



Capital
Markets

EQUITY LINKED SECURITIES | RBC GLOBAL INVESTMENT SOLUTIONS

RBC U.S. Energy Equity Basket Callable Contingent Yield 12.45% Securities (USD), Series 1057, F-Class Non-Principal Protected Security

3.0 year
term

Performance linked to the
common shares of
four United States based
energy companies

Potential 12.4500%
coupon per annual
period

70.00% protection
barrier

Callable
quarterly at
100%

Secondary Market

OTC

Autocall
Observation Dates

June 13, 2025 and
quarterly thereafter

This summary is qualified in its entirety by a pricing supplement (the "Pricing Supplement"), the base shelf prospectus dated March 25, 2022, the program prospectus supplement dated March 28, 2022, as supplemented November 11, 2022 and March 2, 2023 and the product prospectus supplement dated March 28, 2022, in respect of equity, unit and debt linked securities, as supplemented November 11, 2022 and March 2, 2023.

www.rbcnotes.com

KEY TERMS

Issuer: Royal Bank of Canada

Issuer Credit Ratings: Moody's: Aa1; S&P: AA-; DBRS: AA

Currency: USD

Minimum Investment: 50 Securities or US\$5,000

Term: Approximately 3.0 years

Principal at Risk: The Securities are not principal protected

Underlying Securities: The return on the Securities is linked to the price performance (excluding any dividends and other distributions) of a notional portfolio (the "Portfolio") of the common shares (the "Underlying Securities" and each, an "Underlying Security") of the United States-based energy companies listed below (the "Underlying Security Issuers" and each, an "Underlying Security Issuer"). The Underlying Securities will be equally weighted in the Portfolio (the "Portfolio Weight") at the Initial Valuation Date. Such weightings will not be adjusted or rebalanced during the term of the Securities. Securities do not represent an interest in the Underlying Securities, and holders will have no right or entitlement to the Underlying Securities, including, without limitation, redemption rights (if any), voting rights or rights to receive dividends and other distributions paid on any of such Underlying Securities. The annual dividend yield on the Portfolio as of December 13, 2023 was 4.3393%, representing an aggregate dividend yield of approximately 13.591% compounded annually over the three-year term, on the assumption that the dividend yield remains constant.

Entity Name	Symbol	Exchange	Portfolio Weight	Closing Prices (US\$) (as of December 13, 2023)
ConocoPhillips	COP	NYSE	25%	111.85
Marathon Oil Corporation	MRO	NYSE	25%	23.93
Devon Energy Corporation	DVN	NYSE	25%	44.22
Exxon Mobil Corporation	XOM	NYSE	25%	98.92

Issue Date: December 28, 2023

A final base shelf prospectus containing important information relating to the securities described in this document has been filed with the securities regulatory authorities in each of the provinces and territories of Canada. A copy of the final base shelf prospectus, any amendment to the final base shelf prospectus and any applicable shelf prospectus supplement that has been filed, is required to be delivered with this document. This document does not provide full disclosure of all material facts relating to the securities offered. Investors should read the final base shelf prospectus, any amendment and any applicable shelf prospectus supplement for disclosure of those facts, especially risk factors relating to the securities offered, before making an investment decision.

