Region of Peel
working with you

REPORT
Meeting Date: 2023-06-08
Regional Council

For Information

REPORT TITLE: **2022 Treasury Report**

FROM: Patricia Caza, Chief Financial Officer and Commissioner of Corporate Services

OBJECTIVE

To provide the annual results of Treasury activities in accordance with Peel Region's Investment Goals and Policies (F20-05) and Debt Management Policy (F20-06); and, to provide the annual results of energy commodity hedging performance in accordance with the Energy Commodity Procurement Policy (F35-44). This report also fulfills certain legal reporting requirements under the *Municipal Act, 2001.*

REPORT HIGHLIGHTS

- For the year ended December 31, 2022, total investment income was $79 million for Peel and Peel Housing Corporation (PHC).
- Approximately 95 per cent of earnings were allocated to Peel reserves, 1 per cent to operations and 4 per cent to Peel Housing Corporation.
- All investment and debt activity were in accordance with Peel Region's policies and statutory requirements.
- All commodity price hedging agreements during 2022 were in accordance with the *Municipal Act, 2001*, and associated Ontario Regulation 653/05.

DISCUSSION

1. Background

In accordance with the *Municipal Act, 2001*, and associated Ontario Regulation 438/97, and the Peel Region's ("Peel") Investment Goals and Policies, the Treasurer is required to report annually on Peel's investment portfolio, including the performance of the portfolio and its consistency with the Investment Goals and Policies set out by Peel.

Further, under the *Municipal Act, 2001*, and associated Ontario Regulation 653/05, and Peel's Energy Commodity Procurement Policy, the Treasurer is required to report annually on Peel's commodity hedging performance.

2. Compliance

All transactions executed during 2022 were in compliance with the *Municipal Act, 2001*, applicable regulations, Peel's Investment Goals and Policies and Peel's Debt Management Policy. The fixed price hedge volumes for energy that were purchased for 2022 were consistent with Peel's Energy Commodity Procurement Policy and goals to address risks on commodity price volatility and were in alignment with Peel's risk tolerance. Appendix I contains the Treasurer's Statement of Compliance. Peel's Investment Goals and Policies (F20-05) and Debt Management Policy (F20-06) were reviewed, and no changes are being recommended at this time.

3. Market Summary

In 2022, inflation continued to accelerate to multi-decade highs (going back to the 1980s), with Canadian CPI reaching 6.8 per cent year over year. To combat inflation running significantly above the Bank of Canada's (BoC) 2 per cent target, the BoC, in one of the fastest hiking cycles on record, raised interest rates by 4.00 per cent, leaving the policy rate at 4.25 per cent at the end of 2022.

Government of Canada interest rates also moved higher in 2022, with increases ranging from approximately 1.5 per cent to 4 per cent, depending on the term. Despite the efforts of the BoC, inflation expectations remain elevated. Current BoC forecasts have inflation declining to about 3.5 per cent in 2023 and to 2.3 per cent in 2024.

The global economy grew at 3.4 per cent in 2022, while the Canadian economy also grew at 3.4 per cent. Canadian GDP for 2023 and 2024 is expected to decelerate to 1.4 per cent and 1.3 per cent, respectively, per the BoC's most recent forecast. Job markets in Canada and the US remain very tight, with strong wage gains contributing to more persistent inflation. However, consumer confidence and spending expectations weakened towards the end of 2022 due to the earlier interest rate hikes.

The ongoing conflict in Russia and Ukraine and broader geopolitical tensions could continue to impact global growth and inflation outlooks, potentially posing downside risks in 2023. Oil prices had a significant run up in the first half of 2022; however, weaker global demand in the latter part of the year resulted in prices retreating to similar levels seen at the beginning of 2022. In late 2022, markets began pricing in the possibility of a heightened inflation environment, resulting in the possibility of interest rates remaining "higher for longer". There were also some fears of a coming recession at some point in 2023, weakening overall market sentiment.

Since the beginning of 2023, risk and market volatility have remained elevated, highlighted by stress in the US regional banking sector and risk of contagion in the broader financial sector. These events played a part in investors' move to reduce risk by holding higher quality investments such as government bonds.

