

Pricing Supplement

Dated October 13, 2023

To the Product Prospectus Supplement FIN-1, the Prospectus Supplement and the Prospectus, each dated September 14, 2021

\$4,029,000

Redeemable Fixed Rate Notes, Due October 17, 2038 Royal Bank of Canada

Royal Bank of Canada is offering the Redeemable Fixed Rate Notes (the "Notes") described below.

The CUSIP number for the Notes is 78014RRE2.

The Notes will accrue interest at the rate of 6.40% per annum.

We will pay interest on the Notes on April 17th and October 17th of each year (each an "Interest Payment Date"), commencing on April 17, 2024, and ending on the Maturity Date.

We may call the Notes in whole, but not in part, beginning on October 17, 2028, and on each Interest Payment Date thereafter upon 10 business days' prior written notice. All payments on the Notes are subject to our credit risk.

The Notes will not be listed on any securities exchange.

The Notes will be bail-inable notes (as defined in the accompanying prospectus supplement dated September 14, 2021) and subject to conversion in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares of the Bank or any of its affiliates under subsection 39.2(2.3) of the Canada Deposit Insurance Corporation Act (the "CDIC Act") and to variation or extinguishment in consequence, and subject to the application of the laws of the Province of Ontario and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the Notes.

Investing in the Notes involves a number of risks. See "Additional Risk Factors" on page P-5 of this pricing supplement, "Additional Risk Factors Specific to the Notes" beginning on page PS-5 of the product prospectus supplement FIN-1 dated September 14, 2021 and "Risk Factors" 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 (the "FDIC") or any other Canadian or U.S. government agency or instrumentality.

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of these securities or determined that this pricing supplement is truthful or complete. Any representation to the contrary is a criminal offense.

RBC Capital Markets, LLC ("RBCCM") will purchase the Notes from us on the issue date at a purchase price that is equal to 97.25% of the principal amount, and will pay all or a portion of its underwriting discount to certain selected broker-dealers as a selling concession. The public offering price for the Notes will be equal to the principal amount. However, certain dealers who purchase the Notes for sale to certain fee-based advisory accounts and/or eligible institutional investors may forgo some or all of their selling concessions, fees or commissions. The price to public for investors purchasing the Notes in these accounts and/or for an eligible institutional investor may be as low as \$972.50 (97.25%) per \$1,000 in principal amount of the Notes. See "Supplemental Plan of Distribution (Conflicts of Interest)" below.

We will deliver the Notes in book-entry only form through the facilities of The Depository Trust Company on October 17, 2023, against payment in immediately available funds.

SUMMARY

The information in this "Summary" section is qualified by the more detailed information set forth in this pricing supplement, the product prospectus supplement FIN-1, the prospectus supplement, and the prospectus.

Issuer: Royal Bank of Canada (the "Bank")

Issue: Senior Global Medium-Term Notes, Series I

Underwriter: RBC Capital Markets, LLC

Currency: U.S. Dollars

Minimum Investment: \$1,000 and minimum denominations of \$1,000 in excess of \$1,000

Pricing Date: October 13, 2023

Issue Date: October 17, 2023

Maturity Date: October 17, 2038

Type of Note: Fixed Rate Note

Interest Rate: 6.40% per annum

Interest Payment

Dates:

Semi-annually on April 17th and October 17th of each year, commencing on April 17, 2024 and ending on the maturity date. If an Interest Payment Date is not a New York business day, interest will be paid on the next New York business day, without adjustment for period end dates and no interest will be paid in respect

of the delay.

Redemption: Redeemable at our option. If we redeem the Notes, we will pay you the principal amount, together with the

applicable interest payment.

Call Dates: The Notes are callable, in whole, but not in part, beginning on October 17, 2028, and on each Interest

Payment Date thereafter upon 10 business days' prior written notice.

Survivor's Option: Not Applicable.

Canadian Bail-in

Powers

Acknowledgment:

The Notes are bail-inable notes. See "Agreement with Respect to the Exercise of Canadian Bail-in

Powers."