KEY TERMS CONTINUED

Maturity Date:	December 29, 2026
Initial Portfolio Value:	The “ Initial Portfolio Value ” is the Portfolio Value on December 13, 2023 (the “ Initial Valuation Date ”).
Final Portfolio Value:	The “ Final Portfolio Value ” is the Portfolio Value on December 14, 2026 (the “ Final Valuation Date ”).
Coupon Barrier Value:	The “ Coupon Barrier Value ” is 70.00% of the Initial Portfolio Value.
Protection Barrier Value:	The “ Protection Barrier Value ” is 70.00% of the Initial Portfolio Value.
Portfolio Value:	The “ Portfolio Value ” for the Portfolio on any Exchange Day is calculated by: (a) multiplying (i) the official closing price of each Underlying Security, as announced by the NYSE, on such Exchange Days by (ii) the corresponding Number of Underlying Securities for such Underlying Security; and (b) aggregating the resulting products.
Number of Underlying Securities:	The “ Number of Underlying Securities ” for each Underlying Security is calculated by: (i) multiplying the Portfolio Weight for such Underlying Security by the aggregate Principal Amount of Securities issued under this offering; and (ii) dividing the resulting product by the official closing price of such Underlying Security, as announced by the NYSE, on the Initial Valuation Date.
Percentage Change:	The “ Percentage Change ” is the amount, expressed as a percentage rounded to two decimal places, equal to: $\frac{(\text{Final Portfolio Value} - \text{Initial Portfolio Value})}{\text{Initial Portfolio Value}}$
Observation Dates:	An “ Observation Date ” for the purposes of determining the amount of any Interest Payment will occur monthly, from and including January 16, 2024 and on the 13 th day of each month thereafter, to and including December 14, 2026, in each year that the Securities are outstanding and provided that the Securities are not redeemed by the Bank as described below. If any such Observation Date is not an Exchange Day, such Observation Date will be on the first following day that is an Exchange Day.
Interest Payment Dates:	The “ Interest Payment Date ” for an Interest Payment, if any, will occur monthly, on the third Business Day following the corresponding Observation Date for each such month, in each year that the Securities are outstanding (with the exception of the Maturity Date, being December 29, 2026) and provided that the Securities are not redeemed by the Bank as described below. The final Interest Payment, if any, will be made on the earlier of the Autocall Redemption Date (if applicable) and the Maturity Date.
Business Day:	A “ Business Day ” is any day which is not a Saturday, Sunday or a day on which banking institutions are authorized or required by law or regulation to be closed in either the city of Toronto, Ontario or the city of New York, New York.
Interest Payments:	<p>Interest payments (the “Interest Payments” and each, an “Interest Payment”), if any, on the Securities will be payable on each Interest Payment Date, in arrears, at a fixed interest rate of 1.0375% monthly ending on an Interest Payment Date (an “Interest Period”) for each Interest Period in which a Digital Payout Event occurs on the Observation Date occurring in the Interest Period. On the basis of the foregoing, the interest on each US\$100 Principal Amount of Securities for an Interest Period in which a Digital Payout Event has occurred would equal $\text{US\\$100} \times 1.0375\%$.</p> <p>Thus, if a Digital Payout Event occurs:</p> <ul style="list-style-type: none"> (a) on each Observation Date in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$12.45; (b) on eleven out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$11.4125; (c) on ten out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$10.375; (d) on nine out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$9.3375; (e) on eight out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$8.30; (f) on seven out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$7.2625; (g) on six out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$6.225; (h) on five out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$5.1875; (i) on four out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$4.15;

(j) on three out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$3.1125;

(k) on two out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$2.075; and

(l) on one out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each US\$100 Principal Amount of Securities for that twelve-month period will be US\$1.0375.

If a Digital Payout Event does not occur on the Observation Date during a particular Interest Period, no interest will be payable on the Securities for such Interest Period.

