UK MIFIR PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET

Solely for the purposes of the manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is only eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook ("COBS"), and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law of the UK by virtue of the European Union (Withdrawal) Act 2018 ("UK MiFIR"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "distributor") should take into consideration the manufacturer's target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "UK MiFIR Product Governance Rules") is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer's target market assessment) and determining appropriate distribution channels.

PRIIPS REGULATION 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"). 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”); (ii) a customer within the meaning of Directive 2016/97/EU (as amended), 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 (as amended). Consequently, 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 UK. 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 of the UK by virtue of the European Union (Withdrawal) Act 2018 ("EUWA"); (ii) a customer within the meaning of the provisions of the UK Financial Services and Markets Act (as amended, 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 of the UK by virtue of the EUWA (the “UK Prospectus Regulation”). Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended) as it forms part of domestic law of the UK 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.
THESE 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.

Final Terms dated August 4, 2023

ROYAL BANK OF CANADA
(a Canadian chartered bank)
(the “Issuer”)

Legal Entity Identifier (LEI): ES7IP3U3RHIGC71XBU11

Issue of EUR20,000,000 1.034 per cent. Senior Notes due January 25, 2034 (the “Notes”) (on the Exchange Date, to be consolidated and form a single series with EUR450,000,000 1.034 per cent. Senior Notes due January 25, 2034 issued on January 25, 2022 (Tranche 1), EUR40,000,000 1.034 per cent. Senior Notes due January 25, 2034 issued on October 20, 2022 (Tranche 2), EUR28,000,000 1.034 per cent. Senior Notes due January 25, 2034 issued on February 13, 2023 (Tranche 3) and EUR82,000,000 1.034 per cent. Senior Notes due January 25, 2034 (Tranche 4) (the “Existing Notes”)) issued pursuant to the Base Prospectus as part of the Programme for the Issue of Securities

PART A - CONTRACTUAL TERMS

Terms used herein shall be deemed to be defined as such for the purposes of the Conditions (the “Conditions”) set forth in the Base Prospectus dated July 23, 2021 which is incorporated by reference in the Base Prospectus dated July 14, 2023. This document constitutes the Final Terms of the Notes described herein for the purposes of Article 8 of the UK Prospectus Regulation and must be read in conjunction with the Base Prospectus dated July 14, 2023, which constitutes a base prospectus for the purposes of the UK Prospectus Regulation (the “Base Prospectus”), including the Conditions incorporated by reference in the Prospectus. The Base Prospectus, including all documents incorporated by reference therein, are available for viewing on the Issuer’s website at https://www.rbc.com/investor-relations/european-senior-notes-program.html and copies may be obtained from the offices of the Issuer at Investor Relations, Royal Bank of Canada, 200 Bay Street, South Tower, Toronto, Ontario, Canada M5J 2J5 and the offices of the Issuing and Paying Agent, 160 Queen Victoria Street, London EC4V 4LA, England.
1. (i) Series Number: 64148  
(ii) Tranche Number: 5  
(iii) Date on which the Notes become fungible: The Notes shall be consolidated and form a single Series and be interchangeable for trading purposes with the Existing Notes on exchange of the Temporary Global Note for interests in the Permanent Global Note, as referred to in paragraph 23 below which is expected to occur on the Exchange Date specified in paragraph 23 below.

2. Specified Currency or Currencies: Euro ("EUR")  
   (Condition 1.11)

3. Aggregate Principal Amount:  
   (i) Series: EUR620,000,000  
   (ii) Tranche: EUR20,000,000

4. Issue Price: 73.610 per cent. of the Aggregate Principal Amount plus accrued interest from (and including) the Interest Commencement Date to (but excluding) the Issue Date.

5. (i) Specified Denominations: EUR100,000 and integral multiples of EUR1,000 in excess thereof up to and including EUR199,000. No Notes in definitive form will be issued with a denomination above EUR199,000  
   (Condition 1.08 or 1.09)  
   (ii) Calculation Amount: EUR1,000

6. (i) Issue Date: August 8, 2023  
   (ii) Interest Commencement Date January 25, 2023  
   (iii) Trade Date July 27, 2023

7. Maturity Date: January 25, 2034

8. Interest Basis: 1.034 per cent. Fixed Rate (further particulars specified below)

9. Redemption/Payment Basis: Subject to any purchase and cancellation or early redemption, the Notes shall be redeemed on the Maturity Date at par

10. Change of Interest Basis: Not Applicable

11. Put Option/ Call Option: Not Applicable
12. (i) Date of Board approval for issuance of Notes obtained: Not Applicable

(ii) Status of the Notes: Senior Notes

12A. Condition 4 - Negative Covenant (Subordinated Notes): Not Applicable

13. Bail-inable Notes: Yes

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

14. Fixed Rate Note Provisions (Condition 5.02 and 5.02a) Applicable

(i) Rate of Interest: 1.034 per cent. per annum payable annually in arrear on each Interest Payment Date

(ii) Interest Payment Date(s): 25 January in each year, commencing January 25, 2024, up to and including the Maturity Date, adjusted for payment day purposes only in accordance with the Business Day Convention specified in paragraph 14(iv) below

(iii) Adjusted Interest Periods: Not Applicable

(iv) Business Day Convention: Following Business Day Convention

(v) Business Centre(s): TARGET2, Toronto, London and New York

(vi) Fixed Coupon Amount EUR10.34 per Calculation Amount, payable on each Interest Payment Date

(vii) Broken Amount(s): Not Applicable

(viii) Day Count Fraction: Actual/Actual (ICMA)

