The risks identified in this notice are provided as general information only. Clients and counterparties of BNP Paribas that have entered into (or may in the future enter into) financial contracts or have purchased (or may in the future purchase) financial instruments that include a reference rate or index should conduct an independent investigation and analysis regarding the risks involved. BNP Paribas does not represent that the statements below are complete or exhaustive, nor is BNP Paribas in a position to express a view on the likelihood of any contingency highlighted by this notice occurring. BNP Paribas is not providing any advice nor assuming any responsibility to provide advice. If you wish to receive advice regarding the impact of these changes on the products and services you use, you should obtain guidance from your own independent professional advisors.

General risks related to the use of Benchmarks

Reference rates and indices (Benchmarks), such as the London Interbank Offered Rate (LIBOR), are commonly used to determine amounts payable under various financial contracts, loans, account based products and financial instruments (including derivatives and notes) (collectively, products), as well as their value.

Various Benchmarks and, in particular, interest rate Benchmarks are the subject of ongoing national, international and other regulatory guidance and reform. For instance:

- with respect to certain interest rate Benchmarks, regulatory authorities and central banks have strongly encouraged the identification and use of alternative risk-free (or near risk-free) rates (RFRs) on the basis that they are based on more active and liquid overnight lending markets than interbank offered rates (IBORs) such as LIBOR;
- the UK Financial Conduct Authority (FCA) has stated that after 2021 it will no longer require banks to submit rates used for the calculation of LIBOR and has emphasised the need for market participants to proactively transition away from LIBOR before the end of 2021;
- the Working Group on Sterling Risk-Free Reference Rates updated its 2020-21 top level priorities and target milestones in September 2020. These include the following:
  - the initiation of new Sterling LIBOR linked linear derivatives that expire after 2021 should cease by 31 March 2021 (except for risk management of existing positions);
  - all new issuance of Sterling LIBOR referencing loan products that expire after the end of 2021 should cease by 31 March 2021;
  - the Alternative Reference Rates Committee updated its “Recommended Best Practices for Completing the Transition from LIBOR” in September 2020 and these include the following:
    - the issuance of new USD LIBOR referencing floating rate notes utilizing USD LIBOR and maturing after 2021 should cease by 31 December 2020;
    - no business loans using USD LIBOR and maturing after 2021 should be originated after 30 June 2021;
    - market participants should adhere to ISDA's IBOR Fallbacks Protocol within 3 to 4 months of its publication; and
- rules and guidance have been issued with respect to the administration, contribution to, and use of certain Benchmarks, including, in the European Union, pursuant to the European Benchmark Regulation (Regulation (EU) 2016/1011) (BMR) and, globally, pursuant to statements published by the Board of the International Organization of Securities Commissions.

This means that:

- some Benchmarks, including their methodology, may change to ensure compliance with applicable law;
- it may, now or in the future, no longer be permissible for market participants to enter into financial contracts or purchase financial instruments which reference some Benchmarks, because they (or their administrator) do not comply with applicable law;
- some Benchmarks may perform differently to the way they currently do, including if and when contributors cease providing quotations or transaction data used to determine the Benchmark;
- some Benchmarks may disappear and there is no guarantee that an appropriate alternative Benchmark will be available;
- there may be merit in updating the terms of some products, to refer to a relevant RFR;
- replacement of a Benchmark with the relevant RFR may result in your paying more or receiving less than you would have otherwise;
- replacement of a Benchmark with the relevant RFR or entry into of an RFR linked product may mean that you have to update your internal booking and other systems;
- we may no longer be able to offer you products linked to certain Benchmarks;
- we will be offering you products that are linked to RFRs;
there may be merit in updating existing IBOR linked products to introduce new fallback provisions;¹ and

there could be divergence in payment and other conventions across products and jurisdictions. This means that there could be mismatches, for example if a derivative is being used to hedge specific exposure under another product.

Clients and counterparties of BNP Paribas that have entered into financial contracts, loans, account based products or purchased financial instruments that reference a Benchmark (or may in the future enter into or purchase such financial contracts, loans, account based products or financial instruments) should therefore (I) be aware of possible changes in, or disruption to, such Benchmarks or the possibility of the disappearance of such Benchmarks and (II) understand the potential market, liquidity, legal, operational, regulatory and financial impact on those financial contracts, loans, account based products or financial instruments.

