

Final Term Sheet
Dated July 31, 2017
RBC EURO STOXX 50 Barrier RoC Securities, Series 2P (CAD), August 11, 2023
Unless otherwise indicated, references to "\$" are to Canadian dollars.

PRODUCT		DATES	
Issuer:	Royal Bank of Canada (the "Bank")	Term:	Approximately 6 years
Issue:	RBC EURO STOXX 50 Barrier RoC Securities, Series 2P (CAD), due August 11, 2023 (the "Securities")	Trade Date:	July 26, 2017
Bank Credit Rating:	Moody's: A1 Standard & Poor's: AA- DBRS: AA	Initial Valuation Date	July 26, 2017
ADP Code:	9359727	Issue Date:	August 11, 2017
Principal Amount:	\$100 per Security	Final Valuation Date:	July 26, 2023
Index:	EURO STOXX 50 Index	Observation Type at Maturity:	European Monitoring (Single Observation on the Final Valuation Date)
Denomination:	\$100 per Security	Maturity Date:	August 11, 2023
Issue Price:	\$100 per Security	Delivery:	Cash
Issue Amount:	\$30,000,000	RBC Code:	SX5E-BAR-26JUL23
		FundSERV Code:	RBC5102

Index Information

Index	Identifiers	Initial Index Level	Protection Barrier Level
EURO STOXX 50 Index	Bloomberg ticker: SX5E Index	3,491.19	(Initial Index Level × 70.00%) 2,443.833



Issue Price:	The Securities will be issued at a price equal to their Principal Amount (defined below).
Denomination:	Securities are issuable in denominations of \$100 (the " Principal Amount ") and in minimum increments of \$100.
Minimum Investment:	50 Securities or \$5,000.
Objective of the Securities:	The Securities have been designed for investors looking to earn a return linked to the price performance of the Index and who are prepared to assume the risks associated with such an investment.
Principal at Risk Securities:	All but 1.00% (subject to the Partial Principal Repayments) of the Principal Amount of the Securities is fully exposed. You could lose substantially all of your investment.
Return of Capital Securities:	The Securities are " Return of Capital Securities ". Some of the Principal Amount of the Securities will be repaid in instalments as Partial Principal Repayments over the term of the Securities.
Status:	The Securities will be the Bank's direct, unsecured and unsubordinated debt obligations.
Bank Credit Rating:	The Securities have not been and will not be rated. You should consult the relevant rating organization with respect to the interpretation and implications of any rating of the Bank. Any such rating should not be construed as a recommendation to buy, sell or hold the Securities. Ratings may be revised or withdrawn at any time by the respective rating organizations.
Index:	<p>The payment at maturity on the Securities is linked to the price performance of the EURO STOXX 50 Index (the "Index").</p> <p>Securities do not represent an interest in the Index, or in the securities of the companies that comprise the Index (the "Underlying Securities"), and registered holders of the Securities (the "Securityholders") will have no right or entitlement to the Underlying Securities including the dividends or other distributions paid thereon. There is no requirement for the Bank to hold any interest in the Index or the Underlying Securities.</p> <p>This term sheet has been prepared for the sole purpose of assisting prospective investors in making an investment decision with respect to the Securities. This term sheet relates only to the Securities offered hereby and does not relate to the Index or the Underlying Securities. The Bank has not verified the accuracy or completeness of any information pertaining to the Index or determined if there has been any omission by the Index Sponsor to disclose any facts, information or events which may have occurred prior to or subsequent to the date as of which any information has been furnished by the Index Sponsor which may affect the significance or accuracy of such information. The Bank does not make any representation that such publicly available documents or any other publicly available information regarding the Index or Index Sponsor is accurate or complete. Prospective investors should independently investigate the Index Sponsor and decide whether an investment in the Securities is appropriate. The Index Sponsor has not participated in the preparation of this termsheet and the Securities are not in any way sponsored, endorsed, sold or promoted by the Index Sponsor.</p>
Index Sponsor:	" Index Sponsor " means STOXX Ltd.



