

# ROYAL BANK OF CANADA

(a Canadian chartered bank)

4<sup>th</sup> Supplementary Notes Base Prospectus dated December 11, 2017

# Pursuant to the Programme for the Issuance of Securities

Pages i to 141 (inclusive) of the Notes Base Prospectus dated January 31, 2017 (the "Notes Base Prospectus"), as supplemented by the 1st Supplementary Prospectus dated February 28, 2017, the 2nd Supplementary Prospectus dated May 31, 2017 and the 3<sup>rd</sup> Supplementary Prospectus dated September 12, 2017 of Royal Bank of Canada ("RBC" or the "Issuer") comprise a base prospectus (the "Base Prospectus") for the purposes of Article 5.4 of the Prospectus Directive (as defined herein) in respect of notes ("PD Notes" or "Notes") to be offered to the public in the Relevant Member States (as defined in the Base Prospectus) and/or to be admitted to the Official List of the Financial Conduct Authority (in its capacity as competent authority for the purposes of Part VI of the Financial Services and Markets Act 2000 as amended, the "UK Listing Authority") and admitted to trading on the Regulated Market of the London Stock Exchange plc (the "London Stock Exchange"). Pages 142 to 213 (inclusive) of the Notes Base Prospectus, as supplemented by the 1<sup>st</sup> Supplementary Offering Circular dated February 28, 2017, the 2<sup>nd</sup> Supplementary Offering Circular dated May 31, 2017 and the 3<sup>rd</sup> Supplementary Offering Circular dated September 12, 2017 comprise an offering circular (the "Offering Circular"), which has been prepared by the Issuer in connection with the issue of Notes other than PD Notes ("Non PD Notes"). The Offering Circular has not been reviewed or approved by the UK Listing Authority and does not constitute a base prospectus for purposes of the Prospectus Directive.

### SUPPLEMENTARY PROSPECTUS

Pages 1 to 10 inclusive of this supplement (the "**4**<sup>th</sup> **Supplementary Prospectus**") constitute a supplementary prospectus for purposes of Section 87G of the *Financial Services and Markets Act 2000* (the "**FSMA**") prepared in connection with the programme for the issuance of securities established by RBC (the "**Programme**"). The information on page 11 of this supplement constitutes a supplementary offering circular and does not form part of this 4<sup>th</sup> Supplementary Prospectus.

Terms defined in the Base Prospectus have the same meaning when used in this 4<sup>th</sup> Supplementary Prospectus. The 4<sup>th</sup> Supplementary Prospectus is supplemental to, and shall be read in conjunction with, the Base Prospectus and any other supplements to the Base Prospectus issued by RBC.

RBC accepts responsibility for the information in this 4<sup>th</sup> Supplementary Prospectus. To the best of the knowledge of RBC, having taken reasonable care to ensure that such is the case, the information contained in this 4<sup>th</sup> Supplementary Prospectus is in accordance with the facts and does not omit anything likely to affect the import of such information.

The purpose of this 4<sup>th</sup> Supplementary Prospectus is to (a) incorporate by reference in the Base Prospectus the Issuer's latest audited consolidated financial statements (including management's discussion and analysis thereof) and Annual Information Form; (b) include a new statement in respect of no material adverse change and significant change; (c) in light of the issuance of the 2017 MD&A (as defined below), delete certain top risk factors, revise one top risk factor and introduce new Issuer top risk factors; (d) update the Issuer's rating disclosure in light of the recent ratings outlook upgrade from Fitch Ratings, Inc. ("Fitch USA"); (e) update

paragraph 3 of the section entitled "General Information and Recent Developments" in the Base Prospectus regarding governmental, legal or arbitration proceedings which may have, or have had, a significant effect on the financial position or profitability of the Issuer or of the Issuer and its subsidiaries taken as a whole; (f) disclose recent developments relating to RBC's addition to the list of global systemically important banks ("G-SIBs") by the Financial Stability Board ("FSB"); and (g) update Element B.12 of the Programme Summary to reflect financial information incorporated by reference, Element B.17 to reflect the Fitch USA ratings outlook upgrade and Element D.2 to refect the changes to the Issuer risk factors by virtue of this 4<sup>th</sup> Supplementary Prospectus.

