

INTRODUCTION

This summary should be read as an introduction to the Base Prospectus and the Final Terms to which this is annexed. Any decision to invest in any Notes should be based on a consideration of the Base Prospectus as a whole, including any documents incorporated by reference and the Final Terms. An investor in the Notes could lose all or part of the invested capital. Where a claim relating to information contained in the Base Prospectus and the Final Terms is brought before a court, the plaintiff may, under national law where the claim is brought, be required to bear the costs of translating the Base Prospectus and the Final Terms before the legal proceedings are initiated. Civil liability attaches only to the Issuer solely on the basis of this summary, including any translation of it, but only where the summary is misleading, inaccurate or inconsistent when read together with the other parts of the Base Prospectus and the Final Terms or where it does not provide, when read together with the other parts of the Base Prospectus and the Final Terms, key information in order to aid investors when considering whether to invest in the Notes.

You are considering the purchase of a product that is not simple and may be difficult to understand.

The Notes described in this Summary are EUR 30,000,000 “Barrier Phoenix” Index Linked Interest and Index Linked Redemption Notes Linked to EURO STOXX 50 Price EUR Index due July 2025 (the "Notes"), with International Securities Identification Number (ISIN) XS2564031370, issued by Royal Bank of Canada (the "Issuer"), Royal Bank Plaza, 200 Bay Street, 8th Floor, South Tower, Toronto, Ontario, Canada M5J 2J5. The Issuer's Legal Entity Identifier (LEI) is ES7IP3U3RHIGC71XBU11.

The Base Prospectus has been approved as a base prospectus by the Central Bank of Ireland, New Wapping Street, North Wall Quay, Dublin 1, DO1 F7X3 on July 29, 2022 as supplemented by the supplements dated August 31, 2022, December 06, 2022, and December 20, 2022.

KEY INFORMATION ON THE ISSUER

Who is the Issuer of the securities?

The Issuer is incorporated and domiciled in Canada and is a Schedule 1 bank under the *Bank Act* (Canada) which constitutes its charter. The Issuer's Legal Entity Identifier (LEI) is ES7IP3U3RHIGC71XBU11.

Description of the Issuer: Royal Bank of Canada and its subsidiaries are referred to as the “RBC Group”. Royal Bank of Canada is a global financial institution with a purpose-driven, principles-led approach to delivering leading performance. RBC Group's success comes from the 86,000+ employees who leverage their imaginations and insights to bring RBC Group's vision, values and strategy to life so it can help its clients thrive and communities prosper. As Canada's biggest bank, and one of the largest banks in the world based on market capitalization, RBC Group has a diversified business model with a focus on innovation and providing exceptional experiences to the Issuer's 17 million clients in Canada, the U.S. and 27 other countries. Royal Bank of Canada is the ultimate parent company and main operating company of the RBC Group.

Principal Activities of the Issuer: The Issuer's business segments are Personal & Commercial Banking, Wealth Management, Insurance, Investor & Treasury Services and Capital Markets. Personal & Commercial Banking provides a broad suite of financial products and services in Canada, the Caribbean and the U.S. Wealth Management serves high net worth and ultra-high net worth clients from the Issuer's offices in key financial centres mainly in Canada, the U.S., the U.K., Europe and Asia. Wealth Management offers a comprehensive suite of investment, trust, banking, credit and other wealth management solutions. It also provides asset management products to institutional and individual clients through its distribution channels and third-party distributors. Insurance offers a wide range of life, health, home, auto, travel, wealth, annuities and reinsurance advice and solutions, as well as creditor and business insurance services to individual, business and group clients. Investor & Treasury Services acts as a specialist provider of asset services, and a provider of cash management, transaction banking, and treasury services to institutional clients worldwide. It also provides Canadian dollar cash management, correspondent banking and trade finance to financial institutions globally and short-term funding and liquidity management for the Issuer. Capital Markets provides expertise in banking, finance and capital markets to corporations, institutional investors, asset managers, governments and central banks around the world. It serves clients from 58 offices in 14 countries across North America, the U.K. and Europe, and Australia, Asia and other regions.

Controlling Shareholders: To the extent known to the Issuer, the Issuer is not directly or indirectly controlled by any person.

Key managing directors: Andrew A. Chisholm (Toronto, Ontario), Jacynthe Côté (Montreal, Québec), Toos N. Daruvala (New York, New York), David F. Denison (Toronto, Ontario), Cynthia Devine (Toronto, Ontario), David I. McKay (Toronto, Ontario), Kathleen Taylor (Toronto, Ontario), Maryann Turcke (Toronto, Ontario), Bridget A. van Kralingen (New York, New York), Thierry Vandal (Mamaroneck, New York), Frank Vettese (Toronto, Ontario), Jeffery W. Yabuki (Incline Village, Nevada).

Statutory Auditor: PricewaterhouseCoopers LLP, PwC Tower, 18 York Street, Suite 2600, Toronto, Ontario, Canada M5J 0B2.

What is the key financial information regarding the Issuer?

