ROYAL BANK OF CANADA
Form FWP
January 04, 2019

The information in this pricing supplement is not complete and may be changed.
This pricing supplement is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 3, 2019	Filed Pursuant to Rule 433
	Registration No. 333-227001

Preliminary Pricing Supplement No. WFC131 (to Prospectus and Prospectus Supplement each dated September 7, 2018)

Royal Bank of Canada
Market Linked Securities—Leveraged Upside Participation and Fixed Percentage Buffered Downside
Principal at Risk Securities Linked to the EURO STOXX 50® Index, due August 5, 2021

The securities described in this pricing supplement are issued by Royal Bank of Canada (Royal Bank of Canada or the Issuer), and are Senior Global Medium-Term Notes, Series H of the Issuer, as described in the prospectus supplement and prospectus each dated September 7, 2018.

Agent:	Wells Fargo Securities, LLC. The agent may make sales through its affiliates or selling agents.
Principal Amount:	Each security will have a principal amount of $1,000. The securities are not principal-protected. You may lose up to 75% of the principal amount of the securities.
Pricing Date:	January 31, 2019*
Original Issue Date:	February 5, 2019*
Valuation Date:	July 29, 2021*, subject to postponement as described below.
Maturity Date:	August 5, 2021*, subject to postponement as described below.
Interest:	We will not pay you interest during the term of the securities.
Index:	The return on the securities is linked to the performance of the EURO STOXX 50® Index (Bloomberg symbol: SX5E), which we refer to as the Index.
Payment at Maturity:	The amount you receive at maturity, for each security you own, will depend upon the change in the level of the Index based on the Final Index Level relative to the Initial Index Level, and whether or not the Final Index Level is below the Buffer Level. (i) If the Final Index Level is greater than the Initial Index Level, the maturity payment amount per security will equal:

$$\$1{,}000 + \left(\$1{,}000 \times \frac{\text{Final Index Level} - \text{Initial Index Level}}{\text{Initial Index Level}} \times \text{Participation Rate}\right)$$

(ii) If the Final Index Level is equal to or less than the Initial Index Level but greater than or equal to the Buffer Level, the maturity payment amount per security will equal $1,000.

(iii) If the Final Index Level is less than the Buffer Level, the maturity payment amount per security will equal:

$$\$1{,}000 - \left(\$1{,}000 \times \frac{\text{Buffer Level} - \text{Final Index Level}}{\text{Initial Index Level}} \right)$$

	In such a case, you will lose up to 75% of your principal.
Participation Rate:	[130%-140%], to be determined on the pricing date.
Initial Index Level:	The closing level of the Index on the pricing date.
Final Index Level:	The closing level of the Index on the valuation date.
Buffer Level:	75% of the Initial Index Level.
Listing:	The securities will not be listed on any securities exchange.
CUSIP Number:	78013XV96

* To the extent that the Issuer makes any change to the expected pricing date or expected original issue date, the valuation date and the maturity date may also be changed in the Issuer's discretion to ensure that the term of the securities remains the same.

Our initial estimated value of the securities as of the date of this document is $951.56 per $1,000 in principal amount, which is less than the public offering price. While the initial estimated value of the securities on the pricing date may differ from the estimated value set forth above, we do not expect it to differ significantly absent a material change in market conditions or other relevant factors. The final pricing supplement relating to the securities will set forth our estimate of the initial value of the securities as of the pricing date, which will not be less than $931.56 per $1,000 in principal amount. The market value of the securities at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. See "Risk Factors" and "Supplemental Plan of Distribution – Structuring the Securities" for further information.

The securities will be unsecured debt obligations of Royal Bank of Canada. Payments on the securities are subject to Royal Bank of Canada's credit risk. If Royal Bank of Canada defaults on its obligations, you could lose your entire investment. No other company or entity will be responsible for payments under the securities or liable to holders of the securities in the event Royal Bank of Canada defaults under the securities. The securities will not be issued by or guaranteed by Wells Fargo Securities, LLC or any of its affiliates. The securities are not subject to conversion into our common shares under subsection 39.2(2.3) of the Canada Deposit Insurance Corporation Act.

The securities will not constitute deposits insured by the Canada Deposit Insurance Corporation, the U.S. Federal Deposit Insurance Corporation (the "FDIC") or any other Canadian or U.S. government agency or instrumentality.

For a detailed description of the terms of the securities, see "Summary Information" beginning on page PS-2 and "Specific Terms of the Securities" beginning on page PS-15. Defined terms used in this cover page are defined in "Summary Information" and "Specific Terms of the Securities."

The securities have complex features and investing in the securities involves risks. See "Risk Factors" beginning on page PS-9 of this document and page S-1 of the accompanying prospectus supplement.

	Per Security	Total
Public Offering Price	$1,000.00	$•
Maximum Underwriting Discount and Commission (1)	$31.50	$•
Minimum Proceeds to Royal Bank of Canada	$968.50	$•

(1) The agent will receive an underwriting discount and commission of up to $31.50 per security. Of that underwriting discount and commission, each dealer that sells securities will receive a selling concession of $17.50 for each security that such dealer sells. Such securities dealers may include Wells Fargo Advisors ("WFA") (the trade name of the retail brokerage business of Wells Fargo Clearing Services, LLC and Wells Fargo Advisors Financial Network, LLC). In addition to the selling concession allowed to WFA, the agent will pay $0.75 per security of the underwriting discount and commission to WFA as a distribution expense fee for each security sold by WFA. See "Use of Proceeds and Hedging" and "Supplemental Plan of Distribution" in this pricing supplement for information regarding how we may hedge our obligations under the securities.

None of the Securities and Exchange Commission, any state securities commission or any other regulatory body has approved or disapproved of the securities or passed upon the adequacy or accuracy of this pricing supplement. Any representation to the contrary is a criminal offense.

Wells Fargo Securities
The date of this pricing supplement is January [ ], 2019

SUMMARY INFORMATION

This document is a pricing supplement. This pricing supplement provides specific pricing information in connection with this issuance of securities. This summary includes questions and answers that highlight selected information from this pricing supplement and the accompanying prospectus supplement and prospectus to help you understand the Market Linked Securities Leveraged Upside Participation and Fixed Percentage Buffered Downside Principal at Risk Securities Linked to the EURO STOXX 50® Index, due August 5, 2021 (the securities). You should carefully read this pricing supplement and the accompanying prospectus supplement and prospectus to fully understand the terms of the securities and the tax and other considerations that are important to you in making a decision about whether to invest in the securities. You should carefully review the section "Risk Factors" in this pricing supplement and the accompanying prospectus supplement and prospectus, which highlight certain risks associated with an investment in the securities, to determine whether an investment in the securities is appropriate for you.

Unless otherwise mentioned or unless the context requires otherwise, all references in this pricing supplement to "Royal Bank of Canada", "we", "us" and "our" or similar references mean Royal Bank of Canada. Capitalized terms used in this pricing supplement without definition have the meanings given to them in the accompanying prospectus supplement and prospectus.

What are the securities?

The securities offered by this pricing supplement will be issued by Royal Bank of Canada and will mature on August 5, 2021. The return on the securities, if any, will be linked to the performance of the EURO STOXX 50® Index, which we refer to as the Index. The securities will not bear interest and no other payments will be made until maturity. You may lose up to 75% of your investment in the securities.

As discussed in the accompanying prospectus supplement, the securities are debt securities and will be part of a series of debt securities entitled "Senior Global Medium-Term Notes, Series H" that Royal Bank of Canada may issue from time to time. The securities will rank equally with all other unsecured and unsubordinated debt of Royal Bank of Canada. For more details, see "Specific Terms of the Securities" beginning on page PS-15.