Examples of possible change, disruption or disappearance include:

- the expectation that LIBOR will cease to be available or will no longer be representative after the end of 2021;
- the expected discontinuation of the publication of the Euro OverNight Index Average (EONIA) by the administrator on 3 January 2022; and
- the fact that we may no longer offer products referencing benchmarks such as LIBOR in the future.

We provide more detail on specific products in the following pages.

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¹ A “fallback” provision sets out the consequences of an event. For example, it may provide that the parties should use an alternative rate as and when an IBOR is permanently discontinued.
Risks related to the use of benchmarks in derivative transactions

Please read “General risks related to the use of Benchmarks” above for an introduction to risks related to the use of reference rates and indices (Benchmarks), such as the London Interbank Offered Rate (LIBOR), in derivative transactions. For additional IBOR alternative reference rates disclosure please also see https://www.isda.org/a/orTE/IBOR-Alternative-Reference-Rates-Disclosure-October-2020.pdf

Derivative transactions which reference interest rate Benchmarks typically incorporate standard terms such as the 2006 ISDA Definitions (or earlier iterations), as published by the International Swaps and Derivatives Association, Inc. (ISDA). For a number of Inter Bank Offered Rates (IBORs), this means that if the IBOR were to be unavailable, the rate should be determined by reference to quotations from other banks. The 2006 ISDA Definitions generally do not address the consequences of no quotations being provided. If an IBOR were to be permanently or indefinitely discontinued, it is unlikely that quotations would be provided for some or all of the remaining term of the relevant derivative transaction. In these circumstances, if these provisions are not updated, the value and continued existence of, and payments due under, the relevant derivative transaction would be uncertain. If the transaction is centrally cleared, the rules of the central clearing house may allow it to determine a substitute rate using different criteria.

There has been, and continues to be, much activity concerning references to Benchmarks in derivative transactions among market participants, trade associations and regulators. Two notable projects have been undertaken by ISDA.

First, ISDA has published the ISDA Benchmarks Supplement (the Benchmarks Supplement) and related protocol. Amongst other things, the Benchmarks Supplement provides for consequences if a Benchmark ceases to be provided on a permanent basis or if an administrator or a Benchmark itself ceases to have all required regulatory permissions and/or authorisations. If the Benchmarks Supplement is incorporated into a derivative transaction, one possible outcome is that the relevant Benchmark may be replaced with an alternative Benchmark. The possible consequences under the Benchmarks Supplement include a change to the amounts payable under the terms of the derivative transaction as well as changes to its value. The 2006 ISDA Definitions Benchmarks Annex of the Benchmarks Supplement (Benchmarks Annex) sets out a hierarchy of alternative continuation fallbacks that would apply on the occurrence of a “Benchmark Trigger Event”. This has been designed to work with the IBOR Fallbacks Supplement and the IBOR Fallbacks Protocol described below. It includes the concept of a “Priority Fallback” which provides that where the definition of a benchmark includes a reference to a concept defined or otherwise described as an “index cessation event”, upon the occurrence of such an event such Priority Fallback shall apply in priority to the fallbacks set out in the Benchmarks Annex.

Second, ISDA has finalised Supplement 70 to the 2006 ISDA Definitions addressing IBOR fallbacks (IBOR Fallbacks Supplement) and launched the ISDA 2020 IBOR Fallbacks Protocol (IBOR Fallbacks Protocol). The IBOR Fallbacks Supplement introduces fallback provisions in the definitions of rate options that use certain IBORs as the applicable rate. The fallback provisions would apply if the relevant IBOR ceases to be provided permanently or indefinitely, and, in the case only of London Interbank Offered Rate (LIBOR), after a determination and announcement by the Financial Conduct Authority that LIBOR is no longer representative. In these circumstances, the applicable rate for the relevant IBOR rate option will first fall back to a term adjusted risk-free rate (RFR) in the same currency plus a spread. The RFR will be adjusted by being compounded in arrears for the relevant term to reflect the fact that the IBOR is a term rate rather than an overnight rate. A spread will also be added to that adjusted RFR to account for the fact that the IBORs include a degree of bank credit risk. Under the 2006 ISDA Definitions, the fallbacks for the IBORs specified in the IBOR Fallbacks Supplement and used in transactions that refer to the 2006 ISDA Definitions entered into on or after 25 January 2021 (which is when the IBOR Fallbacks Supplement will be published) (Effective Date) will automatically include the new fallback provisions without any further action needed.