To the extent that there is any inconsistency between (a) any statement in this 4<sup>th</sup> Supplementary Prospectus or any statement incorporated by reference into the Base Prospectus by this 4<sup>th</sup> Supplementary Prospectus and (b) any other statement in, or incorporated by reference in, the Base Prospectus, the statements in (a) above will prevail.

Save as disclosed in this 4<sup>th</sup> Supplementary Prospectus, no significant new factor, material mistake or inaccuracy relating to the information included in the Base Prospectus which is capable of affecting the assessment of PD Notes issued under the Programme has arisen or been noted, as the case may be, since the publication of the 3<sup>rd</sup> Supplementary Notes Base Prospectus dated September 12, 2017.

## **DOCUMENTS INCORPORATED BY REFERENCE**

The following documents are, by virtue of this 4<sup>th</sup> Supplementary Prospectus, incorporated in, and form part of, the Base Prospectus:

- (i) RBC's Annual Information Form dated November 28, 2017 (the "**2017 AIF**");
- (ii) the following sections of RBC's 2017 Annual Report (the "2017 Annual Report") for the year ended October 31, 2017:
  - (a) the Management's Discussion and Analysis on pages 11 through 116 (the "2017 MD&A"); and
  - (b) the audited consolidated financial statements, which comprise the consolidated balance sheets as at October 31, 2017 and October 31, 2016, and the consolidated statements of income, statements of comprehensive income, statements of changes in equity, and statements of cash flows for each of the years in the two-year period ended October 31, 2017, prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, together with the Report of Independent Registered Public Accounting Firm thereon on pages 117 through 204 (the "2017 Audited Consolidated Financial Statements"),

the remainder of the 2017 Annual Report is either not relevant for prospective investors or covered elsewhere in this 4<sup>th</sup> Supplementary Prospectus and is not incorporated by reference.

The 2017 AIF, the 2017 Annual Report, which includes the 2017 Audited Consolidated Financial Statements and the 2017 MD&A have been filed with Morningstar plc (appointed by the Financial Conduct Authority to act as the National Storage Mechanism), are available for viewing at <a href="http://www.morningstar.co.uk/uk/NSM">http://www.morningstar.co.uk/uk/NSM</a> and have been announced via the Regulatory News Service operated by the London Stock Exchange.

For the avoidance of doubt, any document incorporated by reference in the 2017 AIF, the 2017 Audited Consolidated Financial Statements and the 2017 MD&A shall not form part of this 4<sup>th</sup> Supplementary Prospectus.

Copies of this 4<sup>th</sup> Supplementary Prospectus, the Base Prospectus and the documents incorporated by reference in either of these can be (i) viewed on the website of the Regulatory News Service operated by the London Stock Exchange at <a href="http://www.londonstockexchange.com/exchange/news/market-news/market-news-home.html">http://www.londonstockexchange.com/exchange/news/market-news/market-news-home.html</a> under the name of the Issuer and the headline "Publication of Prospectus"; and (ii) obtained on written request and without charge from (a) the Issuer at 13<sup>th</sup> Floor, 155 Wellington St. W, Toronto, Ontario, Canada M5V 3K7, Attention: Senior Vice President, Performance Management & Investor Relations, and (b) the office of the Issuing and Paying Agent, The Bank of New York Mellon, London Branch, One Canada Square, London E14 5AL, United Kingdom, Attention: Manager, EMEA Corporate & Sovereign. Certain of the documents incorporated by reference in the Base Prospectus or this 4<sup>th</sup> Supplementary Prospectus may be viewed by accessing the Issuer's disclosure documents through the Internet (a) at the Canadian System for Electronic Document Analysis and Retrieval at www.sedar.com (an internet based securities regulatory filing system), and (b) at the U.S. Securities and Exchange Commission's website at <a href="http://www.sec.gov">http://www.sec.gov</a>. These websites are not incorporated in, and do not form part of, the Base Prospectus.

#### STATEMENT OF NO SIGNIFICANT CHANGE

Since October 31, 2017, the last day of the financial period in respect of which the most recent audited consolidated financial statements of the Issuer have been prepared, there has been no significant change in the financial position of the Issuer and its subsidiaries taken as a whole.

