

REPORT TITLE: Net Zero Emissions Building Retrofit Policy and Standard

FROM: Davinder Valeri, CPA, CA, Chief Financial Officer and Commissioner of Corporate Services

RECOMMENDATION

 That the Net Zero Emissions Building Retrofit Policy (the "Policy") attached as Appendix I and Standard (the "Standard") attached as Appendix II to the Chief Financial Officer and Commissioner of Corporate Services, listed on the June 26, 2025, Regional Council agenda titled "Net Zero Emissions Building Retrofit Policy and Standard", be approved;

REPORT HIGHLIGHTS

- Buildings account for 51 per cent of Peel's corporate greenhouse gas (GHG) emissions. Decarbonizing existing buildings is essential to achieving the Region's 2030 target of a 45 percent GHG reduction from 2010 levels and the longer-term target for 2050.
- The proposed Policy requires the replacement of gas-burning equipment at end-of-life with low-carbon alternatives, aligning with the proposed Net Zero Emissions (NZE) Building Retrofit (BR) Standard and integrating with existing asset management programs.
- Implementing the Policy is expected to reduce GHG emissions by 48,000 tonnes of GHG emissions over 25 years, improve building performance, and enhance occupant health, safety, and comfort.
- Implementing the Policy may increase capital costs by 15–25 per cent depending on the building type, totaling approximately \$400-\$450 million over the next ten years. However, these costs are expected to be partially offset by operational savings and avoided future liabilities.
- Not approving the proposed Policy could result in missed climate targets, reputational damage, increased financial exposure, and lower energy efficiency.

DISCUSSION

1. Background

Recent data confirms that average global temperatures rose by about 1.5°C in the summer of 2024, which made it the hottest year on record. This underscores the escalating urgency of the climate crisis.

The Region's Climate Change Master Plan (CCMP - 2019) established a corporate GHG emissions reduction target of 45 per cent reduction by 2030 compared to 2010 levels and a longer-term target for 2050. Within the Region's GHG emission inventory, buildings are responsible for about 51per cent of the total corporate GHG emissions, which makes

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prioritizing and accelerating building decarbonization essential to achieve the Region's 2030 GHG emissions reduction target. One of the CCMP proposed actions was to develop decarbonization standards and energy emissions management plans.

The Region has a Net Zero Emissions (NZE) New Construction (NC) policy and standard in place since 2022, which requires all new buildings to be constructed to the NZE NC standard. This policy prevents new GHG emissions from future buildings but doesn't address the largest source of Peel's emissions today – existing buildings.

Initiated in 2023, the proposed NZE BR Policy, Standard and Implementation Guide were developed in collaboration with a technical working group, which included all internal program areas that operate and provide asset management services to Region-owned buildings. Upon completion of the Policy, Standard, and Implementation Guide development, the NZE BR package of work was endorsed by the project steering committee and presented to Peel's Executive Leadership Team.

The NZE BR Policy and Standard represent a pioneering step, unique from other low carbon performance standards, Peel is the first municipality to propose such a framework. If approved, this innovative policy and standard would not only position Peel as a climate action leader but also drive a transformative shift in how the organization conducts its capital planning and operations, enhancing efficiency and cost-effectiveness. By integrating the NZE BR Standard with corporate asset management, Peel would embed sustainability into core business.

2. NZE BR Policy and Standard

Objective and Scope

The main objective of the Policy is to formalize application of the NZE BR Standard, including the guiding principles, broad requirements, and internal stakeholder responsibilities.

The Policy applies to the design and construction of planned building retrofits and interventions of all existing Regionally owned buildings and facilities, including Peel Housing Corporation and Peel Regional Police.

How Does it Work

The Policy requires replacement of the fossil fuel-burning equipment, at the end of its useful life, with a low carbon solution as identified in the NZE BR Standard. Low carbon retrofit planning, execution and asset renewal are seamlessly integrated with the existing asset management programs. Buildings that are completely switched to low carbon technologies will be certified to the NZE performance standard.