Derivative transactions incorporating the 2006 ISDA Definitions entered into prior to the Effective Date will not automatically include the new fallback provisions. The IBOR Fallbacks Protocol enables parties to amend those existing derivative transactions and other specified documents which reference certain IBORs to include fallbacks. We will be contacting our clients and counterparts separately about the IBOR Fallbacks Protocol.

The RFRs, even with the adjustment and addition of a spread, will not necessarily be a like for like replacement rate for their corresponding IBORs. This means that adopting the updated fallbacks in an existing derivative transaction or triggering the fallbacks may cause the value of the derivative transaction to change. The extent of any such value change may not be known until the relevant spread is calculated, which may limit the parties’ ability to prepare for the related economic effect.

Generally, there are risks associated with using a derivative transaction to hedge underlying exposure under a different product, such as a loan or a bond, which typically contain, in the case of a loan, a specific waterfall of fallback methods with a final fallback referencing the lender’s cost of funding, the alternative base rate and/or PRIME, and in the case of a bond, a fallback to the rate for the previous interest period (which effectively converts the product into a fixed rate note). The time at which and the way in which the fallback operates under the derivative transaction may cause the derivative
transaction to hedge any underlying exposure less effectively. Examples of differences in operation include differences in fallback rate (such as a difference in the way in which the RFR is adjusted or the spread is calculated), differences in interest payment dates resulting from varying payment conventions and a difference in triggers (such as the inclusion of a non-representativeness trigger in one instrument but not the other). Any mismatches may also impact the accounting treatment (such as hedge accounting) and tax treatment.

It is unclear whether the fallbacks set out in the IBOR Fallbacks Supplement would be suitable for certain non-linear derivative transactions that parties may have entered into such as in-arrear swaps, interest rate caps and floors and range accrual products.

If the ISDA published provisions are not appropriate for a particular transaction, whether for a new or existing derivative transaction, parties will need to bilaterally negotiate and agree to adjust the basis on which they adopt those provisions. For derivative transactions that are traded other than under ISDA terms, counterparties should understand the potential legal, regulatory and financial impact on those transactions of possible changes in, or disruption to, Benchmarks referenced in those transactions, and that it may be necessary to take additional action in relation to such transactions since solutions such as those made available by ISDA may not be available.

Parties to derivative transactions may have also entered into related credit support documentation (such as a credit support annex). These documents may also reference interest rate Benchmarks such as the Euro OverNight Index Average (EONIA) which is not covered by the IBOR Fallbacks Supplement or the IBOR Fallbacks Protocol. Consideration must be given to the consequences of any disruption to any of those Benchmarks.
Risks related to the use of benchmarks in debt securities

Please read “General risks related to the use of Benchmarks” above for an introduction to risks related to the use of reference rates and indices (Benchmarks), such as the London Interbank Offered Rate (LIBOR), in debt securities.

There is no standard master form of terms and conditions for debt securities.

Issuers should assess risks associated with issuing long dated bonds (including securitisations) referencing Benchmarks (and entering into any associated hedges) and ensure that the terms of the bonds include detailed risk factors relating to Benchmark discontinuation and fallback mechanisms which attempt to provide the means by which a future alternative rate might be identified. Issuers should also review the terms and conditions of their outstanding long dated bonds which reference Benchmarks (directly or indirectly) which may be disrupted or disappear before the bonds’ maturity date, in order to identify and assess the fallback mechanisms which would be applicable. Many legacy debt agreements currently have fallback mechanisms if a Benchmark ceases to be quoted or is unavailable. In most cases, these fallbacks were designed to address temporary disruptions in the market and may not provide an acceptable solution for the permanent discontinuation of a Benchmark. Where the Benchmark is not published on the relevant screen page, the provisions typically provide for a fallback first to various iterations of rates to be determined by reference banks and finally to a fixed rate using the last available rate on the screen page (or rate of the preceding interest period) for the life of the bonds. Since reference banks may be unwilling to provide the quotations needed to implement the first stage of this fallback process, this may effectively result in instruments becoming fixed rate. Case by case analyses will need to be carried out by issuers.