4. Liquidity Management

As of December 31, 2022, the General Fund portfolio's amortized book value, including cash holdings was $3,340 million (2021 – $3,057 million). Cash and cash equivalent holdings as of December 31, 2022, for the General Fund totalled $205 million (2021 – $400 million). The Sinking Fund portfolio amortized book value, including cash was $416 million (2021 – $363 million). Additional details are provided in Appendix II.A.

As interest rates moved higher throughout 2022, earnings on cash holdings were optimized through securing attractive short-term deposit rates and more actively managing Peel's liquidity. The liquidity balances held throughout 2022, include both cash and short-term investment holdings less than one year, averaged 19 per cent. Holdings were split across High Interest Savings Accounts (HISA), Guaranteed Investment Certificates (GIC) and fixed income securities. Treasury continues to work with respective program areas to ensure an optimal level of liquidity is held to meet operating/capital requirements.

5. Debt

Under the *Municipal Act, 2001*, Peel has the authority to issue debentures for its own municipal purposes, and, as an upper-tier municipality, issues debentures on behalf of its local municipalities.

Treasury Services continued to engage in multiple investor relations activities, such as conferences, investor meetings and ongoing dialogue with Peel's syndicate members. These activities contributed to the successful placement of one debenture (on behalf of the City of Mississauga) in 2022 and the financial close of the Canada Infrastructure Bank (CIB) loan (on behalf of the City of Brampton).

A summary of 2022 activity is as follows:

- On February 25, 2022 (settlement for March 7, 2022), Peel issued a 1-10 year Serial Debenture for $50.0 million on behalf Mississauga with an all-in financing rate of 2.56 per cent.
  - The deal consisted of 11 unique investors, including a large new investor, which was supported by strong investor relations activities conducted by staff and the debt syndicate in the lead up to the deal.
- On March 29, 2022, Peel, jointly with CIB and the City of Brampton, reached the financial close for a $400 million loan facility to aid in the financing of Zero Emission Buses (ZEBs) for the City of Brampton.
  - The interest rate on the loan facility is one per cent, with a backstop provided by CIB should operational savings not materialize.
  - Deal structure ensures that Peel's role is solely as a conduit to flow funds between CIB and City of Brampton.
  - During 2022 there were no draws on the facility.

As of December 31, 2022, Peel's own source net debt totalled approximately $1,270 million, including $100 million in PHC related debt. During 2022, Peel's net debt outstanding decreased by approximately $50 million, attributable to required contributions and interest earnings on sinking funds.

Treasury Staff continue to work with key stakeholders within and outside the organization to ensure reliable inputs into debt issuance forecasts and financial risk monitoring of key debt related metrics. Improved internal processes and strong support from stakeholders has assisted Treasury staff with the following: structuring a low cost and efficient debt issuance program to meet the financing requirements of Peel and local municipalities; engaging investors through investor relations activities; monitoring and identifying key financial metrics as it relates to Peel's financial sustainability and flexibility, which allows for improved decision making.

Appendix II.B contains additional details.

6. Investments

A. General Fund

The General Fund is comprised of cash and investments held for working capital, reserves and reserve funds, and other funds of Peel. The General Fund is actively managed to meet the following objectives: preservation of capital, adequate liquidity, and optimizing returns within the specified risk tolerance to support Peel's future spending needs.

During 2022, Peel generated earnings of $79.0 million which includes PHC earnings of approximately $3.2 million, reflected on Peel's consolidated financial statements. The General Fund generated earnings of $75.8 million (2021 – $59.6[1] million) on a weighted average portfolio value of $3,274 million (2021 – $2,963 million) and had a realized earnings rate of 2.32 per cent (2021 – 2.01 per cent). Higher earnings in 2022 were driven by higher interest rates, realized gain on sale of equities and increased assets under management. Of the total General Fund earnings, $74.8 million was allocated to reserves and $1.0 million was allocated to operations. As of December 31, 2022 the market value of the General Fund portfolio was $3,054.8 million (2021 - $3,102.5 million).

With interest rates rising at a pace not seen in multiple decades, fixed income and equity markets both experienced poor performance during 2022. With respect to fixed income securities, total returns are inversely related to moves in interest rates (i.e. higher interest rates equates to lower prices on fixed income securities). The rapid rise in interest rates of between 1.5 per cent and 4 per cent on Government of Canada bonds, resulted in one of the worst years for fixed income returns going back to at least the 1980s. Equities also suffered, as rising interest rates and fears of a recession in 2023 impacted valuations. For the one-year period, the aggregate Canadian fixed income index was down 11.7 per cent, and the TSX equity index down 5.8 per cent.