Issue Date:	The " Issue Date " is August 11, 2017.
Maturity Date:	The " Maturity Date " is August 11, 2023 (approximately a six year term).
Initial Index Level:	The " Initial Index Level " for the Index is the Closing Level of the Index, as published by the Index Sponsor, on July 26, 2017 (the " Initial Valuation Date ").
Protection Barrier Level:	The " Protection Barrier Level " for the Index is 70.00% of the Initial Index Level.
Final Index Level:	The " Final Index Level " for the Index is the Closing Level of the Index, as published by the Index Sponsor, on July 26, 2023 (the " Final Valuation Date ").
Closing Level:	The " Closing Level " of the Index on any date is the official closing level of the Index quoted on www.standardandpoors.com on such date, as determined by the Calculation Agent. The official closing level of the Index is available from other sources, such as Bloomberg; however, the Bank does not make any representation as to the accuracy of such information and all calculations regarding the Closing Level of the Index will be made by the Calculation Agent.
Partial Principal Repayments:	Securityholders will receive partial repayments of the Principal Amount (the " Partial Principal Repayments ") and each a " Partial Principal Repayment ") payable monthly on each Partial Principal Repayment Date at a fixed amount of \$0.3575 per \$100 Principal Amount. The Partial Principal Repayments will not be contingent on or related to the price performance of the Index.
Partial Principal Repayment Dates:	The " Partial Principal Repayment Dates " for the Partial Principal Repayments will occur on the 11 th day of every month from and including September 11, 2017 to and including July 11, 2023, with a final payment to be made on the Maturity Date. If any such Partial Principal Repayment Date is not a Business Day, the payment will be made on the first following day that is a Business Day. The final Partial Principal Repayment will be made on the Maturity Date.
Outstanding Principal Amount:	The " Outstanding Principal Amount " on each \$100 Principal Amount per Security at any particular time will be equal to: (i) \$100 minus (ii) the sum of all the Partial Principal Repayments made on the Security at or prior to the particular time.
Partial Principal Repayment Amount:	" Partial Principal Repayment Amount " means an amount equal to the sum of all the Partial Principal Repayments made per \$100 Principal Amount of Securities on or prior to the Maturity Date.
Payment at Maturity:	On the Maturity Date, the amount payable (the " Redemption Amount ") for each \$100 Principal Amount per Security will be equal to the sum of (i) the Outstanding Principal Amount and (ii) the Aggregate Return (which may be positive or negative). The Redemption Amount will be paid in addition to the Partial Principal Repayment that is due on the Maturity Date.
Aggregate Return:	<p>The "Aggregate Return" is computed per \$100 Principal Amount and is calculated as follows:</p> <p>If the Index Return is positive and greater than \$25.74, the Aggregate Return is equal to the sum of (i) the Partial Principal Repayment Amount and (ii) $5.00\% \times (\text{Index Return} - \\$25.74)$.</p> <p>If the Index Return is positive and equal to or lower than \$25.74, the Aggregate Return is equal to the Partial Principal Repayment Amount.</p> <p>If the Index Return is zero or negative but not lower than (i.e., worse than) -\$30.00, the Aggregate Return is equal to the Partial Principal Repayment Amount.</p>



If the Index Return is **negative and lower than -\$30.00**, the Aggregate Return is equal to the sum of (i) the Partial Principal Repayment Amount and (ii) the Index Return. However, the Index Return for the purposes of this calculation will not be less than -\$99.00.

Index Return: "Index Return" means $((X_f / X_i) - 1) \times \100

where:

"X_f" means the Final Index Level, and

"X_i" means the Initial Index Level.

As a result, the Aggregate Return will not be determinable before the Final Valuation Date. See "Risk Factors" below.