Selected Consolidated Balance Sheet Information

	As at April 30, 2022	As at October 31, 2021	As at October 31, 2020
	<i>(in millions of Canadian dollars)</i>		
Loans, net of allowance for loan losses	774,464	717,575	660,992
Total assets	1,848,572	1,706,323	1,624,548
Deposits	1,151,597	1,100,831	1,011,885
Other liabilities	579,635	494,471	514,107
Subordinated debentures	10,276	9,593	9,867
Non-Controlling interests	101	95	103
Equity attributable to shareholders	104,304	98,667	86,664

Consolidated and Condensed Consolidated Statement of Income Information²

	Six-months ended April 30, 2022	Six-months ended April 30, 2021	Year ended October 31, 2021	Year ended October 31, 2020
	<i>(in millions of Canadian dollars, except per share amounts and percentage amounts)</i>			
Net interest income	10,545	9,889	20,002	20,835
Non-interest income	13,741	14,672	29,691	26,346
Total revenue	24,286	24,561	49,693	47,181
Provision for credit losses (PCL)	(237)	14	(753)	4,351
Insurance policyholder benefits, claims and acquisition expense	817	1,555	3,891	3,683
Non-interest expense	13,014	12,921	25,924	24,758
Net Income	8,348	7,862	16,050	11,437
Earnings per share				
– basic	\$5.81	\$5.42	\$11.08	\$7.84
– diluted	\$5.80	\$5.42	\$11.06	\$7.82
Return on common equity (ROE) ^{1,2}	17.9%	19.0%	18.6%	14.2%

1. This measure does not have a standardized meaning under generally accepted accounting principles (GAAP) and may not be comparable to similar measures disclosed by other financial institutions. For further details, refer to the Key performance and non-GAAP measures section of the 2021 MD&A in the 2021 Annual Report and the Key performance and non-GAAP measures section of the Second Quarter 2022 MD&A in the Second Quarter 2022 Report to Shareholders.

2. Average amounts are calculated using methods intended to approximate the average of the daily balances for the period. This includes average common equity used in the calculation of ROE. For further details, refer to the Key performance and non-GAAP measures section of the 2021 MD&A in the 2021 Annual Report and the Key performance and non-GAAP measures section of the Second Quarter 2022 MD&A in the Second Quarter 2022 Report to Shareholders.

The audit reports on historical financial information are not qualified.

What are the key risks that are specific to the Issuer?

Business and Economic Conditions: The Issuer's financial results may be affected to varying degrees by the general business and economic conditions in the geographic regions in which the Issuer operates. These conditions may include factors such as consumer saving and spending habits as well as consumer borrowing and repayment patterns, unemployment rates, the impact of containment measures associated with the COVID-19 pandemic or other health crises on businesses' operations, the level of business investment and overall business sentiment, the level of activity and volatility of the financial markets, inflation, the level of government spending, monetary policies that are adopted by the BoC, the Federal Reserve in the U.S., the European Central Bank in the European Union and monetary authorities in other jurisdictions in which the Issuer operates, and the fiscal policies of the governments of Canada, the U.S., Europe and such other jurisdictions. Such policies can also adversely affect the Issuer's clients and counterparties in Canada, the U.S. and internationally, which may increase the risk of default by such clients and counterparties. For example, economic downturns may result in higher unemployment rates and lower household incomes, lower corporate earnings, changes in business investment and consumer spending, and could adversely affect the Issuer's business, including but not limited to the demand for its loan and other products and result in lower earnings, including higher credit losses. The Issuer's financial results are also sensitive to changes in interest rates and to weaker investor confidence and market conditions, which may lead to lower client activity and unfavourable changes in earnings. Additional risks are emerging around how countries will seek to recoup the unprecedented levels of stimulus measures introduced in response to the COVID-19 pandemic and balance budgets in the future, and around the potential implications that a prolonged low interest rate environment will have, for example, on increasing wealth inequality and extended retirement ages, among others.

Information Technology and Cyber Risks: Information technology (IT) and cyber risks remain top risks, not only for the financial services sector, but for other industries worldwide. Cybersecurity is the risk to the business associated with cyber-attacks initiated to disrupt or disable the Issuer's operations or to expose or damage data. The Issuer continues to be subject to heightened risks in the form of cyberattacks, data breaches, cyber extortion and similar compromises, due to: (i) the size, scale, and global nature of the Issuer's operations; (ii) the Issuer's heavy reliance on the internet to conduct day-to-day business activities; (iii) the Issuer's intricate technological infrastructure; and (iv) the Issuer's use of third-party service providers. Additionally, clients' use of personal devices can create further avenues for potential cyber-related incidents, as the Issuer has little or no control over the safety of these devices. IT and cyber risks have increased during the COVID-19 pandemic, as increased malicious activities are creating more threats for cyberattacks including COVID-19 phishing emails, malware-embedded mobile apps that purport to track infection rates, and targeting of vulnerabilities in remote access platforms as many companies continue to operate with work from home arrangements. Resulting implications could include business interruptions, service disruptions, financial loss, theft of intellectual property and confidential information, litigation, enhanced regulatory attention and penalties, as well as reputational damage. Furthermore, the adoption of emerging technologies, such as cloud computing, AI and robotics, call for continued focus and investment to manage risks effectively. Not managing this risk effectively may have an adverse effect on the Issuer's financial performance and condition.