Each security will have a principal amount of $1,000. Each security will be offered at an initial public offering price of $1,000. However, on the pricing date, our initial estimated value of the securities will be less than $1,000 per security as a result of certain costs that are included in the initial public offering price. See "Risk Factors—Our initial estimated value of the securities will be less than the initial public offering price" and "Supplemental Plan of Distribution—Structuring the Securities." To the extent a market for the securities exists, you may transfer only whole securities. Royal Bank of Canada will issue the securities in the form of a master global certificate, which is held by The Depository Trust Company, also known as DTC, or its nominee. Direct and indirect participants in DTC will record your ownership of the securities.

Are the securities principal protected?

No, the securities do not guarantee any return of principal at maturity. If the Final Index Level is less than the Buffer Level, you will be exposed on a 1-to-1 basis to declines in the level of the Index beyond the Buffer Level. Accordingly, if the Final Index Level is below the Buffer Level, you will lose up to 75% of your principal.

What will I receive upon maturity of the securities?

At maturity, for each security you own, you will receive a cash payment equal to the maturity payment amount. The maturity payment amount to which you will be entitled depends on the percentage change in the level of the Index calculated based on the Final Index Level (as defined below) relative to the Initial Index Level (as defined below), and whether or not the Final Index Level is below the Buffer Level (as defined below).

The maturity payment amount for each security will be determined by the calculation agent as described below:

- If the Final Index Level is greater than the Initial Index Level, the maturity payment amount per security will equal:

$$\$1,000 + (\$1,000 \times \frac{\text{Final Index Level} - \text{Initial Index Level}}{\text{Initial Index Level}} \times \text{Participation Rate})$$

The Participation Rate will be [130%-140%], to be determined on the pricing date.

- If the Final Index Level is equal to or less than the Initial Index Level, but greater than or equal to the Buffer Level, the maturity payment amount per security will equal $1,000.
- If the Final Index Level is less than the Buffer Level, the maturity payment amount per security will equal:

$$\$1,000 - (\$1,000 \times \frac{\text{Buffer Level} - \text{Final Index Level}}{\text{Initial Index Level}})$$

If the Final Index Level is less than the Buffer Level, the amount you will receive at maturity will be less than the principal amount of the securities, and you will lose up to 75% of your principal. If the Final Index Level is zero, the maturity payment amount will be $250.00 per security, and you will lose 75% of your principal.

The Initial Index Level will be equal to the closing level of the Index on the pricing date and disclosed in the final pricing supplement for the securities.

The Buffer Level will equal 75% of the Initial Index Level.

The Final Index Level will be determined by the calculation agent and will be the closing level of the Index on the valuation date.

The valuation date is July 29, 2021. However, if that day occurs on a day that is not a trading day (as defined on page PS-19) or on a day on which the calculation agent has determined that a market disruption event (as defined under "Specific Terms of the Securities—Market Disruption Event" below) has occurred or is continuing, then the valuation date will be postponed until the next succeeding trading day on which the calculation agent determines that a market disruption event does not occur or is not continuing; provided that in no event will the valuation date be postponed by more than eight trading days. If the valuation date is postponed, then the maturity date of the securities will be postponed by an equal number of business days. The maturity date will be a business day. In the event the maturity date would otherwise be a date that is not a business day, the maturity date will be postponed to the next succeeding date that is a business day and no interest shall accrue or be payable as a result of the postponement.

The closing level on any trading day will equal the official closing level of the Index or any successor Index (as defined under "Specific Terms of the Securities—Discontinuation of the Index; Adjustments to the Index" below) published by the Index Sponsor (as defined below) or any successor index sponsor at the regular weekday close of trading on that trading day. In certain circumstances, the closing level will be based on the alternate calculation of the Index described under "Specific Terms of the Securities—Discontinuation of the Index; Adjustments to the Index" below.

If the Final Index Level is less than the Buffer Level, you will you will be exposed on a 1-to-1 basis to declines in the level of the Index beyond the Buffer Level. Accordingly, if the level of the Index decreases below the Buffer Level, you will lose up to 75% of your principal.

Hypothetical Examples

Set forth below are three hypothetical examples of the calculation of the maturity payment amount based on the following hypothetical values (the numbers appearing in the examples below have been rounded for ease of analysis):

Hypothetical Initial Index Level: 3,000.00

Hypothetical Buffer Level: 2,250.00

Hypothetical Participation Rate: 135% (the mid-point of the Participation Rate range set forth in this pricing supplement)

Example 1—The hypothetical Final Index Level is 40.00% of the hypothetical Initial Index Level, which is below the Buffer Level:

Hypothetical Final Index Level: 1,200.00

Maturity payment amount (per security) $= \$1,000 - (\$1,000 \times \frac{2,250.00 - 1,200.00}{3,000.00}) = \$650.00$

Since the hypothetical Final Index Level is less than the hypothetical Initial Index Level and below the hypothetical Buffer Level, the amount you will receive at maturity will be equal to the issue price of $1,000 per security minus $1,000 times the difference between the hypothetical Buffer Level and the hypothetical Final Index Level, divided by the hypothetical Initial Index Level, and you would lose some of your principal. Although the hypothetical Final Index level declined by 60.00% from the hypothetical Initial Index Level to the hypothetical Final Index Level, your total cash payment at maturity would be $650.00 per security, representing a 35.00% loss of the principal amount of your securities.

Example 2—The hypothetical Final Index Level is 95.00% of the hypothetical Initial Index Level, which is below the Initial Index Level, but above the Buffer Level:

Since the hypothetical Final Index Level is less than the hypothetical Initial Index Level but greater than the hypothetical Buffer Level, the maturity payment amount per security will equal the principal amount of $1,000.

Example 3—The hypothetical Final Index Level is 120.00% of the hypothetical Initial Index Level:

Hypothetical Final Index Level: 3,600.00

Maturity payment amount (per security) $= \$1,000 + (\$1,000 \times \frac{3,600.00 - 3,000.00}{3,000.00} \times 135\%)$

$= \$1,000 + \$270.00 = \$1,270.00$

Since the hypothetical Final Index Level is greater than the hypothetical Initial Index Level, you would receive the principal amount of $1,000 plus 135% (the midpoint of the Participation Rate range of 130%-140%) times the amount of the percentage change in the level of the Index times $1,000. Your total cash payment at maturity would be $1,270.00 per security, representing a 27.00% total return.

Hypothetical Returns

The following table assumes a hypothetical Participation Rate of 135%, the mid-point of the Participation Rate range set forth in this pricing supplement, a hypothetical Initial Index Level of 3,000.00 and a range of hypothetical Final Index Levels and illustrates:

· the percentage change from the hypothetical Initial Index Level to the hypothetical Final Index Level;
· the hypothetical maturity payment amount per security; and
· the hypothetical pre-tax total rate of return to beneficial owners of the securities.

The figures below are rounded for ease of analysis and are for purposes of illustration only. The actual maturity payment amount will depend on the actual Participation Rate and the Final Index Level as determined by the calculation agent as described in this pricing supplement.