### STATEMENT OF NO MATERIAL ADVERSE CHANGE

Since October 31, 2017, the date of its last published audited consolidated financial statements, there has been no material adverse change in the prospects of the Issuer and its subsidiaries taken as a whole.

## **RISK FACTORS**

The section entitled "Risk Factors – Top and emerging risks - Top Risks" in the Registration Document incorporated by reference in the Prospectus is amended by:

- (i) deleting the risk factors entitled "Brexit", "Oil & gas", "Anti-Money laundering" and "Exposure to more volatile sectors";
- (ii) revising the risk factor entitled "Global uncertainty" as follows:

to trade, financial regulation and taxation, which add overall global uncertainty and volatility. The Canad economy faces additional risks from the uncertain outcome negotiations of the North American Free Trade Agreem (NAFTA) and from the U.S. government's posture financial regulation and tax reform. Concerns remain arout the social, political and economic impacts of the chang political landscape in Europe, especially the impact of mainmigration, Brexit negotiations, and the Catalan referenda Concerns over a possible economic slowdown in China haincreased in light of mixed economic data. Global tension	Global uncertainty	Global uncertainty remained a key risk during 2017. The U.S. administration continues to advocate policy changes related to trade, financial regulation and taxation, which add to overall global uncertainty and volatility. The Canadian economy faces additional risks from the uncertain outcome of negotiations of the North American Free Trade Agreement (NAFTA) and from the U.S. government's posture on financial regulation and tax reform. Concerns remain around the social, political and economic impacts of the changing political landscape in Europe, especially the impact of mass immigration, Brexit negotiations, and the Catalan referendum. Concerns over a possible economic slowdown in China have increased in light of mixed economic data. Global tensions have also increased due to North Korea's military activities.
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## (iii) and further supplementing it with the following new risk factors:

	1
Canadian housing and household indebtedness	The housing market is a top concern for the Canadian financial system. Housing prices remain elevated in the Greater Toronto Area and Greater Vancouver Area and affordability remains stretched. The Issuer is actively monitoring the impact of recent Government of Ontario measures implemented in an attempt to help cool the housing market. As the Bank of Canada embarks on a path of gradual rate tightening, the rising interest rate environment adds an additional level of uncertainty since elevated household indebtedness is a key risk. Increasing indebtedness could have material negative credit quality implications for the Issuer's consumer lending portfolios, including residential mortgages, credit lines, indirect lending, credit cards, automotive lending and other personal loans.
Regulatory changes	The Issuer operates in multiple jurisdictions, and the continued expansion of the breadth and depth of regulations may lead to declining profitability and slower response to market needs. Financial reforms coming on stream in multiple jurisdictions may have material impacts on the Issuer's businesses and could affect their strategies.

#### **ISSUER RATINGS**

On October 27, 2017, Fitch USA revised the Issuer's outlook to stable from negative. The Issuer's credit ratings remained unchanged.

Fitch USA is not established in the European Union. However, ratings issued by Fitch are endorsed by Fitch Ratings Limited, which is established in the European Union and registered under Regulation (EC) No 1060/2009, as amended.

# AMENDMENT TO STATEMENT REGARDING GOVERNMENTAL, LEGAL OR ARBITRATION PROCEEDINGS

Paragraph 3 of the section entitled "General Information and Recent Developments" on page 136 of the Base Prospectus is hereby deleted in its entirety and replaced with the following:

"Other than the matters disclosed in Note 23 of the Issuer's 2017 Audited Consolidated Financial Statements set out on page 189 of the Issuer's 2017 Annual Report, and the matters disclosed (with the exception of the subsection entitled "Other matters") in Note 26 of the 2017 Audited Consolidated Financial Statements set out on pages 193 and 194 of the Bank's 2017 Annual Report and incorporated by reference herein, there are no, nor have there been any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Issuer is aware) which may have, or have had during the twelve months prior to the date of this document, individually or in the aggregate, a significant effect on the financial position or profitability of the Issuer or of the Issuer and its subsidiaries taken as a whole."

## RECENT DEVELOPMENTS

On November 21, 2017, RBC was designated as a G-SIB by the FSB. RBC does not expect any significant impacts resulting from the designation and will begin disclosing the detailed template used in the calculation of each of the 12 G-SIB indicators beginning in Q1 2018.

