

PROHIBITION OF SALES TO EEA RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area (“**EEA**”) without an up-to-date PRIIPS KID being in place with the prior written consent of RBC Europe Limited and provided in accordance with the PRIIPS Regulation. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, “**MiFID II**”); or (ii) a customer within the meaning of Directive (EU) 2016/97, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Regulation (EU) 2017/1129. If the aforementioned consent of RBC Europe Limited has not been received then no key information document required by Regulation (EU) No 1286/2014 (as amended, the “**PRIIPS Regulation**”) for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPS Regulation.

PROHIBITION OF SALES TO UK RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom (“**UK**”) without an up-to-date UK PRIIPS KID being in place with the prior written consent of RBC Europe Limited and provided in accordance with the PRIIPS Regulation. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA; or (ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of the UK Prospectus Regulation. If the aforementioned consent of RBC Europe Limited has not been received then no key information document required by Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the “**UK PRIIPS Regulation**”) for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPS Regulation.

THE NOTES ARE 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 ROYAL BANK OF CANADA OR ANY OF ITS AFFILIATES UNDER SUBSECTION 39.2(2.3) OF THE CANADA DEPOSIT INSURANCE CORPORATION ACT (CANADA) (“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.

Pricing Supplement dated 02 August 2023



ROYAL BANK OF CANADA
(a Canadian chartered bank)

Legal entity identifier (LEI): ES7IP3U3RHIGC71XBU11

Issue of EUR 2,880,000 Zero Coupon Callable Senior Notes due August 2033
under the Programme for the Issuance of Securities

PART A – CONTRACTUAL TERMS

Any person making or intending to make an offer of the Notes may only do so in circumstances in which no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to either of Article 3 of the Prospectus Regulation or section 85 of the FSMA or to supplement a prospectus pursuant to either of Article 23 of the Prospectus Regulation or Article 23 of the UK Prospectus Regulation, in each case, in relation to such offer.

This document constitutes the Pricing Supplement for the Notes described herein. This document must be read in conjunction with the Structured Securities Base Prospectus dated July 14, 2023 (the “Base Prospectus”). Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of this Pricing Supplement and the Base Prospectus. Copies of the Base Prospectus may be obtained from the offices of the Issuer, Royal Bank Plaza, 200 Bay Street, 8th Floor, South Tower, Toronto, Ontario, Canada and the offices of the Issuing and Paying Agent, 160 Queen Victoria Street, London EC4V 4LA, England and in electronic form on the Luxembourg Stock Exchange's website (www.bourse.lu).

For the purposes hereof:

“**UK Prospectus Regulation**” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA;

“**EUWA**” means the European Union (Withdrawal) Act 2018; and

“**FSMA**” means the Financial Services and Markets Act 2000.

By investing in the Notes, each investor represents that:

(a) **Non-Reliance.** It is acting for its own account, and it has made its own independent decisions to invest in the Notes and as to whether the investment in the Notes is appropriate or proper for it based upon its own judgement and upon advice from such advisers as it has deemed necessary. It is not relying on any communication (written or oral) of the Issuer or any Dealer as investment advice or as a recommendation to invest in the Notes, it being understood that information and explanations related to the terms and conditions of the Notes shall not be considered to be investment advice or a recommendation to invest in the Notes. No communication (written or oral) received from the Issuer or any Dealer shall be deemed to be an assurance or guarantee as to the expected results of the investment in the Notes.

(b) **Assessment and Understanding.** It is capable of assessing the merits of and understanding (on its own behalf or through independent professional advice), and understands and accepts the terms and conditions and the risks of the investment in the Notes. It is also capable of assuming, and assumes, the risks of the investment in the Notes.

(c) **Status of Parties.** Neither the Issuer nor any Dealer is acting as fiduciary for or adviser to it in respect of the investment in the Notes.

1. Issuer: Royal Bank of Canada
Branch of Account / Branch: London Branch
2. i) Series Number:
ii) Tranche Number: 1
3. Specified Currency or Currencies: EUR
(Condition 1.12)
4. Aggregate Principal Amount: EUR 2,880,000
i) Series: EUR 2,880,000
ii) Tranche: EUR 2,880,000
5. Issue Price: 100% of the Aggregate Principal Amount
6. (a) Specified Denominations: EUR 1,000
(b) Calculation Amount: EUR 1,000
(c) Minimum Trading Size: EUR 1,000
7. (i) Issue Date: 02 August 2023
(ii) Interest Commencement Date: Issue Date
(iii) Trade Date: 12 July 2023
8. Maturity Date: 02 August 2033, subject to the details specified below under item 21
9. Interest Basis: Zero Coupon
10. (a) Redemption Basis: Subject to any purchase and cancellation or early redemption, the Notes will be redeemed on the Maturity Date at 154.900% of the Calculation Amount (further particulars specified below)
(b) Protection Amount: Not Applicable
11. Change of Interest Basis: Not Applicable
12. Put Option/ Call Option/ Trigger Early Redemption: Call Option
(Further particulars specified below)
13. Date Board approval for issuance of Notes obtained: Not Applicable
14. Bail-inable Securities: Yes
15. Method of distribution: Non-syndicated

