

<b>Underwriter:</b>	RBC Capital Markets	<b>Participation Rate:</b>	100%
<b>CUSIP:</b>	78016NAA5	<b>Maturity Length:</b>	18 months
<b>Description:</b>	Index-Linked Notes	<b>Funding Deadline Date:</b>	May 19, 2023
<b>Index (Indices):</b>	Lesser Performing of S&P 500 and Dow Jones Industrial Average <sup>5</sup>	<b>Execution Date:</b>	May 25, 2023
<b>Cap:</b>	At least 15.00% <sup>1</sup>	<b>Valuation Date:</b>	November 25, 2024
<b>Buffer:</b>	100.00%	<b>Settlement Date:</b>	November 29, 2024

1. The final cap rate for the offering will be determined on the execution date and will be disclosed on the final prospectus. The final cap rate for the offering will be at or above the stated cap rate and dependent upon market conditions during the offering period.
2. Liquidation prior to maturity is subject to a 0.25% discount to net asset value (NAV).
3. Structured Notes are intended to be held until maturity. Intra-period pricing may not directly correlate with the price return of the index. Structured Note returns tend to lag index returns on the upside and directionally match on the downside.
4. Structured products are subject to the credit risk of the underwriter.
5. Use of a lesser performing return for multiple indices dictates that performance of the offering will be based on the index that provides the lesser return during the pre-determined timeframe. For example, if index A returns 10% and index B returns 5% from execution date to valuation date, the note will mature with a return of 5% based on the lesser performing index B. Example, for a 10% level of buffer protection, if index A returns -15% and index B returns -25% from execution date to valuation date, the note will mature with a return of -15% based on the lesser performing index B and the buffer protection.
6. Once the offering limit is reached, no new investments will be accepted. If demand for the offering size is not met, the offering is subject to cancellation.
7. Investments in structured products must be limited to 25% of a client's Liquid Net Worth.

**IMPORTANT –**

Please check this box if you are currently invested in a structured note that is maturing and you will be using the proceeds to invest in this current offering.

Account#	Account Type	\$ Amount

**By signing below, Client acknowledges receipt of this structured note pre-pricing document and that their investment is no more than 25% of their Liquid Net Worth.\***

\*Liquid Net Worth defined as net worth minus assets that cannot be quickly and easily converted into cash, including but not limited to, real estate, business equity, personal property, automobiles, expected inheritances, assets earmarked for other purposes, and investments or accounts subject to substantial penalties, fees or charges due to early sale or withdrawal.

Accepted and agreed to as of:

Client's Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

2<sup>nd</sup> Client's Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_



The information in this preliminary terms supplement is not complete and may be changed.

## Preliminary Terms Supplement

Subject to Completion:

Dated April 25, 2023

Pricing Supplement Dated May \_\_, 2023 to the Product Prospectus Supplement ERN-EI-1, the Prospectus Supplement and the Prospectus, Each Dated September 14, 2021

\$

Notes Linked to the Lesser Performing of Two Equity Indices, Due November 29, 2024  
Royal Bank of Canada

**Royal Bank of Canada is offering the Notes (the “Notes”) linked to the lesser performing of two equity indices.**

Reference Assets	Initial Levels*
S&P 500® Index (“SPX”)	
Dow Jones Industrial Average™ (“INDU”)	

\*The Initial Level of each Reference Asset will be its closing level on the Trade Date.

- The Notes will provide a return equal to the Percentage Change of the Lesser Performing Reference Asset (each as defined below) if the level of the Lesser Performing Reference Asset increases from its Initial Level to its Final Level, subject to the Maximum Redemption Amount of at least 115% of the principal amount of the Notes (to be determined on the Trade Date).
- Investors will receive the principal amount of the Notes if the Final Level of the Lesser Performing Reference Asset is equal to or less than its Initial Level.
- Any payments on the Notes are subject to our credit risk.
- The Notes do not pay interest.
- The Notes will not be listed on any securities exchange.

**Issue Date:** May 31, 2023

**Maturity Date:** November 29, 2024

**CUSIP:** 78016NAA5

Investing in the Notes involves a number of risks. See “Selected Risk Considerations” beginning on page P-7 of this terms supplement, “Additional Risk Factors Specific to the Notes” beginning on page PS-4 of the product prospectus supplement dated September 14, 2021, and “Risk Factors” beginning on page S-2 of the prospectus supplement dated September 14, 2021.

The Notes will not constitute deposits insured by the Canada Deposit Insurance Corporation, the U.S. Federal Deposit Insurance Corporation or any other Canadian or U.S. government agency or instrumentality. The Notes are not subject to conversion into our common shares under subsection 39.2(2.3) of the Canada Deposit Insurance Corporation Act.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the Notes or determined that this terms supplement is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Note	Total
Price to public	100.00%	\$
Underwriting discounts and commissions <sup>(1)</sup>	0.15%	\$
Proceeds to Royal Bank of Canada	99.85%	\$

<sup>(1)</sup> Certain dealers who purchase the Notes for sale to certain fee-based advisory accounts may forego some or all of their underwriting discount or selling concessions. The public offering price for investors purchasing the Notes in these accounts may be between \$998.50 and \$1,000 per \$1,000 in principal amount.

If the Notes priced on the date of this terms supplement, RBC Capital Markets, LLC (“RBCCM”), acting as our agent, would receive a commission of approximately \$1.50 per \$1,000 in principal amount of the Notes and would use a portion of that commission to allow selling concessions to other dealers of up to approximately \$1.50 per \$1,000 in principal amount of the Notes. The other dealers may forgo, in their sole discretion, some or all of their selling concessions. See “Supplemental Plan of Distribution (Conflicts of Interest)” below.

The initial estimated value of the Notes as of the Trade Date is expected to be between \$940 and \$990 per \$1,000 in principal amount, and will be less than the price to public. The final pricing supplement relating to the Notes will set forth our estimate of the initial value of the Notes as of the Trade Date. The actual value of the Notes at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. We describe our determination of the initial estimated value in more detail below.