Hypothetical Final Index Level		Percentage Change from the Hypothetical Initial Index Level to the Hypothetical Final Index Level	Hypothetical Maturity Payment Amount per Security	Hypothetical Pre-Tax Total Rate of Return on the Securities
0.00		-100.00%	$250.00	-75.00%
300.00		-90.00%	$350.00	-65.00%
600.00		-80.00%	$450.00	-55.00%
900.00		-70.00%	$550.00	-45.00%
1,200.00		-60.00%	$650.00	-35.00%
1,350.00		-55.00%	$700.00	-30.00%
1,500.00		-50.00%	$750.00	-25.00%
1,650.00		-45.00%	$800.00	-20.00%
1,800.00		-40.00%	$850.00	-15.00%
2,100.00		-30.00%	$950.00	-5.00%
2,250.00	(1)	-25.00%	$1,000.00	0.00%
2,400.00		-20.00%	$1,000.00	0.00%
2,700.00		-10.00%	$1,000.00	0.00%
3,000.00	(2)	0.00%	$1,000.00	0.00%
3,300.00		10.00%	$1,135.00	13.50%
3,600.00		20.00%	$1,270.00	27.00%
3,900.00		30.00%	$1,405.00	40.50%
4,200.00		40.00%	$1,540.00	54.00%
4,500.00		50.00%	$1,675.00	67.50%
4,800.00		60.00%	$1,810.00	81.00%
5,100.00		70.00%	$1,945.00	94.50%
5,400.00		80.00%	$2,080.00	108.00%
5,700.00		90.00%	$2,215.00	121.50%
6,000.00		100.00%	$2,350.00	135.00%

(1) This is the hypothetical Buffer Level.
(2) This is the hypothetical Initial Index Level.

The following graph sets forth the return at maturity for a range of hypothetical percentage changes of the Index, based on a hypothetical Participation Rate of 135% (the midpoint of the Participation Rate range set forth in this pricing supplement).

Return Profile of Market Linked Securities —Leveraged Upside Participation
and Fixed Percentage Buffered Downside Principal at Risk Securities vs. the Index

Who should or should not consider an investment in the securities?

We have designed the securities for investors who seek exposure to the Index, who believe that the Index level will increase over the term of the securities, and who want to participate in [1.30-1.40] (to be determined on the pricing date) times the possible appreciation of the Index (measured by the percentage change in the level of the Index based on the Final Index Level relative to the Initial Index Level); who understand that, if the Final Index Level is less than the Buffer Level, they will lose money on their investment; and who are willing to hold their securities until maturity. Investors in the securities should be willing to risk up to 75% of their investment.

The securities are not designed for, and may not be a suitable investment for, investors who are unable or unwilling to hold the securities to maturity, who seek principal protection for their investment, who are unwilling to make an investment exposed to downside performance risk of the Index or who are unwilling to purchase securities with an initial estimated value as of the pricing date that is lower than the initial public offering price and that may be as low as the lower estimated value set forth on the cover page. The securities may not be a suitable investment for investors who prefer the lower risk of fixed income investments with comparable maturities issued by companies with comparable credit ratings.

What will I receive if I sell the securities prior to maturity?

The market value of the securities may fluctuate during the term of the securities. Several factors and their interrelationship will influence the market value of the securities, including the level of the Index, dividend yields of the common stocks underlying the Index, the time remaining to maturity of the securities, interest rates and the volatility of the Index. Depending on the impact of these factors, you may receive less than $1,000 per security from any sale of your securities before the maturity date of the securities and less than what you would have received had you held the securities until maturity. Assuming no change in market conditions or other relevant factors, the price, if any, at which you may be able to sell your securities prior to maturity will be less than the initial public offering price and, subject to the discussion regarding secondary market prices during the four months following the original issue date in "Supplemental Plan of Distribution" on page PS-29, will be less than the initial estimated value of the securities set forth on the cover page. For more details, see "Risk Factors — Many factors affect the market value of the securities" on page PS-10 and "—The price, if any, at which you may be able to sell your securities prior to maturity may be less than the initial public offering price and our initial estimated value" on page PS-11.

Who publishes the Index and what does the Index measure?

The EURO STOXX 50® Index (the Index) is an equity index that is composed of 50 component stocks of sector leaders in 11 Eurozone countries and is intended to provide an indication of common stock price movement in the Eurozone. The Index is published by STOXX Limited (the Index Sponsor).

The Index is determined, calculated and maintained by the Index Sponsor without regard to the securities.

You should be aware that an investment in the securities does not entitle you to any ownership interest in the common stocks of the companies included in the Index. For a discussion of the Index, see "EURO STOXX 50® Index" below.

How has the Index performed historically?

You can find a graph setting forth the closing levels of the Index for the period from January 1, 2014 to a recent date, in the section entitled "EURO STOXX 50® Index— Historical Closing Levels of the Index" in this pricing supplement. We obtained the historical information from Bloomberg Financial Markets without independent verification. You should not take the past performance of the Index as an indication of how the Index will perform in the future.

What are the United States federal income tax consequences of investing in the securities?

The terms of the securities require a holder and us (in the absence of a change in law or an administrative or judicial ruling to the contrary) to treat the securities for all tax purposes as pre-paid cash-settled derivative contracts in respect of the Index. If the securities are so treated, a U.S. holder should generally recognize capital gain or loss upon the sale, exchange or maturity of the securities in an amount equal to the difference between the amount a holder receives at such time and the holder's tax basis in the securities.

Please read carefully the section entitled "Supplemental Discussion of U.S. Federal Income Tax Consequences" in this pricing supplement, the section entitled "Tax Consequences" in the accompanying prospectus and the section entitled "Certain Income Tax Consequences" in the accompanying prospectus supplement. You should consult your tax advisor about your own tax situation.

What are the Canadian federal income tax consequences of investing in the securities?

For a discussion of the Canadian federal income tax consequences of investing in the securities, please read carefully the section entitled "Tax Consequences" in the accompanying prospectus and the section entitled "Certain Income Tax Consequences" in the accompanying prospectus supplement. You should consult your tax advisor about your own tax situation.

Will the securities be listed on a stock exchange?

The securities will not be listed on any securities exchange. There can be no assurance that a liquid trading market will develop for the securities. Accordingly, if you sell your securities prior to maturity, you may have to sell them at a substantial loss. You should review the section entitled "Risk Factors—There may not be an active trading market for the securities" in this pricing supplement.

Are there any risks associated with my investment?

Yes, an investment in the securities is subject to significant risks, including the risk of loss of up to 75% of your principal. We urge you to read the detailed explanation of risks in "Risk Factors" beginning on page PS-9 of this document and page S-1 of the accompanying prospectus supplement.

ADDITIONAL INFORMATION

You should read this pricing supplement together with the prospectus dated September 7, 2018, as supplemented by the prospectus supplement dated September 7, 2018, relating to our Senior Global Medium-Term Notes, Series H, of which these securities are a part. This pricing supplement, together with these documents, contains the terms of the securities and supersedes all other prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours.

You should rely only on the information provided or incorporated by reference in this pricing supplement, the prospectus and the prospectus supplement. We have not authorized anyone else to provide you with different information, and we take no responsibility for any other information that others may give you. We and Wells Fargo Securities, LLC are offering to sell the securities and seeking offers to buy the securities only in jurisdictions where it is lawful to do so. The information contained in this pricing supplement and the accompanying prospectus supplement and prospectus is current only as of their respective dates.

If the information in this pricing supplement differs from the information contained in the prospectus supplement or the prospectus, you should rely on the information in this pricing supplement.

You should carefully consider, among other things, the matters set forth in "Risk Factors" in this pricing supplement and the accompanying prospectus supplement, as the securities involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisers before you invest in the securities.

You may access these documents on the SEC website at www.sec.gov as follows (or if such address has changed, by reviewing our filings for the relevant date on the SEC website):

- Prospectus dated September 7, 2018:
  https://www.sec.gov/Archives/edgar/data/1000275/000121465918005973/l96181424b3.htm

- Prospectus Supplement dated September 7, 2018:
  https://www.sec.gov/Archives/edgar/data/1000275/000121465918005975/f97180424b3.htm

Our Central Index Key, or CIK, on the SEC website is 1000275.

Please see the section "Documents Incorporated by Reference" on page i of the above prospectus for a description of our filings with the SEC that are incorporated by reference therein.