U.S. Tax Treatment: Please see the discussion (including the opinion of our special U.S. tax counsel, Ashurst LLP) in the

product prospectus supplement FIN-1 dated September 14, 2021 under "Supplemental Discussion of U.S. Federal Income Tax Consequences" and specifically the discussion under "Supplemental Discussion of U.S. Federal Income Tax Consequences—Supplemental U.S. Tax Considerations—Where the term of your notes will exceed one year—Fixed Rate Notes, Floating Rate Notes, Inverse Floating Rate Notes, Step Up Notes, Leveraged Notes, Range Accrual Notes, Dual Range Accrual Notes and Non-Inversion Range Accrual Notes," and "Supplemental Discussion of U.S. Federal Income Tax Consequences—Supplemental U.S. Tax Considerations—Where the term of your notes will exceed one year—Sale, Redemption or Maturity of Notes that Are Not Treated as Contingent Payment Debt Instruments," which applies to your Notes.

Calculation Agent: RBC Capital Markets, LLC

Listing: The Notes will not be listed on any securities exchange.

Redeemable Fixed Rate Notes Royal Bank of Canada

Clearance and 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 above the item captioned "Listing" on pages P-2 and P-3 of this pricing supplement, the section "Agreement with Respect to the Exercise of Canadian Bail-in Powers" below, and the applicable terms appearing under the caption "General Terms of the Notes" in the product prospectus supplement FIN-1 dated September 14, 2021, as modified by this pricing supplement.

ADDITIONAL TERMS OF YOUR NOTES

You should read this pricing supplement together with the prospectus dated September 14, 2021, as supplemented by the prospectus supplement dated September 14, 2021 and the product prospectus supplement FIN-1 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 pricing supplement will have the meanings given to them in the product prospectus supplement FIN-1. In the event of any conflict, this pricing supplement will control. *The Notes vary from the terms described in the product prospectus supplement FIN-1 in several important ways. You should read this pricing supplement carefully.*

This pricing 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, "Additional Risk Factors Specific to the Notes" in the product prospectus supplement FIN-1 dated September 14, 2021 and "Additional Risk Factors" in this pricing supplement, 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 SEC website at 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/rbcsupp911210424b3.htm

Product Prospectus Supplement FIN-1 dated September 14, 2021:

https://www.sec.gov/Archives/edgar/data/1000275/000114036121031256/brhc10028916 424b5.htm

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

ADDITIONAL RISK FACTORS

The Notes involve risks not associated with an investment in ordinary fixed rate notes. This section describes the most significant risks relating to the terms of the Notes. For additional information as to these risks, please see the product prospectus supplement FIN-1 and the prospectus supplement and prospectus, each dated September 14, 2021. You should carefully consider whether the Notes are suited to your particular circumstances before you decide to purchase them. Accordingly, prospective investors should consult their financial and legal advisors as to the risks entailed by an investment in the Notes and the suitability of the Notes in light of their particular circumstances.

The Notes Are Subject to the Risk of an Early Redemption. We have the option to redeem the Notes on the Call Dates set forth above. It is more likely that we will redeem the Notes prior to their stated maturity date to the extent that the interest payable on the Notes is greater than the interest that would be payable on our other instruments of a comparable maturity, terms and credit rating trading in the market. If the Notes are redeemed prior to their stated maturity date, you may have to re-invest the proceeds in a lower rate environment, and you will not receive any further payments on the Notes.

Notes with a Longer Term May Be Riskier than Notes with a Shorter Term. By purchasing a note with a longer tenor, you are more exposed to fluctuations in interest rates than if you purchased a security with a shorter tenor. The value of a longer-dated note tends to be more sensitive to rising interest rates than the value of a shorter-dated note. If interest rates rise, the value of a longer-dated note will typically fall faster than the value of a shorter-dated note. You should only purchase the Notes if you are comfortable with owning a security with a longer tenor.

Investors Are Subject to Our Credit Risk, and Our Credit Ratings and Credit Spreads May Adversely Affect the Market Value of the Notes. Investors are dependent on our ability to pay all amounts due on the Notes on the interest payment dates and at maturity, and, therefore, investors are subject to our credit risk and to changes in the market's view of our creditworthiness. Any decrease in our credit ratings or increase in the credit spreads charged by the market for taking our credit risk is likely to adversely affect the market value of the Notes.