## SUMMARY

*The information in this “Summary” section is qualified by the more detailed information set forth in this terms supplement, the product prospectus supplement, the prospectus supplement, and the prospectus.*

General:	This terms supplement relates to an offering of Notes Linked to the Lesser Performing of Two Equity Indices (the “Notes”).
Issuer:	Royal Bank of Canada (“Royal Bank of Canada”)
Trade Date (Pricing Date):	May 25, 2023
Issue Date:	May 31, 2023
Valuation Date:	November 25, 2024
Maturity Date:	November 29, 2024
Denominations:	Minimum denomination of \$1,000, and integral multiples of \$1,000 thereafter.
Initial Level:	For each Reference Asset, its closing level on the Trade Date.
Final Level:	For each Reference Asset, its closing level on the Valuation Date.
Redemption Amount:	We will pay you at maturity an amount based on the Final Level of the Lesser Performing Reference Asset:  If the Final Level of the Lesser Performing Reference Asset is <b>greater than its Initial Level</b> (that is, its Percentage Change is positive), then the investor will receive, for each \$1,000 in principal amount, an amount equal to the lesser of: <ol style="list-style-type: none"><li>1. \$1,000 + \$1,000 x Percentage Change of the Lesser Performing Reference Asset; and</li><li>2. Maximum Redemption Amount</li></ol> If the Final Level of the Lesser Performing Reference Asset is <b>equal to or less than its Initial Level</b> (that is, its Percentage Change is between zero or negative), the investor will receive the principal amount only.
Percentage Change:	With respect to each Reference Asset: $\frac{\text{Final Level} - \text{Initial Level}}{\text{Initial Level}}$
Lesser Performing Reference Asset:	The Reference Asset which has the lowest Percentage Change.
Market Disruption Events:	If a market disruption event occurs on the Valuation Date as to a Reference Asset, the determination of the Final Level of that Reference Asset will be postponed. However, the determination of the Final Level of any Reference Asset that is not affected by that market disruption event will not be postponed.
Maximum Redemption Amount:	At least 115% multiplied by the principal amount, to be determined on the Trade Date.
Calculation Agent:	RBC Capital Markets, LLC (“RBCCM”)
U.S. Tax Treatment:	We intend to take the position that the Notes will be treated as debt instruments subject to the special tax rules governing contingent payment debt instruments for U.S. federal income tax purposes. Please see the section below, “Supplemental Discussion of U.S. Federal Income Tax Consequences,” which applies to the Notes.
Secondary Market:	RBCCM (or one of its affiliates), though not obligated to do so, may maintain a secondary market in the Notes after the issue date. The amount that you may receive upon sale of your Notes prior to maturity may be less than the principal amount.
Listing:	The Notes will not be listed on any securities exchange.

Settlement: DTC global (including through its indirect participants Euroclear and Clearstream, Luxembourg as described under “Ownership and Book-Entry Issuance” in the prospectus dated September 14, 2021).

Terms Incorporated in the Master Note: All of the terms appearing on the cover page and above the item captioned “Secondary Market” on pages P-2 and P-3 of this terms supplement and the terms appearing under the caption “General Terms of the Notes” in the product prospectus supplement dated September 14, 2021, as modified by this terms supplement.

*The Trade Date, issue date and other dates set forth above are subject to change, and will be set forth in the final pricing supplement relating to the Notes.*

## ADDITIONAL TERMS OF YOUR NOTES

You should read this terms supplement together with the prospectus dated September 14, 2021, as supplemented by the prospectus supplement dated September 14, 2021 and the product prospectus supplement dated September 14, 2021, relating to our Senior Global Medium-Term Notes, Series I, of which these Notes are a part. Capitalized terms used but not defined in this terms supplement will have the meanings given to them in the product prospectus supplement. In the event of any conflict, this terms supplement will control. ***The Notes vary from the terms described in the product prospectus supplement in several important ways. You should read this terms supplement carefully.***

This terms supplement, together with the documents listed below, contains the terms of the Notes and supersedes all prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in “Risk Factors” in the prospectus supplement dated September 14, 2021 and “Additional Risk Factors Specific to the Notes” in the product prospectus supplement dated September 14, 2021, as the Notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisors before you invest in the Notes. You may access these documents on the Securities and Exchange Commission (the “SEC”) website at [www.sec.gov](http://www.sec.gov) as follows (or if that address has changed, by reviewing our filings for the relevant date on the SEC website):

Prospectus dated September 14, 2021:

<https://www.sec.gov/Archives/edgar/data/1000275/000121465921009470/rbc911212424b3.htm>

Prospectus Supplement dated September 14, 2021:

<https://www.sec.gov/Archives/edgar/data/1000275/000121465921009472/rbc911212424b3.htm>

Product Prospectus Supplement ERN-EI-1 dated September 14, 2021:

[https://www.sec.gov/Archives/edgar/data/1000275/000114036121031150/brhc10028901\\_424b5.htm](https://www.sec.gov/Archives/edgar/data/1000275/000114036121031150/brhc10028901_424b5.htm)

Our Central Index Key, or CIK, on the SEC website is 1000275. As used in this terms supplement, “we,” “us,” or “our” refers to Royal Bank of Canada.

Royal Bank of Canada has filed a registration statement (including a product prospectus supplement, a prospectus supplement, and a prospectus) with the SEC for the offering to which this terms supplement relates. Before you invest, you should read those documents and the other documents relating to this offering that we have filed with the SEC for more complete information about us and this offering. You may obtain these documents without cost by visiting EDGAR on the SEC website at [www.sec.gov](http://www.sec.gov). Alternatively, Royal Bank of Canada, any agent or any dealer participating in this offering will arrange to send you the product prospectus supplement, the prospectus supplement and the prospectus if you so request by calling toll-free at 1-877-688-2301.

## HYPOTHETICAL EXAMPLES

The table set out below is included for illustration purposes only. The table illustrates the hypothetical Redemption Amount of the Notes for a hypothetical range of performance for the Lesser Performing Reference Asset, assuming the following terms:

Hypothetical Initial Level (for each Reference Asset):	1,000.00*
Hypothetical Maximum Redemption Amount:	115% multiplied by the principal amount
Principal Amount:	\$1,000 per Note

\* The hypothetical Initial Level of 1,000.00 used in the examples below has been chosen for illustrative purposes only and does not represent the actual expected Initial Level of any Reference Asset. The actual Initial Levels for each Reference Asset will be set forth on the cover page of the final pricing supplement relating to the Notes. **We make no representation or warranty as to which of the Reference Assets will be the Lesser Performing Reference Asset. It is possible that the Final Level of each Reference Asset will be equal to or less than its Initial Level.**

Hypothetical Final Levels are shown in the first column on the left. The second column shows the Redemption Amount for a range of Final Levels of the Lesser Performing Reference Asset on the Valuation Date. The third column shows the Redemption Amount to be paid on the Notes per \$1,000 in principal amount.