The issuer has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by calling your financial advisor or by calling Royal Bank of Canada at 1-877-688-2301.

RISK FACTORS

An investment in the securities is subject to the risks described below, as well as the risks described under "Risk Factors" in the accompanying prospectus supplement and prospectus. The securities have complex features and are a riskier investment than ordinary debt securities. Also, your securities are not equivalent to investing directly in the Index or the common stocks included in the Index. Investors in the securities are also exposed to further risks related to the Issuer of the securities, Royal Bank of Canada, which are described in Royal Bank of Canada's most recent annual report on Form 40-F filed with the SEC and incorporated by reference herein. See the categories of risks identified and disclosed in the management's discussion and analysis of financial condition and results of operations included in the annual report on Form 40-F. This section (and the management's discussion and analysis section of the annual report on Form 40-F) describes the most significant risks relating to the securities. You should carefully consider whether the securities are suited to your particular circumstances.

Your investment may result in a loss of up to 75% of your principal

We will not repay you a fixed amount of principal on the securities at maturity. The payment at maturity on the securities will depend on the percentage change in the level of the Index based on the Final Index Level relative to the Initial Index Level, and whether or not the Final Index Level is below the Buffer Level. Because the level of the Index is subject to market fluctuations, the amount of cash you receive at maturity may be more or less than the principal amount of the securities. If the Final Index Level is less than the Buffer Level, you will be exposed on a 1-to-1 basis to declines in the level of the Index beyond the Buffer Level. Accordingly, if the level of the Index decreases below the Buffer Level, you will lose up to 75% of your principal.

You will not receive interest payments on the securities

You will not receive any periodic interest payments on the securities or any interest payment at maturity. Your payment at maturity will depend on the percentage change in the level of the Index based on the Final Index Level relative to the Initial Index Level, and whether or not the Final Index Level falls below the Buffer Level.

Your yield may be lower than the yield on a standard debt security of comparable maturity

The yield that you will receive on your securities, which could be negative, may be less than the return you could earn on other investments. Even if your yield is positive, your yield may be less than the yield you would earn if you bought a standard senior non-callable debt security of Royal Bank of Canada with the same maturity date. Your investment may not reflect the full opportunity cost to you when you take into account factors that affect the time value of money. Unlike conventional senior non-callable debt securities, the securities do not guarantee the return of all of the principal amount at maturity. In addition, no interest will be paid during the term of your securities.

Owning the securities is not the same as owning the common stocks underlying the Index

The return on your securities will not reflect the return you would realize if you actually owned and held the common stocks underlying the Index for a similar period. First, because the maturity payment amount will be determined based on the performance of the Index, which is a price-return index, the return on the securities will not take into account the value of any dividends that may be paid on the common stocks underlying the Index. Second, as a holder of the securities, you will not be entitled to receive any dividend payments or other distributions on the common stocks underlying the Index, nor will you have voting rights or any other rights that holders of those common stocks may have. Even if the level of the Index increases above the Initial Index Level during the term of the securities, the market value of the securities may not increase by the same amount. It is also possible for the level of the Index to increase while the market value of the securities declines.

There may not be an active trading market for the securities

The securities will not be listed on any securities exchange. There can be no assurance that a liquid trading market will develop for the securities. Even if a secondary market for the securities develops, it may not provide significant liquidity and transaction costs in any secondary market could be high. As a result, the difference between bid and asked prices for the securities in any secondary market could be substantial. If you sell your securities before maturity, you may have to do so at a discount from the initial public offering price, and, as a result, you may suffer substantial losses.

Wells Fargo Securities, LLC and its broker-dealer affiliates may make a market for the securities, although they are not required to do so. As market makers, trading of the securities may cause Wells Fargo Securities, LLC or its broker-dealer affiliates to have long or short positions in the securities. Because we do not expect that any other market makers will participate in a secondary market for the securities, the price at which you may be able to sell your securities is likely to depend on the price, if any, at which Wells Fargo Securities, LLC or its broker-dealer affiliates may be willing to buy your securities. See "Supplemental Plan of Distribution."

The amount to be paid at maturity is not linked to the level of the Index at any time other than the valuation date

The payment at maturity will be based on the level of the Index only on the valuation date. Therefore, for example, if the closing level of the Index decreased precipitously on the valuation date, the payment on the securities may be significantly less than it would otherwise have been had the payment been linked to the closing level of the Index prior to that decrease. Although the actual level of the Index on the maturity date or at other times during the term of the securities may be higher than the Index level on the valuation date, you will not benefit from the closing level of the Index at any time other than the valuation date.

Many factors affect the market value of the securities

The market value of the securities will be affected by factors that interrelate in complex ways. It is important for you to understand that the effect of one factor may offset any increase in the market value of the securities caused by another factor and that the effect of one factor may compound any decrease in the market value of the securities caused by another factor. For example, a change in the volatility of the Index may offset some or all of any increase in the market value of the securities attributable to another factor, such as an increase in the level of the Index. In addition, a change in interest rates may offset other factors that would otherwise change the level of the Index, and therefore, may change the market value of the securities. We expect that the market value of the securities will depend to a significant extent on the amount, if any, by which the Index level during the term of the securities exceeds or does not exceed the Initial Index Level. If you choose to sell your securities when the level of the Index exceeds the Initial Index Level, you may receive substantially less than the amount that would be payable at maturity based on this level because of the expectation that the Index will continue to fluctuate until the valuation date. We believe that other factors that may also influence the value of the securities include:

- the volatility (frequency and magnitude of changes in the level) of the Index and, in particular, market expectations regarding the volatility of the Index;
- market interest rates in the U.S.;
- the dividend yields of the common stocks included in the Index;
- our creditworthiness, as perceived in the market;
- changes that affect the Index, such as additions, deletions or substitutions;
- the time remaining to maturity; and
- geopolitical, economic, financial, political, regulatory or judicial events as well as other conditions may affect the common stocks included in the Index.

The securities will be debt obligations of Royal Bank of Canada. No other company or entity will be responsible for payments under the securities

The securities will be issued by Royal Bank of Canada. The securities will not be guaranteed by any other company or entity. No other entity or company will be responsible for payments under the securities or liable to holders of the securities in the event Royal Bank of Canada defaults under the securities. Royal Bank of Canada's credit ratings are an assessment of our ability to pay our obligations, including those on the securities. Consequently, if we default on our obligations, you could lose your entire investment, and actual or anticipated declines in our creditworthiness may affect the value of the securities. The securities will not be issued by or guaranteed by Wells Fargo Securities, LLC or any of its affiliates.

Changes that affect the Index will affect the market value of the securities and the maturity payment amount

The policies of the Index Sponsor concerning the calculation of the Index, additions, deletions or substitutions of the common stocks underlying the Index and the manner in which changes affecting the issuers of those stocks, such as stock dividends, reorganizations or mergers, are reflected in the Index could affect the level of the Index, the maturity payment amount, and the market value of the securities prior to maturity. The amount payable on the securities and their market value could also be affected if the Index Sponsor changes these policies, for example, by changing the manner in which it calculates the Index, or if the Index Sponsor discontinues or suspends calculation or publication of the Index, in which case it may become difficult to determine the market value of the securities. If events such as these occur, or if the level of the Index is not available on the valuation date because of a market disruption event or for any other reason and no successor index is selected, the calculation agent may determine the level of the Index — and thus the maturity payment amount — in its sole discretion.

We have no affiliation with the Index Sponsor and will not be responsible for any actions taken by the Index Sponsor

We have no affiliation with the Index Sponsor and the Index Sponsor will not be involved in the offering of the securities. Consequently, we have no control of the actions of the Index Sponsor, including any actions of the type that would affect the composition of the Index, and therefore, the level of the Index. The Index Sponsor has no obligation of any sort with respect to the securities. Thus, the Index Sponsor has no obligation to take your interests into consideration for any reason, including in taking any actions that might affect the value of the securities.