Privacy, Data and Third Party Related Risks: The collection, use and sharing of data, as well as the management and governance of data, are increasingly important as the Issuer continues to invest in digital solutions and innovation, as well as, expanding its business activities. Data management is the risk of failing to manage information appropriately throughout its lifecycle due to inadequate processes and controls, resulting in legal or regulatory consequences, reputational damage or financial loss. In addition to the management and governance of data, its collection, use, and sharing also remain a top risk given the high value attributed to the Issuer's data. Resulting implications from failing to manage this risk could include financial loss, theft of intellectual property and confidential information, litigation, enhanced regulatory attention and penalties, as well as reputational damage. Privacy risk is the risk of improper creation or collection, use, disclosure, retention or destruction of information. Effective privacy and information

management practices continue to grow in importance, as demonstrated by the continued development of complex regulations in the jurisdictions in which the Issuer operates and recent regulatory developments relating to data privacy. The Chief Privacy Office and the Chief Data Office partner with cross-functional teams to develop and implement enterprise-wide standards and practices that describe how data is used, protected, managed and governed. The Issuer's potential exposure to these risks also increases as the Issuer continues to partner with third-party service providers and adopt new technologies (e.g., cloud computing, AI and machine learning, etc.) and business models. Third-party risk is the risk of failure to effectively manage third parties which may expose the Issuer to service disruptions, regulatory action, financial loss, litigation or reputational damage. Privacy, data and third-party related risks have been heightened as the use of work from home arrangements have become common practice. As the majority of the Issuer's employees continue to work from home, it is continuously monitoring and enforcing best practices as it seeks to maintain the privacy and confidentiality of all sensitive information. The Issuer's security awareness program is required to be completed by each employee annually and includes cyber awareness training on managing risks while working remotely. Third-party providers critical to its operations are being monitored for any impact on their ability to deliver services, including vendors of its third-party providers. Failure to properly onboard and manage service providers may expose the Issuer to service disruption, financial loss and other risks that may negatively impact its financial performance and condition.

Regulatory Changes: The ongoing introduction of new or revised regulations will continue to lead to increasing focus across the organization on meeting additional regulatory requirements across the multiple jurisdictions in which the Issuer operates. See "Business segment results" on pages 26 to 48 of the 2020 MD&A incorporated by reference in the Base Prospectus for information on the Issuer's business segments and the jurisdictions in which they operate. Financial and other reforms that have come into effect or are coming into effect, across multiple jurisdictions, such as Canadian anti-money laundering regulations, the interest rate benchmark reform, as well as data, privacy, consumer protection regulations, Canadian benchmark rate for qualifying insured mortgages and client focused reforms, continue to provide challenges and impact the Issuer's operations and strategies and may negatively impact its financial performance, condition and prospects.

Digital Disruption and Innovation: The COVID-19 pandemic has changed the way consumers interact with financial services providers. Demand for digital banking services has increased, and while this represents an opportunity for the Issuer to leverage its technological advantage, the need to meet the rapidly evolving needs of clients and compete with non-traditional competitors has increased the Issuer's strategic and reputational risks. Additional risks also continue to emerge as demographic trends, evolving client expectations, the increased power to analyze data and the emergence of disruptors are creating competitive pressures across a number of sectors. Moreover, established technology companies, newer competitors, and regulatory changes continue to foster new business models that could challenge traditional banks and financial products. Finally, while the adoption of new technologies, such as AI and machine learning, presents opportunities for the Issuer, it could result in new and complex strategic, reputational, operational, regulatory and compliance risks that would need to be managed effectively and, if not, may adversely impact its financial performance and condition.

KEY INFORMATION ON THE SECURITIES

What are the main features of the securities?

The Notes are Index Linked Redemption and Index Linked Interest Notes due 21 July 2025, with International Securities Identification Number (ISIN) XS2564031370. The currency of this Series of Notes is Euro ("EUR"). The Notes have a minimum Specified Denomination of EUR 1,000, with a minimum trading size of EUR 1,000.

Transferability of the Notes: There are no restrictions on the free transferability of the Notes.

Status (Ranking): The Notes constitute direct, unconditional, unsubordinated and unsecured obligations of the Issuer and rank *pari passu* without any preference among themselves and at least *pari passu* with all other present and future unsubordinated and unsecured obligations of the Issuer (including deposit liabilities), except as otherwise prescribed by law and subject to the exercise of bank resolution powers.

Taxation: All payments in respect of the Notes will be made free and clear of and without withholding or deduction for or on account of taxes, duties, assessments or governmental charges imposed by Canada, any province or territory or political subdivision thereof

or any authority or agency therein or thereof having power to tax and the United Kingdom or any political subdivision thereof or any authority or agency therein or thereof having power to tax. In the event that any such withholding or deduction is made, the Issuer will, save in certain limited circumstances, be required to pay additional amounts to cover the amounts so withheld or deducted and the Issuer may redeem the Notes early in such circumstances.

Negative pledge: The terms of the Notes will not contain a negative pledge provision.

Events of default: The terms of the Notes provide for events of default which are limited to (a) non-payment of interest or principal, in each case for more than 30 business days from the relevant due date; and (b) certain bankruptcy or insolvency events occurring in respect of the Issuer.