Hypothetical Final Level of the Lesser Performing Reference Asset	Redemption Amount as Percentage of Principal Amount	Redemption Amount per \$1,000 in Principal Amount
1,500.00	115.00%	\$1,150.00
1,300.00	115.00%	\$1,150.00
1,200.00	115.00%	\$1,150.00
1,115.00	115.00%	\$1,150.00
1,100.00	110.00%	\$1,100.00
1,000.00	100.00%	\$1,000.00
900.00	100.00%	\$1,000.00
800.00	100.00%	\$1,000.00
700.00	100.00%	\$1,000.00
600.00	100.00%	\$1,000.00
500.00	100.00%	\$1,000.00
400.00	100.00%	\$1,000.00
300.00	100.00%	\$1,000.00
200.00	100.00%	\$1,000.00
100.00	100.00%	\$1,000.00
0.00	100.00%	\$1,000.00

The examples set out below are included for illustration purposes only. The hypothetical Percentage Changes of the Lesser Performing Reference Asset used to illustrate the calculation of the Payment at Maturity (rounded to two decimal places) are not estimates or forecasts of the Initial Level, the Final Level or the level of any Reference Asset on any trading day prior to the Maturity Date. All examples assume a hypothetical Maximum Redemption Amount of 115%, and that a holder purchased Notes with an aggregate principal amount of \$1,000 and that no market disruption event occurs on the Valuation Date.

**Example 1: The level of the Lesser Performing Reference Asset increases by 5% from the Initial Level of 1,000 to its Final Level of 1,100.** Because the Final Level of the Lesser Performing Reference Asset is greater than its Initial Level, the investor receives at maturity, a cash payment of \$1,100 per Note, calculated as follows:

$$\begin{aligned} & \$1,000 + \$1,000 \times \text{Percentage Change of the Lesser Performing Reference Asset} \\ & = \$1,000 + \$1,000 \times 10\% = \$1,000 + \$100.00 = \$1,100 \end{aligned}$$

Because \$1,100 is less than the Maximum Redemption Amount of \$1,150, the investor receives at maturity a cash payment of \$1,100 per Note.

**Example 2: The level of the Lesser Performing Reference Asset increases by 30% from the Initial Level of 1,000 to its Final Level of 1,300.** Because the Final Level of the Lesser Performing Reference Asset is greater than its Initial Level, the investor receives at maturity, a cash payment of \$1,150 per Note, calculated as follows:

$$\begin{aligned} & \$1,000 + \$1,000 \times \text{Percentage Change of the Lesser Performing Reference Asset} \\ & = \$1,000 + \$1,000 \times 30\% = \$1,000 + \$300.00 = \$1,300 \end{aligned}$$

However, because the Maximum Redemption Amount of \$1,150 is less than \$1,300, the investor receives at maturity a cash payment of \$1,150 per Note.

**Example 3: The level of the Lesser Performing Reference Asset decreases by 20% from the Initial Level of 1,000 to its Final Level of 800.** Because the Final Level of the Lesser Performing Reference Asset is less than its Initial Level, the investor receives at maturity the principal amount, despite the 20% decline in the level of the Lesser Performing Reference Asset.

\* \* \*

The Payments at Maturity shown above are entirely hypothetical; they are based on levels of the Reference Assets that may not be achieved on the Valuation Date and on assumptions that may prove to be erroneous. The actual market value of your Notes on the Maturity Date or at any other time, including any time you may wish to sell your Notes, may bear little relation to the hypothetical Redemption Amounts shown above, and those amounts should not be viewed as an indication of the financial return on an investment in the Notes or on an investment in the securities included in either Reference Asset.

## SELECTED RISK CONSIDERATIONS

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Reference Assets. These risks are explained in more detail in the section “Additional Risk Factors Specific to the Notes” in the product prospectus supplement. In addition to the risks described in the prospectus supplement and the product prospectus supplement, you should consider the following:

### Risks Relating to the Terms of the Notes

- **You May Not Earn a Positive Return on Your Investment** – The payment you will receive at maturity will depend on whether the level of the Lesser Performing Reference Asset increases from the Initial Level to the Final Level. If the level of the Lesser Performing Reference Asset decreases from the Initial Level to the Final Level (or if the level of the Lesser Performing Reference Asset is unchanged), you will not receive any positive return on the Notes and you will only receive the principal amount.
- **Your Redemption Amount Will Be Determined Solely by Reference to the Lesser Performing Reference Asset Even if the Other Reference Asset Performs Better** – Your Redemption Amount will be determined solely by reference to the performance of the Lesser Performing Reference Asset. Even if the Final Level of the other Reference Asset has increased compared to its Initial Level, your return will only be determined by reference to the performance of the Lesser Performing Reference Asset, regardless of the performance of the other Reference Asset. The Notes are not linked to a weighted basket, in which the risk may be mitigated and diversified among each of the basket components. For example, in the case of notes linked to a weighted basket, the return would depend on the weighted aggregate performance of the basket components reflected as the basket return. As a result, the depreciation of one basket component could be mitigated by the appreciation of the other basket component, as scaled by the weighting of that basket component. However, in the case of the Notes, the individual performance of each of the Reference Assets would not be combined, and the depreciation of one Reference Asset would not be mitigated by any appreciation of the other Reference Asset. Instead your return will depend solely on the Final Level of the Lesser Performing Reference Asset. Because each Reference Asset tracks a different segment of the U.S. equities market, they may both decrease in a comparable manner.
- **The Notes Do Not Pay Interest and Your Return May Be Lower than the Return on a Conventional Debt Security of Comparable Maturity** – You will not receive any interest payments on the Notes as there would be on a conventional fixed-rate or floating-rate debt security having the same maturity. The return that you will receive on the Notes, which could be as little as 0%, may be less than the return you could earn on other investments. Even if your return is positive, the return may be less than the return you would earn if you purchased one of our conventional senior interest bearing debt securities.
- **Your Potential Payment at Maturity Is Limited** — The Notes will provide less opportunity to participate in the appreciation of the Lesser Performing Reference Asset than an investment in a security linked to the Lesser Performing Reference Asset providing full participation in the appreciation, because the payment at maturity will not exceed the Maximum Redemption Amount. Accordingly, your return on the Notes may be less than your return would be if you made an investment in a security directly linked to the positive performance of the Lesser Performing Reference Asset.
- **Payments on the Notes Are Subject to Our Credit Risk, and Changes in Our Credit Ratings Are Expected to Affect the Market Value of the Notes** – The Notes are our senior unsecured debt securities. As a result, your receipt of the Redemption Amount is dependent upon our ability to repay our obligations at that time. This will be the case even if the levels of the Reference Assets increase after the Trade Date. No assurance can be given as to what our financial condition will be at the maturity of the Notes.
- **You Will Be Required to Include Income on the Notes Over Their Term Based Upon a Comparable Yield, Even Though You Will Not Receive Any Payments Until Maturity** – We intend to take the position that the Notes will be treated as debt instruments subject to the special tax rules governing contingent payment debt instruments for U.S. federal income tax purposes. Under such treatment, the Notes are considered to be issued with original issue discount. You will be required to include income on the Notes over their term based upon a comparable yield, even though you will not receive any payments until maturity. You are urged to review the



section entitled “Supplemental Discussion of U.S. Federal Income Tax Consequences” and consult your own tax advisor.

