

**Pricing Supplement No. 1005  
to Short Form Base Shelf Prospectus dated March 15, 2024**

*No securities regulatory authority has expressed an opinion about these securities and it is an offence to claim otherwise.*

*This pricing supplement together with the short form base shelf prospectus dated March 15, 2024, to which it relates, as amended or supplemented, and each document incorporated by reference into such prospectus, constitutes a public offering of these securities only in those jurisdictions where they may be lawfully offered for sale and therein only by persons permitted to sell such securities.*

*The securities to be issued hereunder have not been, and will not be, registered under the United States Securities Act of 1933, as amended and, subject to certain exceptions, may not be offered, sold or delivered, directly or indirectly, in the United States of America or for the account or benefit of U.S. persons.*



**Royal Bank of Canada  
Senior Note Program  
Maximum \$40,000,000 (400,000 Securities)  
RBC LiONS® Solactive Canada Telecommunications 145 AR Index  
Geared Buffered Accelerator Securities (CAD), Series 12  
Due December 8, 2031  
Non-Principal Protected Securities**

**November 14,  
2024**

Royal Bank of Canada (the “**Bank**”) is offering up to \$40,000,000 of RBC LiONS® Solactive Canada Telecommunications 145 AR Index Geared Buffered Accelerator Securities (CAD), Series 12 (the “**Securities**”). **The Securities are non-principal protected securities that offer a return linked to the performance of the Solactive Canada Telecommunications 145 AR Index (the “Underlying Index”).** The Underlying Index is an adjusted return index that aims to track the gross total return performance of the Solactive Canada Telecommunications Index TR (the “**Target Index**”), subject to a reduction of a synthetic dividend of 145 index points per annum (the “**Adjusted Return Factor**”). For the avoidance of doubt, the return on the Securities is linked to the Underlying Index and is not linked to the Target Index. The Securities are described in this pricing supplement delivered together with our short form base shelf prospectus dated March 15, 2024 (the “**base shelf prospectus**”).

**The Securities are not fixed income securities and are not designed to be alternatives to fixed income or money market instruments. Since the Securities are not principal protected, you could lose substantially all of your investment. See “Risk Factors”.**

**The Securities will not constitute deposits insured under the *Canada Deposit Insurance Corporation Act* or any other deposit insurance regime.**

<b>Price: \$100 per Security</b>			
<b>Minimum Subscription: \$5,000 (50 Securities)</b>			
	<b>Price to public</b>	<b>Selling Commission and Dealer’s fee</b>	<b>Net proceeds to the Bank</b>
Per Security	\$100.00	\$3.50	\$96.50
Total	\$40,000,000	\$1,400,000	\$38,600,000

A selling commission of 3.50% of the Principal Amount of Securities issued under this offering will be paid to the Dealers (defined below) for further payment to representatives, including representatives employed by the Dealers, whose clients purchase the Securities. An agency fee will also be paid, from the Bank’s own funds, to Richardson Wealth Limited in an amount up to 0.15% of the Principal Amount of the Securities issued under this offering for acting as independent agent.

The net proceeds to the Bank reflects the maximum offering size of the Securities. **There is no minimum amount of funds that must be raised under this offering. This means that the issuer could complete this offering after raising only a small proportion of the offering amount set out above.**

The Securities are offered severally by RBC Dominion Securities Inc. (“**RBC DS**”) and Richardson Wealth Limited (collectively, the “**Dealers**”) as agents under a dealer agreement dated March 15, 2024, as amended or supplemented from time to time. **RBC DS is our wholly owned subsidiary. Consequently, we are a related and connected issuer of RBC DS within the meaning of applicable securities legislation.** See “Dealers” in this pricing supplement and “Plan of Distribution” in the base shelf prospectus.

The initial estimated value of the Securities on or about the date of this pricing supplement was \$91.43 per Security, which is less than the price to the public and is not an indication of the actual profit to the Bank or its affiliates. The actual value of the Securities at any time will reflect many factors and may be less than this amount. We describe our determination of the initial estimated value, and certain associated risk factors, in more detail below under “Initial Estimated Value” and in the base shelf prospectus under “Preparation of Initial Estimated Value” and “Risk Factors”.

The Securities will not be listed on any stock exchange. Securities may be resold using the Fundserv network at a price determined at the time of sale by the Calculation Agent (defined below), which price may be lower than the Principal Amount of such Securities. The Securities may also be subject to an Early Trading Charge (defined below), depending on when the Securities are sold. There is no assurance that a secondary market for the Securities will develop or be sustained. See “Secondary Market for Securities”, “Description of the Securities – Calculation Agent” and “Risk Factors” in the base shelf prospectus and “Secondary Market” in this pricing supplement.

Securities described in this pricing supplement will be issued under our Senior Note Program and will be unsecured, unsubordinated debt obligations. The Securities are described in the base shelf prospectus and this pricing supplement, which collectively constitute the “prospectus” for the Securities. See “About this Prospectus for Securities” in the base shelf prospectus. You should read both the base shelf prospectus and this pricing supplement carefully to understand fully the terms of the Securities and other considerations that are important to your investment decision. See Appendix E – Additional Information for more information.

## **Marketing Materials**

The version of the summary for the Securities that was filed with the securities commissions or similar regulatory authorities in each of the provinces and territories of Canada as “marketing materials” (as defined in National Instrument 41-101 – *General Prospectus Requirements*) on November 14, 2024 is deemed to be incorporated by reference into the base shelf prospectus solely for the purpose of our Senior Note Program and the Securities issued hereunder. Any version of marketing materials filed with the securities commission or similar regulatory authority in each of the provinces and territories of Canada in connection with this offering after the date hereof but prior to the termination of the distribution of the Securities under this pricing supplement (including any amendments to, or an amended version of, the marketing materials) is deemed to be incorporated by reference herein and in the base shelf prospectus solely for the purpose of our Senior Note Program and the Securities issued hereunder. Any such marketing materials are not part of this pricing supplement or the base shelf prospectus to the extent that the contents of the marketing materials have been modified or superseded by a statement contained in an amendment to this pricing supplement.

## **Bank Trademarks**

Lion & Globe symbol and RBC LiONS® are registered trademarks of Royal Bank of Canada.