Historical levels of the Index should not be taken as an indication of the future levels of the Index during the term of the securities

The trading prices of the common stocks underlying the Index will determine the Index level at any given time. As a result, it is impossible to predict whether the level of the Index will rise or fall. Trading prices of the common stocks underlying the Index will be influenced by complex and interrelated political, economic, financial and other factors that can affect the issuers of those stocks.

Hedging transactions may affect the return on the securities

As described below under “Use of Proceeds and Hedging” on page PS-28, we, through one or more hedging counterparties, may hedge our obligations under the securities by purchasing common stocks underlying the Index, futures or options on the Index or common stocks underlying the Index, or exchange-traded funds or other derivative instruments with returns linked or related to changes in the level of the Index or trading prices of common stocks underlying the Index, and may adjust these hedges by, among other things, purchasing or selling any of these assets at any time. Although they are not expected to, any of these hedging activities may adversely affect the trading prices of common stocks underlying the Index and/or the level of the Index and, therefore, the market value of the securities. It is possible that we or one or more of our hedging counterparties could receive substantial returns from these hedging activities while the market value of the securities declines.

Our initial estimated value of the securities will be less than the initial public offering price

Our initial estimated value of the securities will be less than the initial public offering price of the securities. This is due to, among other things, the fact that the initial public offering price of the securities reflects the borrowing rate we pay to issue securities of this kind (an internal funding rate that is lower than the rate at which we borrow funds by issuing conventional fixed rate debt), and the inclusion in the initial public offering price of the underwriting discount and commission and hedging and other costs associated with the securities.

The price, if any, at which you may be able to sell your securities prior to maturity may be less than the initial public offering price and our initial estimated value

Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your securities prior to maturity will be less than the initial public offering price and, subject to the discussion in the next paragraph, will be less than our initial estimated value. This is because any such sale price would not be expected to include the underwriting discount and commission or hedging or other costs associated with the securities, including the estimated profit our hedging counterparty(ies) expect to realize in consideration for assuming the risks inherent in hedging our obligations under the securities. In addition, any price at which you may sell the securities is likely to reflect customary bid-ask spreads for similar trades, and the cost of unwinding any related hedge transactions. In addition, the value of the securities determined for any secondary market price is expected to be based in part on the yield that is reflected in the interest rate on our conventional debt securities of similar maturity that are traded in the secondary market, rather than the internal funding rate that we used to price the securities and determine the initial estimated value. As a result, the secondary market price of the securities will be less than if the internal funding rate was used. These factors, together with various credit, market and economic factors over the term of the securities, and, potentially, changes in the level of the Index, are expected to reduce the price at which you may be able to sell the securities in any secondary market and will affect the value of the securities in complex and unpredictable ways. Moreover, we expect that any secondary market price will be based on Wells Fargo Securities, LLC's valuation of the securities, which may differ from (and may be lower than) the valuation that we would determine for the securities at that time based on the methodology by which we determined the initial estimated value set forth on the cover page of this document.

As set forth below in the section "Supplemental Plan of Distribution," for a limited period of time after the original issue date, Wells Fargo Securities, LLC may purchase the securities at a price that is greater than the price that would otherwise be determined at that time as described in the preceding paragraph. However, over the course of that period, assuming no changes in any other relevant factors, the price you may receive if you sell your securities is expected to decline.

The securities are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your securities to maturity.

The initial estimated value of the securities is an estimate only, calculated as of the time the terms of the securities are set

Our initial estimated value of the securities is based on the value of our obligation to make the payments on the securities, together with the mid-market value of the derivative embedded in the terms of the securities. See "Supplemental Plan of Distribution—Structuring the Securities" below. Our estimate is based on a variety of assumptions, including our internal funding rate (which represents a discount from our credit spreads), expectations as to dividends on the securities included in the Index, interest rates and volatility, and the expected term of the securities. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities, including Wells Fargo Securities, LLC in connection with determining any secondary market price for the securities, may value the securities or similar securities at a price that is significantly different than we do.

The value of the securities at any time after the pricing date will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the securities in any secondary market, if any, should be expected to differ materially from our initial estimated value of your securities.

Potential conflicts of interest could arise

We, Wells Fargo Securities, LLC and our respective affiliates may engage in trading activities related to the Index or the common stocks underlying the Index that are not for the account of holders of the securities or on their behalf. These trading activities may present a conflict between the holders' interest in the securities and the interests we, Wells Fargo Securities, LLC and our respective affiliates will have in the proprietary accounts, in facilitating transactions, including options and other derivatives transactions, for our customers and in accounts under our management. These trading activities could be adverse to the interests of the holders of the securities.

We, Wells Fargo Securities, LLC and our respective affiliates may presently or from time to time engage in business with one or more of the issuers of the common stocks underlying the Index. This business may include extending loans to, or making equity investments in, such companies or providing advisory services to such companies, including merger and acquisition advisory services. In the course of business, we, Wells Fargo Securities, LLC and our respective affiliates may acquire non-public information relating to these companies and, in addition, one or more of our affiliates or the affiliates of the agent may publish research reports about these companies. Neither we nor the agent make any representation to any purchasers of the securities regarding any matters whatsoever relating to the issuers of the common stocks underlying the Index. Any prospective purchaser of the securities should undertake an independent investigation of these companies as in its judgment is appropriate to make an informed decision regarding an investment in the securities. The offering of the securities

does not reflect any investment or sell recommendations as to the Index or the securities underlying the Index by us, Wells Fargo Securities, LLC or our respective affiliates.

The calculation agent may postpone the valuation date and, therefore, determination of the Final Index Level and the maturity date if a market disruption event occurs on the valuation date

The valuation date and, therefore, determination of the Final Index Level may be postponed if the calculation agent determines that a market disruption event has occurred or is continuing on the valuation date with respect to the Index. As a result, the maturity date for the securities would be postponed. You will not be entitled to compensation from us or the calculation agent for any loss suffered as a result of the occurrence of a market disruption event, any resulting delay in payment or any change in the level of the Index after the valuation date. See "Specific Terms of the Securities—Valuation Date" and "— Market Disruption Events" below.

There are potential conflicts of interest between you and the calculation agent

The calculation agent will, among other things, determine the amount of your payment at maturity on the securities. Our wholly-owned subsidiary, RBC Capital Markets, LLC, will serve as the calculation agent. We may change the calculation agent after the original issue date without notice to you. The calculation agent will exercise its judgment when performing its functions. For example, the calculation agent may have to determine whether a market disruption event affects the Index. Since this determination by the calculation agent will affect the payment at maturity on the securities, the calculation agent may have a conflict of interest if it needs to make a determination of this kind. In addition, the calculation agent determined the initial estimated value of the securities set forth on the cover page of this pricing supplement.

Risks associated with non-U.S. companies

The level of the Index depends upon the stocks of companies located within the Eurozone, and thus involve risks associated with the home countries of those non-U.S. companies, some of which are and have been experiencing economic stress. The prices of these non-U.S. stocks may be affected by political, economic, financial and social factors in the home country of each applicable company, including changes in that country's government, economic and fiscal policies, currency exchange laws or other laws or restrictions, which could affect the value of the securities. These foreign securities may have less liquidity and could be more volatile than many of the securities traded in U.S. or other securities markets. Direct or indirect government intervention to stabilize the relevant foreign securities markets, as well as cross shareholdings in foreign companies, may affect trading levels or prices and volumes in those markets. The other special risks associated with foreign securities may include, but are not limited to: less liquidity and smaller market capitalizations; less rigorous regulation of securities markets; different accounting and disclosure standards; governmental interference; currency fluctuations; higher inflation; and social, economic and political uncertainties. These factors may adversely affect the performance of the Index and, as a result, the value of the securities.