#### **Risks Relating to the Secondary Market for the Notes**

- **There May Not Be an Active Trading Market for the Notes – Sales in the Secondary Market May Result in Significant Losses** – There may be little or no secondary market for the Notes. The Notes will not be listed on any securities exchange. RBCCM and our other affiliates may make a market for the Notes; however, they are not required to do so. RBCCM or any of our other affiliates may stop any market-making activities at any time. Even if a secondary market for the Notes develops, it may not provide significant liquidity or trade at prices advantageous to you. We expect that transaction costs in any secondary market would be high. As a result, the difference between bid and asked prices for your Notes in any secondary market could be substantial.

#### **Risks Relating to the Estimated Value of the Notes**

- **The Initial Estimated Value of the Notes Will Be Less than the Price to the Public** — The initial estimated value that will be set forth on the cover page of the final pricing supplement for the Notes does not represent a minimum price at which we, RBCCM or any of our affiliates would be willing to purchase the Notes in any secondary market (if any exists) at any time. If you attempt to sell the Notes prior to maturity, their market value may be lower than the price you paid for them and the initial estimated value. This is due to, among other things, changes in the levels of the Reference Assets, the borrowing rate we pay to issue securities of this kind, and the inclusion in the price to the public of the underwriting discount and the estimated costs relating to our hedging of the Notes. These factors, together with various credit, market and economic factors over the term of the Notes, are expected to reduce the price at which you may be able to sell the Notes in any secondary market and will affect the value of the Notes in complex and unpredictable ways. Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your Notes prior to maturity may be less than your original purchase price, as any such sale price would not be expected to include the underwriting discount or the hedging costs relating to the Notes. In addition to bid-ask spreads, the value of the Notes determined by RBCCM for any secondary market price is expected to be based on the secondary rate rather than the internal funding rate used to price the Notes and determine the initial estimated value. As a result, the secondary price will be less than if the internal funding rate was used. The Notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Notes to maturity.
- **The Initial Estimated Value of the Notes that We Will Provide in the Final Pricing Supplement Will Be an Estimate Only, Calculated as of the Time the Terms of the Notes Are Set** — The initial estimated value of the Notes will be based on the value of our obligation to make the payments on the Notes, together with the mid-market value of the derivative embedded in the terms of the Notes. See “Structuring the Notes” below. Our estimate will be based on a variety of assumptions, including our credit spreads, expectations as to dividends, interest rates and volatility, and the expected term of the Notes. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities may value the Notes or similar securities at a price that is significantly different than we do.

The value of the Notes at any time after the Trade Date will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the Notes in any secondary market, if any, should be expected to differ materially from the initial estimated value of your Notes.

#### **Risks Relating to Conflicts of Interest and Our Trading Activities**

- **Our Business Activities May Create Conflicts of Interest** — We and our affiliates expect to engage in trading activities related to the Reference Assets that are not for the account of holders of the Notes or on their behalf. These trading activities may present a conflict between the holders’ interests in the Notes and the interests we and our affiliates will have in their proprietary accounts, in facilitating transactions, including options and other derivatives transactions, for their customers and in accounts under their management. These trading activities, if they influence the levels of the Reference Assets, could be adverse to the interests of the holders of the Notes. We and one or more of our affiliates may, at present or in the future, engage in business with companies included in the Reference Assets, including making loans to or providing advisory services. These services could include

investment banking and merger and acquisition advisory services. These activities may present a conflict between our or one or more of our affiliates' obligations and your interests as a holder of the Notes. Moreover, we, and our affiliates may have published, and in the future expect to publish, research reports with respect to the Reference Assets. This research is modified from time to time without notice and may express opinions or provide recommendations that are inconsistent with purchasing or holding the Notes. Any of these activities by us or one or more of our affiliates may affect the levels of the Reference Assets, and therefore, the market value of the Notes.

#### **Risks Relating to the Reference Assets**

- **You Will Not Have Any Rights to the Securities Included in the Reference Assets** – As a holder of the Notes, you will not have voting rights or rights to receive cash dividends or other distributions or other rights that holders of securities included in the Reference Asset would have. The Final Level will not reflect any dividends paid on the securities included in the Reference Asset, and accordingly, any positive return on the Notes may be less than the potential positive return on those securities.
- **The Payments on the Notes Are Subject to Postponement Due to Market Disruption Events and Adjustments** – The Redemption Amount and the Valuation Date are subject to adjustment as to each Reference Asset as described in the product prospectus supplement. For a description of what constitutes a market disruption event as well as the consequences of that market disruption event, see “General Terms of the Notes—Market Disruption Events” in the product prospectus supplement.

## INFORMATION REGARDING THE REFERENCE ASSETS

All disclosures contained in this terms supplement regarding the Reference Assets, including, without limitation, their make-up, method of calculation, and changes in their components, have been derived from publicly available sources. The information reflects the policies of, and is subject to change by the applicable index sponsor. Each of these sponsors has no obligation to continue to publish, and may discontinue publication of, the applicable Reference Asset. The consequences of an index sponsor discontinuing publication of a Reference Asset are discussed in the section of the product prospectus supplement entitled “General Terms of the Notes—Unavailability of the Level of the Reference Asset.” Neither we nor RBCCM accepts any responsibility for the calculation, maintenance or publication of either Reference Asset or any successor index.

### S&P 500® Index (“SPX”)

The SPX is intended to provide an indication of the pattern of price movements among U.S. large capitalization stocks. The calculation of the level of the SPX is based on the relative value of the aggregate market value of the common stocks of 500 companies as of a particular time compared to the aggregate average market value of the common stocks of 500 similar companies during the base period of the years 1941 through 1943.

