

MIFID II PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET - Solely for the purposes of the manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in Directive 2014/65/EU (as amended, "MiFID II"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "distributor") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

PROHIBITION OF SALES TO EEA RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; or (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Directive 2003/71/EC (as amended or superseded). Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

THE NOTES ARE SUBJECT TO CONVERSION IN WHOLE OR IN PART – BY MEANS OF A TRANSACTION OR SERIES OF TRANSACTIONS AND IN ONE OR MORE STEPS – INTO COMMON SHARES OF ROYAL BANK OF CANADA OR ANY OF ITS AFFILIATES UNDER SUBSECTION 39.2(2.3) OF THE CANADA DEPOSIT INSURANCE CORPORATION ACT (CANADA) ("CDIC ACT") AND TO VARIATION OR EXTINGUISHMENT IN CONSEQUENCE AND SUBJECT TO THE APPLICATION OF THE LAWS OF THE PROVINCE OF ONTARIO AND THE FEDERAL LAWS OF CANADA APPLICABLE THEREIN IN RESPECT OF THE OPERATION OF THE CDIC ACT WITH RESPECT TO THE NOTES.

NO PROSPECTUS IS REQUIRED IN ACCORDANCE WITH DIRECTIVE 2003/71/EC FOR THE ISSUE OF NOTES DESCRIBED BELOW.

Pricing Supplement dated January 31, 2019



ROYAL BANK OF CANADA
(a Canadian chartered bank)

Legal entity identifier (LEI): ES7IP3U3RHIGC71XBU11

Issue of USD 120,000,000 Zero Coupon Callable Notes due February 19, 2049
under the Programme for the Issuance of Securities

PLEASE REFER TO ADDITIONAL RISK FACTOR UNDER ITEM 6 OF ADDITIONAL INFORMATION OF PART B HEROF.

PART A – CONTRACTUAL TERMS

Any person making or intending to make an offer of the Notes may only do so in circumstances in which no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Directive or to supplement a prospectus pursuant to Article 16 of the Prospectus Directive, in each case, in relation to such offer.

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

This document constitutes the Pricing Supplement for the Notes described herein. This document must be read in conjunction with the Structured Securities Base Prospectus dated October 12, 2018 as supplemented by the supplement dated December 19, 2018 (the "**Base Prospectus**").

Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of this Pricing Supplement and the Base Prospectus. Copies of the Base Prospectus may be obtained at the offices of each of the Managers at No. 700 Mingshui Rd, Zhongshan District, Taipei City 10462, Taiwan (R.O.C.) for KGI Securities Co. Ltd. or 8F., No. 225, Sec. 3, Nanjing E. Rd., Taipei 104, Taiwan (R.O.C.) for Yuanta Securities Co., Ltd. and the offices of the Issuing and Paying Agent, One Canada Square, London E14 5AL, England.

By investing in the Notes each investor represents that:

(a) **Non-Reliance.** It is acting for its own account, and it has made its own independent decisions to invest in the Notes and as to whether the investment in the Notes is appropriate or proper for it based upon its own judgement and upon advice from such advisers as it has deemed necessary. It is not relying on any communication (written or oral) of the Issuer or

any Dealer as investment advice or as a recommendation to invest in the Notes, it being understood that information and explanations related to the Conditions of the Notes shall not be considered to be investment advice or a recommendation to invest in the Notes. No communication (written or oral) received from the Issuer or any Dealer shall be deemed to be an assurance or guarantee as to the expected results of the investment in the Notes.

(b) **Assessment and Understanding.** It is capable of assessing the merits of and understanding (on its own behalf or through independent professional advice), and understands and accepts the terms and conditions and the risks of the investment in the Notes. It is also capable of assuming, and assumes, the risks of the investment in the Notes.

(c) **Status of Parties.** Neither the Issuer nor any Dealer is acting as fiduciary for or adviser to it in respect of the investment in the Notes.