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

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| 16. | Fixed Rate Note Provisions
(Condition 4.02/4.02a) | Not Applicable |
| 17. | Floating Rate Note Provisions
(Condition 4.03) | Not Applicable |
| 18. | Zero Coupon Note Provisions | Not Applicable |
| 19. | Reference Item Linked Interest Notes | Not Applicable |
| 20. | Dual Currency Note Provisions | Not Applicable |

PROVISIONS RELATING TO REDEMPTION

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| 21. | Call Option
(Condition 5.03) | Applicable |
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(i)	Optional Redemption Date(s):	See first column of the table in 21(ii) below
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(ii)	Optional Redemption Amount(s) of each Note:	In accordance with the table below
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Optional Redemption Date	Optional Redemption Amount(s)
02/08/2024	Calculation Amount x 105.49%
02/08/2025	Calculation Amount x 110.98%
02/08/2026	Calculation Amount x 116.47%
02/08/2027	Calculation Amount x 121.96%
02/08/2028	Calculation Amount x 127.45%
02/08/2029	Calculation Amount x 132.94%
02/08/2030	Calculation Amount x 138.43%
02/08/2031	Calculation Amount x 143.92%
02/08/2032	Calculation Amount x 149.41%

(iii)	Redeemable in part:	Not Applicable
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(iv)	Notice period	Minimum period: 5 (Five) TARGET Business Days
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Where:

“**TARGET Business Day**” means a day on which commercial banks and foreign exchange markets

		settle payments and are open for general business in TARGET
		Maximum period: Not Applicable
22.	Put Option (Condition 5.06)	Not Applicable
23.	Notice periods for Early Redemption for Taxation Reasons:	
	(i) Minimum period:	30 days
	(ii) Maximum period:	60 days
24.	TLAC Disqualification Events:	Not Applicable
25.	Notice periods for Redemption for Illegality:	
	(i) Minimum period:	10 days
	(ii) Maximum period:	30 days
26.	Trigger Early Redemption (Condition 5.08 and Condition 30.02)	Not Applicable
27.	Final Redemption Amount	Calculation Amount × 154.900%
28.	Early Redemption Amount	
	(i) Early Redemption Amount(s) payable on redemption for taxation reasons, illegality or on event of default or other early redemption (including, in the case of Index Linked Notes, following an Index Adjustment Event in accordance with Condition 7, or in the case of Equity Linked Notes, following a Potential Adjustment Event and/or De-listing and/or Merger Event and/or Nationalisation and/or Insolvency and/or Tender Offer in accordance with Condition 8, or in the case of Equity Linked Notes, Index Linked Notes or Fund Linked Notes (involving ETFs), following an Additional Disruption Event (if applicable) (if required):	As per Condition 5.10

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| (ii) | Early Redemption Amount includes amount in respect of accrued interest: | Yes: no additional amount in respect of interest to be paid |
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PROVISIONS RELATING TO REFERENCE ITEM LINKED NOTES

29. Settlement Method

Whether redemption of the Notes will be by (a) Cash Settlement or (b) Physical Delivery or (c) Cash Settlement and/or Physical Delivery and whether option to vary settlement:	Cash Settlement
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| 30. | Final Redemption Amount for Reference Item Linked Notes | Not Applicable |
| 31. | Multi-Reference Item Linked Notes | Not Applicable |
| 32. | Currency Linked Note Provisions | Not Applicable |
| 33. | Commodity Linked Note Provisions | Not Applicable |
| 34. | Index Linked Note Provisions (Equity Indices only) | Not Applicable |
| 35. | Equity Linked Note Provisions | Not Applicable |
| 36. | Fund Linked Note Provisions | Not Applicable |
| 37. | Credit Linked Note Provisions | Not Applicable |
| 38. | Dual Currency Note Provisions | Not Applicable |
| 39. | Preference Share Linked Notes | Not Applicable |
| 40. | Bond Linked Redemption Note Provisions | Not Applicable |
| 41. | Actively Managed Basket Linked Note Provisions | Not Applicable |
| 42. | Physical Delivery | Not Applicable |

GENERAL PROVISIONS APPLICABLE TO THE NOTES

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| 43. | (i) New Global Note: | No |
| | (ii) Form of Notes: | Registered Notes |
| 44. | Financial Centre(s), TARGET or other special provisions relating to payment dates: | TARGET and London |
| 45. | Relevant Renminbi Settlement Centre | Not Applicable |