S&P calculates the SPX by reference to the prices of the constituent stocks of the SPX without taking account of the value of dividends paid on those stocks. As a result, the return on the Notes will not reflect the return you would realize if you actually owned the SPX constituent stocks and received the dividends paid on those stocks.

Effective with the September 2015 rebalance, consolidated share class lines will no longer be included in the SPX. Each share class line will be subject to public float and liquidity criteria individually, but the company’s total market capitalization will be used to evaluate each share class line. This may result in one listed share class line of a company being included in the SPX while a second listed share class line of the same company is excluded.

### Computation of the SPX

While S&P currently employs the following methodology to calculate the SPX, no assurance can be given that S&P will not modify or change this methodology in a manner that may affect the Payment at Maturity.

Historically, the market value of any component stock of the SPX was calculated as the product of the market price per share and the number of then outstanding shares of such component stock. In March 2005, S&P began shifting the SPX halfway from a market capitalization weighted formula to a float-adjusted formula, before moving the SPX to full float adjustment on September 16, 2005. S&P’s criteria for selecting stocks for the SPX did not change with the shift to float adjustment. However, the adjustment affects each company’s weight in the SPX.

Under float adjustment, the share counts used in calculating the SPX reflect only those shares that are available to investors, not all of a company’s outstanding shares. Float adjustment excludes shares that are closely held by control groups, other publicly traded companies or government agencies.

In September 2012, all shareholdings representing more than 5% of a stock’s outstanding shares, other than holdings by “block owners,” were removed from the float for purposes of calculating the SPX. Generally, these “control holders” will include officers and directors, private equity, venture capital and special equity firms, other publicly traded companies that hold shares for control, strategic partners, holders of restricted shares, ESOPs, employee and family trusts, foundations associated with the company, holders of unlisted share classes of stock, government entities at all levels (other than government retirement/pension funds) and any individual person who controls a 5% or greater stake in a company as reported in regulatory filings. However, holdings by block owners, such as depository banks, pension funds, mutual funds and ETF providers, 401(k) plans of the company, government retirement/pension funds, investment funds of insurance companies, asset managers and investment funds, independent foundations and savings and investment plans, will ordinarily be considered part of the float.

Treasury stock, stock options equity participation units, warrants, preferred stock, convertible stock, and rights are not part of the float. Shares held in a trust to allow investors in countries outside the country of domicile, such as depository shares and Canadian exchangeable shares are normally part of the float unless those shares form a control block.

For each stock, an investable weight factor (“IWF”) is calculated by dividing the available float shares by the total shares outstanding. Available float shares are defined as the total shares outstanding less shares held by control holders. This

calculation is subject to a 5% minimum threshold for control blocks. For example, if a company's officers and directors hold 3% of the company's shares, and no other control group holds 5% of the company's shares, S&P would assign that company an IWF of 1.00, as no control group meets the 5% threshold. However, if a company's officers and directors hold 3% of the company's shares and another control group holds 20% of the company's shares, S&P would assign an IWF of 0.77, reflecting the fact that 23% of the company's outstanding shares are considered to be held for control. As of July 31, 2017, companies with multiple share class lines are no longer eligible for inclusion in the SPX. Constituents of the SPX prior to July 31, 2017 with multiple share class lines were grandfathered in and continue to be included in the SPX. If a constituent company of the SPX reorganizes into a multiple share class line structure, that company will remain in the SPX at the discretion of the S&P Index Committee in order to minimize turnover.

The SPX is calculated using a base-weighted aggregate methodology. The level of the SPX reflects the total market value of all 500 component stocks relative to the base period of the years 1941 through 1943. An indexed number is used to represent the results of this calculation in order to make the level easier to use and track over time. The actual total market value of the component stocks during the base period of the years 1941 through 1943 has been set to an indexed level of 10. This is often indicated by the notation 1941-43 = 10. In practice, the daily calculation of the SPX is computed by dividing the total market value of the component stocks by the "index divisor." By itself, the index divisor is an arbitrary number. However, in the context of the calculation of the SPX, it serves as a link to the original base period level of the SPX. The index divisor keeps the SPX comparable over time and is the manipulation point for all adjustments to the SPX, which is index maintenance.

### **Index Maintenance**

Index maintenance includes monitoring and completing the adjustments for company additions and deletions, share changes, stock splits, stock dividends, and stock price adjustments due to company restructuring or spinoffs. Some corporate actions, such as stock splits and stock dividends, require changes in the common shares outstanding and the stock prices of the companies in the SPX, and do not require index divisor adjustments.

To prevent the level of the SPX from changing due to corporate actions, corporate actions which affect the total market value of the SPX require an index divisor adjustment. By adjusting the index divisor for the change in market value, the level of the SPX remains constant and does not reflect the corporate actions of individual companies in the SPX. Index divisor adjustments are made after the close of trading and after the calculation of the SPX closing level.

Changes in a company's total shares outstanding of 5% or more due to public offerings are made as soon as reasonably possible. Other changes of 5% or more (for example, due to tender offers, Dutch auctions, voluntary exchange offers, company stock repurchases, private placements, acquisitions of private companies or non-index companies that do not trade on a major exchange, redemptions, exercise of options, warrants, conversion of preferred stock, notes, debt, equity participations, at-the-market stock offerings or other recapitalizations) are made weekly, and are generally announced on Fridays for implementation after the close of trading the following Friday (one week later). If a 5% or more share change causes a company's IWF to change by five percentage points or more, the IWF is updated at the same time as the share change. IWF changes resulting from partial tender offers are considered on a case-by-case basis.

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assurance that investment products based on the SPX will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC and its subsidiaries are not investment advisors. Inclusion of a security or futures contract within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security or futures contract, nor is it considered to be investment advice. Notwithstanding the foregoing, CME Group Inc. and its affiliates may independently issue and/or sponsor financial products unrelated to the Notes currently being issued by us, but which may be similar to and competitive with the Notes. In addition, CME Group Inc. and its affiliates may trade financial products which are linked to the performance of the SPX. It is possible that this trading activity will affect the value of the Notes.

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**Historical Information**

The graph below sets forth the information relating to the historical performance of the SPX for the period from January 1, 2013 through April 21, 2023.

We obtained the information regarding the historical performance of the SPX in the graph below from Bloomberg Financial Markets.

We have not independently verified the accuracy or completeness of the information obtained from Bloomberg Financial Markets. The historical performance of the SPX should not be taken as an indication of its future performance, and no assurance can be given as to the Final Level of the SPX. We cannot give you assurance that the performance of the SPX will not result in any positive return on the Notes.

