RBC Capital Markets

2022 SSA Maple Roundtable

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SSA KEY THEMES

1. **Funding Programs Normalized with Increased Private Placement Activity:** SSA Funding requirements continue to normalize from 2020 peaks as the demand for COVID-related funding eased. At the same time, they faced more challenging conditions given the volatile market backdrop amid series of economic data releases and central bank rate hikes. Attractive funding conditions in the EUR market through most of the year took the pressure off key markets such as USD. Most issuers saw an uptick in private placement activity – much of it driven by interest in ESG themed issuance.

2. **Currency Selection, Market Volatility and Investor Demand:** Navigating a volatile market backdrop in 2022, SSA issuers tended to rely on their home currencies for at least 50% of their funding. While currency diversification remains a common goal, the final currency mix of SSA issuers' funding programmes were ultimately determined by investor demand as well as cost of funds. In addition, more challenging execution conditions and timing constraints around central bank events and economic data releases made for narrower and more crowded issuance windows. Issuers generally expect EUR to continue to offer attractive opportunities in 2023 but also expressed interest in maintaining a presence in USD as well as other currencies such as AUD, CAD, GBP and NOK.

3. **ESG Framework Standardization:** 2022 marked a successful year in thematic bond supply with SSA issuers diverging from the traditional Green projects to a wider range of themes such as gender, biodiversity, blue, and health. SSA issuers further embedded ESG initiatives to areas beyond bond origination by increasing their ESG offerings to their own customers while incorporating a more systematic approach on data and reporting transparency. Market participants noted that ESG investors continue to grow in sophistication as is reflected in their ability to absorb data usability and other disclosure.

4. **Maple SSA Issuance Moderated in 2022:** Maple issuances totaled C$6 billion this year compared to the C$10 billion seen in 2021, however the breadth of ESG issuance has increased with 7 out of 8 offerings this year being a theme bond. Despite a strong desire on the part of SSA borrowers to access the CAD market, higher funding costs relative to other currencies and the comparatively short issuance windows this year resulted in lower CAD supply in 2022. Market participants remain optimistic that 2023 will offer more stable issuance windows, a broader selection of maturities, and continued growth of the investor base in CAD.

FUNDING PROGRAMS

Jigme Shingsar (RBC): Let's start with providing a quick overview of your funding program for this year. Did your funding program change? Are there any developments that you'd like to highlight or talk about? I'll start with Zauresh since your program fluctuated a little bit.

Zauresh Kezheneva (IFC): Happy to start. Our fiscal year runs from July to June. Right now, we're in the second quarter of our 2023 fiscal year. The plan for this fiscal year is to raise about USD12 billion of medium and long-term funding, and it does not include our issuances under the discount note program, which can be kept up to USD5 billion outstanding at any point of time. There have been some changes in the size of the funding program. In fiscal year 2022, we were at the lower end of the funding range, as we had more demand for shorter term products on our lending side so our funding program reflected that. Our issuance of discount notes grew last year, whereas medium and long-term funding was calibrated to our lending needs. This year, we continue to evaluate our loan disbursement needs, and expect the funding program size to be higher than last year's. We've done USD 7 billion out of that program so far, and we'll continue to calibrate it later in 2023.

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>
> *Zauresh Kezheneva, IFC*

Anthony Ostrea (ADB): We have a calendar year program. We're practically done for 2022 since we have raised essentially over USD35 billion this year. That's pretty similar to the size we raised last year, which largely resulted by the bank ramping its support for member countries due to COVID. The execution of the 2022 program was influenced by a number of factors including heightened volatility in the markets, what seemed like less straightforward issuance windows, and our desire to keep to our goal of having the average maturity of borrowings between 4.5 and 5 years. Given the aforementioned items, we strategically employed 3 dual tranche USD issuances, which allowed us to keep our outings to a minimum while providing reasonable size in total. The favorable USD EUR basis allowed us to issue in 10 and 15 year EUR market, which enabled a barbell approach in terms of allowing us to access the shorter end while keeping to the target average maturity. As far as composition of borrowings, there were no major surprises this year. We were able to fund about USD19.75 billion in the USD market which is on par with the percentage of total funding in previous years. Opportunistic financing in other markets including CAD was quite substantial as well, with volume eclipsing funding in 2021 in multiple markets. Next year, the program will probably be slightly less than this year's, but still quite substantial – most likely with a three handle still on it.