Extraordinary Events:

Determination of the Closing Level of the Index, including the Final Index Level, and the Redemption Amount, may be postponed, or the Bank can accelerate determination of the Final Index Level and the Redemption Amount and repay the Securities in full prior to their maturity, in certain circumstances. If an Extraordinary Event occurs then the Calculation Agent may, but is not required to make such adjustments to any payment or other term of the Securities as it determines to be appropriate, acting in good faith, to account for the economic effect of such event on the Securities and determine the effective date of any such adjustment.

Costs and Fees:

A commission of 2.50% of the Principal Amount of Securities issued under this offering will be paid to the dealers for further payment to representatives, including representatives employed by the dealers, whose clients purchase the Securities.

Risk Factors:

The Redemption Amount payable on the Securities at maturity is unknown and subject to many variables, including interest rate fluctuations and changes in the level of the Index. You should independently determine, with your own advisors, whether an investment in the Securities is suitable for you having regard to your own investment objectives and expectations.

Limited Upside Participation by the Securities

The return on the Securities is limited; even if the Index Return is positive, the maximum return on the Securities, over the term of the Securities, will be equal to \$25.74 per Security plus an amount equal to 5.00% of any Index Return in excess of \$25.74.

Uncertain Redemption Amount until Final Valuation Date

The Redemption Amount, if any, on the Securities will be uncertain until the Final Valuation Date. The Redemption Amount will depend on the Closing Level of the Index on the Initial Valuation Date and the Final Valuation Date. There can be no assurance that the Securities will generate a positive return or that the objectives of the Securities will be achieved and, in particular, there is a substantial risk of the Aggregate Return being negative. Other than the regular Partial Principal Repayments payable during the term of the Securities (which are not contingent on or related to the performance of the Index), holders of the Securities may not be repaid the amount they invested in the Securities (other than \$1.00 per Security), depending on the performance of the Index. Historical levels of the Index should not be considered as an indication of the future performance of the Index. Investors should understand that the risk involved in this type of investment is greater than that normally associated with other types of investments.

Volatility May Affect the Redemption Amount or Trading Value of the Securities



Volatility is the term used to describe the size and frequency of price and/or market fluctuations. If the volatility, or anticipated volatility, of the Index changes during the term of the Securities, the trading value of the Securities may be adversely affected. In periods of high volatility, the likelihood of an investor not receiving a return of the full Principal Amount of the Securities increases.

Suitability for Investment:

You should consult with your advisors regarding the suitability of an investment in the Securities. The Securities may be suitable for:

- investors seeking an investment product with exposure to the large-cap segment of the Eurozone equity market
- investors who believe that the Index Return will not be lower than -\$30.00
- investors who are willing and can afford to risk substantially all of the principal amount of their investment
- investors looking to achieve a largely fixed return (based on the receipt at maturity of the Partial Principal Repayment Amount) and who are prepared to assume the risks associated with an investment linked to the price performance of the Index
- investors with an investment horizon equal to the term to maturity of the Securities who are prepared to hold the Securities until maturity

Tax: **All holders of Securities should consult their own tax advisors with respect to their tax positions and the tax consequences of holding the Securities.**

Business Day Convention: Following

Day Count: 30/360 Unadjusted

Settlement: RBC Dominion Securities Inc. ("**RBC DS**")

Governing Law: Province of Ontario and the laws of Canada applicable therein.

Secondary Market: Securities may be purchased through dealers and other firms that facilitate purchase and related settlement using the FundSERV network. Securities may be resold using the FundSERV network at a sale price equal to the closing price posted on FundSERV as of the close of business on the Exchange Day on which the order is placed, as determined by and posted to FundSERV by the Calculation Agent, which sale price may be lower than the Principal Amount of such Securities, less an early trading charge ("Early Trading Charge") equal to a percentage of the Principal Amount determined as set out below.