**S&P 500® Index (“SPX”)**



***PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.***

### **Dow Jones Industrial Average™ (“INDU”)**

The INDU is designed to provide an indication of the composite performance of 30 common stocks of corporations representing a broad cross-section of U.S. industry. The corporations represented in this index tend to be market leaders in their respective industries and their stocks are typically widely held by individuals and institutional investors. The index is a price-weighted index, which means an underlying stock’s weight in the index is based on its price per share rather than the total market capitalization of the issuer.

The index is maintained by an Averages Committee. The committee is composed of three representatives of S&P Dow Jones Indices and two representatives of The Wall Street Journal. The Averages Committee was created in 2010, when Dow Jones Indexes became part of CME Group Index Services, LLC, a joint venture company owned by CME Group Inc. and by Dow Jones & Company. Generally, composition changes occur only after mergers, corporate acquisitions or other dramatic shifts in a component’s core business. When such an event necessitates that one component be replaced, the entire index is reviewed. As a result, when changes are made they typically involve more than one component. While there are no rules for component selection, a stock typically is added only if it has an excellent reputation, demonstrates sustained growth, is of interest to a large number of investors and accurately represents the sector(s) covered by the average.

Changes in the composition of the index are made entirely by the Averages Committee without consultation with the corporations represented in the index, any stock exchange, any official agency or us. Unlike most other indices, which are reconstituted according to a fixed review schedule, constituents of the index are reviewed on an as-needed basis. Changes to the common stocks included in the index tend to be made infrequently, and the underlying stocks of the index may be changed at any time for any reason. The companies currently represented in the index are incorporated in the United States and its territories and their stocks are listed on the New York Stock Exchange and Nasdaq.

In addition to the daily governance of the index, at least once within any 12-month period, the Averages Committee reviews the methodology to ensure that the index continues to achieve its stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

The index initially consisted of 12 common stocks and was first published in the WJSJ in 1896. The index was increased to include 20 common stocks in 1916 and to 30 common stocks in 1928. The number of common stocks in the index has remained at 30 since 1928, and, in an effort to maintain continuity, the constituent corporations represented in the index have been changed on a relatively infrequent basis.

### **Computation of the Index**

The level of the index is the sum of the primary exchange prices of each of the 30 component stocks included in the index, divided by a divisor that is designed to provide a meaningful continuity in the level of the index. Because the index is price-weighted, stock splits or changes in the component stocks could result in distortions in the index level. In order to prevent these distortions related to extrinsic factors, the divisor is periodically changed in accordance with a mathematical formula that reflects adjusted proportions within the index.

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security or futures contract, nor is it considered to be investment advice. Notwithstanding the foregoing, CME Group Inc. and its affiliates may independently issue and/or sponsor financial products unrelated to the Notes currently being issued by us, but which may be similar to and competitive with the Notes. In addition, CME Group Inc. and its affiliates may trade financial products which are linked to the performance of the INDU. It is possible that this trading activity will affect the value of the Notes.

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**Historical Information**

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**Dow Jones Industrial Average™ (“INDU”)**



***PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.***

## **SUPPLEMENTAL DISCUSSION OF U.S. FEDERAL INCOME TAX CONSEQUENCES**

The following is a general description of the material U.S. tax considerations relating to the Notes. It does not purport to be a complete analysis of all tax considerations relating to the Notes. Prospective purchasers of the Notes should consult their tax advisors as to the consequences under the tax laws of the country of which they are resident for tax purposes and the tax laws of the U.S. of acquiring, holding and disposing of the Notes and receiving payments under the Notes. This summary is based upon the law as in effect on the date of this document and is subject to any change in law that may take effect after such date.

The following section supplements the discussion of U.S. federal income taxation in the accompanying prospectus and prospectus supplement and it supersedes the discussion of U.S. federal income taxation in the accompanying product prospectus supplement. It applies only to those holders who are not excluded from the discussion of U.S. federal income taxation in the accompanying prospectus. This discussion applies only to holders that will purchase the Notes upon original issuance and will hold the Notes as capital assets for U.S. federal income tax purposes. Further, this discussion does not address the tax consequences applicable to any holders under section 451(b) of the U.S. Internal Revenue Code of 1986, as amended (the "Code").

You should consult your tax advisor concerning the U.S. federal income tax and other tax consequences of your investment in the Notes in your particular circumstances, including the application of state, local or other tax laws and the possible effects of changes in federal or other tax laws.

**NO STATUTORY, JUDICIAL OR ADMINISTRATIVE AUTHORITY DIRECTLY DISCUSSES HOW THE NOTES SHOULD BE TREATED FOR U.S. FEDERAL INCOME TAX PURPOSES. AS A RESULT, THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF AN INVESTMENT IN THE NOTES ARE UNCERTAIN. BECAUSE OF THE UNCERTAINTY, YOU SHOULD CONSULT YOUR TAX ADVISOR IN DETERMINING THE U.S. FEDERAL INCOME TAX AND OTHER TAX CONSEQUENCES OF YOUR INVESTMENT IN THE NOTES, INCLUDING THE APPLICATION OF STATE, LOCAL OR OTHER TAX LAWS AND THE POSSIBLE EFFECTS OF CHANGES IN FEDERAL OR OTHER TAX LAWS.**

We intend to take the position that the Notes will be treated as debt instruments subject to the special tax rules governing contingent payment debt instruments for U.S. federal income tax purposes. Under those rules, the amount of interest you are required to take into account for each accrual period and adjustments in respect of the Notes will be determined by constructing a projected payment schedule for the Notes, and applying the rules similar to those for accruing original issue discount ("OID") on a hypothetical noncontingent debt instrument with that projected payment schedule. Under these rules, you will be required to include amounts in income during the term of the Notes, although we will not make any payments on the Notes until maturity.

This method is applied by first determining the yield at which we would issue a noncontingent fixed rate debt instrument with terms and conditions similar to the Notes (the "comparable yield") including the level of subordination, term, timing of payment and general market conditions, but excluding any adjustments for riskiness of the contingencies or liquidity of the Notes, and then determining a payment schedule as of the issue date that would produce the comparable yield. A projected payment schedule with respect to a note generally is a series of projected payments, the amount and timing of which would produce a yield to maturity on that note equal to the comparable yield. This projected payment schedule and comparable yield are constructed solely for tax purposes, and does not constitute a representation of the amount of contingent payments (if any) that we will make on the Notes.