In respect of debt securities for which BNP Paribas or one of its affiliates is the issuer or the guarantor (BNPP Securities), the terms and conditions will typically state that, in the event of a discontinuation of a Benchmark: (i) the applicable interest rate would be determined by reference to quotations from other banks and (ii) if no quotations are provided, the last available rate of the Benchmark will be used. Investors in most existing floating rate BNPP Securities should be aware that, if a Benchmark ceases to be published on a permanent basis and no quotations are provided, unless the terms and conditions of the BNPP Securities are amended, the interest rate will be fixed at that last available rate until maturity.

BNP Paribas has initiated a process of revising the terms of the debt securities programmes for which it or an affiliate is the issuer, to provide for a new fallback for where the original Benchmark ceases to be published on a permanent basis. Under that fallback:

- the issuer or the calculation agent will select a replacement Benchmark that has been specified by a public body, such as a regulator or central bank, and is consistent with industry accepted standards. If they are unable to identify a replacement Benchmark, the issuer will appoint a determination agent which will select a replacement Benchmark that is substantially comparable to the original Benchmark; and

- the entity that determined the replacement Benchmark will make any other changes necessary to account for observed differences between the replacement Benchmark and the original Benchmark, such as adding an ‘adjustment spread’ to the replacement Benchmark.

If, following the permanent cessation of a Benchmark, the terms and conditions of a BNPP Security lead to the selection of an alternative Benchmark, investors should be aware that, even with the application of any ‘adjustment spread’, it is possible that the alternative Benchmark may result in a change to the amounts that would otherwise have been payable under the terms of the BNPP Security as well as changes to its value.

If the alternative Benchmark is a risk-free (or near risk-free) rate (RFR), it may be that, unless a term RFR is developed and used for the relevant currency, the interest rate is only determined at the end of an interest period based on a collection of overnight rates, rather than at the start of an interest period as is currently the case.

As RFRs in different currencies are being developed at different times, it may be that the consequences are different for different currencies. It is also possible that conventions for calculation and payment of interest do not operate consistently across different currencies.

If the interest rate payable under a BNPP Security is hedged, any change to the interest rate in the BNPP Security may cause any derivative transaction hedging that exposure to be a less effective hedge. Investors buying or having bought floating rate securities or other securities referencing a Benchmark issued by issuers other than BNP Paribas are likely to face similar issues to those described above but such other issuers may envisage different actions or remedies for their own securities.
Risks related to the use of benchmarks in loan documentation

Please read “General risks related to the use of Benchmarks” above for an introduction to risks related to the use of reference rates and indices (Benchmarks), such as the London Interbank Offered Rate (LIBOR), in loan documentation. Syndicated loan documentation based on market standard forms usually include provisions to address the short-term unavailability of a Benchmark such as LIBOR.

Borrowers using syndicated loan documentation produced by the Loan Market Association (LMA), which is often governed by English law, should be aware that these provisions will commonly provide that if a relevant Benchmark is not available for a required currency and interest period, a waterfall of fallback methods to determine an alternative rate will apply, with the final fallback typically referencing the lenders’ cost of funding.

Borrowers with syndicated loan facilities governed by the laws of the State of New York or another U.S. jurisdiction should be aware that such loan facilities often provide that if LIBOR for a certain tenor is unavailable for any reason, an interpolated rate will be used and if such interpolated rate is also unavailable, in lieu of LIBOR, the benchmark will be the offered quotation rate to first class banks in the London interbank market by the administrative agent for deposits in U.S. dollars. Such loan facilities will typically also have “market disruption” provisions in which a market disruption occurs if the administrative agent determines that, by reason of circumstances affecting the London interbank market, LIBOR cannot be determined or U.S. dollar deposits are not being offered to banks in the London interbank market for the amount and interest period of the relevant LIBOR loan. In such case, U.S. Dollar LIBOR loans would convert to an alternate base rate determined by the higher of (i) the then current prime rate (such as that announced periodically by the administration agent) and (ii) the federal funds effective rate plus 50 basis points. These provisions are generally to address short term unavailability of LIBOR.