<u>If Sold Within the Following</u> <u>No. of Days from Issue Date</u>	<u>Early Trading Charge</u> <u>(% of Principal Amount)</u>
1-60 days	3.00%
61-120 days	2.75%
121-180 days	2.50%
181-240 days	2.00%
241-300 days	1.50%
301-360 days	1.00%



Thereafter

Nil

Canadian Offering Information

Canadian Offering Information:

The Securities may not be offered, sold or distributed, directly or indirectly, in Canada or to or for the benefit of, any resident in Canada except under an exemption under applicable securities law.

Book-Entry Only Securities:

The Securities will be issued through the "book-entry-only system" and must be purchased, transferred or redeemed through RBC DS or using the FundSERV network (see "Transfers of Securities" below). On the Issue Date, the Securities will be registered in the name of RBC DS or its nominee, as the case may be, which will hold such Securities as depository on behalf of the registered dealers through whom the Securities are purchased (i.e., the members of RBC DS' distribution network that participate in the offering as "selling firms" and not as dealers under the base shelf prospectus). RBC DS or one of its affiliates will maintain a record of all of the beneficial owners of the Securities.

Except as described below, a purchaser acquiring a beneficial interest in the Securities will not be entitled to a certificate or other instrument from the Bank, any trustee or the depository evidencing that purchaser's interest therein, and such purchaser will not be shown as the registered holder of the Securities on the records maintained by the depository. Each such purchaser of Securities will receive a customer confirmation of purchase from the registered dealer through whom the Securities are purchased in accordance with the practices and procedures of that registered dealer.

As long as the Securities are held in the book-entry-only system maintained by RBC DS, the Bank will recognize only RBC DS as the holder of the Securities and the Bank will make all payments on the Securities to RBC DS. RBC DS will in turn make payments to beneficial owners, by distributing such payments through the FundSERV network. The Bank understands that RBC DS does so under agreements it has made with the registered dealers through whom the Securities are purchased; RBC DS is not obligated to do so under the terms of the Securities.

Under this arrangement and pursuant to the Securities Transfer Act, 2006 (Ontario) (the "STA"), investors will not own the Securities directly. Instead, they will own beneficial interests in the Securities, through RBC DS and, if applicable, any other registered dealer through whom the Securities are purchased. As long as the Securities are held in the book-entry-only system, investors will be indirect owners, and not registered holders, of Securities. Under the STA, RBC DS has the rights and obligations of a securities intermediary vis-à-vis any investors who purchase their beneficial interests from RBC DS. As such, the Securities are held for the benefit of investors, are not the property of RBC DS and are not subject to the claims of creditors of RBC DS.

Neither the Bank nor the Dealers (other than RBC DS) will assume any liability for: (a) any aspect of the records relating to the beneficial ownership of the Securities held by a depository or the payments or deliveries relating thereto; (b) maintaining, supervising or reviewing any records relating to the Securities; or (c) any advice or representation made by or with respect to a depository, including those contained in this prospectus, relating to the rules governing the depository or any action to be



taken by the depository or at the direction of the selling firms. The depository acts as the agent and depository for the selling firms, who in turn are agents for the beneficial owners. As a result, for payment or deliveries made by or on behalf of the Bank to the depository in respect of the Securities, the beneficial owners of the Securities must look solely to the selling firms, who in turn will look to the depository for such payment or deliveries.

As indirect holders of Securities, investors should be aware that, except in the circumstances described below, they: (a) may not have Securities registered in their name; (b) may not have physical certificates representing their interest in the Securities; (c) may not be able to sell the Securities to institutions required by law to hold physical certificates for securities they own; and (d) may be unable to pledge Securities as security.

Securities in fully registered and certificated form will be issued to beneficial owners of Securities only if: (i) required by applicable law; (ii) RBC DS' book-entry-only system ceases to exist; (iii) the Bank or RBC DS advises that RBC DS is no longer willing or able to properly discharge its responsibilities as depository with respect to the Securities and the Bank is unable to locate a qualified successor; (iv) the Bank, at its option, decides to terminate its present arrangements with RBC DS; (v) if an event of default has occurred with regard to the Securities and has not been cured or waived; or (vi) as otherwise agreed by the Bank and RBC DS.