The amount of interest that you will be required to include in income during each accrual period for the Notes will equal the product of the adjusted issue price for the Notes at the beginning of the accrual period and the comparable yield for the Notes for such period, adjusted upward or downward to reflect the difference, if any, between the actual and projected amount of any contingent payments. Any net differences between actual payments received by a holder on a Note in a taxable year and the projected amounts of those payments will be accounted for as additional interest (in the case of a net positive adjustment) or as an offset to interest income in respect of the Notes (in the case of a net negative adjustment), for that taxable year. If the net negative adjustment for a taxable year exceeds the amount of interest on the Notes for that year, the excess will be treated as an ordinary loss in that year, but only to the extent the holder's total interest inclusions on the Notes exceed the total amount of any ordinary loss in respect of the Notes claimed by the U.S. holder under this rule in prior taxable years. Any net negative adjustment that is not allowed as an ordinary loss for the taxable year is carried forward to the next taxable year, and is taken into account in determining whether the U.S. holder has a net

positive or negative adjustment for that year. Any net negative adjustment that is carried forward to a taxable year in which a holder sells or taxably disposes of the Notes reduces the holder's amount realized on the sale or other taxable disposition.

To obtain the comparable yield and projected payment schedule for your Note, you should call RBC Capital Markets, LLC toll free at 1-877-688-2301. You are required to use such comparable yield and projected payment schedule in determining your interest accruals in respect of your Notes, unless you timely disclose and justify on your federal income tax return the use of a different comparable yield and projected payment schedule. The comparable yield and projected payment schedule are not provided to you for any purpose other than the determination of your interest accruals in respect of the Notes, and we make no representations regarding the amount of contingent payments with respect to the Notes.

The adjusted issue price of the Notes will equal the Notes' original offering price plus any interest deemed to be accrued on the Notes (under the rules governing contingent payment debt instruments). Special rules apply in determining interest accruals for a U.S. holder that purchases the Notes for an amount that differs from the Note's adjusted issue price at the time of the purchase and such holders are urged to consult with their tax advisor.

Special rules apply if one or more contingent payments become fixed prior to maturity. If all remaining contingent payments become fixed substantially contemporaneously, applicable Treasury regulations provide that you should make adjustments to the prior and future interest inclusions in respect of your Notes over the remaining term for the Notes in a reasonable manner. If one or more (but not all) contingent payments become fixed more than six months prior to the relevant payment date, applicable Treasury regulation provide that you should account for the difference between the original projected payments and the fixed payments by making an adjustment equal to the difference between the present value of the amount that is fixed and the projected amount of the contingent payment by discounting each amount from the date the payment is due to the date the payment becomes fixed, using a discount rate equal to the comparable yield on the debt instrument. Additionally, the projected payment schedule is modified prospectively to reflect the fixed amount of the payment. You should consult your tax advisor regarding the application of these rules.

You will recognize gain or loss on the sale or maturity of the Notes in an amount equal to the difference, if any, between the amount of cash you receive at such time and your adjusted basis in the Notes. In general, your adjusted basis in the Notes will equal the amount you paid to acquire the Notes, increased by the amount of interest income you have previously accrued in respect of the Notes (determined without regard to any of the positive or negative adjustments to interest accruals described above) and decreased by the amount of any projected payments in respect of the Notes through the date of the sale or exchange. The rules for determining the adjusted basis for holders who acquire the Notes at a price other than the adjusted issue price are complex, such holders should consult their tax advisors for assistance in determining their adjusted basis in the Notes.

Any gain you recognize on the sale or maturity of the Notes generally will be ordinary interest income. Any loss you recognize at such time will be ordinary loss to the extent of interest you included as income in the current or previous taxable years in respect of the Notes (reduced by the total amount of net negative adjustments previously taken into account as ordinary losses), and thereafter, capital loss. The deductibility of capital losses is limited.

**Backup Withholding and Information Reporting.** Payments made with respect to the Notes and proceeds from the sale of the Notes may be subject to a backup withholding tax unless, in general, the holder complies with certain procedures or is an exempt recipient. Any amounts so withheld generally will be refunded by the Internal Revenue Service ("IRS") or allowed as a credit against the holder's U.S. federal income tax, provided the holder makes a timely filing of an appropriate tax return or refund claim.

Reports will be made to the IRS and to holders that are not exempted from the reporting requirements.

*Non-U.S. Holders.* The following discussion applies to non-U.S. holders of the Notes. You are a non-U.S. holder if you are a beneficial owner of a Note and are for U.S. federal income tax purposes a non-resident alien individual, a foreign corporation, or a foreign estate or trust.

Except as discussed below, payments made to a non-U.S. holder, and any gain realized on the sale or maturity of the Notes, generally should be exempt from U.S. federal income and withholding tax, subject to generally applicable exceptions set forth in the rules exempting "portfolio interest" from U.S. withholding tax, provided that (i) the holder complies with applicable certification requirements, which certification may be made on Form W-8BEN or W-8BEN-E (or a substitute or successor form) on which the holder certifies, under penalties of perjury, that the holder is not a U.S. person

and provides its name and address, (ii) the payment or gain is not effectively connected with the conduct by the holder of a U.S. trade or business, and (iii) if the holder is a non-resident alien individual, the holder is not present in the U.S. for 183 days or more during the taxable year of the sale or maturity of the Notes. In the case of (ii) above, the holder generally should be subject to U.S. federal income tax with respect to any income or gain in the same manner as if the holder were a U.S. holder and, in the case of a holder that is a corporation, the holder may also be subject to a branch profits tax equal to 30% (or such lower rate provided by an applicable U.S. income tax treaty) of a portion of its earnings and profits for the taxable year that are effectively connected with its conduct of a trade or business in the U.S., subject to certain adjustments. Payments made to a non-U.S. holder may be subject to information reporting and to backup withholding unless the holder complies with applicable certification and identification requirements as to its foreign status.