The securities will not be adjusted for changes in exchange rates

Although the equity securities that comprise the Index are traded in euro, and your securities are denominated in U.S. dollars, the amount payable on your securities at maturity, if any, will not be adjusted for changes in the exchange rates between the U.S. dollar and the euro. Changes in exchange rates, however, may also reflect changes in the applicable non-U.S. economies that in turn may affect the level of the Index, and therefore your securities. The amount we pay in respect of your securities will be determined solely in accordance with the procedures described in this pricing supplement.

Significant aspects of the tax treatment of the securities are uncertain

The tax treatment of the securities is uncertain. We do not plan to request a ruling from the Internal Revenue Service or from the Canada Revenue Agency regarding the tax treatment of the securities, and the Internal Revenue Service, the Canada Revenue Agency or a court may not agree with the tax treatment described in this pricing supplement. The Internal Revenue Service has issued a notice indicating that it and the U.S. Treasury Department are actively considering whether, among other issues, a holder should be required to accrue interest over the term of an instrument such as the securities even though that holder will not receive any payments with respect to the securities until maturity or earlier sale or exchange and whether all or part of the gain a holder may recognize upon sale, exchange or maturity of an instrument such as the securities should be treated as ordinary income. The outcome of this process is uncertain and could apply on a retroactive basis.

Please read carefully the section entitled “Supplemental Discussion of U.S. Federal Income Tax Consequences” in this pricing supplement, the section entitled “Tax Consequences” in the accompanying prospectus and the section entitled “Certain Income Tax Consequences” in the accompanying prospectus supplement. You should consult your tax advisor about your own tax situation.

For a discussion of the Canadian federal income tax consequences of investing in the securities, please read the section entitled “Tax Consequences” in the accompanying prospectus and the section entitled “Certain Income Tax Consequences” in the accompanying prospectus supplement. You should consult your tax advisor about your own tax situation.

SPECIFIC TERMS OF THE SECURITIES

The securities are to be issued pursuant to the terms of the Indenture dated as of October 23, 2003, between Royal Bank of Canada and The Bank of New York Mellon (as supplemented, the “Indenture”).

The information contained in this section and in the prospectus supplement and the prospectus summarizes some of the terms of the securities and the Indenture. This summary does not contain all of the information that may be important to you as a potential investor in the securities. You should read the Indenture before making your investment decision. We have filed copies of the Indenture with the SEC.

Issuer:	Royal Bank of Canada
Specified Currency:	U.S. dollars
Principal Amount:	$1,000 per security
Aggregate Principal Amount:	$·
Agent:	Wells Fargo Securities, LLC The agent may make sales through its affiliates or selling agents.
Agent Acting in the Capacity of:	Principal
Pricing Date:	January 31, 2019
Original Issue Date:	February 5, 2019
Maturity Date:	August 5, 2021, subject to postponement as described below. The maturity date will be a business day. In the event the maturity date would otherwise be a date that is not a business day, the maturity date will be postponed to the next succeeding date that is a business day and no interest shall accrue or be payable as a result of that postponement.
Valuation Date:	July 29, 2021. However, if that day occurs on a day that is not a trading day or on a day on which the calculation agent has determined that a market disruption event (as defined under “—Market Disruption Events” below) has occurred or is continuing, then the valuation date will be postponed until the next succeeding trading day on which the calculation agent determines that a market disruption event does not occur or is not continuing; provided that in no event will the valuation date be postponed by more than eight trading days. If the valuation date is postponed by eight trading days, and a market disruption event occurs or is continuing on that eighth trading day, the calculation agent will determine the closing level of the Index on such eighth trading day in accordance with the formula for and method of calculating the closing level of the Index last in effect prior to commencement of the market disruption event, using the closing price (or, with respect to any relevant security, if a market disruption event has occurred with respect to such security, its good faith estimate of the value of such security at the time at which the official closing level of the Index is calculated and published by the index sponsor) on such date of each security included in the Index. As used herein, “closing price” means, with respect to any security on any date, the relevant stock exchange traded or quoted price of such security as of the time at which the official closing level of the Index is calculated and published by the index sponsor.
The Index:	The return on the securities is linked to the performance of the EURO STOXX 50® Index (the Index).
Payment at Maturity:	At maturity, for each security you own, you will receive a cash payment equal to the maturity payment amount. The maturity payment amount to which you will be entitled depends on the change in the level of the Index based on the Final Index Level relative to the Initial Index Level, and whether or not the Final Index Level is below the Buffer Level.
	The maturity payment amount for each security will be determined by the calculation

PS-15

agent as described below:

· If the Final Index Level is greater than the Initial Index Level, the maturity payment amount per security will equal:

$$\$1,000 + \left(\$1,000 \times \frac{\text{Final Index Level} - \text{Initial Index Level}}{\text{Initial Index Level}} \times \text{Participation Rate}\right)$$

· If the Final Index Level is less than or equal to the Initial Index Level but greater than or equal to the Buffer Level, the maturity payment amount per security will equal $1,000.

· If the Final Index Level is less than the Buffer Level, the maturity payment amount per security will equal:

$$\$1,000 - \left(\$1,000 \times \frac{\text{Buffer Level} - \text{Final Index Level}}{\text{Initial Index Level}}\right)$$

· In such a case, you will lose up to 75% of your principal.

	If the Final Index Level is less than the Buffer Level, you will lose up to 75% of your principal. If the Final Index Level is zero, the maturity payment amount will be $250.00 per security. If any payment is due on the securities on a day which is not a business day, then that payment may be made on the next day that is a business day, in the same amount and with the same effect as if paid on the original due date. No interest shall be payable as a result of such postponement.
Initial Index Level:	The closing level of the Index on the pricing date.
Final Index Level:	The closing level of the Index on the valuation date, as determined by the calculation agent.
Buffer Level:	75% of the Initial Index Level.
Closing Level of the Index:	The official closing level of the Index or any successor index (as defined under "—Discontinuation of the Index; Adjustments to the Index" below) published by the Index Sponsor or any successor index sponsor at the regular weekday close of trading on that trading day. In certain circumstances, the closing level will be based on the alternate calculation of the Index described under "—Discontinuation of the Index; Adjustments to the Index" below.
Participation Rate:	[130%-140%], to be determined on the pricing date.
Market Disruption Events:	As determined by the calculation agent in its sole discretion, a "market disruption event" means any of (A), (B), (C) or (D) below: A. Any of the following events occurs or exists with respect to any security included in the Index or any successor index, and the aggregate of all securities included in the Index or such successor index with respect to which any such event occurs comprise 20% or more of the level of the Index or such successor index: · a material suspension of or limitation imposed on trading by the relevant stock exchange for such security or otherwise at any time during the one-hour period that ends at the scheduled closing time for the relevant stock exchange for such security on that day, whether by reason of movements in price exceeding limits permitted by the relevant stock exchange or otherwise; · any event, other than an early closure, that materially disrupts or impairs the ability of market participants in general to effect transactions in, or obtain

market values for, such security on its relevant stock exchange at any time during the one-hour period that ends at the scheduled closing time for the relevant stock exchange for such security on that day; or

· the closure on any exchange business day of the relevant stock exchange for such security prior to its scheduled closing time unless the earlier closing is announced by such relevant stock exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on such relevant stock exchange and (ii) the submission deadline for orders to be entered into the relevant stock exchange system for execution at the scheduled closing time for such relevant stock exchange on that day.