The second sentence in the paragraph above is subject to the "Caution regarding Forward-Looking Statements" set out on pages x and xi of the Notes Base Prospectus.

# **UPDATES TO THE SUMMARY TO THE PROGRAMME**

The Summary to the Programme included in the Base Prospectus is made up of disclosure requirements known as "Elements". These elements are numbered in Sections A to E (A.1 - E.7).

Following the release of RBC's 2017 Annual Report, Element B.12 of the Summary to the Programme is updated as set out below:

B.12	Key Historical Financial Information; no material adverse change and no significant change statements:	With the exception of the figures for return on common equity, information in the tables below for the years ended October 31, 2017 and 2016 have been extracted from the Issuer's 2017 audited consolidated financial statements which have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and are incorporated by reference in the Base Prospectus. The amounts under return on common equity for the years ended October 31, 2017, and 2016 have been extracted from the Issuer's
		October 31, 2017 and 2016 have been extracted from the Issuer's 2017 Annual Report:

	As at October 31, 2017	As at October 31, 2016
_	(in millions of Canadian dollars)	
Loans, net of allowance for loan losses	542,617	521,604
Total assets	1,212,853	1,180,258
Deposits	789,635	757,589
Other liabilities	338,309	340,314
Subordinated debentures	9,265	9,762
Non-controlling interests	599	598
Equity attributable to shareholders	73,829	71,017

	Year ended October 31, 2017	Year ended October 31, 2016
	(in millions of Canadian dollars except pe amounts	· · · · · · · · · · · · · · · · · · ·
Net interest income	17,140	16,53 <sup>-</sup>
Non-interest income <sup>1</sup>	23,529	22,264
Total revenue <sup>1</sup>	40,669	38,799
Provision for credit losses	1,150	1,546
Insurance policyholder benefits, claims and acquisition expense	3,053	3,424
Non-interest expense <sup>1</sup>	21,794	20,526
Net Income	11,469	10,458
Earnings per share		
– basic	\$7.59	\$6.80
– diluted	\$7.56	\$6.78
Return on common equity <sup>2</sup>	17.0%	16.3%
similar measures disclosed by other fir	vised from those previously reported. tandardized meaning under generally accepted accounting plancial institutions. For further details, refer to the Key performalysis for the year ended October 31, 2017.	

# Statement of no significant or material adverse change

Since October 31, 2017, there has been no material adverse change in the prospects of the Issuer and its subsidiaries taken as a whole.

Since October 31, 2017, there has been no significant change in the financial or trading position of the Issuer and its subsidiaries taken as a whole.

Following the Fitch USA rating outlook upgrade, Element B.17 of the Summary to the Programme, in respect of Fitch USA, is updated as set out below:

B.17 Credit Ratings Assigned to the Issuer or its Debt Securities at the Request of or in Cooperation with the Issuer:

The credit ratings assigned to the Issuer are (i) A1 (negative outlook) (long term senior debt), Baa1 (subordinated debt)¹ and P-1 (short-term debt) and Baa3 (hyb) (preferred shares) by Moody's Investors Services, Inc. ("Moody's USA"), (ii) AA- (negative outlook) (long term senior debt), A-1+ (short-term debt), A (subordinated debt)¹ and BBB+ (preferred shares)² by Standard & Poor's Financial Services LLC ("S&P USA"); (iii) AA (stable outlook) (long term senior debt), AA- (subordinated debt)¹ and F1+ (short-term debt) by Fitch Ratings, Inc. ("Fitch USA"); and (iv) AA (long term senior debt), AA (low) (subordinated debt)¹ and R-1 (high) (short-term debt), each with a stable outlook, and Pfd-2 (high) (stable outlook) (preferred shares)² by DBRS Limited ("DBRS").

The Senior Notes issuable under the Programme have been generally rated A1 (P-1 for short term debt) by Moody's Canada Inc. ("**Moody's Canada**") and AA- by S&P Global Ratings, acting through Standard & Poor's Rating Services (Canada), a business unit of S&P Global Canada Corp. ("**S&P Canada**").