I. Summary of General Fund Performance:

	Realized (A)	Unrealized (B)	Peel's Total Return (A+B)	Benchmark Total Return* (C)	Value Add (A+B-C)
1-year	2.32%	-7.54%	-5.22%	-4.77%	-0.45%
5-year	2.80%	-1.68%	1.12%	1.01%	0.11%

*Total Benchmark Return is a blend of FTSE TMX Indices & TSX Composite – 91 Day T-bill (20%); FTSE 1-5 year Gov't (45%); FTSE 5-10 year Gov't (30%); S&P/TSX Composite (5%)

a) Total Returns vs. Benchmark

As noted earlier, the rapid increase in interest rates during 2022 resulted in fixed income returns being negative on a total return basis. Total return for the General Fund during 2022 was -5.22 per cent, underperforming the -4.77

[1] Differential between General Fund earnings and consolidated financials is attributed to EB surplus of $11.6 million.

per cent total return on the benchmark. Over the past five-year period, the General Fund's total return of 1.12 per cent exceeded the 1.01 per cent total return of the benchmark by 0.11 per cent.

For the one-year period ending December 31, 2022:

- Cash and equivalents were the best performing asset classes on an absolute and relative basis, returning +2.99 per cent vs. +1.82 per cent on the benchmark, due to attractive rates on Peel's cash deposits. A slightly lower allocation to cash than the benchmark allocation was an offset to performance.
- Fixed income was relatively inline with the benchmark, returning -6.56 per cent vs. -6.47 per cent on the benchmark. Shorter maturity bank holdings contributed positively to relative performance, while slightly longer dated holdings in provincial and Government of Canada bonds were slight detractors. Finally, a slightly higher allocation to fixed income detracted from total performance.
- Equity returned -8.24 per cent vs. -5.84 per cent on the benchmark, with underperformance a result of the One Investment Equity fund lagging the TSX due to lower allocation to energy and materials stocks. The relative underperformance within the equity asset class explains approximately 0.30 per cent of the total funds' 0.45 per cent underperformance over the one-year horizon. Of note, the average allocation to equities was 4.6 per cent in 2022

Despite the negative total returns in 2022, the ability to invest/re-invest cash at higher interest rates during 2022 is expected to be positive for the portfolio's realized earnings over time given the higher rates on investments. Given the strong liquidity management, long-term investment horizon of the General Fund, and risk oversight, there is no expectation that Peel would need to sell fixed income securities at a loss to support cash requirements (i.e. do not need to lock-in unrealized losses).

b) Realized Return versus Inflation

For the year ended December 31, 2022, the General Fund generated gross earnings for Peel of $75.8 million, or 2.32 per cent realized earnings rate on weighted annual average portfolio holdings of $3,274 million.

Realized returns lagged five-year Toronto Consumer Price Index (CPI) of 3.1 per cent by 0.3 per cent due to the spike in inflation during 2021 and 2022 (4.7 per cent and 6.0 per cent respectively). Over a longer horizon, realized returns have exceeded Toronto CPI.

Additional performance and portfolio characteristics are provided in Appendix II.C

II. Environmental Social and Governance (ESG) Bond Holdings

Since 2020, Peel has invested over $120 million in ESG related bonds. Specific initiatives supported by these bonds range from climate awareness/green energy to supporting improved outcomes (e.g. health equality in low income nations, supporting women owned businesses). Peel also invests in bonds issued by First Nations Financing Authority (FNFA), which seeks to provide access to funding for First Nations communities within Canada to support ESG initiatives within their communities.

III. Transactions in Own Securities

From time to time, Peel invests in its own securities no different than any other portfolio investments where Peel sees value relative to other similar securities. As of December 31, 2022, Peel owned $42 million of its own bonds which comprised 1.1 per cent of the overall portfolio par value (2021 – 1.7 per cent). In addition, there was one transaction related to Peel's bonds in 2022. Appendix II.E. contains details of holdings and transactions throughout 2022.

B. Sinking Funds

Sinking funds are established upon issuance of sinking fund debentures, and managed separately, pursuant to the *Municipal Act, 2001*, with an amount contributed annually to the sinking funds which, with interest compounded annually, is estimated to be sufficient to retire the debentures at maturity.