Digital Payout Event:	A “ Digital Payout Event ” will occur if, on the relevant Observation Date, the Portfolio Value is greater than or equal to the Coupon Barrier Value.											
Autocall Redemption Event:	An “ Autocall Redemption Event ” will occur if the Portfolio Value on an Autocall Observation Date is greater than or equal to 100.00% of the Initial Portfolio Value (the “ Autocall Redemption Value ”). Following the occurrence of an Autocall Redemption Event, the Securities will be redeemed for an amount equal to the Principal Amount thereof (the “ Autocall Redemption Amount ”) on the Autocall Redemption Date. In addition to the Autocall Redemption Amount, an Interest Payment will be paid on the Autocall Redemption Date.											
Autocall Observation Dates:	<p>An “Autocall Observation Date” for the purposes of determining an Autocall Redemption Event will occur quarterly on the Observation Dates specified below in each year that the Securities are outstanding, from and including June 13, 2025 to and including September 14, 2026. If any such Autocall Observation Date is not an Exchange Day, such Autocall Observation Date will be on the first following day that is an Exchange Day.</p> <p>Provided that the Securities are not redeemed by the Bank, the Bank intends the Autocall Observation Dates to be:</p> <table><tr><td>June 13, 2025</td><td>September 15, 2025</td><td>December 15, 2025</td><td>March 13, 2026</td></tr><tr><td>June 15, 2026</td><td>September 14, 2026</td><td></td><td></td></tr></table>				June 13, 2025	September 15, 2025	December 15, 2025	March 13, 2026	June 15, 2026	September 14, 2026		
June 13, 2025	September 15, 2025	December 15, 2025	March 13, 2026									
June 15, 2026	September 14, 2026											
Autocall Redemption Date:	<p>The “Autocall Redemption Date” for an Autocall Redemption Event, if applicable, will be the next succeeding Interest Payment Date, among those specified below, following the occurrence of such Autocall Redemption Event.</p> <p>The Bank intends the Autocall Redemption Date, if applicable, to be one of the following Interest Payment Dates:</p> <table><tr><td>June 18, 2025</td><td>September 18, 2025</td><td>December 18, 2025</td><td>March 18, 2026</td></tr><tr><td>June 18, 2026</td><td>September 17, 2026</td><td></td><td></td></tr></table>				June 18, 2025	September 18, 2025	December 18, 2025	March 18, 2026	June 18, 2026	September 17, 2026		
June 18, 2025	September 18, 2025	December 18, 2025	March 18, 2026									
June 18, 2026	September 17, 2026											
Payment at Maturity:	<p>On the Maturity Date, if the Securities have not been previously redeemed, the amount payable (the “Final Redemption Amount”) for each US\$100 Principal Amount per Security will be equal to:</p> <p>(a) if the Final Portfolio Value is greater than or equal to the Protection Barrier Value, US\$100; or</p> <p>(b) if the Final Portfolio Value is less than the Protection Barrier Value, an amount equal to:</p> <p style="text-align: center;">$\text{US\\$100.00} + (\text{US\\$100.00} \times \text{Percentage Change})$</p> <p>In addition to the Final Redemption Amount, an Interest Payment will be paid on the Maturity Date if a Digital Payout Event occurs on the Final Valuation Date. All dollar amounts will be rounded to the nearest whole cent. The minimum payment at maturity is US\$1.00.</p>											
Secondary Market:	OTC											

SAMPLE CALCULATIONS OF FINAL REDEMPTION AMOUNT OR AUTOCALL REDEMPTION AMOUNT AND INTEREST PAYMENTS

The examples set out below are included for illustration purposes only. The Portfolio Values used to illustrate the calculation of the Final Redemption Amount or Autocall Redemption Amount and the Interest Payments over the term of the Securities are not estimates or forecasts of the Portfolio Values on which the Percentage Change, and in turn the Final Redemption Amount, Autocall Redemption Amount and Interest Payments, if any, will depend.

Hypothetical Calculation of the Initial Portfolio Value:

It is assumed that the aggregate Principal Amount of Securities issued under this offering is US\$15,000,000.00 and the (hypothetical) closing prices of the Underlying Securities comprising the Portfolio on the Initial Valuation Date are as illustrated in the table below:

Entity Name	Symbol	Closing Price (US\$)	Underlying Security Value in Portfolio (US\$)	Portfolio Weight	Number of Underlying Securities
ConocoPhillips	COP	111.85	3,750,000.00	25%	33,527.04515
Marathon Oil Corporation	MRO	23.93	3,750,000.00	25%	156,707.06226
Devon Energy Corporation	DVN	44.22	3,750,000.00	25%	84,803.25645
Exxon Mobil Corporation	XOM	98.92	3,750,000.00	25%	37,909.42175

Based on those assumptions, the Initial Portfolio Value would be the sum of the Underlying Security values, which is US\$15,000,000.00.