## Description of the Securities

<b>Issuer:</b>	Royal Bank of Canada
<b>Dealers:</b>	<p>RBC Dominion Securities Inc. and Richardson Wealth Limited.</p> <p>Richardson Wealth Limited, an independent dealer, participated in the due diligence performed by the Dealers in respect of the offering, but did not participate in the structuring and pricing of the Securities or the calculation of the initial estimated value of the Securities.</p>
<b>Fundserv Code:</b>	RBC11952
<b>Objective of the Securities:</b>	The objective of the Securities is to make a payment to investors at maturity linked to the performance of the Underlying Index.
<b>Minimum Investment:</b>	50 Securities or \$5,000.
<b>Principal Amount:</b>	\$100 per Security.
<b>Issue Date:</b>	December 9, 2024 or such other date as may be agreed by the Bank and the Dealers.
<b>Issue Size:</b>	The maximum issue size will be \$40,000,000.
<b>Maturity Date:</b>	<p>December 8, 2031, subject to earlier repayment in full following an Extraordinary Event, and provided that if such date is not a Business Day (as defined in the base shelf prospectus), the Maturity Date will be the first following day that is a Business Day. See “Description of the Securities – Maturity Date and Amount Payable” and “– Special Circumstances” in the base shelf prospectus.</p>
<b>Underlying Index:</b>	<p>The return on the Securities is linked to the performance of the Underlying Index. The Underlying Index is an adjusted return index that aims to track the gross total return performance of the Target Index, subject to reduction of a synthetic dividend of 145 index points per annum. <b>For the avoidance of doubt, the return on the Securities is linked to the Underlying Index and is not linked to the Target Index.</b> The Closing Level (defined below) on November 6, 2024 was 2,391.35. The Adjusted Return Factor divided by the Closing Level was therefore equal to 6.0635% on November 6, 2024. Over the term of the Securities, the sum of the Adjusted Return Factor will be approximately 1,015 index points, representing 42.4446% of the Closing Level on November 6, 2024.</p> <p>The Target Index is a gross total return index that reflects the price changes of its constituent securities and the reinvestment in the index of any dividends and distributions paid in respect of such securities. For the calculation of the level of the Target Index, any dividends or other distributions paid on the constituent securities of the Target Index are assumed to be reinvested across all of the constituent securities of the Target Index. There is no assurance of the ability of issuers of the securities comprising the Target Index to declare and pay dividends or make distributions in respect of the constituents of the Target Index or to sustain or increase such dividends and distributions at or above historical levels. As of November 6, 2024, the annual dividend yield on the Target Index was 6.529%, representing an aggregate dividend yield of approximately 55.695% compounded annually over the term of the Securities, on the assumption that the dividend yield remains constant. The performance of the Underlying Index will vary higher or lower from the performance of a price return index (being an index which tracks the price performance of its constituent securities without taking into account the effects of dividends and distributions) with the same constituents and weights as the Target Index over the term of the Securities depending on whether the impact of the dividends and other distributions reinvested in the Target Index is greater or less than the impact the Adjusted Return Factor has on the Closing Level over the term of the Securities.</p> <p>See “Description of the Securities” in the base shelf prospectus. See Appendix A to this pricing supplement for summary information regarding the Underlying Index. See “Risk Factors” in this pricing supplement and “Risk Factors – Risk Factors Related to the Underlying Interests” in the base shelf prospectus for a discussion of risks relating to the Underlying Index.</p>

<b>Index Sponsor:</b>	Solactive AG.
<b>Initial Index Level:</b>	The Closing Level as published by the Index Sponsor on the Initial Valuation Date.
<b>Initial Valuation Date:</b>	December 3, 2024.
<b>Buffer:</b>	20.00%.  The principal of the Securities will be protected against a decline of up to 20.00% in the performance of the Underlying Index, but declines in the performance of the Underlying Index beyond the Buffer will be subject to the Gearing Multiplier.
<b>Gearing Multiplier:</b>	100/80, which is 1.2500, applied only if the Percentage Change in the Underlying Index is negative, declining by more than 20.00%.
<b>Final Index Level:</b>	The Closing Level as published by the Index Sponsor on the Final Valuation Date.
<b>Final Valuation Date:</b>	December 3, 2031.
<b>Protection Buffer Level:</b>	80.00% of the Initial Index Level.
<b>Closing Level:</b>	The official closing level of the Underlying Index as announced by the Index Sponsor for the relevant date, as determined by the Calculation Agent (defined below).
<b>Percentage Change:</b>	The amount, expressed as a percentage rounded to three decimal places, equal to: $\frac{(\text{Final Index Level} - \text{Initial Index Level})}{\text{Initial Index Level}}$ See “Description of the Securities — Maturity Date and Amount Payable” in the base shelf prospectus.
<b>Participation Rate:</b>	550.00%, applied only if the Percentage Change is positive.
<b>Payment at Maturity:</b>	Payment at maturity will be based on the Percentage Change of the Underlying Index measured from the Initial Index Level to the Final Index Level and, in the case of a positive Percentage Change only, multiplied by the Participation Rate. The amount payable (the “ <b>Redemption Amount</b> ”) on each \$100.00 Principal Amount per Security at maturity will be determined as follows: If the Percentage Change in the Underlying Index is <b>positive</b> , then the Redemption Amount will be: <ul style="list-style-type: none"> <li>• <math>\\$100.00 + (\\$100.00 \times \text{Participation Rate} \times \text{Percentage Change})</math></li> </ul> If the Percentage Change in the Underlying Index is <b>zero or negative, declining by 20.00% or less</b> (i.e., the Final Index Level is equal to or above the Protection Buffer Level), then the Redemption Amount will be \$100.00. If the Percentage Change in the Underlying Index is <b>negative, declining by more than 20.00%</b> (i.e., the Final Index Level is below the Protection Buffer Level), then the Redemption Amount will be: <ul style="list-style-type: none"> <li>• <math>\\$100.00 + [\\$100.00 \times (\text{Percentage Change} + 20.00\%) \times \text{Gearing Multiplier}]</math></li> </ul> All dollar amounts will be rounded to the nearest whole cent. The minimum payment at maturity is \$1.00.
<b>Sample Calculations:</b>	See Appendix B to this pricing supplement for sample calculations of the payment to be made on the Securities. See Appendix C to this pricing supplement for a graphical description of the payment at maturity.
<b>Issuer Credit Rating:</b>	Moody’s: Aa1 Standard & Poor’s: AA- DBRS: AA  The Securities have not been and will not be rated. See “Risk Factors — Credit Ratings” in the base shelf prospectus.
<b>Extraordinary Events:</b>	Determination of the Closing Level and the Redemption Amount may be postponed or the Bank can accelerate determination of the Final Index Level and the Redemption Amount and repay the Securities in full prior to their maturity in certain circumstances.

If an Extraordinary Event occurs the Calculation Agent may, but is not required to, make such adjustments to any payment or other term of the Securities as it determines to be appropriate, acting in good faith, to account for the economic effect of such event on the Securities and determine the effective date of any such adjustment. See “Description of the Securities — Special Circumstances” in the base shelf prospectus.

**Summary of Fees and Expenses:**

A selling commission of 3.50% of the Principal Amount of Securities issued under this offering will be paid to the Dealers for further payment to representatives, including representatives employed by the Dealers, whose clients purchase the Securities. An agency fee will also be paid, from the Bank’s own funds, to Richardson Wealth Limited, in an amount up to 0.15% of the Principal Amount of the Securities issued under this offering for acting as independent agent. The selling commission and the agency fee are indirectly borne by holders of the Securities. There are no fees directly payable by a holder of Securities. See “Description of the Securities — Summary of Fees and Expenses” in the base shelf prospectus. An Early Trading Charge (defined below) may also apply. See “Secondary Market” below.

**Eligibility for Investment:**

Eligible for RRSPs, RRIAs, RESPs, RDSPs, FHSAs, DPSPs and TFSAAs (each as defined in Appendix D). See “Eligibility for Investment” in Appendix D, including the summary of the “prohibited investment” rule.