1. Issuer: Royal Bank of Canada
Branch of Account / Branch: London Branch
2. (i) Series Number: 43146
(ii) Tranche Number: 1
3. Specified Currency or Currencies: United States Dollars (“**USD**”)
(Condition 1.12)
4. Aggregate Principal Amount:
(i) Series: USD 120,000,000
(ii) Tranche: USD 120,000,000
5. Issue Price: 100 per cent of the Aggregate Principal Amount
6. (a) Specified Denominations: USD 1,000,000
(Condition 1.10, 1.11 or 1.11a)
(b) Calculation Amount: USD 1,000,000
(c) Minimum Trading Size: Applicable: USD 1,000,000
7. (i) Issue Date: February 19, 2019
(ii) Interest Commencement Date: Not Applicable
8. Maturity Date: February 19, 2049

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| 9. | Interest Basis: | Zero Coupon |
| 10. | (a) Redemption Basis: | Subject to any purchase and cancellation or early redemption, the Notes will be redeemed on the Maturity Date at 433.430785 per cent. of the Principal Amount (further particulars specified below) |
| | (b) Protection Amount: | Not Applicable |
| 11. | Change of Interest or Redemption/Payment Basis: | Not Applicable |
| 12. | Put Option/ Call Option/ Trigger Early Redemption: | Call Option
(further particulars specified below) |
| 13. | Date [Board] approval for issuance of Notes obtained: | Not Applicable |
| 14. | Bail-inable Securities: | Yes |
| 15. | Method of distribution: | Syndicated |

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

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| 16. | Fixed Rate Note Provisions
(Condition 4.02/4.02a) | Not Applicable |
| 17. | Floating Rate Note Provisions
(Condition 4.03) | Not Applicable |
| 18. | Zero Coupon Note Provisions | Applicable |
| | (i) Accrual Yield: | 5.01 per cent per annum |
| | (ii) Reference Price: | USD 1,000,000 per Calculation Amount |
| | (iii) Any other formula/basis of determining amount payable: | Not Applicable |
| | (iv) Day Count Fraction: | 30/360 (unadjusted) |
| | (v) Determination Dates | Not Applicable |
| | (vi) Early Redemption Amount: | Zero Coupon Early Redemption Amount 1 |
| 19. | Reference Item Linked Interest Notes | Not Applicable |

20. **Dual Currency Note Provisions** Not Applicable

PROVISIONS RELATING TO REDEMPTION

21. **Call Option** (Condition 5.03) Applicable but Issuer Call on any Optional Redemption Date is only exercisable in whole and not in part
- (i) Optional Redemption Date(s): See first column of the table in 21(ii) below
- (ii) Optional Redemption Amount(s) of each Note and method, if any, of calculation of such amount(s): In accordance with the table below

Optional Redemption Date	Optional Redemption Price (expressed as a percentage of the Calculation Amount)	Optional Redemption Price (expressed per aggregate principal of the issue)	Optional Redemption Amount per Calculation Amount
19-Feb-2024	127.688943%	USD 153,226,731.60	USD 1,276,889.43
19-Feb-2025	134.086159%	USD 160,903,390.80	USD 1,340,861.59
19-Feb-2026	140.803876%	USD 168,964,651.20	USD 1,408,038.76
19-Feb-2027	147.858150%	USD 177,429,780.00	USD 1,478,581.50
19-Feb-2028	155.265843%	USD 186,319,011.60	USD 1,552,658.43
19-Feb-2029	163.044662%	USD 195,653,594.40	USD 1,630,446.62
19-Feb-2030	171.213200%	USD 205,455,840.00	USD 1,712,132.00
19-Feb-2031	179.790981%	USD 215,749,177.20	USD 1,797,909.81
19-Feb-2032	188.798509%	USD 226,558,210.80	USD 1,887,985.09
19-Feb-2033	198.257314%	USD 237,908,776.80	USD 1,982,573.14
19-Feb-2034	208.190006%	USD 249,828,007.20	USD 2,081,900.06
19-Feb-2035	218.620325%	USD 262,344,390.00	USD 2,186,203.25
19-Feb-2036	229.573203%	USD 275,487,843.60	USD 2,295,732.03
19-Feb-2037	241.074821%	USD 289,289,785.20	USD 2,410,748.21
19-Feb-2038	253.152669%	USD 303,783,202.80	USD 2,531,526.69