Jorge Grasa (EIB): Our initial funding target of EUR45 billion for 2022 was confirmed and achieved. We just finished the funding program with a total issuance of around EUR44 billion, of which the remaining was some pre-funding we did at the end of 2021. There has been 86 transactions with more than 15 currencies this year. The structure of the funding has been adjusted a bit in favor of the benchmark transactions, which accounted for roughly 70% of our total issuance. The benchmark transactions have been key to manage EIB's appetite for longer duration against what has been a very volatile year in many aspects.

> The benchmark transactions have been key to manage EIB's appetite for longer duration against what has been a very volatile year in many aspects.
>
> *Jorge Grasa, EIB*

Right now, we have two core currencies EUR and USD, which continue to represent the bulk of the funding program. Our funding program this year comprised of roughly 50% EUR, and around 30% USD. Regarding all the currencies, the share has remained in line with 2021, but it's been a little bit lower than the average level we've seen from 2017 to 2019. I think that the EMTN market has presented less opportunities of issuance for names like ours in the past three years. I assume this has been mostly caused by the volatility, the pandemic, the unwinding of the QE in many geographies, and also the energy crisis.

Piet Juerging (KfW): Our funding year has been incredible, as we had a record funding volume again. In the past, we got used to doing EUR80 billion, but this year we had to fund EUR90 billion and we just recently achieved. Surprisingly those record volumes came in combination with favorable funding conditions, mainly due to the EUR being our dominant currency with a share of over 65%. In this market, KfW benefited from the widening of the bond swap spread, which led to a spread of more than 80bps at times. In the past, this had been closer to 20 or 30bps.

Likewise, we had an extremely successful year in GBP, where we increased funding from less than GBP7 billion to above GBP8 billion. From my point of view, without those issues around formation of governments, it could have been way more this year. Private placements have seen a strong increase in volume too by almost doubling from EUR6 billion to more than EUR10 billion, mainly due to a heightened demand in EUR callables. Finally, we kept our promise to issue more than EUR10 billion in green bonds.

Private placements have seen a strong increase in volume too by almost doubling from EUR6 billion to more than EUR10 billion, mainly due to a heightened demand in EUR callables.

Piet Juerging, KfW

Randy Ewell (The World Bank): For IBRD, we are also on a fiscal year basis which goes from July to June, so we're just approaching the middle of our year. During the pandemic years, we were certainly at the peak level for funding as our lending spiked which is the key driver of our funding program. This year we anticipate the program to be somewhere in the range of USD40 to USD50 billion. As the effects of the pandemic have moderated, we are now seeing our funding program normalize to the levels we would expect. For CAD issuance our funding this year has been a bit constrained as compared to previous years and overall funding has favored USD issuance.

We've stayed a little silent on some of the other currencies such as GBP and CAD, simply because the market dynamics weren't quite there. We tend to take an approach of issuing large liquid bonds and letting them perform. We do look forward to the New Year where we hope markets settle down as we see further redemptions so we can look to continue our trend in the CAD market. We have stayed quite active in some of our private placements in EM currencies and callable, while staying a little quieter on benchmark issuances.

We are looking to re-enter markets in January. IDA is quite liquid at the moment so we will see how IDA funding needs play out. So far for IDA this fiscal year we have EUR2 billion.