Meetings: The terms of the Notes will contain provisions for calling meetings of holders of such Notes and passing written resolutions and obtaining electronic consents, in each case in relation to matters affecting their interests generally. These provisions permit defined majorities to bind all holders, including holders who did not attend and vote at the relevant meeting or by way of written resolution or electronically and holders who voted in a manner contrary to the majority.

Governing law: English law.

Representative of holders: Not applicable, no representative of the Holders of the Notes has been appointed by the Issuer.

Interest: Each Note pays the Interest Amount (if any) on each Interest Payment Date. The Interest Amount is:

- (a) If an Interest Barrier Event occurs in respect of the relevant Interest Period, an amount (which may never be less than zero) calculated by the Calculation Agent equal to: (EUR 1,000 x 1.85 per cent.) ; or
- (b) otherwise, zero.

“Interest Barrier Event” means, in respect of an Interest Period, the Relevant Reference Performance on the relevant Observation Date is equal to or greater than the Interest Barrier Level.

“Relevant Reference Performance” means the Reference Level on the relevant Observation Date / Initial Level

“Reference Level” means The official closing level of the Reference Item quoted on the Relevant Exchange or, as the case may be, as calculated and published by the respective Index Sponsor, as determined by or on behalf of the Calculation Agent (or if, in the opinion of the Calculation Agent, no such official closing level can be determined at such time and the relevant day is not a Disrupted Day, the Calculation Agent's good faith estimate of the level of the Reference Item as of the actual closing time of the Exchange on the relevant date), or as otherwise determined by the Calculation Agent pursuant to the Conditions.

“Initial Level” means 3,959.48

“Final Level” means the Reference Level on the Valuation Date.

“Observation Dates” are as defined in the table below, subject to adjustment as provided herein.

“Interest Barrier Level” is as defined in the table below.

“Day Count Fraction” means 1

“Reference Item” means to EURO STOXX 50 Price EUR

Interest Barrier Level	Observation Dates	Interest Payment Dates
60.00%	12 April 2023	19 April 2023
60.00%	12 July 2023	19 July 2023
60.00%	12 October 2023	19 October 2023
60.00%	12 January 2024	19 January 2024

60.00%	12 April 2024	19 April 2024
60.00%	12 July 2024	19 July 2024
60.00%	14 October 2024	21 October 2024
60.00%	13 January 2025	20 January 2025
60.00%	14 April 2025	23 April 2025
60.00%	Valuation Date	21 July 2025

Maturity: Subject to any purchase and cancellation or early redemption, each Note will be redeemed on 21 July 2025 at the Final Redemption Amount set out below.

Final Redemption Amount: The Final Redemption Amount is:

- (a) if a Capital Barrier Event has occurred on the Valuation Date, an amount (which may never be less than zero) calculated by the Calculation Agent equal to: EUR 1,000 x (Final Level / Initial Level); or
- (b) otherwise, par.

“Capital Barrier Event” means the Relevant Reference Performance on the Valuation Date is less than the Capital Barrier Level.

“Capital Barrier Level” means 60%

“Valuation Date” means 14 July 2025, subject to adjustment as provided herein.

Early Redemption: The Notes may be redeemed early for taxation reasons, illegality, or event of default, or on the occurrence of certain events (“**Benchmark Events**”) relating to the Reference Item or the administrator or sponsor (including without limitation material change; cancellation; prohibition of use; non-representativeness; or rejection, suspension or withdrawal of authorisation or registration) at the fair value of the Notes as determined by the Calculation Agent.

Trigger Early Redemption Event: If on any Observation Date except the first Observation Date the Relevant Reference Performance is equal to or greater than 100%, the Notes will be redeemed on the relevant Interest Payment Date at par.

Adjustments: The terms of the Notes may be subject to adjustment as provided therein to take into account events in relation to the Reference Item or the Notes or the occurrence of a Benchmark Event.

Where will the securities be traded?

Application is expected to be made by the Issuer (or on its behalf) for the Notes to be admitted to trading on the regulated market of the Bourse de Luxembourg.

What are the key risks that are specific to the securities?

Risks associated with the Notes include the following:

Modification and waivers: holders of the Notes are exposed to the risk that their rights in respect of the Notes are varied against their will, which may result in an investment in any Notes becoming less advantageous to a particular holder depending on individual circumstances.

Secondary market: an active secondary market in respect of the Notes may never be established or may be illiquid and this would adversely affect the value at which an investor could sell its Notes.

Exchange rate risk: if an investor holds Notes which are not denominated in the investor’s home currency, the investor will be exposed to movements in exchange rate adversely affecting the value of the holding of Notes. Also the imposition of exchange controls or certain other specified events in relation to the Notes could result in an investor not receiving payment on the Notes.

Credit ratings: Credit ratings assigned to the Issuer or the Notes might not reflect all the risks associated with an investment in the Notes.

Risks relating to Reference Item Linked Notes: an investor's return (if any) will depend upon the performance of the Reference Item. An investment in the Notes entails significant risks that are not associated with similar investments in conventional debt or equity securities and in some circumstances the amount of interest payable on the Notes on an interest payment date may be zero and/or the value of the Notes and/or the amount paid at maturity may be less than the purchase price amount of the Notes and may be zero in which case an investor may lose some or all of the amount it invested in the Notes.

