in this report at a net cost of approximately \$673,260 to be funded through MFA Equipment Financing;

**AND FURTHER THAT** Council approve the work to be completed during the City's 2024 and 2025 annual arena shutdown period.

CARRIED UNANIMOUSLY

## CONCLUSION

The City's Corporate Climate Action Plan has an emission reduction target of 30% of 2021 emissions by 2030. This project will reduce corporate emissions by 17%.

An additional net amount of \$186,312 is being requested to complete the recommended projects and to be financed through MFA equipment financing over 5 years.

One of the recommendations will correct the need to replace a heat pump that failed in 2024.

### Alternate Recommendation:

**THAT** Council not execute the updated Fortis BC Implementation Letter dated March 13, 2025 to receive approximately \$540,428 for completing the four (4) energy retrofit projects;

**AND THAT** Council direct staff to bring forward a Capital request for the replacement of the failed Heat Pump as part of the 2026 budget process.

PowerPoint: Yes  No

### Attachments:

*RLP Energy Retrofit Consultant Recommendation Letter (Fortis Incentive Program)*