If the Securities are issued in fully registered and certificated form in the circumstances described above, the Final Redemption Amount due at maturity will be paid upon surrender thereof at any branch of the Bank in Canada.

Transfers of Securities

Transfers of ownership of the Securities will be effected only through records maintained by RBC DS or one of its affiliates, as the case may be, with respect to interests of the beneficial owners. If you hold Securities and desire to purchase, sell or otherwise transfer ownership of or other interests in Securities, you may do so only through RBC DS or by using the FundSERV network.

Your ability to pledge Securities or otherwise take action with respect to your interest in Securities (other than through RBC DS or by using the FundSERV network) may be limited due to the lack of a physical certificate.

Global Securities

The Securities will be issued as book-entry only securities in fully registered form and will be represented by a global security (the "Global Security") that the Bank will deposit with and register in the name of RBC DS, or its nominee, as depository. The Global Security may also be held by the Bank in its capacity as domestic custodian for the depository. Except in the circumstances described above, owners of beneficial interests in book-entry securities will not be entitled to physical delivery of securities in certificated form. The Bank will make payments of all amounts payable on the Securities to the depository. The Global Security may not be transferred to the name of a beneficial owner except in the special circumstances described above.

Amendments to the Global

The Bank may amend the Global Security without the consent of the holders of Securities if, in the opinion of the Bank, acting reasonably, the amendment would not materially and adversely affect



Security: the interests of the holders of Securities.

In other cases, the Bank may amend the Global Security if the amendment is approved by a resolution passed by the favourable votes of the holders of not less than 66 2/3% of the outstanding principal amount of the Securities represented by the Global Security represented at a meeting convened for the purposes of considering the resolution, or by written resolution signed by holders of not less than 66 2/3% of the outstanding principal amount of the Securities represented by the Global Security. Each holder is entitled to one vote per \$100 of principal amount for the purpose of voting at meetings convened for considering the resolution or for the purpose of passing a written resolution. The Securities do not carry the right to vote in any other circumstances.

Adjustments relating to the Index: If an Extraordinary Event occurs, the Calculation Agent may, but is not required to, make such adjustments to any payment or other term of the Securities as it determines to be appropriate, acting in good faith, to account for the economic effect of such event on the Securities and determine the effective date of any such adjustment.

Delay in determination of the Closing Level: Subject to the Bank's right to accelerate payment on Securities in the circumstances described below under "*Acceleration upon Occurrence of Extraordinary Event*", if an Extraordinary Event occurs and is continuing on a day on which a Closing Level is to be determined, then the day on which such Closing Level will be determined will instead be the earlier of (1) the next Exchange Day for the Index on which there is no such Extraordinary Event, and (2) the fifth day that would otherwise have been an Exchange Day for the Index following the day on which the Closing Level was supposed to have been determined but for the occurrence of the Extraordinary Event. In the latter case, if the Extraordinary Event is continuing on such fifth day, then the Calculation Agent will make such calculations as it may deem appropriate to determine the Closing Level of the Index on such day using, to the extent possible, the Closing Level for the Index on the last day it was determinable. In such case, any payment due to be made on the Securities to be wholly or partially determined from such postponed Closing Level determination will be postponed to the first Business Day after the Closing Level of the Index to which the affected Securities are linked has been determined.