AGREEMENT WITH RESPECT TO THE EXERCISE OF CANADIAN BAIL-IN POWERS

By its acquisition of the Notes, each holder or beneficial owner is deemed to (i) agree to be bound, in respect of that Note, by the CDIC Act, including the conversion of that Note, in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares of the Bank or any of its affiliates under subsection 39.2(2.3) of the CDIC Act and the variation or extinguishment of that Note in consequence, and by the application of the laws of the Province of Ontario and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to that Note; (ii) attorn and submit to the jurisdiction of the courts in the Province of Ontario with respect to the CDIC Act and those laws; and (iii) acknowledge and agree that the terms referred to in paragraphs (i) and (ii), above, are binding on that holder or beneficial owner despite any provisions in the indenture or that Note, any other law that governs that Note and any other agreement, arrangement or understanding between that holder or beneficial owner and the Bank with respect to that Note.

Holders and beneficial owners of any Note will have no further rights in respect of that Note to the extent that Note is converted in a bail-in conversion, other than those provided under the bail-in regime, and by its acquisition of an interest in any Note, each holder or beneficial owner of that Note is deemed to irrevocably consent to the converted portion of the principal amount of that Note and any accrued and unpaid interest thereon being deemed paid in full by the Bank by the issuance of common shares of the Bank (or, if applicable, any of its affiliates) upon the occurrence of a bail-in conversion, which bail-in conversion will occur without any further action on the part of that holder or beneficial owner or the trustee; provided that, for the avoidance of doubt, this consent will not limit or otherwise affect any rights that holders or beneficial owners may have under the bail-in regime.

See "Description of Notes We May Offer—Special Provisions Related to Bail-inable Notes" in the accompanying prospectus supplement dated September 14, 2021 for a description of provisions applicable to the Notes as a result of Canadian bail-in powers.

SUPPLEMENTAL PLAN OF DISTRIBUTION (CONFLICTS OF INTEREST)

Delivery of the Notes will be made against payment for the Notes on October 17, 2023, which is the second (2nd) business day following the Pricing Date (this settlement cycle being referred to as "T+2"). See "Plan of Distribution" in the prospectus supplement dated September 14, 2021. For additional information as to the relationship between us and RBC Capital Markets, LLC, please see the section "Plan of Distribution—Conflicts of Interest" in the prospectus dated September 14, 2021.

After the initial offering of the Notes, the price to the public may change.

We may use this pricing supplement in the initial sale of the Notes. In addition, RBC Capital Markets, LLC or another of our affiliates may use this pricing 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 pricing supplement is being used in a market-making transaction.

VALIDITY OF THE NOTES

In the opinion of Norton Rose Fulbright Canada LLP, the issue and sale of the Notes has been duly authorized by all necessary corporate action of the Bank in conformity with the Indenture, and when the Notes have been duly executed, authenticated and issued in accordance with the Indenture and delivered against payment therefor, the Notes will be validly issued and, to the extent validity of the Notes is a matter governed by the laws of the Province of Ontario or Québec, or the laws of Canada applicable therein, will be valid obligations of the Bank, subject to equitable remedies which may only be granted at the discretion of a court of competent authority, subject to applicable bankruptcy, to rights to indemnity and contribution under the Notes or the Indenture which may be limited by applicable law, to insolvency and other laws of general application affecting creditors' rights, to limitations under applicable limitations statutes, and to limitations as to the currency in which judgments in Canada may be rendered, as prescribed by the Currency Act (Canada). This opinion is given as of the date hereof and is limited to the laws of the Provinces of Ontario and Québec and the federal laws of Canada applicable thereto. In addition, this opinion is subject to customary assumptions about the Trustee's authorization, execution and delivery of the Indenture and the genuineness of signatures and certain factual matters, all as stated in the letter of such counsel dated September 14, 2021, which has been filed as Exhibit 5.3 to the Bank's Form 6-K filed with the SEC dated September 14, 2021.

In the opinion of Ashurst LLP, when the Notes have been duly completed in accordance with the Indenture and issued and sold as contemplated by the prospectus supplement and the prospectus, the Notes will be valid, binding and enforceable obligations of the Bank, entitled to the benefits of the Indenture, subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability relating to or affecting creditors' rights and subject to general principles of equity, public policy considerations and the discretion of the court before which any suit or proceeding may be brought. This opinion is given as of the date hereof and is limited to the laws of the State of New York. This opinion is subject to customary assumptions about the Trustee's authorization, execution and delivery of the Indenture and the genuineness of signatures and to such counsel's reliance on the Bank and other sources as to certain factual matters, all as stated in the legal opinion dated September 14, 2021, which has been filed as Exhibit 5.4 to the Bank's Form 6-K dated September 14, 2021.