Issue specific summary

[The Senior Notes to be issued [have been/are expected to be] rated:

[Moody's Canada: [•]] [S&P Canada: [•]]

[The Senior Notes to be issued have not been specifically rated.]

<sup>&</sup>lt;sup>1</sup> The Issuer's Basel III-compliant subordinated notes issued after January 1, 2014 have different ratings from these ratings from all rating agencies except Fitch USA. They are rated "A-" by S&P USA, "Baa2 (hyb)" by Moody's USA and "A (low)" (stable outlook) by DBRS.

<sup>&</sup>lt;sup>2</sup> The Issuer's Basel III-compliant preferred shares issued after January 1, 2014 received different credit ratings from these ratings from both DBRS and S&P USA. They are rated "Pfd-2" (stable outlook) by DBRS; "P-2" by S&P USA using the S&P Canadian scale for preferred shares and "BBB" using S&P USA's global scale for preferred shares.

Following the deletion of certain top risk factors, revision of one top risk factor and the introduction of new Issuer top risk factors. Element D.2 of the Summary to the Programme is updated as set out below:

D.2 Key Information on the key risks that are specific to the Issuer:

The following is a summary of the key risks relating to the Issuer:

Global uncertainty: Global uncertainty remained a key risk during 2017. The U.S. administration continues to advocate policy changes related to trade, financial regulation and taxation, which add to overall global uncertainty and volatility. The Canadian economy faces additional risks from the uncertain outcome of negotiations of the North American Free Trade Agreement (NAFTA) and from the U.S. government's posture on financial regulation and tax reform. Concerns remain around the social, political and economic impacts of the changing political landscape in Europe, especially the impact of mass immigration, Brexit negotiations, and the Catalan referendum. Concerns over a possible economic slowdown in China have increased in light of mixed economic data. Global tensions have also increased due to North Korea's military activities.

Cyber risk: Information and Cybersecurity continue to be an increasingly problematic issue, not only for the financial services sector, but for other industries in Canada and around the globe. The volume and sophistication of cyber attacks in the industry continue to increase and adversearies are becoming more organised. These attacks could compromise the Issuer's confidential information as well as that of its clients and third parties with whom the Issuer interacts and may result in negative consequences, including remediation costs, loss of revenue, additional regulatory scrutiny, litigation and reputational damage. The Issuer continues to see challenges in the management of information technology risk with respect to third party hosted applications, eMessaging and social media related risks.

Credit risk: Credit risk is the risk of loss associated with an obligor's potential inability or unwillingness to fulfil its contractual obligations. Credit risk may arise directly from the risk of default of a primary obligor of the Issuer (e.g. issuer, debtor, counterparty, borrower or policyholder), or indirectly from a secondary obligor of the Issuer (e.g. guarantor or reinsurer). Credit risk includes counterparty credit risk from both trading and non-trading activities. The failure to effectively manage credit risk across all the Issuer's products, services and activities can have a direct, immediate and material impact on the Issuer's earnings and reputation.

**Market risk**: Market risk is defined to be the impact of market prices upon the financial condition of the Issuer. This includes potential gains or losses due to changes in market determined variables such as interest rates, credit spreads, equity prices, commodity prices, foreign exchange rates and implied volatilities.

Liquidity and funding risk: Liquidity and funding risk is the risk that the Issuer may be unable to generate sufficient cash or its equivalent in a timely and cost-effective manner to meet its commitments as they come due (including the Securities). Liquidity risk arises from mismatches in the timing and value of on-balance sheet and off-balance sheet cash flows. Core funding, comprising, capital, longer-term wholesale liabilities and a diversified pool of personal and, to a lesser extent, commercial and institutional deposits is the foundation of the Issuer's structural liquidity position. The Issuer's ability to access

unsecured funding markets and to engage in certain collateralized business activities on a cost-effective basis are primarily dependent upon maintaining competitive credit ratings. Credit ratings and outlooks provided by rating agencies reflect their views and methodologies. Ratings are subject to change from time to time, based on a number of factors including, but not limited to, the Issuer's financial strength, competitive position and liquidity and other factors not completely within the Issuer's control. A lowering of the Issuer's credit ratings may have potentially adverse consequences for the Issuer's funding capacity or access to the capital markets, may affect the Issuer's ability, and the cost, to enter into normal course derivative or hedging transactions and may require the Issuer to post additional collateral under certain contracts, any of which may have an adverse effect on its results of operations and financial condition.