19-Feb-2039	265.835618%	USD 319,002,741.60	USD 2,658,356.18
19-Feb-2040	279.153983%	USD 334,984,779.60	USD 2,791,539.83
19-Feb-2041	293.139597%	USD 351,767,516.40	USD 2,931,395.97
19-Feb-2042	307.825891%	USD 369,391,069.20	USD 3,078,258.91
19-Feb-2043	323.247968%	USD 387,897,561.60	USD 3,232,479.68
19-Feb-2044	339.442691%	USD 407,331,229.20	USD 3,394,426.91
19-Feb-2045	356.448770%	USD 427,738,524.00	USD 3,564,487.70
19-Feb-2046	374.306853%	USD 449,168,223.60	USD 3,743,068.53
19-Feb-2047	393.059627%	USD 471,671,552.40	USD 3,930,596.27
19-Feb-2048	412.751914%	USD 495,302,296.80	USD 4,127,519.14

(iii) Redeemable in part: Not Applicable
If redeemable in part:

(iv) Notice periods: Minimum period: 10 London, New York and Taipei Business Days where London, New York and Taipei Business Days means a day on which commercial banks and foreign exchange markets settle payments and are open for general business in London, New York and Taipei

Maximum period: Not Applicable

22. **Put Option** Not Applicable
(Condition 5.06)

23. **Notice periods for Early Redemption for Taxation Reasons:**

(i) Minimum period: 15 days

(ii) Maximum period: 30 days

24. **TLAC Disqualification Event:** Not Applicable

25. **Notice periods for Redemption for Illegality:**

(i) Minimum period: 15 days

(ii) Maximum period: 30 days

26.	Trigger Early Redemption (Condition 5.09)	Not Applicable
27.	Final Redemption Amount of each Note	USD 4,334,307.85 Calculation Amount
28.	Early Redemption Amount	
	(i) Early Redemption Amount(s) payable on redemption for taxation reasons, illegality or on event of default or other early redemption and/or the method of calculating the same (including, in the case of Index Linked Notes, following an Index Adjustment Event in accordance with Condition 7, or in the case of Equity Linked Notes, following a Potential Adjustment Event and/or De-listing and/or Merger Event and/or Nationalisation and/or Insolvency and/or Tender Offer in accordance with Condition 8, or in the case of Equity Linked Notes, Index Linked Notes or Fund Linked Notes (involving ETFs), following an Additional Disruption Event (if applicable), or in the case of Fund Linked Notes, following a Fund Event or De-listing, Material Underlying Event, Merger Event, Nationalisation or Tender Offer in accordance with Conditions 11 and 12) (if required):	As per Condition 5.10

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| (ii) | Early Redemption Amount includes amount in respect of accrued interest: | Yes: no additional amount in respect of accrued interest to be paid |
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PROVISIONS RELATING TO REFERENCE ITEM LINKED NOTES

29. Settlement Method

Whether redemption of the Notes will be by (a) Cash Settlement or (b) Physical Delivery or (c) Cash Settlement and/or Physical Delivery and whether option to vary settlement:	Not Applicable
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30. Final Redemption Amount for Reference Item Linked Notes	Not Applicable
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31. Multi-Reference Item Linked Notes	Not Applicable
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32. Currency Linked Note Provisions	Not Applicable
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33. Commodity Linked Note Provisions	Not Applicable
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34. Index Linked Note Provisions (Equity Indices only)	Not Applicable
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35. Equity Linked Note Provisions	Not Applicable
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36. Fund Linked Note Provisions	Not Applicable
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37. Credit Linked Note Provisions	Not Applicable
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38. Dual Currency Note Provisions	Not Applicable
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39. Preference Share Linked Notes	Not Applicable
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40. Physical Delivery	Not Applicable
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GENERAL PROVISIONS APPLICABLE TO THE NOTES

41. (i)	New Global Note:	No
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(ii)	Form of Notes:	Bearer Notes Temporary Global Note exchangeable for a Permanent Global Note which is exchangeable for Definitive Notes in the limited circumstances specified in the Permanent Global Note
42.	Financial Centre(s) or other special provisions relating to payment dates:	London, New York and Taipei
43.	Relevant Renminbi Settlement Centre:	Not Applicable
44.	Talons for future Coupons or Receipts to be attached to Definitive Notes (and dates on which such Talons mature): (Condition 1.06)	No
45.	Details relating to Partly Paid Notes: amount of each payment comprising the Issue Price and date on which each payment is to be made [and consequences (if any) of failure to pay, including any right of the Issuer to forfeit the Notes and interest due on late payment]:	Not Applicable
46.	Details relating to Instalment Notes: amount of each instalment (" Instalment Amounts "), date on which each payment is to be made (" Instalment Dates "):	Not Applicable
47.	Redenomination provisions:	Not Applicable
48.	Consolidation provisions:	Not Applicable
49.	Name and address of Calculation Agent:	Royal Bank of Canada, London branch Thames Court One Queenhithe London EC4V 3DQ
50.	Issuer access to the register of creditors (<i>Sw. skuldboken</i>) in respect of Swedish Notes:	Not Applicable