During 2022, the eight sinking funds generated total gross earnings of $3.9 million (2021 – $12.8 million) with the total aggregate amortized book value of the sinking funds increasing to approximately $416 million inclusive of annual provision payments (2021 – $363 million). As of December 31, 2022 the market value of the sinking funds was $362.4 million (2021 - $383.8 million).

The investment returns outperformed the target[2] returns for four sinking funds while four sinking funds generated returns less than their respective targets during 2022. Sinking Fund EP and Sinking Fund DQ have life to date deficits of $33,967 and $3.2 million respectively at the end of 2022.

During 2022, Peel rotated out of approximately $48 million of existing investments into securities offering yields approximately 1.0 per cent higher than existing holdings. The benefit of this strategy was presented to the Treasury Oversight Committee (TOC) and is expected to result in approximately $20 million improvement in terminal asset values, which will result in eliminating one to two years of required provision payments at the end of life of the sinking funds. The sale of existing holdings resulted in a negative one-time accounting impact to 2022 investment income of approximately $6.8 million.

As required by the *Municipal Act, 2001*, Peel will contribute any shortfalls during 2023. Further details for individual sinking funds are contained in Appendix II.D.

[2] Target returns or required returns are established at the time of borrowing and therefore required returns for some sinking funds were set above current market rates.

C. Portfolio Costs

Portfolio costs are measured using management expense ratios (MER). The MER represents the direct operational cost of the investment portfolio relative to the size of the assets under management.

Treasury Services internally manages the fixed income and cash holdings of the portfolio. In 2022 the MER for this portion of the portfolio was 0.03 per cent, which was below the five-year average of 0.04 per cent. By comparison, an equivalent fixed income and cash portfolio managed by ONE Investment would have an MER of 0.35 per cent. By managing this portion of the portfolio internally, Peel was able to save approximately 0.32 per cent, equivalent to fee savings of $10.7 million in 2022. This represents excellent value for money relative to alternative options.

Peel continues to hold a position in the ONE Investment Canadian Equity Fund which has an MER of 0.5 per cent per year. The overall MER on Peel's entire portfolio (fixed income, cash and equity holdings) for 2022 was 0.05 per cent.

7. Energy Procurement Performance

A. Electricity

No electricity hedge volumes were procured for 2022 because projections showed that 2022 market conditions would be relatively stable and there was ample room created by the Global Adjustment rates which acted as a natural hedge against spot price fluctuations. Peel's exposure to the spot market was minimal and the increases in the spot market during the period were offset by decreases in Global Adjustment costs. This strategy allowed Peel to take advantage of the low spot market prices that averaged $0.047/kWh in 2022, which was lower than the competitive forward market hedge price for 2022 which averaged $0.0655/kWh. The net benefit to Peel of not hedging in 2022 based on a 10 per cent hedge volume was approximately $802,000.

B. Natural Gas

Peel hedged 64.6 per cent of its approximately 16.84 million cubic meters (m^3) of natural gas requirements for 2022, based on a "highly volatile" gas market condition and Peel's moderate risk appetite. A hedge volume of 9.76 million m^3 was purchased from Peel's natural gas supplier at an average price of $0.1495/ m^3, and a hedge volume of 1.11 million m^3 was purchased from the Housing Services Corporation (HSC) at various delivery points at an average price of $0.1966/ m^3 inclusive of transaction fees, or a total hedge cost of approximately $1.68 million. Peel also purchased spot/index volumes of 5.97 million m^3 at a total spot/index cost of approximately $1.48 million inclusive of transaction fee costs. The total risk mitigated of the 64.6 per cent hedge from volatility in the natural gas spot/index market which averaged $0.2481/ m^3 for 2022 was approximately $1,005,795.

Peel benefited from its energy procurement strategy in 2022 in an aggregate amount of approximately $1.8 million. Further details on energy procurement performance are in Appendix II.F.

8. Treasury Services Initiatives

During 2022, liquidity and sustainability of Peel's capital program remained a strong focus. Improvements were made to the capital cash flow process to enhance data intelligence in support of capital planning, monitoring financial sustainability and optimizing investing activities.