Hypothetical Calculation of the Final Portfolio Value:

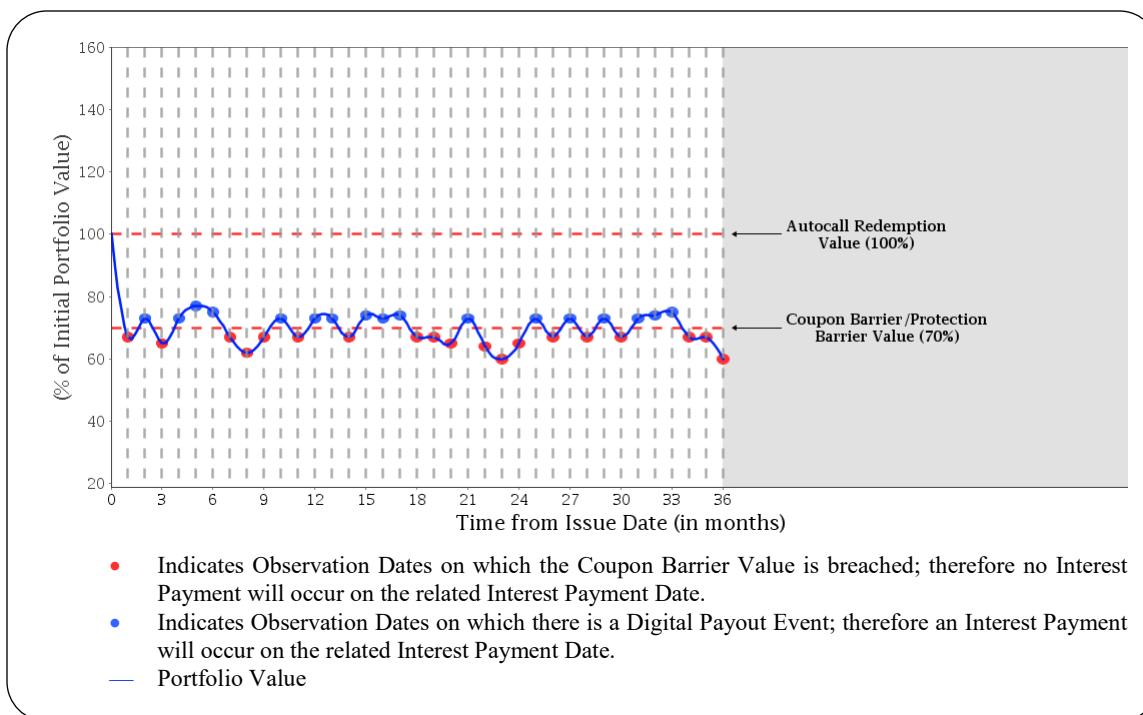
For illustration purposes, it is assumed that no Extraordinary Event has occurred and that the (hypothetical) closing prices of the Underlying Securities comprising the Portfolio on the Final Valuation Date are as illustrated in the table below. For the purposes of the following table, certain dollar values have been rounded to two decimal places.

Entity Name	Symbol	Closing Price (US\$)	Number of Underlying Securities	Underlying Security Value in Portfolio (US\$)
ConocoPhillips	COP	137.02	33,527.04515	4,593,875.73
Marathon Oil Corporation	MRO	29.31	156,707.06226	4,593,083.99
Devon Energy Corporation	DVN	54.17	84,803.25645	4,593,792.40
Exxon Mobil Corporation	XOM	121.18	37,909.42175	4,593,863.73

Based on those assumptions, the Final Portfolio Value would be the sum of the Underlying Security values, which is US\$18,374,615.85.

All examples below assume that a holder of the Securities has purchased Securities with an aggregate principal amount of US\$100.00, that no Extraordinary Event has occurred, an Autocall Redemption Value of 100.00% of the Initial Portfolio Value, a Coupon Barrier Value of 70.00% of the Initial Portfolio Value and a Protection Barrier Value of 70.00% of the Initial Portfolio Value. For convenience, each vertical line in the charts below represents both a hypothetical Observation Date and the next succeeding Interest Payment Date. All dollar amounts are rounded to the nearest whole cent.