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| 51. | Other terms or special conditions: | The Maturity Date and any Optional Redemption Date are subject to adjustment for payment purposes only in accordance with the "Modified Following Business Day Convention" (as defined in Condition 4.11) where the Business Days are London, New York and Taipei. |
| 52. | Exchange Date: | March 31, 2019 |
| 53. | The Aggregate Principal Amount of the Notes issued has been translated into U.S. dollars at the rate of U.S.\$1.00 = [●], producing a sum of: | Not Applicable |
| 54. | Governing law of Notes (if other than the laws of the Province of Ontario and the federal laws of Canada applicable therein and jurisdiction: | Not Applicable |
| 55. | Alternative Currency Payment: | Not Applicable |

RESPONSIBILITY

The Issuer accepts responsibility for the information contained in this Pricing Supplement.

Signed on behalf of the Issuer:

By:
Duly authorised

By:
Duly authorised

PART B – OTHER INFORMATION

1. LISTING AND ADMISSION TO TRADING

Listing/Admission to trading: Application will be made by the Issuer to the Taipei Exchange (the "TPEX") in the Republic of China ("ROC") for the listing and trading of the Notes on the TPEX.

TPEX is not responsible for the content of this Pricing Supplement and the Base Prospectus and any supplement or amendment thereto and no representation is made by TPEX as to the accuracy or completeness of this Pricing Supplement and the Base Prospectus and any supplement or amendment thereto. TPEX expressly disclaims any and all liability for any losses arising from, or as a result of the reliance on, all or part of the contents of this Pricing Supplement and the Base Prospectus and any supplement or amendment thereto.

Admission to the listing and trading of the Notes on the TPEX shall not be taken as an indication of the merits of the Issuer or the Notes. The Notes are expected to be traded on the TPEX pursuant to the applicable rules of the TPEX. Effective date of listing of the Notes on the TPEX is on or about February 19, 2019.

2. RATINGS

Ratings: Not Applicable

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

Save for any fees payable to the Managers and as discussed in "Subscription and Sale", so far as the Issuer is aware, no person involved in the issue of the Notes has an interest material to the issue.

4. OPERATIONAL INFORMATION

- (i) ISIN: XS1939253081
- (ii) Common Code: 193925308
- (iii) CFI: Not Applicable
- (iv) FISN: Not Applicable
- (v) Other Identification Number: Not Applicable

- (vi) Any clearing system(s) other than Euroclear and Clearstream, Luxembourg, their addresses and the relevant identification number(s): Not Applicable
- (vii) Delivery: Delivery against payment
- (viii) Name(s) and address(es) of Initial Paying Agents, Registrar and Transfer Agents: The Bank of New York Mellon, London Branch
One Canada Square
London E14 5AL
- (ix) Names and addresses of additional Paying Agent(s), [Registrar and Transfer Agents] (if any): Not Applicable
- (x) Intended to be held in a manner which would allow Eurosystem eligibility: Not Applicable

5. DISTRIBUTION

- (i) Method of distribution: Syndicated
- (ii) If syndicated, names of Managers: KGI Securities Co. Ltd. (as Lead Manager)
Yuanta Securities Co., Ltd. (as Co-Manager)
- (iii) Stabilisation Manager(s) (if any): Not Applicable
- (iv) If non-syndicated, name of Dealer: Not Applicable
- (v) U.S. Selling Restrictions: Regulation S compliance Category 2; TEFRA D rules apply
- (vi) Canadian Sales: Canadian Sales Not Permitted
- (vii) Additional selling restrictions: The Notes have not been, and shall not be, offered, sold or re-sold, directly or indirectly, to investors other than "professional institutional investors" as defined under Paragraph 2, Article 4 of the Financial Consumer Protection Act of the ROC ("**Professional Institutional Investors**"). Purchasers of the Notes are not permitted to sell or otherwise dispose of the Notes except by transfer to a Professional Institutional Investor.