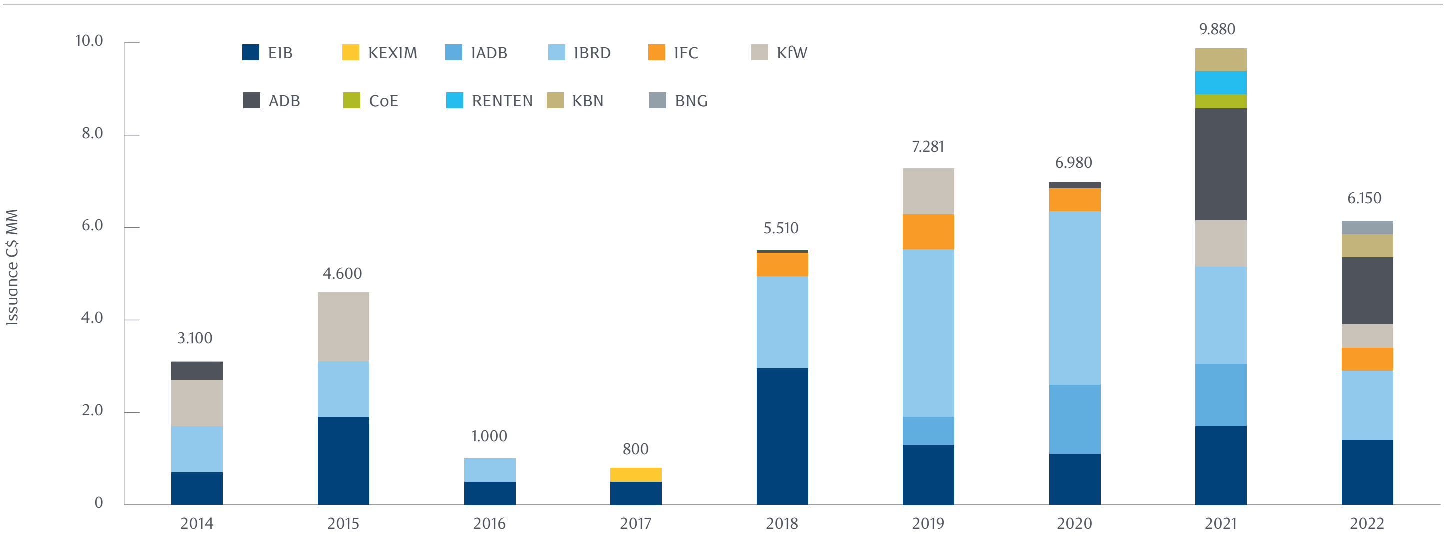
Jigme Shingsar (RBC): David, Inter-American Development Bank's program has been fairly stable. Any comments in terms of your expectations going forward and how it went this year?

David Abensur (IADB): Inter-American Development Bank's program has been fairly stable. We did USD10.5 billion in benchmark trades this year including USD2 billion benchmark trades in SOFR. We labelled FRN benchmark trades as trades that are higher than USD1 billion in the floating rate market. GBP got a large share of it with around GBP1.6 billion. Unfortunately, we did not issue in the CAD market this year. We monitor the market on a regular basis and hope to be able to issue in CAD next year, subject to market conditions. This year we started the program with a goal of USD20 billion, but then we adjusted to a final size of USD17 billion, which have been successfully achieved. For next year, we are looking again for a size of around USD17 to 18 billion, but the number could be adjusted during the year according to the bank's cash flow needs.

As the effects of the pandemic have moderated, we are now seeing our funding program normalize to the levels we would expect.

Randy Ewell, The World Bank

ANNUAL MAPLE ISSUANCE



Source: RBC Capital Markets

CURRENCY DISTRIBUTION AND SELECTION

Jigme Shingsar (RBC): Thank you all for the quick overview. Just staying with your funding requirements, as we hit more volatile markets, I think you guys will allude to how much you do in different currencies. How do you benchmark the funding opportunity in various currencies? How does your home currency impact what you end up issuing when everything's going well finally? I'm curious as to how someone with a large funding program manages diversification versus pure cost and arbitrage. Why don't I start off with Randy just to comment on how you benchmark an opportunity in another currency?

Randy Ewell (The World Bank): It's no secret that our balance sheet is in USD floating rate so our funding curve is built around USD. That being said, investor diversification is important to the funding program of the World Bank so we look to other markets to enhance and bolster IBRD/IDA funding sources. We do have a general push for duration. This is simply because our lending goes out to 30 years on an amortizing basis so from an ALM perspective, we'd like to extend funding duration when possible and mitigate refinancing risk.

We like to be strategic rather than purely opportunistic in markets and currencies, and we like to build liquid lines and stay regular for investors in many markets. That being said, there are limitations to what we can do. On balance, we find in most years that works. What's key for us is organic demand, we don't want to be pushing out bonds where we don't see that demand. When we do get a pulse on demand and it coalesces in that region, than we push for larger, liquid issuances. That more or less tend to be the strategy. For EM/frontier currencies we're a little bit more flexible and can issue for shorter tenors.

> What's key for us is organic demand, we don't want to be pushing out bonds where we don't see that demand.
>
> *Randy Ewell, The World Bank*

Jigme Shingsar (RBC): Would you say, Randy, when you're going into the funding year, you had some sort of potential vision of where you think you'd end up funding across markets, and has that panned out this past year?