**Risk Factors:**

You should carefully consider all the information set out in this prospectus for any Securities in which you are considering investing. **In particular, you should evaluate the risks described under “Risk Factors” in the base shelf prospectus, as well as the risks described below.** The return on the Securities is unknown and subject to many variables including interest rate fluctuations and changes in the Underlying Index levels. You should independently determine, with your own advisors, whether an investment in the Securities is suitable for you having regard to your own investment objectives and expectations.

*Investors May Not Receive the Full Principal Amount at Maturity and the Protection Provided by the Buffer May be Affected by the Gearing Multiplier*

All but 1.00% of the Principal Amount of the Securities is fully exposed. Investors in the Securities could lose substantially all of their investment if there is a decline in the performance of the Underlying Index beyond the Buffer. While investors in the Securities will be fully protected from a decline in the performance of the Underlying Index within the Buffer, payment at maturity on the Securities will be reduced by the amount of any decline beyond the Buffer multiplied by the Gearing Multiplier. This means that investors will lose 1.2500% of the Principal Amount of their investment in the Securities for each 1.00% that the Final Index Level is less than the Buffer (i.e., for each 1.00% decrease in the Percentage Change below -20.00%). As a result of the application of the Gearing Multiplier, if there is a decline in the performance of the Underlying Index beyond the Buffer, the protection provided by the Buffer will progressively decrease as the performance of the Underlying Index increasingly declines beyond 20.00% and investors could lose substantially all of their investment.

*Uncertain Return until Final Valuation Date*

The return on the Securities will be uncertain until the Final Valuation Date. There can be no assurance that the Securities will generate a positive return. Holders of the Securities may not be repaid the amount they invested in the Securities (other than \$1.00 per Security), depending on the performance of the Underlying Index. Historical levels of the Underlying Index should not be considered as an indication of the future performance of the Underlying Index. Investors should understand that the risk involved in this type of investment is greater than that normally associated with other types of investments.

*The Underlying Index and Target Index Have Limited Performance Histories*

The Underlying Index and Target Index have limited performance histories. See Appendix A – Summary Information Regarding the Underlying Index and Target Index. Accordingly, there is limited trading history for the Underlying Index and Target Index and as such, the Securities may perform in unexpected ways and may involve greater risk than securities linked to one or more indices with a more

established record of performance. This may make it more difficult for an investor to make an informed decision with respect to the Securities.

*Return Calculated With Reference to Performance of the Underlying Index*

The return on the Securities is calculated with reference to the performance of the Underlying Index, which is not a price return index and instead aims to track the gross total return performance of the Target Index less the Adjusted Return Factor. Although the Target Index is a gross total return index that reflects the applicable performance of the constituent securities of the Target Index and any dividends and distributions paid in respect of such securities, without deduction of any withholding tax or other amounts to which an investor holding the constituent securities of the Target Index would typically be exposed, an investment in the Securities is not the same as making a direct investment in the constituent securities of the Target Index, including the fact that an investor will not have the right to receive any dividends, distributions or other income or amounts accruing or paid on such securities, nor will an investor have the right to exercise any voting rights on such securities. In addition, the Adjusted Return Factor is not representative of an estimate or a forecast of any dividends that may be paid or payable, or of any distributions that may be made, now or in the future on the constituent securities of the Target Index.

*Returns on the Underlying Index Are Reduced by the Adjusted Return Factor and will be Lower than Returns on the Target Index*

Since the calculation of the Closing Level will reflect the deduction of the Adjusted Return Factor from the closing level of the Target Index at regular intervals, the performance of the Underlying Index will be less than that of the Target Index or a direct investment in the constituent securities of the Target Index. Furthermore, the difference between the Underlying Index and the Target Index over a longer period is subject to the effects of compounding returns and, as a result, may be greater or less than the Adjusted Return Factor pro-rated over the same period.

*The Adjusted Return Factor is a Fixed Point Deduction*

The Adjusted Return Factor is a fixed point deduction which means that the Underlying Index is based on the daily gross total return performance of the Target Index less a fixed number of points that are deducted from the Target Index at regular intervals. The Adjusted Return Factor does not vary with the level of the Target Index and, as a result, the Adjusted Return Factor will result in the subtraction of a greater percentage of the level of the Target Index in circumstances where the level of the Target Index decreases over time.

*Dividends and Distributions of the Constituent Securities of the Target Index May Vary When Compared to Historical Levels*

The Underlying Index is not a price return index and instead aims to track the gross total return performance of the Target Index less the Adjusted Return Factor, which represents a reduction for a synthetic dividend of 145 index points per annum. The level of the Target Index and, in turn, the Closing Level, may be affected by the ability of issuers comprising the Target Index to declare and pay dividends or make distributions in respect of the equity securities of the issuers comprising the Target Index. Historical levels of dividends and distributions paid in respect of the constituent securities comprising the Target Index are not indicative of future payments, which payments are uncertain and depend upon various factors, including, without limitation, the financial position, earnings ratio and cash requirements of the applicable issuer and the state of financial markets in general. It is not possible to predict if dividends or distributions paid in respect of the constituent securities comprising the Target Index will increase, decrease or remain the same over the term of the Securities. If the dividends paid out by the constituent securities comprising the Target Index over a period of time decrease below the synthetic dividends represented by the Adjusted Return Factor (taking into account the reinvestment and compounding impacts), the Closing Level at the end of such period will be lower than the closing level of a price return index comprised of the same constituent securities at the end of such period.

### *Income Tax Considerations*

Any excess of the amount payable to a Resident Holder (as defined below) in respect of a Security at maturity or early repayment, or of the sale price received for a Security in the case of a sale in the secondary market, over the Principal Amount of such Security will generally be included in the Resident Holder's income, whereas a Resident Holder who holds a Security as capital property will generally realize a capital loss if and to the extent that the maturity amount, early repayment amount or proceeds of disposition of the Security, as the case may be, is less than the Resident Holder's adjusted cost base of such Security. If a Resident Holder realizes a capital loss, such loss is deductible only against capital gains of the Resident Holder (as described in further detail in Appendix D).

The tax consequences to a Holder (as defined below) may be subject to changes in taxation laws, regulations or administrative practices. Any changes to the existing published administrative position of the CRA (as defined below) could result in changes to the tax consequences to a Holder as described herein.

#### **Initial Estimated Value:**

The initial estimated value of the Securities set forth on the cover page is an estimate only, calculated on or about the date set forth on the cover page, and does not represent a minimum price at which the Bank, RBC DS or any of our affiliates would be willing to purchase the Securities in any secondary market.

In order to satisfy the Bank's payment obligations under the Securities, the Bank may choose to enter into certain hedging arrangements (which may include call options, put options or other derivatives) on the Issue Date, which may or may not be with RBC DS or one of our other subsidiaries. The terms of these hedging arrangements, if any, take into account a number of factors, including the Bank's creditworthiness, interest rate movements, the volatility of the applicable underlying interest, and the term to maturity of the Securities.