A new Treasury Management System (TMS) was implemented and Go Live commenced in Q4 2022. Numerous benefits have already been realized through the new TMS as processes have been streamlined, manual tasks have been reduced, and improved data collection for analysis and reporting. The TMS implementation was the final piece of the Cash Management Strategy as per the May 2017 Audit and Risk Committee report.

RISK CONSIDERATIONS

Peel monitors and manages investment risk at the total portfolio level, and on a relative basis compared to the portfolio's benchmark. Overall, risk is governed by Peel's Investment Goals & Policies approved by Council and aligns to Peel's Risk Appetite Framework. Additionally, managing against a market benchmark allows staff to identify, compare, and quantify the risks of the portfolio more specifically. Given the portfolio is comprised of approximately 75 per cent fixed income securities (excluding cash and equivalents and equity), interest rate risk is one of the most significant risks to the portfolio. To manage the interest rate risk of the portfolio, staff closely monitor the sensitivity of various interest rate shifts and manages the maturity profile of the portfolio to closely align to that of the benchmark.

The portfolio is well diversified across allowable sectors and issuers to avoid an undue risk in a specific issuer or sector. Through the course of 2022, Peel increased holdings in Government of Canada bonds to de-risk the portfolio, with the average credit quality of the overall portfolio extremely high with improved liquidity. Peel also sold approximately 50 per cent of the equity position, given the market volatility, to maintain the appropriate risk profile of the overall portfolio.

In adherence to Peel's Debt Management Policy, staff ensure adequate infrastructure, services, and resources to support existing and growing communities, financial sustainability, and structuring of debt that provides flexibility to meet financial obligations and ensure intergenerational equity.

Peel has maintained a Triple A credit rating for almost 30 years due to its commitment to prudent financial and risk management. As a result, the credit rating agencies have recognized Peel for their strong governance practices, positive fiscal outcomes supported by prudent, forward-looking fiscal and budget policies, diversified economy with strong population growth, exceptional liquidity, and declining net debt.

FINANCIAL IMPLICATIONS

The revenue generated through investment activities by Peel in 2022 was $79 million allocated as follows: approximately 95 per cent to reserves, 1 per cent to operations and 4 per cent to PHC.

CONCLUSION

Peel's 2022 Treasury and Energy Hedging activities have been undertaken in accordance with its Investment Goals and Policies, Debt Management Policy, and Energy Commodity Procurement Policy. These provide Peel with an effective and efficient investment and debt management operation that adheres to Peel's strong governance practices.

APPENDICES

Appendix I – 2022 Certificate of the Treasurer
Appendix II – 2022 Treasury Dashboard

Patricia Caza, Chief Financial Officer and Commissioner of Corporate Services

Authored By: Julie Pittini, Director, Treasury Services

Treasurer's Statement of Compliance

(made pursuant to section 8 of Ontario Regulation 438/97, and sections 4 and 7 of Ontario Regulation 653/05)

The report to Peel Regional Council, dated June 8, 2023 and titled "2022 Treasury Report" from Patricia Caza, Chief Financial Officer & Commissioner of Corporate Services (the "Report") has been prepared in accordance with and satisfy the requirements of:

a) *The Municipal Act, 2001* as well as Ontario Regulations 438/97 and 653/05, and
b) the Region of Peel's Investment Goals and Policies, and
c) the Region of Peel's Energy Commodity Procurement Policy

which documents shall be referred to collectively as the "Applicable Legislation and Policies".

The statements and descriptions contained within the Report pursuant to the requirements of the Applicable Legislation and Policies are in my opinion accurate and are consistent with the Region of Peel's statement of policies and goals

Stephanie Nagel

Stephanie Nagel, BBA, CPA, CGA, MPA

Treasurer & Director of Corporate Finance

Region of Peel

2022 Treasury Dashboard

Region of Peel
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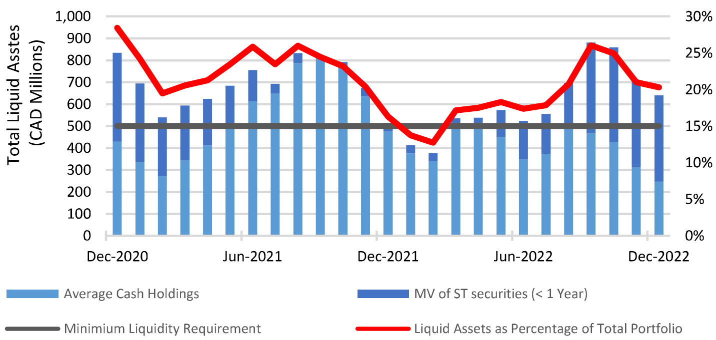
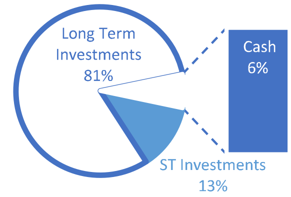
Appendix II.A: Liquidity Management