Acceleration upon Occurrence of Extraordinary Event: If an Extraordinary Event occurs and continues for at least five consecutive Exchange Days, then the Bank may, by notice to Securityholders (an "**Acceleration Notice**") accelerate the calculation of the return payable in respect of all Securities to the date of the Acceleration Notice (the "**Accelerated Valuation Date**") and accelerate payment of such return to the Business Day that is ten Business Days after the Accelerated Valuation Date (the "**Special Payment Date**") to Securityholders of record on the Special Payment Date. Instead of the Redemption Amount at maturity of the Securities, the Bank will pay the greater of (1) an amount equal to 1.00% of the Principal Amount of the Securities and (2) the Actualized Fair Value of the Securities, calculated as at the Accelerated Valuation Date, to Securityholders of record on the Special Payment Date. Such payment will constitute payment in full on the Securities and no other payments will be made or due in respect of the Securities at any time after such date.

SALES RESTRICTIONS AND DISCLAIMER

Selling Restrictions	No action has been or will be taken that would permit a public offering of the Securities or possession or distribution of any offering material in relation to the Securities in any jurisdiction where action for that purpose is required. No purchase, offer, sale or re-sale or
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delivery of any Securities or distribution of any offering material relating to the Securities may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws and regulations and which will not impose any obligation on the Bank, the guarantor, if any, or the Calculation Agent.

Resale Restrictions: The distribution of the Securities is being made on a private placement basis and will be subject to a four-month hold period under Canadian securities law. Accordingly, any resale of the Securities must be made: (i) through an appropriately registered dealer or in accordance with an exemption from the registered dealer requirements of applicable provincial securities laws; and (ii) during such four-month hold period, in accordance with, or pursuant to an exemption from, or in a transaction not subject to, the prospectus requirements of those laws. The Securities may be relatively illiquid during the four-month hold period due to the restrictions on resale described above.

On-sales of Securities: In addition to the specific restrictions in relation to offers in Canada stated above, any on-sales, subsequent offer or buy back of the Securities should only be made in accordance with any applicable law and regulation. In particular any applicable securities laws or regulations relating to the requirement for a prospectus or other prescribed disclosure or any requirement to conduct suitability or appropriateness assessments and any requirement regarding the disclosure of commissions and/or fees and/or non-monetary benefits paid or received should be complied with.

US Offering Information: Securities have not been and will not be registered under the *Securities Act* of 1933 (United States), as amended (the “**Securities Act**”) and may not be offered or sold within the United States or to or for the account or benefit of U.S. persons except in accordance with Regulation S under the Securities Act or pursuant to an exemption from the registration requirements of the Securities Act.

OTHER RISK INFORMATION

Product Risk: The Securities are not principal protected. Depending on the performance of the Index over the term of the Securities, you could lose substantially all of your investment.

Issuer Risk: Investors bear the issuer risk. The value of the Securities is dependent not only on the performance of the Index, but also on the creditworthiness of the Bank, which may vary over the term of the Securities. The ratings of the Bank noted above reflect the independent opinion of the rating agencies as to the safety of the Bank's payment obligations. These ratings are not a guarantee of credit quality. The ratings do not take into consideration any risk associated with fluctuations in the market value of the Securities, or where factors other than the Banks' credit quality determine the amount required to be paid by the Bank with respect to the Securities.

Differences from a direct investment in the Underlying Securities of the Index: The return on the Securities will not reflect the return you would realize if you owned the Underlying Securities. As such, the Securities are subject to different risks than, and the return on the Securities will not be identical to the returns associated with, such investment.

Investing in the Securities will not make you a holder of any of the Underlying Securities. You will not have any voting rights, any right to receive dividends or other distributions or any other rights with respect to any of the Underlying Securities.



Liquidity Risk:

The investor should be prepared to hold this Security until maturity should it not be called or terminated early, if such option exists, by the Bank. The Bank will, however, use its reasonable endeavours to provide liquidity to the Security but is not obliged to do so and may stop providing liquidity at any time without notice. The price at which you purchase the Securities include hedging costs and profits that the Bank or its affiliates expect to incur or realize. These costs and profits will reduce the secondary market price, if any secondary market develops, for the Securities. As a result, you may experience an immediate and substantial decline in the value of your securities on the Issue Date.