The issue price of the Securities also reflects the selling commissions and/or agency fee, if any, disclosed herein, as well as an amount retained by the Bank to compensate it for the creation, issuance and maintenance of the Securities (which may or may not also include any costs of its hedging obligations thereunder). The initial estimated value for the Securities may therefore be less than their issue price.

See "Risk Factors – The Initial Estimated Value of the Securities Is an Estimate Only, Calculated as of the Time the Terms of the Securities Were Set" in the base shelf prospectus.

#### **Suitability for Investment:**

You should consult with your advisors regarding the suitability of an investment in the Securities. The Securities may be suitable for investors:

- seeking an investment product with exposure to the securities included in the Target Index;
- who believe that the Final Index Level will not be below the Protection Buffer Level;
- who are willing and can afford to risk substantially all of the principal amount of their investment;
- looking for the potential to earn an enhanced return, over fixed-rate investments, linked to the performance of the Underlying Index, which is not a price return index and instead aims to track the gross total return performance of the Target Index less the Adjusted Return Factor, and who are prepared to assume the risks associated with an investment linked to the performance of the Underlying Index;
- with an investment horizon equal to the term to maturity of the Securities who are prepared to hold the Securities until maturity; and
- who do not need or expect to receive regular payments of return over the term of the Securities.

#### **Book-entry Only Securities:**

The Securities will be Fundserv Securities (defined in the base shelf prospectus) and will be issued through the "book-entry-only system". See "Description of the Securities – Global Securities" and "– Legal Ownership" in the base shelf prospectus.

If the Securities are issued in fully registered and certificated form in the circumstances described in the base shelf prospectus under “Description of the Securities - Legal Ownership - Book-Entry-Only Fundserv Securities”, the Redemption Amount will be paid by the Bank to the registered holder.

**Listing:**

The Securities will not be listed on any stock exchange. See “Risk Factors” in the base shelf prospectus.

**Secondary Market:**

Securities may be purchased through dealers and other firms that facilitate purchase and related settlement using the Fundserv network. Securities may be resold using the Fundserv network at a sale price equal to the price posted on Fundserv as of the close of business on the Exchange Day on which the order is placed, as determined by and posted to Fundserv by the Calculation Agent, which sale price may be lower than the Principal Amount of such Securities, and such sale price may be less an Early Trading Charge as specified below. Generally, to be effective on a Business Day, a redemption request will need to be initiated by 2:00 p.m. (Toronto time) on that Business Day (or such other time as may be established by Fundserv). Any request received after such time will be deemed to be a request sent and received on the next following Business Day. See “Risk Factors – The Initial Estimated Value of the Securities May be Less than the Price to the Public and May not Reflect the Secondary Market Price, if any, of the Securities” and “Secondary Market for Securities – Fundserv” in the base shelf prospectus.

If a Security is sold within the first 270 days from the Issue Date, the proceeds from the sale of the Securities will be reduced by an early trading charge (“**Early Trading Charge**”) equal to a percentage of the Principal Amount determined as set out below.

If Sold Within the Following No. of Days from the Issue Date	Early Trading Charge (% of Principal Amount)
1 – 60 days	4.00%
61 – 90 days	3.50%
91 – 120 days	3.00%
121 – 180 days	2.00%
181 – 270 days	1.00%
Thereafter	Nil

In addition to any Early Trading Charge, many factors will affect the price at which you may be able to sell the Securities prior to maturity. For example, factors similar to those that may impact the value of zero coupon bonds and options may have an impact on the price of the Securities. Such factors include: (i) the Closing Level of the Underlying Index; (ii) the time remaining to the Maturity Date; (iii) the volatility of the Underlying Index; (iv) interest rates; (v) dividends or other income paid on the securities included in the Target Index; and (vi) changes in our financial condition, results from operations or credit rating. The effect of any one factor may be offset or magnified by the effect of another factor. It is possible in certain limited circumstances that a particular factor may have a contrary effect with the passage of time.

Ongoing information regarding the Securities, including the Closing Level and the daily closing price for the Securities may be accessed at [www.rbcnotes.com](http://www.rbcnotes.com). There is no assurance that a secondary market for the Securities will develop or be sustained. See “Secondary Market for Securities” in the base shelf prospectus.

**Fiscal Agent:**

RBC DS. See “Description of the Securities – Fiscal Agency, Calculation Agency and Fundserv Depository Agreement” in the base shelf prospectus.

**Calculation Agent:**

RBC DS. See “Description of the Securities – Calculation Agent” and “Risk Factors” in the base shelf prospectus.

**Tax:**

Certain Canadian income tax considerations are described below under “Certain Canadian Income Tax Considerations” in Appendix D. **Potential purchasers of**



**Securities should consult with their own tax advisors having regard to their particular circumstances.**

## APPENDIX A

### Summary Information Regarding the Underlying Index and Target Index

#### Public Information

Information contained in this pricing supplement with respect to the Underlying Index, the Target Index and the constituent securities in the Target Index was obtained from a number of public sources that the Bank believes to be reliable, including the Index Sponsor's website at [www.solactive.com](http://www.solactive.com). The Bank and the Dealers, as well as their respective affiliates and associates, have not independently verified the accuracy or completeness of any such information, including the calculation, maintenance or publication of the Underlying Index or the Target Index. Information relating to the Underlying Index and the Target Index can be found at [www.solactive.com](http://www.solactive.com).

#### The Underlying Index

The Solactive Canada Telecommunications 145 AR Index was first launched and published on March 1, 2023. It is an adjusted return index that aims to track the gross total return performance of the Target Index, subject to a reduction of a synthetic dividend of 145 index points per annum calculated daily in arrears.

#### The Target Index

The Solactive Canada Telecommunications Index TR was first launched and published on August 19, 2020. It is a gross total return index that reflects the price changes of its constituent securities and the reinvestment in the index of any dividends and distributions paid in respect of such securities. For the calculation of the level of the Target Index, any dividends or other distributions paid on the constituent securities of the Target Index are assumed to be reinvested across all of the constituent securities of the Target Index. The Target Index is adjusted quarterly, ordinarily on the first Wednesday in February, May, August, and November, and is also subject to extraordinary adjustments in compliance with the rules of the Index Sponsor. For further details regarding these adjustments and the methodology for the Target Index, refer to the Index Sponsor's website at [www.solactive.com](http://www.solactive.com).

The Target Index is a weighted free-float market capitalization weighted index and, on each adjustment, the weighting of the constituents of the Target Index is subject to the weight constraints that the weight of a constituent does not exceed 30%. In the case that less than four securities are selected as constituents, each constituent is assigned an initial weight according to the free float market capitalization subject to the weight constraints that the weight of a constituent does not exceed 30%, and the remaining unassigned weight is re-distributed pro-rata across all the constituents according to the free float market capitalization. The methodology for the Target Index provides that the constituent securities fulfill all of the following criteria: (i) part of the Solactive Canada Broad Market Index PR; (ii) listed on the Toronto Stock Exchange; (iii) classified by the Index Sponsor as "Cable/Satellite TV", "Specialty Telecommunications", "Major Telecommunications" or "Wireless Telecommunications"; (iv) security market capitalization of at least \$4 billion; and (v) a minimum average daily trading value of \$10 million across all Canadian exchanges, as calculated by the Index Sponsor.