Liquidity Management

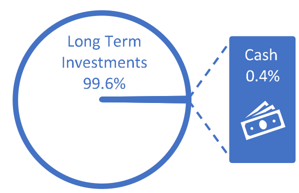


- Earnings on cash holdings were optimized as staff were able to source more attractive short-term deposit rates and implement a more active approach to managing short term cash holdings.
- Treasury staff continue to collaborate with the Region's program areas to develop longer term cash flow forecasts to optimize the Region's liquidity position over time.

2022 General Fund cash holdings totaled $205M, down from $400M at the end of 2021

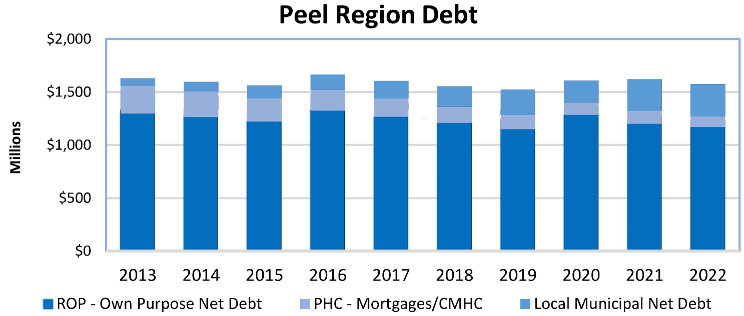


2022 Sinking Fund cash holdings totaled $1.6M, down from $3.6M at the end of 2021



Appendix II.B: Debt

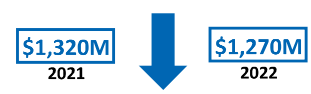
Peel Region Debt



In 2022, the Region had own source net debt of $1,270M

This includes $100M in PHC related debt.

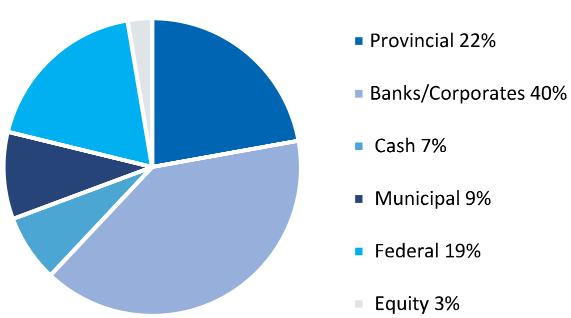
The Region had a $50M decrease in net debt



Debt is split by the Region's "own purpose debt", Peel Housing Corporation (PHC) debt, and local municipality debt.

Appendix II.C: Investments – General Fund

Sector Distribution



Investment Returns vs. Market Benchmark	2022	2021	2020	2019	2018
Annual Investment Earnings[1] (millions)	**$75.8**	**$59.6**	$80.6	$78.2	$67.5
Realized Annual Investment Returns[1] (A)	**2.3%**	**2.0%**	3.4%	3.2%	2.9%
Unrealized Annual Investment Returns (B)	**-7.6%**	**-2.2%**	1.9%	0.7%	-0.8%
Total Annual Return (A + B)	**-5.2%**	**-0.2%**	5.3%	3.9%	2.1%
Total Benchmark Return[2] (C)	**-4.8%**	**-0.2%**	5.5%	3.0%	1.9%
Value Add (A + B - C)	**-0.4%**	**0.0%**	-0.2%	0.9%	0.2%

- Portfolio returns lagged the benchmark
- 2022 realized earnings were higher due to realized gain on equity investment

Investment Returns vs. Inflation	2022	2021	2020	2019
Annual Investment Earnings (millions)	**$75.8**	**$59.6**	$80.6	$78.2
5-year Average Investment Returns[1] (realized) (A)	**2.8%**	**2.8%**	3.0%	2.9%
5-year Average Inflation[3] (B)	**3.1%**	**2.3%**	1.8%	2.1%
Value Add vs Inflation (A-B)	**-0.3%**	**0.6%**	1.2%	0.8%

- A major goal of the General Fund is the preservation of purchasing power over the long run. Inflation is used as a barometer of the Portfolio's long-term minimum return requirement.