Suitability:

This document is being provided to you based on our reasonable belief that you are an accredited investor that is capable of assessing the merits and risks of the matters discussed herein. Institutions referencing this document or extracting information from this document with which to advise their clients will need to ensure that the information satisfies their local jurisdictional requirements and applicable securities laws for conducting business with private and /or retail clients.

Non-CDIC Protection:

The Securities will not constitute deposits that are insured under the *Canada Deposit Insurance Corporation Act*.

DEFINITIONS

Actualized Fair Value:

“Actualized Fair Value” per Security is the fair value of the Security as at the Accelerated Valuation Date as determined by the Calculation Agent acting in good faith in accordance with industry-accepted valuation methods, practices and procedures for valuing financial instruments of the nature of the Securities. In this regard, the Calculation Agent will have regard to any relevant factors, including the lack of principal protection (subject to the 1.00% floor), the level of the Index as at the Accelerated Valuation Date relative to the level of the Index as at the Initial Valuation Date for the Index; the prevailing level of interest rates; the volatility of the Underlying Securities; the existence of any right to redeem the Securities and the time remaining until such redemption right may be exercised by the Bank; and the time remaining until the maturity of the Securities. The calculation of the Actualized Fair Value is expected to involve a market valuation of the various components of the formula for determining the amount payable in respect of the Securities.

Business Day:

“Business Day” means a day on which commercial banks are open for business and able to effect transactions in foreign exchange and foreign currency deposits in Toronto, Ontario, Canada and a day on which book-entry transfers may be effected through CDS. If any date on which any action is otherwise required to be taken in respect of the Securities is not a Business Day, the date on which such action shall be taken shall, except as otherwise indicated, be the next following Business Day and, if the action involves payment of any amount, no interest or other compensation shall be paid as a result of any such delay.

Calculation Agent:

A calculation agent will be appointed by the Bank from time to time (the “Calculation Agent”). The calculation agent will initially be RBC Dominion Securities Inc.

Absent manifest error, all determinations of the Calculation Agent will be final and binding on you and the Bank, without any liability on the part of the Calculation Agent except in the case of the Calculation Agent’s negligence, bad faith or wilful misconduct. The Calculation Agent will act solely as the Bank’s agent and will not assume any obligation or duty to, or



any relationship of agency or trust for or with, the Securityholders.

The Bank may vary or terminate the appointment of the Calculation Agent in respect of the Securities and may appoint another Calculation Agent at any time without your consent.

Exchange:

"Exchange" means a securities exchange or trading platform on which Underlying Securities trade, or on which futures contracts, options or other derivatives relating to the Index or the Underlying Securities trade.

Exchange Day:

"Exchange Day" means a day on which each Exchange is (or, but for the occurrence of an Extraordinary Event, would have been) open for trading during its regular trading session, including a day on which trading on such an Exchange is scheduled to close prior to its regular closing time.

Extraordinary Event:

"Extraordinary Event" means any event, circumstance or cause that the Bank determines, and the Calculation Agent confirms, has or will have a material adverse effect on the ability of the Bank to perform its obligations under the Securities or to hedge its position in respect of its obligation to make payment of amounts owing thereunder, including as a result of any of Royal Bank's internal policies, and more specifically includes the following events to the extent that they have such effect:

- (i) the occurrence or existence on any Exchange Day of a Market Disruption Event in respect of the Index;
- (ii) the enactment, publication, decree or other promulgation of, or any change in, any statute, regulation, rule, policy, practice, or order, or the promulgation or any change in the interpretation by any court, tribunal or other government authority of any statute, regulation, rule, policy, practice, or order that would make it unlawful or impracticable for the Bank to perform its obligations under the Securities or for dealers to execute, maintain or modify a hedge in a position in respect of the Index or the Underlying Securities;
- (iii) the taking of any action by any governmental, administrative, legislative or judicial authority or power of Canada or any other country or political subdivision thereof that has a material adverse effect on the financial markets of Canada or a country in which an Exchange is located; or
- (iv) any outbreak or escalation of hostilities or other national or international calamity or crisis (including, without limitation, natural calamities) which has or would have a material adverse effect on the Bank's ability to perform its obligations under the Securities or of a dealer to execute, maintain or modify a hedge of a position with respect to the Index or the Underlying Securities or a material and adverse effect on the economy of Canada or any country in which an Exchange is located or on the trading of securities generally on any Exchange; or
- (v) a Hedging Event.