Randy Ewell (The World Bank): I hope it starts to normalize going forward. We did sit back when we had opportunities to issue in GBP and CAD last year where we didn't quite see the markets been conducive. The GBP secondary spread, for example, was pricing as much as 20 bps from secondaries and we didn't feel comfortable wedging bonds between different points on the curve and repricing the market, or do anything that could be unfavorable to the investor. We looked for opportunities to go longer if we could. Besides the widening vs secondaries, in the end, we didn't see the demand as being adequate enough to proceed. I do hope and expect this to change next year.

Jigme Shingsar (RBC): David, any comments in terms of how you guys decide which markets to access? Will you pay for diversification or is your idea to essentially maximize your USD funding and then see what you can do as close to that funding level as possible?

> We are also interested in maintaining a diverse investor base and this year we started issuing NOK settling domestically in Norway (VPS).
>
> *David Abensur, IADB*

David Abensur (IADB): Similar to the World Bank, it's not a surprise that all of our clients mainly demand loans in USD. As such, the USD is our core market. However, we do not want to raise the entire funding program in USD. Currency and investor diversification are an important part of our funding strategy. GBP, CAD, AUD, NZD are strategic markets for IADB. Unfortunately, we were unable to issue in the CAD market this year. However, we hope to print something in CAD in 2023. We are also interested in maintaining a diverse investor base and this year we started issuing NOK settling domestically in Norway (VPS). Non-USD currencies represented 20% of the IADB's 2022 funding program. As in previous years, the main volume will come from the USD fixed rate benchmark and to some extent, to the floating rate market. In addition, we also issue our first digital bonds settling through block chain.

Jigme Shingsar (RBC): Thank you. Piet you mentioned EUR has worked really well for you, but you also mentioned, the spread has become attractive for investors, which raised two questions. One is the traditional approach about seeing the cost back to your base home currency EUR. Do you also care about your spread to the Sovereigns and whether that looks too wide? So how do you put all that together in terms of what you decide as a good opportunity?

Piet Juerging (KfW): The spread to Bunds widened to levels never seen in the recent past and I'm sure that many traders thought the levels were not justified when reaching a spread of 50 or 60 bps. But they had been caught on the wrong foot when the level further widened. There's a specialness in the collateral market driving the bond swap spread. I expected it will tighten in 2023, meaning that the attractiveness of our EUR bonds will not diminish, but at least it will be less attractive. However, I'm pretty sure that this bond swap spread will stay at elevated levels going forward, at least in 2023.

Our benchmark is floating EUR at KfW. In general, we compare our deals to the one currency which offers the best funding. This has been EUR or GBP most of the time this year. However, in order to diversify and to maintain strategic presence in other markets like USD, GBP & AUD, it's always possible to pay up versus the cheapest currency. Especially it had been quite a challenging year for USD, maybe at the beginning we saw comparable conditions to the EUR but after that we had to pay up 10, 15, sometimes even 20bps. Still, we managed to issue four USD benchmarks raising USD18 billion. We are still the second biggest issuers in USD. So this just shows that there is some flexibility to maintain a strategic presence.

> In order to diversify and to maintain strategic presence in other markets like USD, GBP & AUD, it's always possible to pay up versus the cheapest currency.
>
> *Piet Juerging, KfW*

Jigme Shingsar (RBC): EIB has a strong presence in the EUR market and enjoys excellent funding levels, it must have been a challenge to maintain a presence in some of the other markets, and how did you manage that?

Jorge Grasa (EIB): We have two core currencies, which are EUR and USD. At the beginning, we don't have any specific targets per currency, whatever markets we can access, we will try to access them. Normally, the share of EUR issuance tends to be 40% to 50%, and USD is roughly between 30% and 40%. The share of the EUR has increased to 50% this year, and USD has been on the lower range around 30%. But like the other participants, we like to maintain a presence in other markets where we can.

We also had presence in GBP, although not in big volumes as in other years. We have also issued in other markets like AUD, CAD or PLN. In other EMTN markets, we have been present in more than 15 currencies and we will continue to issue in other markets.

Jigme Shingsar (RBC): So when you're benchmarking opportunity, let's say in CAD, will you have some flexibility to benchmark it versus maybe the USD curve as opposed to the EUR curve?

Jorge Grasa (EIB): Yes, what we tend to think is the currencies that are more linked to USD, for example CAD or AUD, we will benchmark them against the Bank's USD global secondary curve, while other currencies will probably be more benchmarked against the EUR curve.