Under Section 871(m) of the Code, a “dividend equivalent” payment is treated as a dividend from sources within the United States. Such payments generally would be subject to a 30% U.S. withholding tax if paid to a non-U.S. holder. Under U.S. Treasury Department regulations, payments (including deemed payments) with respect to equity-linked instruments (“ELIs”) that are “specified ELIs” may be treated as dividend equivalents if such specified ELIs reference, directly or indirectly, an interest in an “underlying security,” which is generally any interest in an entity taxable as a corporation for U.S. federal income tax purposes if a payment with respect to such interest could give rise to a U.S. source dividend. However, the IRS has issued guidance that states that the U.S. Treasury Department and the IRS intend to amend the effective dates of the U.S. Treasury Department regulations to provide that withholding on dividend equivalent payments will not apply to specified ELIs that are not delta-one instruments and that are issued before January 1, 2025. Royal Bank has determined that non-U.S. holders should not be subject to withholding under Section 871(m) of the Code on payments under the Notes. However, it is possible that the Notes could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting a Reference Asset or the Notes (for example, upon a Reference Asset rebalancing), and following such occurrence the Notes could be treated as subject to withholding on dividend equivalent payments. Non-U.S. holders that enter, or have entered, into other transactions in respect of the Reference Assets or the Notes should consult their tax advisors as to the application of the dividend equivalent withholding tax in the context of the Notes and their other transactions. If any payments are treated as dividend equivalents subject to withholding, we (or the applicable withholding agent) would be entitled to withhold taxes without being required to pay any additional amounts with respect to amounts so withheld.

*Foreign Account Tax Compliance Act.* The Foreign Account Tax Compliance Act (“FATCA”) imposes a 30% U.S. withholding tax on certain U.S. source payments, including interest (and original issue discount), dividends, and other fixed or determinable annual or periodical gain, profits, and income (“Withholdable Payments”), if paid to a foreign financial institution (including amounts paid to a foreign financial institution on behalf of a holder), unless such institution enters into an agreement with the U.S. Treasury Department to collect and provide to the U.S. Treasury Department certain information regarding U.S. financial account holders, including certain account holders that are foreign entities with U.S. owners, with such institution, or otherwise complies with the legislation. In addition, the Notes may constitute a “financial account” for these purposes and, thus, be subject to information reporting requirements pursuant to FATCA. FATCA also generally imposes a withholding tax of 30% on Withholdable Payments made to a non-financial foreign entity unless such entity provides the withholding agent with a certification that it does not have any substantial U.S. owners or a certification identifying the direct and indirect substantial U.S. owners of the entity. Under certain circumstances, a holder may be eligible for refunds or credits of such taxes.

The U.S. Treasury Department has proposed regulations that eliminate the requirement of FATCA withholding on payments of gross proceeds upon the sale or disposition of financial instruments of a type which can produce U.S. source interest or dividends. The U.S. Treasury Department has indicated that taxpayers may rely on these proposed regulations pending their finalization, and the discussion above assumes the proposed regulations will be finalized in their proposed form with retroactive effect. If we (or the applicable withholding agent) determine withholding is appropriate with respect to the Notes, tax will be withheld at the applicable statutory rate, and we (or the applicable withholding agent) will not pay any additional amounts in respect of such withholding. Therefore, if such withholding applies, any payments on the Notes will be significantly less than what you would have otherwise received. Depending on your circumstances, these amounts withheld may be creditable or refundable to you. Foreign financial institutions and non-financial foreign entities located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules. Prospective investors are urged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in the Notes.

## SUPPLEMENTAL PLAN OF DISTRIBUTION (CONFLICTS OF INTEREST)

We expect that delivery of the Notes will be made against payment for the Notes on or about May 31, 2023, which is the third (3rd) business day following the Trade Date (this settlement cycle being referred to as “T+3”). See “Plan of Distribution” in the prospectus dated September 14, 2021. For additional information as to the relationship between us and RBCCM, please see the section “Plan of Distribution—Conflicts of Interest” in the prospectus dated September 14, 2021.

We expect to deliver the Notes on a date that is greater than two business days following the Trade Date. Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the Notes more than two business days prior to the original issue date will be required to specify alternative settlement arrangements to prevent a failed settlement.

In the initial offering of the Notes, they will be offered to investors at a purchase price equal to par, except with respect to certain accounts as indicated on the cover page of this document. In addition to the underwriting discount set forth on the cover page of this document, we or one of our affiliates will also pay an expected fee to a broker-dealer that is unaffiliated with us for providing certain electronic platform services with respect to this offering.

The value of the Notes shown on your account statement may be based on RBCCM’s estimate of the value of the Notes if RBCCM or another of our affiliates were to make a market in the Notes (which it is not obligated to do). That estimate will be based upon the price that RBCCM may pay for the Notes in light of then prevailing market conditions, our creditworthiness and transaction costs. For a period of approximately three months after the issue date of the Notes, the value of the Notes that may be shown on your account statement may be higher than RBCCM’s estimated value of the Notes at that time. This is because the estimated value of the Notes will not include the underwriting discount or our hedging costs and profits; however, the value of the Notes shown on your account statement during that period may be a higher amount, reflecting the addition of the underwriting discount and our estimated costs and profits from hedging the Notes. This excess is expected to decrease over time until the end of this period. After this period, if RBCCM repurchases your Notes, it expects to do so at prices that reflect their estimated value.

We may use this terms supplement in the initial sale of the Notes. In addition, RBCCM or another of our affiliates may use this terms supplement in a market-making transaction in the Notes after their initial sale. **Unless we or our agent informs the purchaser otherwise in the confirmation of sale, this terms supplement is being used in a market-making transaction.**

## STRUCTURING THE NOTES

The Notes are our debt securities, the return on which is linked to the performance of the Reference Assets. As is the case for all of our debt securities, including our structured notes, the economic terms of the Notes reflect our actual or perceived creditworthiness at the time of pricing. In addition, because structured notes result in increased operational, funding and liability management costs to us, we typically borrow the funds under these Notes at a rate that is more favorable to us than the rate that we might pay for a conventional fixed or floating rate debt security of comparable maturity. Using this relatively lower implied borrowing rate rather than the secondary market rate, is a factor that is likely to reduce the initial estimated value of the Notes at the time their terms are set. Unlike the estimated value that will be included in the final pricing supplement, any value of the Notes determined for purposes of a secondary market transaction may be based on a different funding rate, which may result in a lower value for the Notes than if our initial internal funding rate were used.

In order to satisfy our payment obligations under the Notes, we may choose to enter into certain hedging arrangements (which may include call options, put options or other derivatives) on the issue date with RBCCM or one of our other subsidiaries. The terms of these hedging arrangements take into account a number of factors, including our creditworthiness, interest rate movements, the volatility of the Reference Assets, and the tenor of the Notes. The economic terms of the Notes and their initial estimated value depend in part on the terms of these hedging arrangements.

The lower implied borrowing rate is a factor that reduces the economic terms of the Notes to you. The initial offering price of the Notes also reflects the underwriting discount and our estimated hedging costs. These factors result in the initial estimated value for the Notes on the Trade Date being less than their public offering price. See “Selected Risk Considerations—The Initial Estimated Value of the Notes Will Be Less than the Price to the Public” above.