Example #1: Loss Scenario with Payment on the Maturity Date at Less Than the Principal Amount



In this scenario, there is no Autocall Observation Date on which the Portfolio Value is at or above the Autocall Redemption Value and, accordingly, the Securities would not be redeemed before the Maturity Date. On the Final Valuation Date, the Final Portfolio Value is below the Protection Barrier Value.

(i) Interest Payments

In this example, there is a Digital Payout Event on 17 of the 36 Observation Dates. On the other 19 Observation Dates, no Digital Payout Event would occur because the Portfolio Value is below the Coupon Barrier Value. Therefore, the Interest Payment of US\$1.0375 per Interest Period would be payable for 17 Interest Periods on the applicable Interest Payment Date, for total Interest Payments of:

$$\begin{aligned} & \text{Principal Amount of Securities} \times 1.0375\% \text{ per Interest Period} \times 17 \text{ Interest Periods} \\ & \text{US\$100} \times 1.0375\% \times 17 = \text{US\$17.64} \end{aligned}$$

(ii) Final Redemption Amount

In this example, the Initial Portfolio Value (X_i) is US\$15,000,000.00 and the Final Portfolio Value (X_f) is US\$9,000,000.00. Therefore, the Final Redemption Amount would be calculated as follows:

Initial Portfolio Value = US\$15,000,000.00

Final Portfolio Value = US\$9,000,000.00

Percentage Change = $(\text{US\$9,000,000.00} - \text{US\$15,000,000.00}) / \text{US\$15,000,000.00} = -0.4000$ or -40.00%

Since the Final Portfolio Value is below the Protection Barrier Value, the Final Redemption Amount is calculated as follows:

Final Redemption Amount = $\text{US\$100.00} + (\text{US\$100.00} \times -40.00\%) = \text{US\$60.00}$

Therefore, the total amounts payable per Security from the Issue Date to the Maturity Date are:

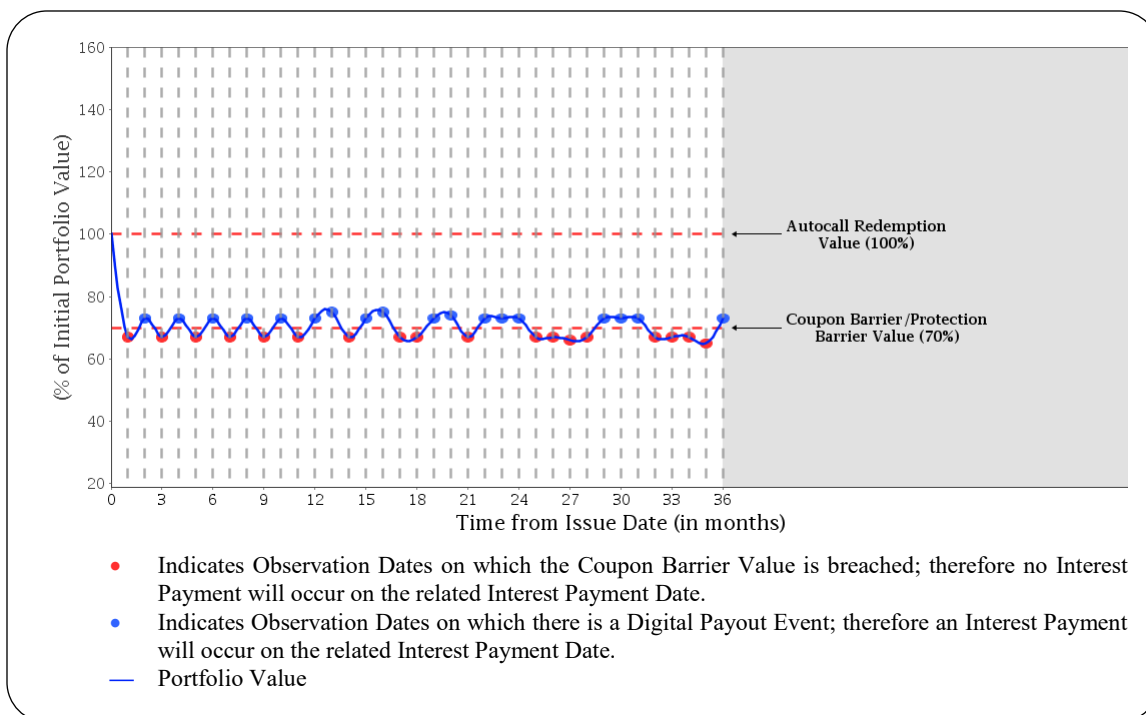
(a) Total Interest Payments: US\$17.64

(b) Final Redemption Amount: US\$60.00

(c) Total amount paid over the term of the Securities: US\$77.64

The equivalent annually compounded rate of return in this example is -8.09%.

Example #2: Gain Scenario with Payment on the Maturity Date at the Principal Amount



In this scenario, there is no Autocall Observation Date on which the Portfolio Value is at or above the Autocall Redemption Value and, accordingly, the Securities would not be redeemed before the Maturity Date. On the Final Valuation Date, the Final Portfolio Value is at or above the Protection Barrier Value.

(i) Interest Payments

In this example, there is a Digital Payout Event on 18 of the 36 Observation Dates. On the other 18 Observation Dates, no Digital Payout Event would occur because the Portfolio Value is below the Coupon Barrier Value. Therefore, the Interest Payment of US\$1.0375 per Interest Period would be payable for 18 Interest Periods on the applicable Interest Payment Date for total Interest Payments of:

$$\begin{aligned} & \text{Principal Amount of Securities} \times 1.0375\% \text{ per Interest Period} \times 18 \text{ Interest Periods} \\ & \text{US\$100} \times 1.0375\% \times 18 = \text{US\$18.68} \end{aligned}$$

(ii) Final Redemption Amount

In this example, since the Final Portfolio Value is US\$10,950,000.00, which is above its Protection Barrier Value of 70.00% of the Initial Portfolio Value of US\$15,000,000.00, the Final Redemption Amount per Security is equal to US\$100.00.

Therefore, the total amounts payable per Security from the Issue Date to the Maturity Date are:

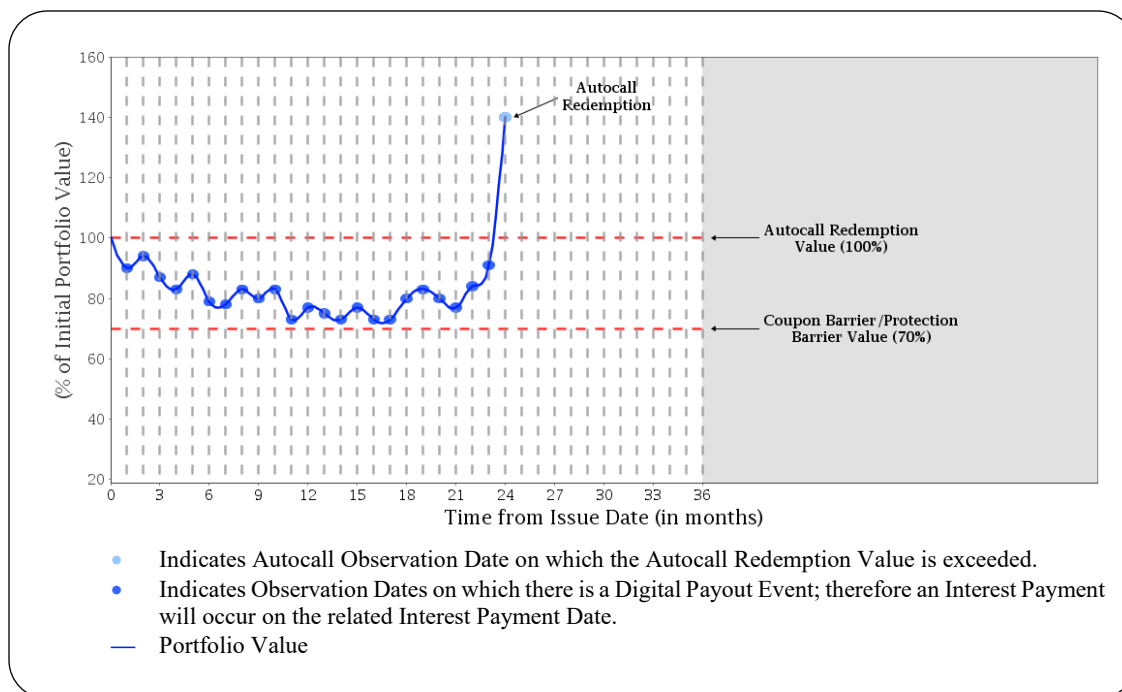
(a) Total Interest Payments: US\$18.68

(b) Final Redemption Amount: US\$100.00

(c) Total amount paid over the term of the Securities: US\$118.68

The equivalent annually compounded rate of return in this example is 5.87%.

Example #3: Gain Scenario with Autocall Redemption Event



In this scenario, the Portfolio Value is at or above the Autocall Redemption Value on the Autocall Observation Date that falls 24 months into the term of the Securities. This would constitute an Autocall Redemption Event and, on the next succeeding Interest Payment Date, the Bank would redeem the Securities.

(i) Interest Payments

In this example, there is a Digital Payout Event on each of the 24 Observation Dates prior to the redemption of the Securities because the Portfolio Value is at or above the Coupon Barrier Value on each such date. Therefore, the Interest Payment of US\$1.0375 per Interest Period would be payable for each Interest Period on the applicable Interest Payment Date (including on the Autocall Redemption Date), for total Interest Payments of:

$$\text{Principal Amount of Securities} \times 1.0375\% \text{ per Interest Period} \times 24 \text{ Interest Periods} \\ \text{US\$100} \times 1.0375\% \times 24 = \text{US\$24.90}$$

(ii) Autocall Redemption Amount

The Autocall Redemption Amount per Security is equal to US\$100.00.

Therefore, the total amounts payable per Security from the Issue Date to the Autocall Redemption Date are:

(a) Total Interest Payments: US\$24.90

(b) Autocall Redemption Amount: US\$100.00

(c) Total amount paid over the term of the Securities: US\$124.90

The equivalent annually compounded rate of return in this example is 11.76%.

Initial Estimated Value:	The initial estimated value of the Securities as of December 13, 2023 was US\$98.69 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, cannot be predicted with accuracy, and may be less than this amount. The initial estimated value of the Securities is an estimate only and is based on the value of the Bank's obligation to make the payments on the Securities. We describe our determination of the initial estimated value in more detail in the Pricing Supplement.
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All capitalized terms unless otherwise defined have the meanings ascribed to them in the Pricing Supplement.

Clients should evaluate the financial, market, legal, regulatory, credit, tax and accounting risks and consequences of the proposal before entering into any transaction, or purchasing any instrument. Clients should evaluate such risks and consequences independently of Royal Bank of Canada and the Dealers, RBC Dominion Securities Inc. and Wellington-Altus Private Wealth Inc., respectively.

The Securities will not constitute deposits insured under the *Canada Deposit Insurance Corporation Act*. The Securities are not fixed income securities and are not designed to be alternatives to fixed income or money market instruments. The Securities are structured products that possess downside risk.

An investment in the Securities involves risks. An investment in the Securities is not the same as a direct investment in the securities that comprise the Portfolio and investors have no rights with respect to the securities in the Portfolio. The Securities are considered to be "specified derivatives" under applicable Canadian securities laws. If you purchase Securities, you will be exposed to fluctuations in interest rates and changes in the Portfolio Value, among other factors. Price changes may be volatile and an investment in the Securities may be considered to be speculative. Since the Securities are not principal protected and the Principal Amount will be at risk, you could lose substantially all of your investment.