The Notes do not benefit from a protection amount: on the maturity date the amount payable in respect of the Notes may be less than the initial investment amount and purchasers of the Notes are exposed to full loss of their investment due to the lack of protection amount.

Cap on return: the maximum possible return on the Notes will be limited to principal amount of the Notes and the return will not increase even if the Reference Item outperforms the stated maximum return.

Market disruptions: the Calculation Agent may determine that a market disruption event or other adjustment event has occurred which may have an adverse effect on the value of or payment received with respect to the Notes and/or may delay applicable payments or settlement.

Risks relating to Index Linked Notes: the value of the Reference Item on any day will reflect the value of its constituents on such day. Changes in the composition of the Reference Item and factors which either affect or may affect the value of the constituents, will affect the value of the Reference Item and therefore may adversely affect the return on an investment in the Index Linked Notes.

Additional disruption events: if any of Change in Law, Hedging Disruption or Increased Cost of Hedging occur, the Notes will be subject to adjustment or may be redeemed early. The amount due on such redemption may be substantially less than an investor's investment and may in certain circumstances be zero.

KEY INFORMATION ON THE OFFER OF NOTES AND ADMISSION TO TRADING ON A REGULATED MARKET

Are the Notes being offered to the public as part of a Non-Exempt Offer?

The Notes are not being offered to the public as part of a Non-exempt Offer.

Under which conditions and timetable can I invest in this security?

Not applicable – the Notes are not being offered to the public as part of a Non-exempt Offer.

Application is expected to be made by the Issuer (or on its behalf) for the Notes to be admitted to trading on the regulated market of the Bourse de Luxembourg on 19 January 2023 (the "Listing Date").

Why is this prospectus being produced?

This summary has been produced to fulfil the listing requirements of the regulated market of the Bourse de Luxembourg.

The net proceeds from the issue of Notes will be added to the general funds of the Issuer and used by the Issuer and/or its affiliates for hedging the Notes. The estimated net proceeds are EUR 30,000,000.

The Issue Price may include a fee or commission payable to a distributor or third party. Such fee or commission will be determined by reference to a number of factors including but not limited to the maturity date of the Notes, hedging costs and legal fees. Further details in respect of the fee or commission are available upon request.

Other than as mentioned above, so far as the Issuer is aware, no person involved in the offer of the Notes has an interest material to the offer.

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; (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.

Final Terms dated 19 January 2023



ROYAL BANK OF CANADA
(a Canadian chartered bank)

Legal entity identifier (LEI): ES7IP3U3RHIGC71XBU11

Issue of EUR 30,000,000 “Barrier Phoenix” Index Linked Interest and Index Linked Redemption Notes
Linked to EURO STOXX 50 Price EUR due July 2025
under the Programme for the Issuance of Securities

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, and subject as provided in the sections entitled "Prohibition of Sales to EEA Retail Investors" and "Prohibition of Sales to UK Retail Investors" above.

Neither the Issuer nor any Dealer has authorised, nor do they authorise, the making of any offer of Notes in any other circumstances.

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 Structured Securities Base Prospectus dated July 29, 2022 as supplemented by the supplements dated August 31, 2022, December 06, 2022, and December 20, 2022 which together constitute a base prospectus for the purposes of the Prospectus Regulation (the "**Base Prospectus**"). This document constitutes the Final Terms of the Notes described herein for the purposes of the Prospectus Regulation and must be read in conjunction with the Base Prospectus in order to obtain all the relevant information. A summary of the Notes is annexed to these Final Terms. The Base Prospectus has been published on the website of Euronext Dublin (www.euronext.com/en/markets/dublin) and the Issuer (www.rbc.com) and copies 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.

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 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:	67533
	(ii) Tranche Number:	1
3.	Specified Currency or Currencies:	EUR
	(Condition 1.12)	
4.	Aggregate Principal Amount:	EUR 30,000,000
	(i) Series:	EUR 30,000,000
	(ii) Tranche:	EUR 30,000,000
5.	Issue Price:	100.00% 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:	19 January 2023
	(ii) Interest Commencement Date	Issue Date
	(iii) Trade Date:	5 January 2023
8.	Maturity Date:	21 July 2025
9.	Interest Basis:	Non-Exempt Reference Item Linked Interest Notes Index Linked Interest Interest Barrier Notes
10.	(a) Redemption Basis:	Subject to any purchase and cancellation or early redemption, the Notes will be redeemed on the Maturity Date at their Final Redemption Amount specified in item 26 below

	Non-Exempt Redemption Notes	Reference Item	Linked
	Index Linked Redemption		
(b) Protection Amount:	Not Applicable		
11. Change of Interest Basis:	Not Applicable		
12. Put Option/ Call Option/ Trigger Early Redemption:	Trigger Early Redemption (further particulars specified below)		
13. Date Board approval for issuance of Notes obtained:	Not Applicable		
14. Bail-inable Securities:	No		
15. Method of distribution:	Non-syndicated		