Jigme Shingsar (RBC): Anthony, you've been active in a lot of currencies. I assume it's anchored to the USD curve, but must have some flexibility.

> Total transactions for the year was over 130, but the benchmark has always been versus what we can achieve in the USD market.
>
> *Anthony Ostrea, ADB*

Anthony Ostrea (ADB): We are also a USD based funder. We do benchmark other currencies versus what we can achieve in USD. This year in USD, we did just a little shy of USD20 billion in the USD benchmark space. We did quite a bit actually in opportunistic financing and in other key non-USD market such as GBP, AUD and NZD. We also had two trades in CAD this year. In private placements, we were able to issue in about 17 currencies this year. Total transactions for the year was over 130, but the benchmark has always been versus what we can achieve in the USD market.

Now, how we fine tune that over the year is we go through the year and figure out exactly how the markets are and where we can fund. We typically don't like to overload being in the USD market, but with a USD35 billion program, issuing what we did in USD was probably a necessity for us this year, and in recent years as well.

Jigme Shingsar (RBC): Zauresh you've always had a very stable funding program. You haven't had to do a lot of benchmark issuance in your home currency. If anything, sometimes that's probably the most expensive funding you do. How do you decide and value that? How does it all fit together in terms of how you look at other opportunities in CAD? You were recently active in GBP and always active in AUD for example.

> Issuances in local currencies are used for lending to IFC's clients and help to promote the development of local capital markets.
>
> *Zauresh Kezheneva, IFC*

Zauresh Kezheneva (IFC): Similarly, we also have a USD based balance sheet. The USD curve is the primary curve against which we benchmark. We also established some presence and focus on certain parts of the curve in different markets over the years. For instance, AUD is a very important market for us, especially when we seek an attractive cost of funding relative to USD. For instance, this year to date, more than 20% of our funding volume has come from the AUD market.

USD is traditionally one of the most expensive markets for us. The idea here is to be strategic and to also have a forward-thinking approach. As you may know, the capital increase that the World

Bank Group received in 2018 was based on commitments from each institution within the group. For IFC specifically, there is a commitment to double our investment portfolio by 2030. So, we aim to maintain our presence in diverse markets and to position ourselves for potential growth in the future. I would say USD does stay the key market for us. On average, it's between 40% and 50% of funding volume and everything else we fund in different currencies like GBP, NZD, AUD, CAD, SEK or NOK.

We are also very active in different EM market currencies. They account for a smaller portion of our funding but are very important from a strategic standpoint, as issuances in local currencies are used for lending to IFC's clients and help to promote the development of local capital markets.

ESG PROGRAM, LEGISLATION & REPORTING

Jigme Shingsar (RBC): We'll move into the ESG section, and please feel free to jump in when someone's made a point that you either agree with or have a different view on. ESG obviously dominates a lot of the headlines not just in terms of the SSA bond issuance, but also in a lot of the announcements and articles we see from your institutions, there's a lot of focus on climate and just ESG in general. Why don't we start off with EIB? I know Aldo has been at the forefront of the development of this market and a great person to kick us off here.

How does this continuing drive around climate awareness affect your funding program? I know you already have a long history in this, but is there any changes there? Then there's a follow on, when we talk about ESG, a lot of the focus has been on the E part of it, and I think more on the S now, and then perhaps G gets incorporated in there somewhere. Any comments on what you've seen so far and where do you see things going?

Aldo Romani (EIB): First of all, let me start by saying that in 2022 ~EUR20 billion equivalent, or 45% of EIB's total funding program were issued in the format of Climate and Sustainability Awareness Bonds (CABs and SABs). It is a remarkable enlargement from the 8% that we had four years ago. This development is driven essentially by the link that we established in 2018 between the allocations of these bonds and the evolving EU legislation on sustainable finance, notably in terms of a gradual alignment of the CAB/SAB allocations with the EU taxonomy that is in the making.

In terms of composition, two thirds of our sustainability funding last year - covering around one third of total disbursements - were in CAB-format, and were therefore allocated to lending activities contributing substantially to climate change mitigation. This highlights the strong engagement of the Bank in this area.

What characterizes our approach is absolute consistency through time, in the first place in the area of clean energy, which has been an operational priority for the EIB since 2006. Already in 2007, the first Climate Awareness Bond promised accountability on disbursements in renewable energy and energy efficiency based on a precise definition of the eligible projects. This accountability has meanwhile been extended to low-carbon transport and technologies.