B. Any of the following events occurs or exists with respect to futures or options contracts relating to the equity index or any successor index:

· a material suspension of or limitation imposed on trading by any related futures or options exchange or otherwise at any time during the one-hour period that ends at the close of trading on such related futures or options exchange on that day, whether by reason of movements in price exceeding limits permitted by the related futures or options exchange or otherwise;

· Any event, other than an early closure, that materially disrupts or impairs the ability of market participants in general to effect transactions in, or obtain market values for, futures or options contracts relating to the Index or such successor index on any related futures or options exchange at any time during the one-hour period that ends at the close of trading on such related futures or options exchange on that day; or

· the closure on any exchange business day of any related futures or options exchange prior to its scheduled closing time unless the earlier closing time is announced by such related futures or options exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on such related futures or options exchange and (ii) the submission deadline for orders to be entered into the related futures or options exchange system for execution at the close of trading for such related futures or options exchange on that day.

C. The Index Sponsor fails to publish the level of the Index or any successor index (other than as a result of the Index Sponsor having discontinued publication of the Index or successor index and no successor index being available).

D. Any related futures or options exchange fails to open for trading during its regular trading session.

For the purposes of determining whether a market disruption event has occurred:

· the relevant percentage contribution of a security included in the Index or any successor index to the level of such index will be based on a comparison of (x) the portion of the level of such index attributable to that security to (y) the overall level of such index, in each case using the official opening weightings as published by the relevant index sponsor as part of the market opening data;

· the "scheduled closing time" of any relevant stock exchange or related futures or options exchange on any trading day means the scheduled weekday closing time of such relevant stock exchange or related futures or options exchange on such trading day, without regard to after hours or any other trading outside the regular trading session hours; and

an "exchange business day" means any trading day on which (i) the relevant index sponsor publishes the level of the Index or any successor equity index and (ii) each

	related futures or options exchange is open for trading during its regular trading session, notwithstanding any related futures or options exchange closing prior to its scheduled closing time.
Related Futures or Options Exchange:	An exchange or quotation system where trading has a material effect (as determined by the calculation agent) on the overall market for futures or options contracts relating to the Index.
Relevant Stock Exchange:	For any security underlying the Index, the primary exchange or quotation system on which such security is traded, as determined by the calculation agent.
Discontinuation of/Adjustments to the Index:	If the Index Sponsor discontinues publication of the Index and the Index Sponsor or another entity publishes a successor or substitute index that the calculation agent determines, in its sole discretion, to be comparable to the Index (a successor index), then the calculation agent will substitute the successor index as calculated by the Index Sponsor or any other entity for the Index and calculate the Final Index Level as described above under "—Closing Level of the Index." If the Index Sponsor discontinues publication of the Index and: · the calculation agent does not select a successor index, or · the successor index is no longer published on any of the relevant trading days, the calculation agent will compute a substitute level for the Index in accordance with the procedures last used to calculate the level of the Index before any discontinuation but using only those securities that were included in the Index prior to that discontinuation. If a successor index is selected or the calculation agent calculates a level as a substitute for the Index as described below, the successor index or level will be used as a substitute for the Index for all purposes going forward, including for purposes of determining whether a market disruption event exists, even if the Index Sponsor elects to begin republishing the Index, unless the calculation agent in its sole discretion decides to use the republished Index. If the Index Sponsor discontinues publication of the Index before the valuation date and the calculation agent determines that no successor index is available at that time, then on each trading day until the earlier to occur of: · the determination of the Final Index Level, or · a determination by the calculation agent that a successor index is available, the calculation agent will determine the level that would be used in computing the maturity payment amount as described in the preceding paragraph as if that day were a trading day. The calculation agent will cause notice of each level to be published not less often than once each month in The Wall Street Journal, another newspaper of general circulation or a website or webpage available to holders of the securities, and arrange for information with respect to these levels to be made available by telephone. Notwithstanding these alternative arrangements, discontinuation of the publication of the Index would be expected to adversely affect the value of, liquidity of and trading in the securities. If at any time the method of calculating the level of the Index or the successor index changes in any material respect, or if the Index or successor index is in any other way modified so that the level of the Index or successor index does not, in the opinion of the calculation agent, fairly represent the level of the Index had those changes or modifications not been made, then, from and after that time, the calculation agent will, at the close of business in The City of New York, on each date that the closing level of the Index is to be calculated, make any adjustments as, in the good faith judgment of the calculation agent, may be necessary in order to arrive at a calculation of a level of a stock index comparable to the Index or the successor index, as the case may be, as if those changes or modifications had not been made, and calculate the closing level with reference to the Index or the successor index, as so adjusted. Accordingly, if the method

	of calculating the Index or a successor index is modified and has a dilutive or concentrative effect on the level of that index e.g., due to a split, then the calculation agent will adjust that index in order to arrive at a level of that index as if it had not been modified, e.g., as if a split had not occurred. Neither the calculation agent nor Royal Bank of Canada will have any responsibility for good faith errors or omissions in calculating or disseminating information regarding the Index or any successor index or as to modifications, adjustments or calculations by the Index Sponsor or any successor index sponsor in order to arrive at the level of the Index or any successor index.
Calculation Agent:	RBC Capital Markets, LLC will serve as the calculation agent. All determinations made by the calculation agent will be at the sole discretion of the calculation agent and, absent a determination of a manifest error, will be conclusive for all purposes and binding on the holders and beneficial owners of the securities.
Trustee:	The Bank of New York Mellon
Business Day:	For purposes of the securities, a business day means a Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in The City of New York generally are authorized or obligated by law, regulation or executive order to close.
Trading Day:	A day, as determined by the calculation agent, on which (i) the Index Sponsor is scheduled to publish the level of the Index and (ii) each related futures or options exchange is scheduled to be open for trading for its regular trading session.
Additional Amounts:	We will pay any amounts to be paid by us on the securities without deduction or withholding for, or on account of, any and all present or future income, stamp and other taxes, levies, imposts, duties, charges, fees, deductions or withholdings (taxes) now or hereafter imposed, levied, collected, withheld or assessed by or on behalf of Canada or any Canadian political subdivision or authority that has the power to tax, unless the deduction or withholding is required by law or by the interpretation or administration thereof by the relevant governmental authority. At any time a Canadian taxing jurisdiction requires us to deduct or withhold for or on account of taxes from any payment made under or in respect of the securities, we will pay such additional amounts (Additional Amounts) as may be necessary so that the net amounts received by each holder (including Additional Amounts), after such deduction or withholding, shall not be less than the amount the holder would have received had no such deduction or withholding been required. However, no Additional Amounts will be payable with respect to a payment made to a holder of a security or of a right to receive payments in respect thereto (a Payment Recipient), which we refer to as an Excluded Holder, in respect of any taxes imposed because the beneficial owner or Payment Recipient: (i) is someone with whom we do not deal at arm's length (within the meaning of the Income Tax Act (Canada)) at the time of making such payment; (ii) is subject to such taxes by reason of its being connected presently or formerly with Canada or any province or territory thereof otherwise than by reason of the holder's activity in connection with purchasing the securities, the holding of securities or the receipt of payments thereunder; (iii) is, or does not deal at arm's length with a person who is, a specified shareholder (within the meaning of subsection 18(5) of the Income Tax Act (Canada)) of Royal Bank of Canada (generally a person will be a specified shareholder for this purpose if that person, either alone or together with persons with whom the person does not deal at arm's length, owns 25% or more of (a) our voting shares, or (b) the fair