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

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	Applicable
(i) Rate of Interest:	Rate of Interest 1
(ii) Monitoring Date(s):	Each Observation Date
(iii) Relevant Monitoring Date(s):	Each Monitoring Date
(iv) Initial Monitoring Date(s):	Not Applicable
(v) Relevant Initial Monitoring Date(s):	Not Applicable
(vi) Range Observation Period:	Not Applicable
(vii) Range Observation Date(s):	Not Applicable
(viii) Range Observation Cut-Off Date:	Not Applicable
(ix) Interest Barrier Level:	

Specified Interest Payment Date:	Interest Barrier Level:
19 April 2023	60.00%
19 July 2023	60.00%

19 October 2023	60.00%
19 January 2024	60.00%
19 April 2024	60.00%
19 July 2024	60.00%
21 October 2024	60.00%
20 January 2025	60.00%
23 April 2025	60.00%
21 July 2025	60.00%

(x)	Lower Barrier:	Not Applicable
(xi)	Upper Barrier:	Not Applicable
(xii)	Floor:	Not Applicable
(xiii)	Cap:	Not Applicable
(xiv)	Global Interest Cap Event:	Not Applicable
(xv)	Global Interest Floor Event:	Not Applicable
(xvi)	Initial Valuation:	3,959.48
(xvii)	Relevant Valuation:	Relevant Valuation 1
(xviii)	Relevant Reference Performance:	Single Underlying Relevant Reference Performance
(xix)	Reference Interest Rate:	Not Applicable
(xx)	Reference Interest Rate Business Day:	Not Applicable
(xxi)	Memory Feature:	Not Applicable
(xxii)	P%:	Not Applicable
(xxiii)	T%:	Not Applicable
(xxiv)	XXX%:	1.85%
(xxv)	AAA%:	Not Applicable
(xxvi)	BBB%;	Not Applicable
(xxvii)	BonusHigh:	Not Applicable
(xxviii)	BonusLow:	Not Applicable
(xxix)	YYY%;	Not Applicable
(xxx)	Z%	Not Applicable

(xxxi)	Interest Period(s)/Specified Interest Payment Date(s):	19 April 2023 19 July 2023 19 October 2023 19 January 2024 19 April 2024 19 July 2024 21 October 2024 20 January 2025 23 April 2025 21 July 2025
(xxxii)	Business Day Convention:	Following Business Day Convention
(xxxiii)	Additional Financial Centre(s):	London and TARGET2
(xxxiv)	Minimum Rate of Interest:	Not Applicable
(xxxv)	Maximum Rate of Interest:	Not Applicable
(xxxvi)	Day Count Fraction:	One
(xxxvii)	Default Rate:	As set out in Condition 4.06

PROVISIONS RELATING TO REDEMPTION

20.	Call Option (Condition 5.03)	Not Applicable
21.	Put Option (Condition 5.06)	Not Applicable
22.	Notice periods for Early Redemption for Taxation Reasons:	
	(i) Minimum period:	30 days
	(ii) Maximum period:	60 days
23.	TLAC Disqualification Event:	Not Applicable
24.	Notice periods for Redemption for Illegality:	
	(i) Minimum period:	30 days
	(ii) Maximum period:	60 days

25.	Trigger Early Redemption (Condition 5.09 and Condition 31.02)	Applicable
(i)	Trigger Early Redemption Event:	Trigger Early Redemption Event 1
(ii)	Trigger Barrier Level:	100%
(iii)	Lower Trigger Barrier:	Applicable
	(A) Equal to or Greater than:	Applicable
	(B) Greater than:	Not Applicable
(iv)	Upper Trigger Barrier:	Not Applicable
(v)	Monitoring Date(s):	Each Observation Date except the first Observation Date
(vi)	Relevant Monitoring Date(s):	Each Monitoring Date
(vii)	Initial Monitoring Date(s):	Not Applicable
(viii)	Relevant Initial Monitoring Date(s):	Not Applicable
(ix)	Initial Valuation:	3,959.48
(x)	Relevant Valuation:	Relevant Valuation 1
(xi)	Relevant Reference Performance:	Single Underlying Relevant Reference Performance
(xii)	Reference Interest Rate:	Not Applicable
(xiii)	Reference Interest Rate Business Day:	Not Applicable
(xiv)	Floor:	Not Applicable
(xv)	First Number of Hours:	Not Applicable
(xvi)	Second Number of Hours;	Not Applicable
(xvii)	Trigger Event Period:	Not Applicable
(xviii)	Trigger FX Currency:	Not Applicable
(xix)	Trigger FX Price Source:	Not Applicable
(xx)	Trigger FX Valuation Time:	Not Applicable
(xxi)	Trigger Early Redemption Date(s):	19 July 2023

19 October 2023

19 January 2024

19 April 2024

19 July 2024

21 October 2024

20 January 2025

23 April 2025

21 July 2025

- | | | | |
|--------|-----|---|---|
| (xxii) | (a) | Trigger Early Redemption Amount: | 100.00% per Calculation Amount |
| | (b) | Trigger Early Redemption Amount includes amount in respect of Accrued Interest: | Yes: no additional amount in respect of accrued interest to be paid |

26. **Final Redemption Amount** See Condition 31.01, as completed by the relevant sections of item 29 below