[1] The fixed income realized earnings rate is based on earned revenues (interest income, realized capital gains/losses, amortized premiums/discounts, and securities lending income).
[2] Total Benchmark Return is a blend of FTSE TMX Indices & TSX Composite – 91 Day T-bill (20%); FTSE 1-5 year Gov't (45%); FTSE 5-10 year Gov't (30%); S&P/TSX Composite (5%)
[3] Toronto CPI.
Unless otherwise stated all figures are as at December 31, 2022.

2022 Treasury Dashboard

Appendix II.D: Investments – Sinking Funds

Sinking Fund Holdings and Surplus/Deficit

Series	Issue Date	Maturity Date	($Millions)		Holdings ($Millions)			Life to Date Surplus / (Deficit)		
			Annual Provision Payments	Total Provision Payments (Cumulative)	Investments (Amortized Book Value)	Cash	Total	Region	City of Brampton	Town of Caledon
DQ	Jun 29/10	Jun 29/40	$8.9	$107.0	$132.3	$1.2	$133.5	($3,225,087)	N/A	$619
EC (Region)	Oct 30/12	Oct 30/42	$6.8	$68.3	$78.3	$0.1	$78.5	$1,578,742	N/A	N/A
EC (Brampton)	Apr 15/19	Oct 30/42	$0.7	$2.8	$3.0	$0.0	$3.0	N/A	$10,173	N/A
EP	Jun 20/13	Jun 20/53	$0.3	$3.1	$3.7	$0.0	$3.7	($33,968)	N/A	N/A
EQ	Aug 23/13	Dec 02/33	$9.1	$81.6	$93.7	$0.1	$93.8	$418,931	N/A	N/A
FX	Nov 02/16	Nov 02/26	$13.7	$82.2	$88.3	$0.1	$88.4	$1,717,669	N/A	N/A
HE (Region)	Jun 16/21	Jun 16/51	$8.9	$14.2	$14.6	$0.1	$14.7	$325,709	N/A	N/A
HE (Brampton)	Jun 16/21	Jun 16/51	$0.6	$0.6	$0.6	$0.0	$0.6	N/A	$9,016	N/A
TOTALS			$49.0	$359.5	$414.5	$1.6	$416.0			

The objective of each Sinking Fund is to meet or exceed the target or required return. The target return is the estimated return requirement necessary to ensure that each Sinking Fund is fully funded at maturity to repay its obligation.

Appendix II.E: Investments Held in Region of Peel Securities

Region of Peel Bonds – Holdings

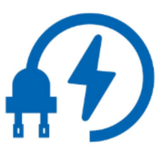
Date	Par Value		% Of
	Portfolio[4]	Peel Bonds[5]	Portfolio
Dec. 31/22	$3,775,340,729	$42,546,000	1.1%
Dec. 31/21	$3,404,169,360	$59,348,000	1.7%
Dec. 31/20	$3,213,620,209	$70,679,000	2.2%
Dec. 31/19	$2,880,347,215	$71,189,000	2.5%
Dec. 31/18	$2,752,357,130	$70,711,000	2.6%
Dec. 31/17	$2,579,877,871	$55,811,000	2.2%

Region of Peel Bonds – Transactions

Portfolio	Transaction	Date	Coupon	Par Value (millions)	Price		Yield
					Purchase	Sale	
EC (Region)	Sale	Aug 17/22	3.85%	$16.8	$104.47	$94.58	4.25%

Appendix II.F: Energy Procurement Performance

No electricity hedge volumes were procured for 2022



This strategy allowed the Region to take advantage of the low spot market prices that averaged $0.047/kWh in 2022, which was lower than the average forward market hedge price for 2022 ($0.0655/kWh).

The Region hedged 64.6% of natural gas requirements for 2022

The total risk mitigated from volatility in the natural gas market due to hedging was $1,005,795 in 2022.

[4] Total of General Fund and six Sinking Fund portfolios.
[5] Peel investment portfolios.
Unless otherwise stated all figures are as at December 31, 2022.