	market value of all of our issued and outstanding shares); (iv) presents such security for payment (where presentation is required) more than 30 days after the relevant date (except to the extent that the holder thereof would have been entitled to such Additional Amounts on presenting a security for payment on the last day of such 30 day period); for this purpose, the relevant date in relation to any payments on any security means: a. the due date for payment thereof, or b. if the full amount of the monies payable on such date has not been received by the Trustee on or prior to such due date, the date on which the full amount of such monies has been received and notice to that effect is given to holders of the securities in accordance with the Indenture; (v) could lawfully avoid (but has not so avoided) such withholding or deduction by complying, or requiring that any agent comply with, any statutory requirements necessary to establish qualification for an exemption from withholding or by making, or requiring that any agent make, a declaration of non-residence or other similar claim for exemption to any relevant tax authority; or (vi) is subject to deduction or withholding on account of any tax, assessment, or other governmental charge that is imposed or withheld by reason of the application of Section 1471 through 1474 of the United States Internal Revenue Code of 1986, as amended (Code) (or any successor provisions), any regulation, pronouncement, or agreement thereunder, official interpretations thereof, or any law implementing an intergovernmental approach thereto, whether currently in effect or as published and amended from time to time. For the avoidance of doubt, we will not have any obligation to pay any holders Additional Amounts on any tax which is payable otherwise than by deduction or withholding from payments made under or in respect of the securities at maturity. We will also make such withholding or deduction and remit the full amount deducted or withheld to the relevant authority in accordance with applicable law. We will furnish to the Trustee, within 30 days after the date the payment of any taxes is due pursuant to applicable law, certified copies of tax receipts evidencing that such payment has been made or other evidence of such payment satisfactory to the Trustee. We will indemnify and hold harmless each holder of the securities (other than an Excluded Holder) and upon written request reimburse each such holder for the amount of (x) any taxes so levied or imposed and paid by such holder as a result of payments made under or with respect to the securities, and (y) any taxes levied or imposed and paid by such holder with respect to any reimbursement under (x) above, but excluding any such taxes on such holder's net income or capital. For additional information, see the section entitled "Tax Consequences—Canadian Taxation" in the accompanying prospectus.
Authorized Denominations:	$1,000 and integral multiples of $1,000 in excess thereof.
Form of Securities:	Book-entry
Listing:	The securities will not be listed on any securities exchange.
Failure to Pay Maturity Payment Amount When Due:	In the event we fail to pay the maturity payment amount on the maturity date, any overdue payment in respect of the maturity payment amount of the securities on the maturity date will bear interest until the date upon which all sums due in respect of such securities are received by or on behalf of the relevant holder, at a rate per annum which is the rate for deposits in U.S. dollars for a period of six months which appears on the

	Reuters Page LIBOR01 (or any replacement page or pages for the purpose of displaying prime rates or base lending rates of major U.S. banks) as of 11:00 a.m. (London time) on the first business day following that failure to pay. That rate will be determined by the calculation agent. If interest is required to be calculated for a period of less than one year, it will be calculated on the basis of a 360-day year consisting of the actual number of days in the period.
Events of Default and Acceleration:	If the maturity of the securities is accelerated upon an event of default under the Indenture, the amount payable upon acceleration will be determined by the calculation agent. The amount will be the maturity payment amount, calculated as if the date of declaration of acceleration were the valuation date.

PS-21

EURO STOXX 50® INDEX

All disclosures contained in this document regarding the Index, including, without limitation, its make-up, method of calculation, and changes in its components, have been derived from publicly available sources. The information reflects the policies of, and is subject to change by, STOXX Limited, as the sponsor of the Index ("STOXX"). STOXX, which owns the copyright and all other rights to the Index, has no obligation to continue to publish, and may discontinue publication of, the Index. None of us, Wells Fargo Securities, LLC or RBCCM accepts any responsibility for the calculation, maintenance or publication of the Index or any successor index.

The Index was created by STOXX and is currently wholly owned by Deutsche Börse AG. Publication of the Index began in February 1998, based on an initial index level of 1,000 at December 31, 1991. Changes to the component stocks are implemented on the third Friday in September and are effective the following trading day. Changes in the composition of the Index are made to ensure that the Index includes the 50 market sector leaders from within the EURO STOXX Total Market Index. Additional information about the Index is available on the STOXX Limited website: http://www.stoxx.com. However, information included in that website is not included or incorporated by reference in this document.

For each of the 19 EURO STOXX regional supersector indices, the stocks are ranked in terms of free-float market capitalization. The largest stocks are added to the selection list until the coverage is close to, but still less than, 60% of the free-float market capitalization of the corresponding supersector index. If the next highest-ranked stock brings the coverage closer to 60% in absolute terms, then it is also added to the selection list. All current stocks in the Index are then added to the selection list. All of the stocks on the selection list are then ranked in terms of free-float market capitalization to produce the final index selection list. The largest 40 stocks on the selection list are selected; the remaining 10 stocks are selected from the largest remaining current stocks ranked between 41 and 60; if the number of stocks selected is still below 50, then the largest remaining stocks are selected until there are 50 stocks. In exceptional cases, STOXX's management board can add stocks to and remove them from the selection list.

The index components are subject to a capped maximum index weight of 10%, which is applied on a quarterly basis.

The Index is composed of 50 component stocks of market sector leaders from within the EURO STOXX® supersector indices, which includes stocks selected from the Eurozone portion of the STOXX Europe 600® supersector indices. The component stocks have a high degree of liquidity and represent the largest companies across a wide range of market sectors.

Computation of the Index

The Index is calculated with the "Laspeyres formula," which measures the aggregate price changes in the component stocks against a fixed base quantity weight. The formula for calculating the index level can be expressed as follows:

$$\text{Index} = \frac{\text{free float market capitalization of the index at the time}}{\text{divisor of the index at the time}}$$

The "free float market capitalization of the index" is equal to the sum of the products of the closing price, number of shares, free float factor, weighting cap factor, and the exchange rate from local currency into the index currency for the component company as of the time that the Index is being calculated.

The divisor of the Index is adjusted to maintain the continuity of the Index's values across changes due to corporate actions, such as cash dividends, rights offerings, stock dividends from treasury shares, repurchases of shares and self tender, and spin-offs.

Index Maintenance

The composition of the Index is reviewed annually, based on the closing stock data on the last trading day in August. Changes in the composition of the Index are made to ensure that the Index includes the 50 market sector leaders from within the Index. The component stocks are announced on the first trading day in September.

The free float factors for each component stock used to calculate the Index, as described above, are reviewed, calculated, and implemented on a quarterly basis and are fixed until the next quarterly review.

The Index is subject to a "fast exit rule." The index components are monitored for any changes based on the monthly selection list ranking. A stock is deleted from the Index if: (a) it ranks 75 or below on the monthly selection list and (b) it has been ranked 75 or below for a consecutive period of two months in the monthly selection list. The highest-ranked

stock that is not an index component will replace it. Changes will be implemented on the close of the fifth trading day of the month, and are effective the next trading day.

The Index is also subject to a "fast entry rule." All stocks on the latest selection lists and initial public offering (IPO) stocks are reviewed for a fast-track addition on a quarterly basis. A stock is added, if (a) it qualifies for the latest STOXX blue-chip selection list generated end of February, May, August or November and (b) it ranks within the "lower buffer" on this selection list.

The Index is also reviewed on an ongoing basis. Corporate actions (including initial public offerings, mergers and takeovers, spin-offs, delistings, and bankruptcy) that affect the index composition are immediately reviewed. Any changes are announced, implemented, and made effective in line with the type of corporate action and the magnitude of the effect.

License Agreement

Royal Bank of Canada has entered into a non-exclusive license agreement with STOXX, which grants us a license in exchange for a fee to use the Index in connection with the issuance of certain securities, including the securities. STOXX has no relationship to Royal Bank of Canada, other than the licensing of the Index and its service marks for use in connection with the securities.

STOXX does not:

§ sponsor, endorse, sell or promote the securities.

§ recommend that any person invest in the sec