Hedging Event:

"Hedging Event" means the occurrence of an event that has a material adverse effect on the Bank's ability to place, maintain or modify any hedge, including without limitation:

- (i) the adoption of or any change in any applicable law or regulation (including tax law), or the promulgation or any change in the interpretation by any court, tribunal or regulatory authority of any applicable law or regulation



(including by a taxing authority);

- (ii) the termination or material amendment of any hedging contract with a third party;
- (iii) the inability of the Bank after using commercially reasonable efforts, to acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset for hedging its price risk, or realize, recover or remit the proceeds of any such transaction or asset, including as a result of the application of the Bank's internal policies; or
- (iv) a material increase in the amount of tax, duty, expense or fee to acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction or asset for hedging its price risk or realize, recover or remit the proceeds of any such transaction or asset.

The Bank will publish information regarding any adjustments required upon the occurrence of a Hedging Event at www.rbcnotes.com.

Market Disruption Event:

"Market Disruption Event" means, in respect of the Index, the occurrence of any of the following events:

- (i) the failure of the Index Sponsor to announce or publish the Closing Level of the Index, or the information necessary for determining the Closing Level of the Index, or the temporary or permanent discontinuance or unavailability of the Index, in circumstances where the Index Sponsor or another entity does not replace the Index as contemplated under "Discontinuation of the Index" below;
- (ii) a suspension, absence or material limitation of trading on an Exchange for the Underlying Securities, or futures contracts, options or other derivatives relating to the Index or the Underlying Securities, including a limitation on trading on any such Exchange on any one day by reason of movements in prices that exceed the price permitted by such Exchange;
- (iii) the cessation of the Index and no successor Index is selected by the Calculation Agent within five Exchange Days of the cessation of the Index;
- (iv) the occurrence of a material change in the formula for or method of determining the level of the Index; or
- (v) the occurrence of a material change in the content, composition or constitution of the Index.

For the purpose of determining whether a Market Disruption Event exists at any time, a limitation on the hours or number of days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of an Exchange and an "absence" or "limitation on trading" of or on such Exchange will not include any time when such Exchange itself is closed for trading under ordinary circumstances.

Discontinuation of the Index

If the Index level which is required for determination of any amount payable on a Security is not announced or published by the Index Sponsor for at least two consecutive Exchange



Days, but is calculated and publicly announced by another independent authoritative third party appointed as a result of such disruption in the announcement or publication of the Index level, which third party is acceptable to the Calculation Agent, then the Index level will be determined by reference to the level of the Index as so calculated and announced by such third party.

If at any time the Index Sponsor or the third party ceases to announce or publish the Index level, either temporarily or permanently, or if at any time the Bank is unable to hedge its position in respect of its obligation to make payment of amounts owing under Securities linked to the Index (the “**discontinued Index**”), including as a result of the general unavailability of information or the discontinuance or suspension of trading on any Exchange for futures contracts, forward contracts or options contracts related to the Index, then the Calculation Agent may designate another Index (a “**successor Index**”) to replace the discontinued Index, provided that the successor Index substantially and transparently tracks the market performance of the broad local market or markets in respect of the Underlying Securities of the discontinued Index, and subject to appropriate adjustments being made to the terms and provisions of the Securities which the Calculation Agent determines to be necessary or appropriate to preserve the economic value of the Securities as of the effective date of replacement.