27. **Early Redemption Amount**

- | | | |
|-----|--|------------------------|
| (i) | Early Redemption Amount(s) payable on redemption for taxation reasons, a TLAC Disqualification Event, 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. |
|-----|--|------------------------|

- | | | |
|------|---|---|
| (ii) | Early Redemption Amount includes amount in respect of accrued interest: | Yes: no additional amount in respect of accrued interest to be paid |
|------|---|---|

PROVISIONS RELATING TO REFERENCE ITEM LINKED NOTES

28. Settlement Method

Whether redemption of the Notes will be by (a) Cash Settlement or (b) Physical Delivery or (c) Cash Settlement or Physical Delivery:	Cash Settlement
--	-----------------

29. Additional Payouts Condition Terms – Final Redemption Amount and/or Physical Settlement Event

- | | | |
|--------|--------------------------------------|--|
| (i) | Capital Barrier Event: | Applicable |
| | | Capital Barrier Event 1 |
| | | If a Capital Barrier Event has occurred: |
| | | Final Redemption Amount 1 |
| | | If a Capital Barrier Event has not occurred: |
| | | Final Redemption Amount 7 |
| | | Final - Initial Level: Applicable |
| (ii) | Put Strike Event: | Not Applicable |
| (iii) | Mini-Future Short Redemption Notes: | Not Applicable |
| (iv) | IndiCap Redemption Notes: | Not Applicable |
| (v) | Himalayan Redemption Notes: | Not Applicable |
| (vi) | Monitoring Date(s): | The Valuation Date |
| (vii) | Relevant Monitoring Date(s): | The Monitoring Date |
| (viii) | Initial Monitoring Date(s): | Not Applicable |
| (ix) | Relevant Initial Monitoring Date(s): | Not Applicable |
| (x) | Capital Barrier Level: | 60% |
| | (A) Equal to or Less than: | Not Applicable |

	(B) Less than:	Applicable		
(xi)	Put Strike Level:	Not Applicable		
(xii)	Initial Valuation:	3,959.48		
(xiii)	Relevant Valuation:	Relevant Valuation 1		
(xiv)	Relevant Reference Performance:	Single Underlying Performance	Relevant	Reference
(xv)	Floor:	Not Applicable		
(xvi)	F:	Not Applicable		
(xvii)	K:	Not Applicable		
(xviii)	LC:	Not Applicable		
(xix)	LF:	Not Applicable		
(xx)	Cap:	100%		
(xxi)	P%:	Not Applicable		
(xxii)	X%:	Not Applicable		
(xxiii)	Y%:	Not Applicable		
(xxiv)	Z%:	100.00%		
(xxv)	X1%:	Not Applicable		
(xxvi)	X2%:	Not Applicable		
(xxvii)	K1%:	Not Applicable		
(xxviii)	K2%:	Not Applicable		
(xxix)	Physical Settlement Level	Not Applicable		
(xxx)	Preference Share Linked Notes:	Not Applicable		
30.	Multi-Reference Item Linked Notes	Not Applicable		
31.	Currency Linked Note Provisions	Not Applicable		
32.	Commodity Linked Note Provisions	Not Applicable		

33. Index Linked Note Provisions (Equity Indices only)	Applicable
(i) Whether the Notes relate to a Basket of Indices or a single Index and the identity of the relevant Index/Indices and details of the relevant Index Sponsor(s) and whether such Index / Indices is a Multi-Exchange Index:	<p>Single Index</p> <p>Index or Indices: EURO STOXX 50 Price EUR (Bloomberg code: SX5E Index)</p> <p>Index Sponsor(s): STOXX Limited</p> <p>Multi-Exchange Index: Yes</p>
(ii) Averaging Date(s):	Not Applicable
(iii) Observation Period(s):	Not Applicable
(iv) Observation Date(s):	<p>12 April 2023</p> <p>12 July 2023</p> <p>12 October 2023</p> <p>12 January 2024</p> <p>12 April 2024</p> <p>12 July 2024</p> <p>14 October 2024</p> <p>13 January 2025</p> <p>14 April 2025</p> <p>Valuation Date</p>
(v) Valuation Date(s):	14 July 2025
(vi) Valuation Time:	Condition 7.03 applies
(vii) Specified Level:	Closing Level
(viii) Additional Disruption Events:	<p>Applicable</p> <p>Change in Law</p> <p>Hedging Disruption</p> <p>Increased Cost of Hedging</p>
(ix) Index Substitution:	Not Applicable
(x) Exchange(s):	In relation to each component security included in the Index (each a "Component Security"), the principal stock exchange on which such

Component Security is principally traded, as determined by the Calculation Agent

(xi)	Related Exchange(s):	All Exchanges
(xii)	Initial Level:	3,959.48
(xiii)	Hedging Entity:	Not Applicable
(xiv)	Weighting or w:	Not Applicable
(xv)	Common Disrupted Days:	Not Applicable
34.	Equity Linked Note Provisions	Not Applicable
35.	Fund Linked Note Provisions (ETF)	Not Applicable
36.	Bond Linked Redemption Note Provisions	Not Applicable
37.	Actively Managed Basket Linked Note Provisions	Not Applicable
38.	Non-Exempt Physical Delivery Notes	Not Applicable