#### Constituents of the Target Index

The following table shows, as of November 6, 2024, the constituent securities included in the Target Index:

Issuer	Security Ticker and Exchange
Rogers Communications Inc. - B	TSX: RCI/B
TELUS Corporation	TSX: T
BCE Inc.	TSX: BCE
QUEBECOR Inc.- CL B	TSX: QBR/B

Source: Solactive AG, [www.solactive.com](http://www.solactive.com).

## APPENDIX B

### Sample Calculations of Redemption Amount

The following examples show how the return on the Securities would be calculated under different scenarios. These examples are included for illustration purposes only. The performance of the Underlying Index used in the examples is not an estimate or forecast of the performance of the Underlying Index or the Securities. The actual performance of the Underlying Index and the Securities will be different from these examples and the differences may be material. All examples assume that a holder of the Securities has purchased Securities with an aggregate Principal Amount of \$100.00 and that no Extraordinary Event has occurred. Where applicable, dollar amounts are rounded to the nearest whole cent.

#### **Example #1 — Calculation of the Redemption Amount where the Percentage Change is negative, declining by more than 20.00% (i.e., the Final Index Level is below the Protection Buffer Level)**

Assuming that the Initial Index Level is 2,391.35 and the Final Index Level is 1,793.51, the Redemption Amount would be calculated as follows:

Initial Index Level = 2,391.35

Final Index Level = 1,793.51

Percentage Change =  $(1,793.51 - 2,391.35) / 2,391.35 = -0.25000$  or -25.000%

Since the Percentage Change is negative, declining by more than 20.00% (i.e., the Final Index Level is below the Protection Buffer Level), the Redemption Amount is calculated as follows:

Redemption Amount =  $\$100.00 + [\$100.00 \times (\text{Percentage Change} + 20.00\%) \times \text{Gearing Multiplier}]$

Redemption Amount =  $\$100.00 + [\$100.00 \times (-25.00\% + 20.00\%) \times 1.2500] = \$93.75$

In this example, the Redemption Amount results in a loss on the Principal Amount equivalent to an annually compounded loss rate of -0.92%.

#### **Example #2 — Calculation of the Redemption Amount where the Percentage Change is zero or negative, declining by 20.00% or less (i.e., the Final Index Level is equal to or above the Protection Buffer Level)**

Assuming that the Initial Index Level is 2,391.35 and the Final Index Level is 2,271.78, the Redemption Amount would be calculated as follows:

Initial Index Level = 2,391.35

Final Index Level = 2,271.78

Percentage Change =  $(2,271.78 - 2,391.35) / 2,391.35 = -0.05000$  or -5.000%

Since the Percentage Change is zero or negative, declining by 20.00% or less (i.e., the Final Index Level is equal to or above the Protection Buffer Level), the Redemption Amount is \$100.00.

In this example, the Redemption Amount provides a return on the Principal Amount equivalent to an annually compounded rate of return of 0.00%.

#### **Example #3 — Calculation of the Redemption Amount where the Percentage Change is positive**

Assuming that the Initial Index Level is 2,391.35 and the Final Index Level is 2,989.19, the Redemption Amount would be calculated as follows:

Initial Index Level = 2,391.35

Final Index Level = 2,989.19

Percentage Change =  $(2,989.19 - 2,391.35) / 2,391.35 = 0.25000$  or 25.000%

Since the Percentage Change is positive, the Redemption Amount is calculated as follows:

Redemption Amount =  $\$100.00 + (\$100.00 \times \text{Participation Rate} \times \text{Percentage Change})$

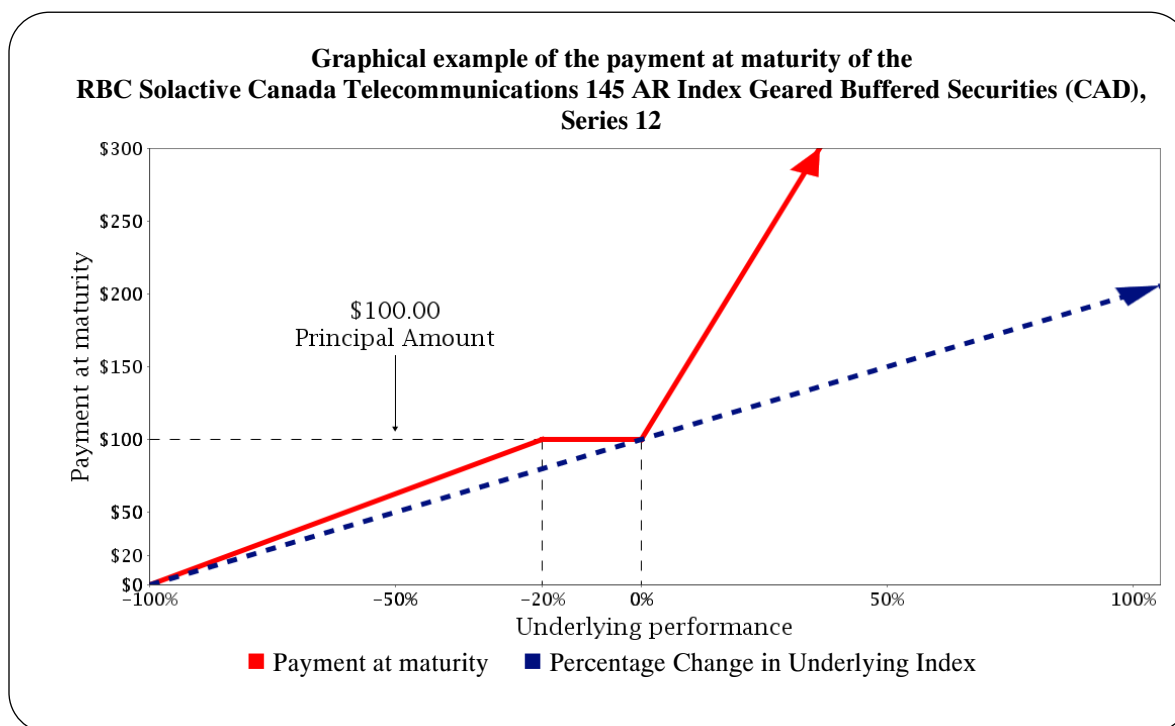
Redemption Amount =  $\$100.00 + (\$100.00 \times 550.00\% \times 25.000\%) = \$237.50$

In this example, the Redemption Amount provides a return on the Principal Amount equivalent to an annually compounded rate of return of 13.15%.