- (viii) Prohibition of Sales to EEA Retail Investors: Applicable

6. ADDITIONAL INFORMATION The Notes are not Specified Securities for purposes of Section 871(m) of the U.S. Internal Revenue Code of 1986.

7. ADDITIONAL INFORMATION

- (i) ROC Taxation:** *The following summary of certain taxation provisions under ROC law is based on current law and practice and that the Notes will be issued, offered, sold and re-sold, directly or indirectly, to professional institutional investors as defined under Paragraph 2, Article 4 of the Financial Consumer Protection Act of the ROC only. It does not purport to be comprehensive and does not constitute legal or tax advice. Investors (particularly those subject to special tax rules, such as banks, dealers, insurance companies and tax-exempt entities) should consult with their own tax advisers regarding the tax consequences of an investment in the Notes.*

Interest on the Notes

As the Issuer is not an ROC statutory tax withholder, there is no ROC withholding tax on the interest or deemed interest to be paid on the Notes.

ROC corporate holders must include the interest or deemed interest receivable under the Notes as part of their taxable income and pay income tax at a flat rate of 20 per cent. (unless the total taxable income for a fiscal year is under NT\$500,000), as they are subject to income tax on their worldwide income on an accrual basis. The alternative minimum tax (the “**AMT**”) is not applicable.

Sale of the Notes

In general, the sale of corporate bonds or financial bonds is subject to a 0.1 per cent. securities transaction tax (the “**STT**”) on the transaction price. However, Article 2-1 of the Securities Transaction Tax Act of the ROC prescribes that STT will cease to be levied on the sale of corporate bonds and financial bonds from January 1, 2010 to December 31, 2026. Therefore, the sale of the Notes will be exempt from STT if the sale is conducted on or before December 31, 2026. Starting from January 1, 2027, any sale of the Notes will be subject to STT at 0.1 percent of the transaction price, unless

otherwise provided by the tax laws that may be in force at that time.

Capital gains generated from the sale of bonds are exempt from income tax. Accordingly, ROC corporate holders are not subject to income tax on any capital gains generated from the sale of the Notes. However, ROC corporate holders should include the capital gains in calculating their basic income for the purpose of calculating their AMT. If the amount of the AMT exceeds the ordinary income tax calculated pursuant to the Income Basic Tax Act of the ROC (known as the AMT Act), the excess becomes the ROC corporate holders' AMT payable. Capital losses, if any, incurred by such holders could be carried over 5 years to offset against capital gains of same category of income for the purposes of calculating their AMT.

(ii) ROC Settlement and Trading:

Investors with a securities book-entry account with a ROC securities broker and a foreign currency deposit account with a ROC bank may request the approval of the Taiwan Depository & Clearing Corporation ("**TDCC**") to the settlement of the Notes through the account of TDCC with Euroclear or Clearstream, Luxembourg and if such approval is granted by the TDCC, the Notes may be so cleared and settled. In such circumstances, TDCC will allocate the respective book-entry interest of such investor in the Notes to the securities book-entry account designated by such investor in the ROC. The Notes will be traded and settled pursuant to the applicable rules and operating procedures of TDCC and the TPEX as domestic bonds.

In addition, an investor may apply to TDCC (by filing in a prescribed form) to transfer the Notes in its own account with Euroclear or Clearstream, Luxembourg to the TDCC account with Euroclear or Clearstream, Luxembourg for trading in the domestic market or vice versa for trading in overseas markets.

For such investors who hold their interest in the Notes through an account opened and held by TDCC with Euroclear or Clearstream, Luxembourg, distributions of principal and/or interest for the Notes to such holders may be made by payment services banks whose systems are connected to TDCC to the foreign currency deposit accounts of the holders.

Such payment is expected to be made on the second Taiwanese business day following TDCC's receipt of such payment (due to time difference, the payment is expected to be received by TDCC one Taiwanese business day after the distribution date). However, when the holders will actually receive such distributions may vary depending upon the daily operations of the Taiwan banks with which the holder has the foreign currency deposit account.

(iii) Additional Risk Factor:

Application will be made for the listing of the Notes on the TPEX. No assurance can be given as to whether the Notes will be, or will remain, listed on the TPEX. If the Notes fail to or cease to be listed on the TPEX, certain investors may not invest in, or continue to hold or invest in, the Notes. See "No obligation to maintain listing" on pages 116 and 117 of the Base Prospectus under "Risk Factors – 4. Risks related to the Securities generally".