46.	Talons for future Coupons to be attached to Definitive Notes (and dates on which such Talons mature): (Condition 1.06)	No
47.	Details relating to Partly Paid Notes: amount of each payment comprising the Issue Price and date on which each payment is to be made and consequences (if any) of failure to pay, including any right of the Issuer to forfeit the Notes and interest due on late payment:	Not Applicable
48.	Details relating to Instalment Notes: amount of each instalment (" Instalment Amounts "), date on which each payment is to be made (" Instalment Dates "):	Not Applicable
49.	Redenomination provisions:	Not Applicable
50.	Consolidation provisions:	Not Applicable
51.	Name and address of Calculation Agent:	Royal Bank of Canada, London Branch
52.	Name and address of RMB Rate Calculation Agent:	Not Applicable
53.	Issuer access to the register of creditors (Sw. <i>skuldboken</i>) in respect of Swedish Notes:	No
54.	Exchange Date:	Not Applicable
55.	The Aggregate Principal Amount of the Notes issued has been translated into U.S. dollars at the rate of U.S.\$1.00 = [], producing a sum of:	Not Applicable
56.	Governing law of Notes (if other than the laws of the Province of Ontario and the federal laws of Canada applicable therein):	English Law
57.	Alternative Payment Currency:	Not Applicable
58.	Masse:	Not Applicable

RESPONSIBILITY

The Issuer accepts responsibility for the information contained in this Pricing Supplement.

Signed on behalf of the Issuer:



By: Nicole Blackwood
Vice President, Transaction Management Group

Duly authorised



By: Guillaume Horent
Global Head of Structured Rates Trading

Duly authorised

PART B – OTHER INFORMATION

1. LISTING AND ADMISSION TO TRADING

Listing/Admission to trading: Not Applicable

2. RATINGS

Ratings: Not Applicable

3. INTERESTS OF NATURAL AND LEGAL PERSONS INVOLVED IN THE ISSUE

Save as discussed in “Subscription and Sale”, so far as the Issuer is aware, no person involved in the offer of the Notes has an interest material to the offer.

4. OPERATIONAL INFORMATION

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| (i) ISIN: | XS2632532136 |
| (ii) Common Code: | 263253213 |
| (iii) CFI: | See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN |
| (iv) FISN: | See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN |
| (v) Any clearing system(s) other than Euroclear and Clearstream, Luxembourg, their addresses and the relevant identification number(s): | Not Applicable |
| (vi) Any clearing system(s) other than Euroclear and Clearstream, Luxembourg, their addresses and the relevant identification number(s): | Not Applicable |
| (vii) Delivery: | Delivery against payment |
| (viii) Name(s) and address(es) of Initial Paying Agents, French Paying Agent, Registrar and Transfer Agents: | The Bank of New York Mellon, London Branch
160 Queen Victoria Street
London EC4V 4LA |
| (ix) Names and addresses of additional Paying Agent(s), Registrar and Transfer Agents (if any): | Not Applicable |

(x) Intended to be held in a manner which would allow Eurosystem eligibility:	No
	Whilst the designation is specified as "no" at the date of these Final Terms, should the Eurosystem eligibility criteria be amended in the future such that the Notes are capable of meeting them the Notes may then be deposited with one of the ICSDs as common safe-keeper. Note that this does not necessarily mean that the Notes will then be recognised as eligible collateral for Eurosystem monetary policy and intra day credit operations by the Eurosystem at any time during their life. Such recognition will depend upon the ECB being satisfied that Eurosystem eligibility criteria have been met.

5. DISTRIBUTION

(i) Method of distribution:	Non-syndicated
(ii) If syndicated, names of Managers:	Not Applicable
(iii) Stabilising Manager(s) (if any):	Not Applicable
(iv) If non-syndicated, name of Dealer:	RBC Europe Limited 100 Bishopsgate London EC2N 4AA
(v) U.S. Selling Restrictions:	Super Reg S; TEFRA rules not applicable
(vi) Canadian Sales:	Canadian Sales Not Permitted
(vii) Additional selling restrictions:	Not Applicable
(viii) Prohibition of Sales to EEA Retail Investors:	Applicable, other than with respect to offers of the Notes for which a PRIIPs KID is being prepared.
(ix) Prohibition of Sales to UK Retail Investors:	Applicable, other than with respect to offers of the Notes for which a UK PRIIPs KID is being prepared.
(x) Prohibition of Offer to Private Clients in Switzerland:	Applicable

6. HIRE ACT WITHHOLDING

The notes are not specified securities for purposes of section 871(m) of the U.S. internal revenue code of 1986.