## APPENDIX C

### Graphical Description of the Redemption Amount

The graph set out below illustrates the payment at maturity on the Securities in a range of scenarios depending on the performance of the Underlying Index during the term of the Securities. The performance of the Underlying Index used in the graph is not an estimate or forecast of the performance of the Underlying Index or the Securities. This graph shows a limited range of hypothetical returns on the Underlying Index and is intended to be representative of that range only. Returns on the Underlying Index not shown on the graph are possible. The graph is included for illustration purposes only, and in all cases, the return on the Securities will be calculated using the formulas set out in this pricing supplement. There can be no assurance that any specific return on the Securities will be achieved. The graph assumes that a holder of the Securities has purchased Securities with an aggregate Principal Amount of \$100.00 and that no Extraordinary Event has occurred. The minimum payment at maturity is \$1.00.



## APPENDIX D

### Certain Canadian Income Tax Considerations

In the opinion of Blake, Cassels & Graydon LLP, the following summary describes the principal Canadian federal income tax considerations under the *Income Tax Act* (Canada) (the “**Tax Act**”) generally applicable as of the date hereof to a purchaser who purchases Securities as beneficial owner at the time of their issuance under this pricing supplement who, at all relevant times, for purposes of the Tax Act, deals at arm’s length with the Bank and the Dealers (a “**Holder**”).

This summary is based upon the current provisions of the Tax Act and the regulations thereunder (the “**Regulations**”), all specific proposals to amend the Tax Act or such Regulations publicly announced by the federal Minister of Finance prior to the date hereof (the “**Proposals**”) and counsel’s understanding of the current administrative and assessing policies and practices of the Canada Revenue Agency (“**CRA**”) made publicly available prior to the date hereof. Except for the Proposals, this summary does not take into account or anticipate any changes in the law or the administrative and assessing policies or practices of the CRA, whether by judicial, regulatory, governmental or legislative action, nor does it take into account tax laws of any province or territory of Canada, or of any jurisdiction outside Canada. Provisions of provincial income tax legislation vary from province to province in Canada and may differ from federal income tax legislation. No assurance can be given that the Proposals will be implemented in their current form, or at all.

**This summary is of a general nature only and is not intended to constitute, nor should it be relied upon or construed as, tax advice to any particular Holder, nor is it exhaustive of all possible Canadian federal income tax considerations. Holders should consult their own tax advisors as to the potential consequences to them of the acquisition, ownership and disposition of Securities having regard to their particular circumstances.**

#### **Holders Resident in Canada**

The following discussion applies to a Holder who, at all relevant times, for the purposes of the Tax Act is an individual (other than a trust) who is resident (or deemed to be resident) in Canada, who acquires and holds the Securities as capital property, who is not affiliated with the Bank or any of the Dealers and who has not entered into a “derivative forward agreement” (as defined in the Tax Act) in respect of the Securities (a “**Resident Holder**”). Generally, Securities will be considered to be capital property to a Resident Holder provided that the Resident Holder does not hold the Securities in the course of carrying on a business (or as part of an adventure or concern in the nature of trade). Certain Resident Holders who might not otherwise be considered to hold their Securities as capital property may, in certain circumstances, have their Securities, and all other “Canadian securities” (as defined in the Tax Act) owned by such Resident Holders in the taxation year and each subsequent taxation year, treated as capital property as a result of having made the irrevocable election permitted by subsection 39(4) of the Tax Act. Resident Holders should note that such an election will not affect the requirement to include in income any interest accrued (or deemed to have accrued) on a Security to the time of a sale, assignment or transfer.

#### *Holding Securities*

The amount of any interest received or receivable (depending on the method regularly followed in computing income under the Tax Act) by a Resident Holder in a taxation year (including the amount of any interest received on the Maturity Date or on an early repayment by the Bank as a consequence of an Extraordinary Event, as described below) will be required to be included in computing the Resident Holder’s income for the taxation year (except to the extent that such amount has already been included in the Resident Holder’s income).

In certain circumstances, provisions of the Tax Act require a holder of a “prescribed debt obligation” (as defined for the purposes of the Tax Act) to include in income for each taxation year the amount of any interest, bonus or premium on the obligation over its term based on the maximum amount of interest, bonus or premium, which may be receivable on the obligation. While the Securities will generally be considered to be prescribed debt obligations to a Resident Holder, based on counsel’s understanding of the CRA’s current administrative practice, there should be no deemed accrual of interest on the Securities until such time as the return thereon becomes determinable. Counsel has been advised that the Bank anticipates that throughout each taxation year ending before the Maturity Date or a date on which there is an Extraordinary Event (if any), the return on the Securities generally will not be determinable. Where this is the case, on the basis of such understanding of the CRA’s administrative practice there should be no deemed accrual of interest on the Securities for taxation years (being calendar years) of a Resident Holder ending prior to the Maturity Date or a date on which there is an Extraordinary Event (if any), except as described below under “Disposition of Securities Other Than to the Bank on the Maturity Date or as a Consequence of an Extraordinary Event” where a Security is transferred before any such date.

#### *Disposition of Securities Other Than to the Bank on the Maturity Date or as a Consequence of an Extraordinary Event*

On an assignment or other transfer of a Security by a Resident Holder (other than to the Bank on the Maturity Date or in connection with an early repayment as a consequence of an Extraordinary Event), the Resident Holder will be required in the taxation year in which the assignment or transfer occurs to include in income as interest an amount equal to the excess, if any, of the price for which the Security is so transferred over its outstanding Principal Amount at the time of the transfer.

The amount, if any, required to be so included in computing income as described above will be excluded in computing the Resident Holder's proceeds of disposition of the Security and will not give rise to a capital gain. The Resident Holder generally will realize a capital loss to the extent that the proceeds of disposition, net of any reasonable costs of disposition, are less than the Resident Holder's adjusted cost base of the Security.

#### *Disposition of Securities to the Bank on the Maturity Date or as a Consequence of an Extraordinary Event*

A Resident Holder who disposes of a Security to the Bank, whether on the Maturity Date or in connection with an early repayment as a consequence of an Extraordinary Event, will be considered to receive interest in an amount equal to the excess, if any, of the amount paid to the Resident Holder by the Bank over the Principal Amount of the Security. Where, in connection with an early repayment as a consequence of an Extraordinary Event, such interest on a Security becomes determinable in a taxation year prior to the taxation year in which the Security is repaid, such interest will be deemed to have accrued, and will be required to be included in the Resident Holder's income, in the taxation year in which the return became determinable, and will be excluded in computing the Resident Holder's proceeds of disposition from the Security.

A Resident Holder who disposes of a Security to the Bank, whether on the Maturity Date or in connection with an early repayment as a consequence of an Extraordinary Event, and who receives repayment proceeds that are less than the Principal Amount of the Security generally will realize a capital loss to the extent that the amount received at such time is less than the Resident Holder's adjusted cost base of such Security.