(ix) Determination Dates: 25 January in each year

(x) Default Rate: As set out in Condition 5.04

(xi) Calculation Agent: Not Applicable

(xii) Fixed Rate Resettable Note Provisions (Condition 5.02b) Not Applicable

15. Floating Rate Note Provisions (Condition 5.03) Not Applicable


PROVISIONS RELATING TO REDEMPTION

17. Call Option (Condition 6.03) Not Applicable

18. Put Option (Condition 6.06) Not Applicable
19. **Final Redemption Amount of each Note**
   EUR1,000 per Calculation Amount

20. **Bail-inable Notes - TLAC Disqualification Event Call**
   Not Applicable

21. **Early Redemption Amount**
   (i) Early Redemption Amount(s) payable on redemption for taxation reasons or on event of default:
   EUR1,000 per Calculation Amount

   (ii) Early Redemption Amount includes amount in respect of accrued interest:
   No: together with the Early Redemption Amount, accrued interest shall also be paid

22. **Provisions relating to the NVCC Automatic Conversion**
   (Condition 8)
   Not Applicable: the Notes are not Subordinated Notes

**GENERAL PROVISIONS APPLICABLE TO THE NOTES**

23. (i) **Form of Notes**: Bearer Notes
   Temporary Global Note exchangeable for a Permanent Global Note which is exchangeable for Definitive Notes in the limited circumstances specified in the Permanent Global Note
   Exchange Date: Not earlier than August 17, 2023

   (ii) **New Global Note (in respect of Bearer Notes) or New Safekeeping Structure (in respect of Registered Notes)**: Yes

24. **Financial Centre(s) or other special provisions relating to payment dates**: TARGET2, Toronto, London and New York

25. **Relevant Renminbi Settlement Centre**: Not Applicable

26. **Calculation Agent for purposes of Condition 10.16 (if other than Issuing and Paying Agent)**: Not Applicable

27. **Name and address of RMB Rate Calculation Agent (for purposes of Condition 10.17)**: Not Applicable

28. **Branch of Account**: Main branch in Toronto

29. **Unmatured Coupons missing upon Early Redemption**: Condition 10.06(i) applies

30. **Talons for future Coupons to be attached to Definitive Notes (Condition 1.06)**: No
THIRD PARTY INFORMATION

The ratings explanations set out in Item 2. “Ratings” of Part B have been extracted from the websites of Moody’s Canada and S&P Canada (as applicable), as indicated. The Issuer confirms that such information has been accurately reproduced and that, so far as it is aware, and is able to ascertain from information published by Moody’s Canada or S&P Canada, no facts have been omitted which would render the reproduced information inaccurate or misleading.

Signed on behalf of the Issuer:

By:  /s/ Ken Mason
      Duly authorised

By:  /s/ Rajneesh Sharma
      Duly authorised
PART B - OTHER INFORMATION

1. LISTING AND ADMISSION TO TRADING
   (i) Listing/Admission to Trading: Application has been made by the Issuer (or on its behalf) for the Notes to be admitted to the Official List of the FCA and to trading on the London Stock Exchange’s Main Market with effect from August 8, 2023.
   The Existing Notes are already admitted to the Official List of the FCA and to trading on the London Stock Exchange’s Main Market.
   
   (ii) Estimate of total expenses related to admission: GBP550

2. RATINGS
   Ratings: The Notes to be issued are expected to be specifically rated:
   
   Moody’s Canada: A1
   
   Obligations rated “A” are considered upper medium-grade and are subject to low credit risk. The modifier “1” indicates the highest ranking within this category. (Source: https://ratings.moodys.io/ratings)
   
   S&P Canada: A
   
   A long term obligation rated “A” is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the Issuer's capacity to meet its financial commitments on the obligation is still strong. (Source: S&P, https://www.standardandpoors.com/en_US/web/guest/article/-/view/sourceld/504352)

3. INTERESTS OF NATURAL AND LEGAL PERSONS INVOLVED IN THE ISSUE
   Save for any fees payable to RBC Europe Limited 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. Fixed Rate Notes only - YIELD
   Indication of yield: 4.202 per cent. per annum
   The yield is calculated at the Issue Date on the basis of the Issue Price. It is not an indication of future yield.
5. OPERATIONAL INFORMATION

(i) ISIN: XS2661966288 (to be consolidated and form a single Series with the Existing Notes under ISIN XS2435102103 on the Exchange Date)

(ii) Common Code: 266196628 (to be consolidated and form a single Series with the Existing Notes under Common Code 243510210 on the Exchange Date)

(iii) CFI: DTFUFBB, as updated and as set out on 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: ROYAL BANK OF C/1.034EMTN 20340125, as updated and as set out on the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN

(v) WKN or any other relevant codes: Not Applicable

(vi) Any clearing system(s) other than Euroclear Bank SA/NV and Clearstream Banking S.A., their addresses and the relevant identification number(s): Not Applicable

(vii) Names and addresses of additional Paying Agent(s), Registrar and Transfer Agents (if any): Not Applicable

(viii) 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 safekeeper. 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.
6. DISTRIBUTION

(i) Canadian Selling Restrictions: Canadian Sales Not Permitted

(ii) Prohibition of Sales to EEA Retail Investors: Applicable

(iii) Prohibition of Sales to UK Retail Investors: Applicable

(iv) Whether TEFRA D or TEFRA C applicable or TEFRA Rules not applicable: TEFRA D Rules applicable

(v) Prohibition of Sales to Belgian Consumers: Applicable

7. REASONS FOR THE OFFER AND ESTIMATED NET PROCEEDS

(i) Use of proceeds: As specified in the Base Prospectus

(ii) Estimated Net proceeds: EUR14,832,482.19

8. UK BENCHMARKS REGULATION

UK Benchmarks Regulation: Article 29(2) statement on benchmarks: Not Applicable