Importantly, in the past, eligibility criteria were set only by the EIB; now they are externalized and more comparable: since January 2022, the economic activities with substantial contribution to climate change mitigation have been classified by EU law. Investors can monitor the CABs' convergence process in a fully transparent way via the comparisons that we publish in our CAB Frameworks, with the reliability provided by KPMG's reasonable assurance in accordance with ISAE 3000.

Investors do appreciate this strategy and the factual evidence we provide, including areas not yet covered by the Taxonomy, where our engineers have already started to apply their expertise in line with the logic and structure of the EU Taxonomy. In this way, Sustainability Awareness Bonds can cover areas beyond climate change mitigation, using a coherent approach in relevant fields of EIB's "green" and "social" engagement granting access to water, education, health and housing.

I would say that the main feature that has built our credibility in this area is the willingness from the very start to create transparency and accountability on EIB's gradual alignment process with the objective screening criteria that are being put in place by the EU. It's a discovery process that builds on a triangulation between funding, project evaluation and external audit.

Based on the audited growth of the disbursements contributing substantially to EU sustainability objectives and notably climate change mitigation, sustainability funding has grown to such an extent that the Bank has decided to mainstream the bulk of CAB/SAB issuance into its benchmark funding programs.

Jigme Shingsar (RBC): Zauresh, you've obviously been focused on ESG for quite a long time now. Institutionally, I know that you're very active in green and now looking at other aspects of the ESG. Any comments on what you're up to? Any new developments there? Particularly with regard to the S and G aspect of ESG?

Zauresh Kezheneva (IFC): A new development we can highlight is the update of IFC's green bond framework to include biodiversity and blue economy projects, which have both garnered a lot of attention in recent years. Earlier this year, IFC published Guidelines for Blue Finance which were developed to provide guidance to the market on the identification and selection of blue economy projects in a way that is consistent with the Green Bond and Loan Principles. We have since adopted these guidelines and incorporated them into our own green bond framework.

At IFC, we have two thematic bond labels, namely green and social bonds. Sustainability is at the core of IFC's DNA, as every project we finance has to comply with our Sustainability Framework. However, we specifically focus on green and social themes to cater to investors who seek to make an environmental or social impact alongside a financial return. Projects financed by these bonds go through additional selection, filtering, and reporting.

We also started thinking about how to apply ESG aspects beyond traditional areas as an issuer, which led to incorporating ESG measures into the management of our liquid assets. This process includes negative screening for certain industries and referencing ESG ratings where relevant.

Jigme Shingsar (RBC): Piet, obviously green and climate bonds have been a big part of most headlines. Is there anything new there? You're also the only state agency, the only MDB on this panel. Just looking at the headlines, obviously there's some pressure in terms of energy and things in Germany. Does that impact how you do things going forward, or are you able to manage in the context of your mandate right now?

A major internal sustainable finance project called Transform will further develop KfW towards a transformative promotional bank in order to improve economic, ecological and social living conditions worldwide.

Piet Juerging, KfW

Piet Juerging (KfW): Those are two different topics. Because of the war in Ukraine, we are doing some mandated business for the Federal Republic of Germany. Those mandated transactions are in the area of energy security and the gas price cap. It is on our balance sheet, but it will mainly be financed via the Federal Republic of Germany. Since October we are allowed to make use of the Economic Stabilization Funds to receive funds from the government. We already made use of this Stabilization Funds during the COVID crisis.

What's new with KfW is currently we are realizing a major internal sustainable finance project called Transform, which will further develop KfW towards a transformative promotional bank in order to improve economic, ecological and social living conditions worldwide. Also, to meet the 1.5 degree Paris Climate Agreement. Likewise, in this process, KfW implemented a new group wide IT system to gather economic, social, and ecological impacts data. This increases transparency in our financing activities throughout the entire group. Ultimately, this system should make it possible to provide impact data of every loan handed out at KfW. Potentially, this could be the preparation work to issue even social bonds in the future and not just green bonds. However, we will still stick to our green bond framework for next year and we would like to issue at least USD10 billion in green bonds in 2023.

Jigme Shingsar (RBC): Randy, any comments in terms of what's changed on your funding program? Any new themes that the investors can look forward to?

Every project that gets approved goes to a very strong climate lens. Over 90% of our projects had some additive with some climate component.