#### *Treatment of Capital Losses*

Currently, one-half of any capital loss realized by a Resident Holder in a particular taxation year will constitute an allowable capital loss that must be deducted against taxable capital gains of the Resident Holder realized in such year and may be deductible against taxable capital gains in any of the Resident Holder's three previous taxation years or any subsequent taxation year, subject to and in accordance with the provisions of the Tax Act. Proposals that would amend certain parts of the capital gains regime (the "**Capital Gains Proposals**") would increase a Resident Holder's capital gains inclusion rate for a taxation year ending after June 24, 2024 from one-half to two-thirds, subject to a transitional rule applicable for a Resident Holder's 2024 taxation year that would reduce the capital gains inclusion rate for that taxation year to, in effect, be one-half for net capital gains realized before June 25, 2024. The Capital Gains Proposals also include provisions that would offset the increase in the capital gains inclusion rate in certain circumstances. If the Capital Gains Proposals are enacted as proposed, capital losses which are deductible against capital gains that are included in income for the 2024 or subsequent taxation years will offset an equivalent capital gain regardless of the inclusion rate which applied at the time such capital losses were realized. **Resident Holders should consult their own tax advisors.**

#### **Holders Not Resident in Canada**

The following discussion applies to a Holder who, at all relevant times, for the purposes of the Tax Act: (a) is neither resident nor deemed to be resident in Canada; (b) deals at arm's length with any Canadian resident (or deemed Canadian resident) to whom the Holder disposes of the Securities; (c) is entitled to receive all payments (including any interest and principal) made on the Securities; (d) is not a "specified shareholder" of the Bank or a person who does not deal at arm's length with a specified shareholder of the Bank for purposes of the "thin capitalization" rules in the Tax Act; (e) is not an entity in respect of which the Bank or any transferee resident (or deemed to be resident) in Canada to whom the Holder disposes of, loans or otherwise transfers the Securities is a "specified entity", and is not a "specified entity" in respect of such a transferee, in each case, for purposes of the "hybrid mismatch rules" in the Tax Act (the "**Hybrid Mismatch Rules**"); (f) does not use or hold and is not deemed to use or hold the Securities in the course of carrying on a business in Canada; and (g) is not an insurer carrying on an insurance business in Canada and elsewhere (a "**Non-Resident Holder**").

Interest paid or credited or deemed to be paid or credited on the Securities to a Non-Resident Holder (including any amount paid on the Maturity Date or as a consequence of an Extraordinary Event in excess of the Principal Amount and any interest deemed to be paid in certain cases involving the assignment or other transfer of a Security to a resident or deemed resident of

Canada) will not be subject to Canadian non-resident withholding tax unless any portion of such interest is contingent or dependent on the use of or production from property in Canada or is computed by reference to revenue, profit, cash flow, commodity price or any other similar criterion or by reference to dividends paid or payable to shareholders of any class of shares of the capital stock of a corporation (“**Participating Debt Interest**”).

In addition, in certain circumstances, interest that is paid by a resident of Canada to a non-resident of Canada will be a deemed dividend, and therefore subject to Canadian non-resident withholding tax, where the interest constitutes the deduction component of a “structured arrangement” that is a “hybrid mismatch arrangement” as contemplated by the Hybrid Mismatch Rules.

The Bank intends to take the position that interest paid or credited or deemed to be paid or credited on the Securities will be Participating Debt Interest and, on this basis, expects that Canadian non-resident withholding tax will be withheld and remitted at the rate of 25% of the gross amount of any interest paid by the Bank or an affiliate of the Bank to a Non-Resident Holder (although the rate of this withholding tax may ultimately be reduced pursuant to the terms of an applicable income tax treaty or convention between Canada and the country of residence of the Non-Resident Holder). **Non-Resident Holders should consult with their own tax advisors before acquiring a Security or disposing of a Security to a resident or deemed resident of Canada other than the Bank or an affiliate of the Bank.**

There should be no other taxes on income (including taxable capital gains) payable by a Non-Resident Holder in respect of a Security.

#### **Eligibility for Investment**

The Securities, if issued on the date of this pricing supplement, would be qualified investments (for purposes of the Tax Act) for trusts governed by registered retirement savings plans (“**RRSPs**”), registered retirement income funds (“**RRIFs**”), tax-free savings accounts (“**TFSA**s”), registered disability savings plans (“**RDSPs**”), first home savings accounts (“**FHSA**s”), registered education savings plans (“**RESPs**”) and deferred profit sharing plans (“**DPSPs**”), each within the meaning of the Tax Act (other than a DPSP to which payments are made by the Bank or a corporation or partnership with which the Bank does not deal at arm’s length within the meaning of the Tax Act).

Notwithstanding the foregoing, if Securities are “prohibited investments” (as that term is defined in the Tax Act) for an RRSP, RRIF, TFSA, RDSP, FHSA or RESP, the annuitant of the RRSP or RRIF, the holder of the TFSA, RDSP or FHSA, or the subscriber of the RESP, as the case may be (each a “**Plan Holder**”), will be subject to a penalty tax as set out in the Tax Act. Securities will be prohibited investments for an RRSP, RRIF, TFSA, RDSP, FHSA or RESP of a Plan Holder who has a “significant interest” (as defined in the Tax Act for purposes of the prohibited investment rules) in the Bank or who does not deal at arm’s length, within the meaning of the Tax Act, with the Bank. Investors should consult their own tax advisors in this regard.



## APPENDIX E

### Additional Information

#### Documents Incorporated by Reference

This pricing supplement is deemed to be incorporated by reference into the base shelf prospectus solely for the purpose of our Senior Note Program and the Securities issued hereunder. The following documents, which have been filed by the Bank with the various securities commissions or similar authorities in Canada, are specifically incorporated by reference into, and form an integral part of, the base shelf prospectus as of the date of this pricing supplement:

- our unaudited interim condensed consolidated financial statements, which comprise the condensed consolidated balance sheets as of July 31, 2024 and October 31, 2023, and the related interim condensed consolidated statements of income, comprehensive income, changes in equity, and cash flows for the three and nine months ended July 31, 2024 and July 31, 2023, including selected explanatory notes, and our management's discussion and analysis for the three and nine month periods ended July 31, 2024 (the "**Q3 2024 Management's Discussion and Analysis**");
- our audited annual consolidated financial statements, which comprise the consolidated balance sheets as at October 31, 2023 and 2022, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for the years then ended, including the related notes, Management's Report on Internal Control over Financial Reporting as of November 29, 2023, the Independent Auditor's Report dated November 29, 2023, the Report of Independent Registered Public Accounting Firm dated November 29, 2023, and our management's discussion and analysis for the year ended October 31, 2023 (the "**2023 Management's Discussion and Analysis**");
- our annual information form dated November 29, 2023; and
- our management proxy circular dated February 13, 2024 for our annual meeting of common shareholders held on April 11, 2024.