Where BNP Paribas or one of its affiliates is a lender on a bilateral basis (BNPP Loans), the loan agreement may or may not contain provisions analogous to those described above intended to address the short-term unavailability of interest rate Benchmarks such as LIBOR.

If, in respect of both BNPP Loans and syndicated loans involving BNP Paribas and other lenders, the applicable Benchmark ceases to be published on a permanent basis and the parties wish to use an alternative Benchmark, to do so will usually require an amendment with the consent of some or all of the parties to the loan agreement.

The LMA has published certain standard “replacement of screen rate wording” which is intended to facilitate amendments to be made upon the occurrence of certain events relating to the potential permanent unavailability of LIBOR (including for example the announcement by the supervisor of the LIBOR administrator of the permanent discontinuation of LIBOR) with a lower consent threshold than may otherwise be required. The most recent LMA “replacement of screen rate wording” also provides for a specified start date for negotiation of a new Benchmark and a specified date for its effectiveness. The LMA has also published an exposure draft of its multicurrency rate switch facility agreement. This provides for a facility agreement with LIBOR-based interest to switch into interest based on risk free rates upon the occurrence of a “Rate Switch Date” for the relevant currency (and taking effect from the next interest period for existing loans). The rate switch date can be triggered by a “Rate Switch Trigger Event” – a concept which includes the permanent cessation of a benchmark.

Many recent U.S. syndicated loan facilities have adopted fallback language providing for an amendment mechanism that will allow for the selection of a benchmark replacement upon LIBOR being permanently discontinued or declared to be non-representative, subject to a negative consent right from majority lenders. The Alternative Reference Rates Committee (ARRC), a group convened by the Federal Reserve Board, has also released “hardwired” fallback language for LIBOR syndicated loans, which includes terms for a legacy LIBOR loan denominated in U.S. dollars to automatically fall back to a successor rate based on the Secured Overnight Financing Rate (SOFR) upon LIBOR being discontinued or declared to be unrepresentative. The ARRC’s hardwired fallback language also allows the borrower and administrative agent to jointly make an “Early Opt-In Election” to trigger a fallback to a SOFR-based successor rate when an agreed-upon number of SOFR-based credit facilities are identified, subject to a 5 business day negative consent right from majority lenders.

Parties may find it useful to consider fallback language and other documents (including as to amendment of loan documentation) produced by loan market bodies such as the ARRC and the LMA in connection with the discontinuation of benchmarks and indices, such as LIBOR.

If, following the permanent cessation of a Benchmark, the terms of a loan lead to the selection of an alternative Benchmark, borrowers should be aware that, even with the application of any ‘adjustment spread’, it is possible that the alternative Benchmark or the application of any existing fallback rate in the loan may result in a change to the amounts that would otherwise have been payable under the terms of the loan. This could result in you paying more under the loan than you previously had.

If the alternative Benchmark is a risk-free (or near risk-free) rate (RFR), it may be that, unless a term RFR is developed
and used for the relevant currency, the interest rate is only determined at the end of an interest period based on a collection of overnight rates using an observation period (which is slightly different to the interest period), rather than at the start of an interest period as is currently the case.

As RFRs in different currencies are being developed, it may be that these rates are developed at different times and on a different basis, resulting in different amendment consequences for different currencies. More generally, the loan markets continue to evolve in this area and language in BNPP Loans dealing with the risk of Benchmark discontinuance may be different from that of other products or lenders. Where the loan is a syndicated loan, differences may also emerge as the amendments are likely to be led by the agent and decisions may rest with the majority lenders, which may not include BNPP or its affiliates. It is also possible that conventions for calculation of interest do not operate consistently across different currencies.

To the extent that a loan is one element of wider financing arrangements, including (without limitation) hedging, the permanent cessation of a Benchmark and the selection of an alternative Benchmark may materially impact the economics of such arrangements, and in particular the effectiveness of the hedging.

Any mismatches may also impact the accounting treatment (such as hedge accounting) and tax treatment. Please refer to the section titled “Risks related to the use of benchmarks in derivative transactions” above and obtain appropriate advice.