Randy Ewell, The World Bank

Randy Ewell (The World Bank): It's probably no secret that we've taken more of a holistic approach. Even though we're one of the earlier pioneers in the green bond, and are part of that format and its growth, we realized that ultimately, we had to come to terms with ourselves that we are first and foremost a social bank. We had to pivot and tell the larger story of the World Bank. Even so, we continue to issue green bonds in a segregated portfolio that are also ring-fenced with proceeds allocated to fund pre-selected green projects. But it's fair to say that we have more green projects than we have green bonds to allocate to them, and we tend to issue green bonds in private placement format based of reverse inquiry. As a percentage of our annual funding program, about 1% to 2% of funding are green bonds dedicated to fund green projects. The remainder of our issuances are sustainability bonds or what we call Sustainable Development Bonds. We have an impact report that we publish every year which goes through World Bank projects where we've taken a holistic approach. This approach always applies climate considerations and funding in nearly everything project do. In terms of impact, it's also important to note that the World Bank is much more than a lender of funds – we are a knowledge bank with deployable expertise in projects, so our lending goes with a technical package depending on what it's lending into.

Every project that gets approved goes to a very strong climate lens. Over 90% of our projects had some additive with some climate component. A third of the money from an issuance goes towards something that's related to climate. Every project, whether it's a school or a hospital, always has climate related financing.

We also work to stay innovative in other areas. You may have heard something about an IBRD Rhino bond that was done to mobilize private funding to help with funding of wildlife parks in South Africa, designed to support the growth of the Black Rhino population. It took a little bit of time to put together, but those are sorts of things that we like to do where we can help mobilize private money to help fund worthy public concerns. This bond was set up so that coupon payments were provided to fund the park as part of a grant. It was structured like a zero-coupon bond with a kicker towards the end and rewarded investors in connection with the growth of the Rhino population. Those are the sorts of things that we do in the biodiversity realm. We are at the moment where sometimes we will label bonds to highlight some of the projects that the World Bank is focused on, sometimes it comes with examples of what those projects are.

Jigme Shingsar (RBC): David, you have also moved towards a sustainable bond format as well as having EYE (Education, Youth, and Employment) Bond. Do you see any new developments there, different kinds of demand that you're seeing, or comments on what you've done differently this year?

David Abensur (IADB): In 2014 we started our thematic bonds with the EYE Bond, which is attached to loans focused on education, youth and employment. In 2019, we started doing Sustainable Development Bonds (SDBs). Our approach is that all IADB's loans are aligned to the sustainable development goals. Just to give you a sense of magnitude, this year, we printed around USD408 million, around 2.4% of our funding program in EYE bonds because we are limited in the amount of loans that are focused on education, youth and employment. However, we did 17 SDB bonds, for USD6.6 billion which is around 39% of our funding programs. Combined, both programs represent around 41% of our total funding volume. In terms of new development, we are working on looking to publish a report for the SDB bonds during next year. This report will be in addition to what the bank already publishes (e.g. Development Effectiveness Overview, Corporate Sustainability Report).

Jigme Shingsar (RBC): Anthony, you've been doing sustainable and then you've obviously made a splash with the issuance on gender. Where do you see your program going on that front as far as ESG themed issuance goes?

> The thematic approach, rather than the portfolio approach, provides a good balance of responding to specific investor demand to be associated with specific themes that ADB is involved, while highlighting specific projects that ADB is funding.
>
> *Anthony Ostrea, ADB*

Anthony Ostrea (ADB): We regard ourselves really as an ESG institution, ESG is in our DNA first and foremost. In our long term strategy - Strategy 2030, the priorities map out to the SDGs. We have two areas of ESG issuance, the first being Green Bonds, the framework of which was updated in 2021 to include Blue Bonds and the second being thematic issuances, which include Education, Gender, Health, and Water.

On these thematic bonds, they are basically investor driven. It's a different approach where we feel that the thematic approach, rather than the portfolio approach, provides a good balance of responding to specific investor demand to be associated with specific themes that ADB is involved, while highlighting specific projects that ADB is funding. We've been actually pretty successful in terms of thematic issuances this year. Traditionally we would issue most thematic bonds in private placement format, but starting a couple years ago we started branching out and we've done that in public format in non USD market. We've issued thematic bonds in a number of currencies including AUD and NZD. In CAD, these have been gender bonds. It's been a banner year for us in terms of thematic issuances. As far as new themes, we always look at our portfolio to see whether or not we have the assets ready to accommodate additional themes, which we can highlight to investors.