Business Value and Benefits

This approach ensures consistency across asset management programs, increases predictability of capital planning needs, enhances cost-effectiveness with end-of-life replacements, and delivers zero carbon operations over the next 25 years.

The NZE BR Standard incorporates flexibility by providing multiple pathways for compliance and embeds fiscal responsibility of decarbonization by identifying best value technical solutions.

Impact and Return on Investment

Once zero carbon operations are achieved, a total of 48,000 tonnes of GHG emissions will be removed from Peel's corporate GHG inventory. This significant reduction is equivalent to the impact of planting **2,000,000** trees.

The low carbon solutions proposed in the NZE BR Standard will improve building energy performance by introduction of up to 4 times higher efficiency mechanical equipment than the existing fossil fuel burning equipment. As a result of the higher efficiency equipment, it is expected that there will be no net impact on the building operating costs due to electrification. In some cases, net operational savings are anticipated.

Development of the NZE BR Standard has fostered significant momentum and strengthened cross-departmental collaboration. Teams across Peel have aligned around a shared vision for climate leadership, working collectively to develop innovative, practical solutions.

People First Approach

Implementation of the NZE BR Standard is expected to deliver measurable improvements in occupant comfort through introduction of space cooling (in buildings where cooling was not previously available), enhanced indoor air quality and thermal regulation. By integrating highefficiency, low-carbon technologies, retrofitted buildings will provide healthier, safer, and more comfortable environments for people.

FINANCIAL IMPLICATIONS

Implementing the Policy is estimated to increase state of good repair (SoGR) capital costs for Peel's buildings by 15–25 per cent, depending on the building type. The impact of the Policy is estimated at \$400-450 million over the next ten years.

The estimated capital increment for decarbonization is subject to refinement as specific capital projects progress through detailed design and SoGR needs are validated by updated building condition assessments. Further, as low carbon technology becomes more mainstream and the market transitions, upfront costs for these types of equipment can reasonably expect to decrease over time.

RISK CONSIDERATIONS

Not approving the NZE Building Retrofit Policy and Standard poses significant risks to the Region, foremost, missing Council-approved GHG emissions reduction targets. Failing to meet these targets erodes Peel's efforts to combat global climate change, which has direct local impacts, leading to increased environmental degradation and adverse health effects on our community. Missing these reduction targets can also result in reputational damage, specifically affecting Peel's standing in leading regional and national climate initiatives. Most importantly,

Another major concern is the creation of stranded assets, which are buildings and infrastructure that become obsolete or non-compliant due to evolving regulations and market demands. As the global clean energy transition continues, assets reliant on fossil fuels, particularly natural gas, will likely face increased volatility in prices and potential devaluation. This instability can lead to higher operational costs and financial losses, undermining financial health and economic stability. Additionally, not standardizing the opportunity to implement highly efficient, clean energy

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upgrades exacerbates these risks. It misaligns with building optimization goals aimed at reducing energy consumption and associated costs.

BILL 112 RISKS AND IMPLICATIONS

On June 8, 2023, the Province passed Bill 112, the *Hazel McCallion Act (Peel Dissolution), 2023* and created a Transition Board to make restructuring recommendations to the Province. The Transition Board was dissolved on December 31, 2024, pursuant to O. Reg. 547/24. The Transition Board's recommendations have not been released to the Region.

On June 4, 2025, Bill 45, the *Peel Transition Implementation Act, 2025*, was introduced. If passed, Bill 45 will transfer jurisdiction over regional roads — including related stormwater infrastructure — from Peel Region to Mississauga, Brampton and Caledon on July 1, 2026, and will transfer jurisdiction over waste collection from Peel Region to the three lower-tier municipalities on January 1, 2026.

CONCLUSION

Staff recommend the NZE Building Retrofit Policy and Standard be approved and implemented as part of the Region's SoGR capital planning. Ensuring Region-owned buildings are energy-efficient and aligned with a net zero emissions future is crucial for maintaining Peel's leadership and commitment to sustainability.

APPENDICES

Appendix I – Net Zero Emission Building Retrofit Policy Appendix II – Net Zero Emission Building Retrofit Standard

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