GENERAL PROVISIONS APPLICABLE TO THE NOTES


39.	(i)	New Global Note:	No
	(ii)	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.
40.		Financial Centre(s) or other special provisions relating to payment dates:	London and TARGET2
41.		Relevant Renminbi Settlement Centre	Not Applicable
42.		Talons for future Coupons to be attached to Definitive Notes: (Condition 1.06)	No
43.		Name and address of Calculation Agent:	Royal Bank of Canada, London Branch 100 Bishopsgate London, EC2N 4AA
44.		Name and address of RMB Rate Calculation Agent:	Not Applicable
45.		Issuer access to the register of creditors (Sw. <i>skuldboken</i>) in respect of Swedish Notes:	Not Applicable

- | | | |
|-----|--|---|
| 46. | Exchange Date: | On or after 40 calendar days following the Issue Date |
| 47. | 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 |
| 48. | Governing law of Notes (if other than the laws of the Province of Ontario and the federal laws of Canada applicable therein): | English Law |
| 49. | Alternative Currency Payment: | Not Applicable |
| 50. | 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 authorized


By: Jason Goss
Managing Director, Head of European Solutions & Structured Product Sales

Duly authorized

PART B – OTHER INFORMATION

1. LISTING AND ADMISSION TO TRADING

Listing/Admission to trading: Application will be made by the Issuer (or on its behalf) for the Notes to be admitted to trading on the regulated market of the Bourse de Luxembourg.

2. RATINGS

Ratings: Not Applicable

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

The Issue Price may include a fee or commission payable to a distributor or third party, such fee or commission will be determined by a number of factors including but not limited to Maturity Date of the note, hedging costs and legal fees. Further details in respect of the fee or commission are available upon request.

4. OPERATIONAL INFORMATION

- (i) ISIN: XS2564031370
- (ii) Common Code: 256403137
- (iii) CFI: 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: 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) Other Identification Number: 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: Issuing and Paying Agent:
The Bank of New York Mellon, London Branch
160 Queen Victoria Street
London

EC4V 4LA

England

- (ix) Name(s) 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 this Pricing Supplement, 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 intraday 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

- (a) If syndicated, names and addresses of Managers: Not Applicable
- (b) If non-syndicated, name of Dealer: RBC Europe Limited
100 Bishopsgate
London, EC2N 4AA
- (c) U.S. Selling Restrictions: Super Reg S; TEFRA D rules apply
- (d) Canadian Sales: Canadian Sales Not Permitted
- (e) Non-Exempt Offer: Not Applicable
- (f) Swiss Non-Exempt Offer: Not Applicable
- (g) 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.
- (h) 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.
- (i) 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.

7. INDEX DISCLAIMER

INFORMATION RELATING TO THE EURO STOXX 50 PRICE EUR

STOXX Limited, Deutsche Börse Group and their licensors, research partners or data providers have no relationship to the Royal Bank of Canada, other than the licensing of the EURO STOXX 50 PRICE EUR and the related trademarks for use in connection with the Securities.

STOXX, Deutsche Börse Group and their licensors, research partners or data providers do not:

- Sponsor, endorse, sell or promote the Securities.*
- Recommend that any person invest in the Securities or any other Securities.*
- Have any responsibility or liability for or make any decisions about the timing, amount or pricing of Securities.*
- Have any responsibility or liability for the administration, management or marketing of the Securities.*
- Consider the needs of the Securities or the owners of the Securities in determining, composing or calculating the EURO STOXX 50 PRICE EUR or have any obligation to do so.*

STOXX, Deutsche Börse Group and their licensors, research partners or data providers give no warranty, and exclude any liability (whether in negligence or otherwise), in connection with the Securities or their performance.

STOXX does not assume any contractual relationship with the purchasers of the Securities or any other third parties.

Specifically,

- STOXX, Deutsche Börse Group and their licensors, research partners or data providers do not give any warranty, express or implied, and exclude any liability about:*
- The results to be obtained by the Securities, the owner of the Securities or any other person in connection with the use of the EURO STOXX 50 PRICE EUR and the data included in the EURO STOXX 50 PRICE EUR;*
- The accuracy, timeliness, and completeness of the EURO STOXX 50 PRICE EUR and its data;*
- The merchantability and the fitness for a particular purpose or use of the EURO STOXX 50 PRICE EUR and its data; and*
- The performance of the Securities generally.*
- STOXX, Deutsche Börse Group and their licensors, research partners or data providers give no warranty and exclude any liability, for any errors, omissions or interruptions in the EURO STOXX 50 PRICE EUR or its data;*
- Under no circumstances will STOXX, Deutsche Börse Group or their licensors, research partners or data providers be liable (whether in negligence or otherwise) for any lost profits or indirect, punitive, special or consequential damages or losses, arising as a result of such errors, omissions or interruptions in the EURO STOXX 50 PRICE EUR or its data or generally in relation to the Securities, even in circumstances where STOXX, Deutsche Börse Group or their licensors, research partners or data providers are aware that such loss or damage may occur.*

The licensing Agreement between the Royal Bank of Canada and STOXX is solely for their benefit and not for the benefit of the owners of the Securities or any other third parties.

8. EU BENCHMARKS REGULATION

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