#### Caution Regarding Forward-Looking Statements

From time to time, we make written or oral forward-looking statements within the meaning of certain securities laws, including the "safe harbour" provisions of the *United States Private Securities Litigation Reform Act of 1995* and any applicable Canadian securities legislation. We may make forward-looking statements in the base shelf prospectus and in the documents incorporated by reference therein, in this pricing supplement, in other filings with Canadian regulators or the United States Securities and Exchange Commission, in reports to shareholders, and in other communications. In addition, our representatives may communicate forward-looking statements orally to analysts, investors, the media and others. Forward-looking statements in, or incorporated by reference in, this prospectus include, but are not limited to, statements relating to our financial performance objectives, vision and strategic goals, the economic, market and regulatory review and outlook for Canadian, U.S., United Kingdom, European and global economies, the regulatory environment in which we operate, the expected impacts of the HSBC Bank Canada transaction, including transaction and integration costs, the risk environment including our credit risk, market risk, liquidity and funding risk, as well as the effectiveness of our risk monitoring, circumstances that impact the value of the Securities, transaction costs in the secondary market and profits that we or our affiliates expect to make in connection with hedging arrangements, and includes statements made by our President and Chief Executive Officer and other members of management. The forward-looking statements contained in, or incorporated by reference in, this prospectus represent the views of management and are presented for the purpose of assisting the holders of our securities, potential purchasers of our securities and financial analysts in understanding our financial position and results of operations as at and for the periods ended on the dates presented, as well as our financial performance objectives, vision, strategic goals and priorities and anticipated financial performance, and may not be appropriate for other purposes. Forward-looking statements are typically identified by words such as "believe", "expect", "suggest", "seek", "foresee", "forecast", "schedule", "anticipate", "intend", "estimate", "goal", "commit", "target", "objective", "plan", "outlook", "timeline" and "project" and similar expressions of future or conditional verbs such as "will", "may", "might", "should", "could", "can", "would" or negative or grammatical variations thereof.

By their very nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties, both general and specific in nature, which give rise to the possibility that our predictions, forecasts, projections, expectations or conclusions will not prove to be accurate, that our assumptions may not be correct, that our financial performance, environmental & social or other objectives, vision and strategic goals will not be achieved and that our actual results may differ materially from such predictions, forecasts, projections, expectations or conclusions. We caution readers not to place undue reliance on our forward-looking statements as a number of risk factors could cause our actual results to differ materially from the expectations expressed in such forward-looking statements. These factors – many of which are beyond our control and the effects of which can be difficult to predict – include, but are not limited to: credit, market, liquidity and funding, insurance, operational, regulatory compliance (which could lead to us being subject to various legal and regulatory proceedings,

the potential outcome of which could include regulatory restrictions, penalties and fines), strategic, reputation, legal and regulatory environment, competitive, model, systemic risks and other risks discussed in the risk sections of the 2023 Management's Discussion and Analysis and the Risk management section of the Q3 2024 Management's Discussion and Analysis incorporated by reference herein; including business and economic conditions in the geographic regions in which we operate, Canadian housing and household indebtedness, information technology, cyber and third-party risks, geopolitical uncertainty, environmental and social risk (including climate change), digital disruption and innovation, privacy, data and third-party related risks, regulatory changes, culture and conduct risks, the effects of changes in government fiscal, monetary and other policies, tax risk and transparency, and our ability to anticipate and successfully manage risks arising from all of the foregoing factors. Additional factors that could cause actual results to differ materially from the expectations in such forward-looking statements can be found in the risk sections of our 2023 Management's Discussion and Analysis and the Risk management section of our Q3 2024 Management's Discussion and Analysis, as may be updated by subsequent quarterly reports.

We caution that the foregoing list of risk factors is not exhaustive and other factors could also adversely affect our results. When relying on our forward-looking statements to make decisions with respect to us or the Securities, investors and others should carefully consider the foregoing factors and other uncertainties and potential events, as well as the inherent uncertainty of forward-looking statements. Material economic assumptions underlying the forward-looking statements contained in, or incorporated by reference in, this prospectus are set out in the "Economic, market and regulatory review and outlook" section and for each business segment under the "Strategic priorities" and "Outlook" sections in our 2023 Management's Discussion and Analysis, as updated by the "Economic, market and regulatory review and outlook" section of our Q3 2024 Management's Discussion and Analysis. Such sections may be updated by subsequent quarterly reports. Except as required by law, we do not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by us or on our behalf.

Additional information about these and other factors can be found in the risk sections of our 2023 Management's Discussion and Analysis and the Risk management section of our Q3 2024 Management's Discussion and Analysis incorporated by reference in this prospectus, as may be updated by subsequent quarterly reports.

### **License Agreement and Disclaimer**

All information contained in this pricing supplement regarding the Underlying Index and the Target Index, including, without limitation, the make-up, performance, method of calculation and changes in their constituents, has been derived from publicly available sources without independent verification. Such information reflects the policies of and is subject to change by the Index Sponsor. The Bank makes no representation or warranty as to the accuracy or completeness of such information. The Index Sponsor independently calculates, maintains and publishes the Underlying Index and Target Index. The Index Sponsor has no obligation to continue to publish, and may discontinue publication of, the Underlying Index or the Target Index. The Index Sponsor has no obligation relating to the Securities or amounts to be paid to an investor, including any obligation to take the needs of the Bank, the Dealers or the beneficial owners of the Securities into consideration for any reason. The Index Sponsor will not receive any of the proceeds of the offering of the Securities, is not responsible for and has not participated in, the offering of the Securities nor is it responsible for, nor will it participate in, the determination or calculation of the amount receivable by beneficial owners of the Securities. The Index Sponsor makes no representation or warranty, express or implied, regarding the advisability of investing in securities generally or the Securities in particular. Neither the Index Sponsor nor any of its affiliates are involved in the operation or distribution of the Securities and neither the Index Sponsor nor its affiliates shall have any liability for operation or distribution of the Securities or the failure of the Securities to achieve their investment objective.

The Index Sponsor is not related to the Bank or the Dealers. The Index Sponsor and the Bank have entered into a license agreement providing the Bank, in exchange for a fee, with the right to use the Underlying Index in connection with the Securities. The Index Sponsor does not guarantee the accuracy or completeness of the Underlying Index or the Target Index, any data included therein, or any data from which it is derived, and the Index Sponsor has no liability for any errors, omissions, or interruptions therein. The Index Sponsor does not make any warranty, express or implied, as to results to be obtained from use of information provided by the Index Sponsor in respect of the Underlying Index or the Target Index and the Index Sponsor expressly disclaims all warranties of suitability with respect thereto.

The Underlying Index and the Target Index are calculated by the Index Sponsor. The Securities are not sponsored, promoted, sold or supported in any other manner by the Index Sponsor nor does the Index Sponsor offer any express or implicit guarantee or assurance either with regard to the results of using the Underlying Index and/or Underlying Index trade mark or the Closing Level at any time or in any other respect. The Underlying Index and the Target Index are calculated and published by the Index Sponsor. The Index Sponsor uses its best efforts to ensure that the Underlying Index and the Target Index are calculated correctly. Irrespective of its obligations towards the Bank, the Index Sponsor has no obligation to point out errors in the Underlying Index or the Target Index to third parties including but not limited to investors and/or financial intermediaries of the Securities. Neither publication of the Underlying Index or the Target Index by the Index Sponsor nor the use of the

Underlying Index or the Underlying Index trade marks for the purpose of use in connection with the Securities constitutes a recommendation by the Index Sponsor to invest capital in the Securities nor does it in any way represent an assurance or opinion of the Index Sponsor with regard to any investment in the Securities.

The name “Solactive” is a registered trademark of the Index Sponsor. The Index Sponsor is registered with and regulated by the German Federal Financial Supervisory Authority.