Canadian housing and household indebtedness: The housing market is a top concern for the Canadian financial system. Housing prices remain elevated in the Greater Toronto Area and Greater Vancouver Area and affordability remains stretched. The Issuer is actively monitoring the impact of recent Government of Ontario measures implemented in an attempt to help cool the housing market. As the Bank of Canada embarks on a path of gradual rate tightening, the rising interest rate environment adds an additional level of uncertainty since elevated household indebtedness is a key risk. Increasing indebtedness could have material negative credit quality implications for the Issuer's consumer lending portfolios, including residential mortgages, credit lines, indirect lending, credit cards, automotive lending and other personal loans.

**Regulatory changes:** The Issuer operates in multiple jurisdictions, and the continued expansion of the breadth and depth of regulations may lead to declining profitability and slower response to market needs. Financial reforms coming on stream in multiple jurisdictions may have material impacts on the Issuer's businesses and could affect their strategies.

#### SUPPLEMENTARY OFFERING CIRCULAR

This page 11 of this Supplement (the "**4**<sup>th</sup> **Supplementary Offering Circular**") constitutes a supplement to the Offering Circular and is prepared in connection with the Programme for the Issuance of Securities established by RBC.

Terms defined in the Offering Circular have the same meaning when used in this 4<sup>th</sup> Supplementary Offering Circular. The 4<sup>th</sup> Supplementary Offering Circular is supplemental to, and shall be read in conjunction with, the Offering Circular and any other prior supplements to the Offering Circular issued by RBC (together, the "Offering Circular").

NEITHER THE OFFERING CIRCULAR NOR THIS  $4^{TH}$  SUPPLEMENTARY OFFERING CIRCULAR TO THE OFFERING CIRCULAR HAVE BEEN REVIEWED OR APPROVED BY THE UK LISTING AUTHORITY AND THE OFFERING CIRCULAR DOES NOT CONSTITUTE A PROSPECTUS FOR THE PURPOSE OF DIRECTIVE 2003/71/EC AS AMENDED.

RBC accepts responsibility for the information in this 4<sup>th</sup> Supplementary Offering Circular. To the best of the knowledge of RBC, having taken reasonable care to ensure that such is the case, the information contained in this 4<sup>th</sup> Supplementary Offering Circular is in accordance with the facts and does not omit anything likely to affect the import of such information.

This 4<sup>th</sup> Supplementary Offering Circular is supplemental to, and should be read in conjunction with, the Offering Circular and the documents incorporated by reference therein. This 4<sup>th</sup> Supplementary Offering Circular is to be read in conjunction with the following sections of the 4<sup>th</sup> Supplementary Prospectus (as amended herein):

- (i) Documents Incorporated by Reference;
- (ii) Statement of No Significant Change;
- (iii) Statement of No Material Adverse Change;
- (iv) Risk Factors;
- (v) Issuer Ratings;
- (vi) Amendment to Statement Regarding Governmental, Legal or Arbitration Proceedings; and
- (vii) Recent Developments;

which will be deemed to be incorporated by reference herein, save that references to "Base Prospectus" shall be deemed to be to the "Offering Circular" and references to "4<sup>th</sup> Supplementary Prospectus" shall be deemed to be to the "4<sup>th</sup> Supplementary Offering Circular".

To the extent that there is any inconsistency between (a) any statement in this 4<sup>th</sup> Supplementary Offering Circular or any statement incorporated by reference into the Offering Circular by this 4<sup>th</sup> Supplementary Offering Circular and (b) any other statement in, or incorporated by reference in, the Offering Circular, the statements in (a) above will prevail.

Save as disclosed in this 4<sup>th</sup> Supplementary Offering Circular, no significant new factor, material mistake or inaccuracy relating to the information included in the Offering Circular which is capable of affecting the assessment of Non-PD Notes issued under the Programme has arisen or been noted, as the case may be, since the 3<sup>rd</sup> Supplementary Offering Circular dated September 12, 2017.