Jigme Shingsar (RBC): Why don't we go back to the EIB team? I have a two part question. One is we've heard from some MDBs that they have been able to essentially label most of the program and all benchmark issuances as sustainable to some degree. Is that something you've considered? And secondly, when you began this, there was a lot more reliance on third party opinions, and investors didn't necessarily have the infrastructure to deep dive into some of what they were investing in. We've noticed that among the investors, there's been a lot more infrastructure built up to be able to analyze everything on their own terms. Any comments in terms of how you see that developing and in terms of how sophisticated investors have become in this regard, and what sort of questions are they asking?

Aldo Romani (EIB): Your second point explains EIB's prudence on holistic labelling at this stage and I'll address it first. Let me clarify core ideas that are important not only from an EU perspective but also in the broader international context.

Investors are indeed becoming increasingly attentive and demanding because the overall regulatory and supervisory framework in Europe is evolving rapidly towards a more factual and objective clarification, as to where the moneys are presently going and where they should be going in the future. This process aims to contain nominalism and eye-catching marketing that cannot be substantiated via auditable evidence. It does so by creating the conditions for fairer competition in the market as well as more effective collection of information along the investment chain. Investors are being empowered to become a catalyst of due diligence and assessment of sustainability.

A few years ago, based on lack of clarity on what constitutes green finance – a reflection of lack of clarity in the real economy - European Union institutions concluded that a set of core definitions and technical screening criteria would be key to promoting the efficiency of capital allocation to sustainable economic activities. This would strengthen the internal market and provide a common reference across investors and end users of capital in the economy. By asking investors to report on the sustainability content of their portfolios, they would inevitably become a key driver of clarification. This is the framework that has been put in place.

> ESG framework should be living documents, they should not be cemented, but rather adjusted as more knowledge is gained and disseminated throughout the market.
>
> *Zauresh Kezheneva, IFC*

Implementation is underway in a stepwise fashion. In 2020, the European co-legislators adopted a so-called taxonomy regulation establishing the principles for this approach, initially with a focus on economic activities that contribute substantially to environmental sustainability objectives. These activities are therefore also the focus of CABs and SABs. The European Commission is now working on the classification details, and a first taxonomy for climate action entered into force in January 2022. A second wave of criteria that will cover other areas of environmental protection is expected to be adopted in 2023. To complete the picture, the EU Platform on Sustainable Finance, EUPSF, which gathers the inputs of a large group of international experts and stakeholders, has already proposed a taxonomy extension to include other types of sustainable economic activities. These are for example “amber” activities that do not contribute substantially but also cause no significant harm to sustainability objectives, or activities that cause harm at present but can be “corrected” to no-significant harm via adequate investments. An extension to social objectives has equally been proposed.

The bottom line is that, from a European perspective, clarification and classification are part of a dynamic, step-by-step discovery process that needs to take place on the basis of objective criteria rather than in an auto-referential manner, as so far the case. It therefore requires time to produce solid results. Green bonds are just a litmus test for the broader application of this principle. In the Climate Bank Roadmap’s five-year operational plan, EIB has committed to a) aligning its tracking methodology for green finance with the framework established by the taxonomy regulation as it evolves over time; and, b) to reflect such alignment to capital markets via progressive extension of CAB/SAB eligibilities and gradual alignment of CABs/SABs with the proposed EU Green Bond Standard (EUGBS). It is a voluntary commitment, as the EIB is not subject per se to the regulatory framework.

The EUGBS requires full alignment of the use of proceeds with the EU taxonomy. The required information is only partially available at this point, notably in the fields of “do-no-significant-harm” and “minimum safeguards”, which the taxonomy considers in addition to “substantial contribution”. We have therefore highlighted to investors and regulators alike that, at this stage, the EUGBS may only be used as a touchstone. The core objective is the clarification of where issuers stand, where they want to go, and how they intend to get there. If non-financial disclosures are then properly set up – i.e. in a way the market can use, investors will be able to monitor how things are evolving in reality, helping to steer the process via efficient pricing of green finance.

The new criteria are indeed redefining the landscape and it is clear that this discovery process is testing a number of claims that have been made in the past with regard to what is green and what is sustainable. This doesn’t mean there was greenwashing before, it simply means that a more orderly debate on sustainability is underway, in which verifiable and comparable evidence becomes a condition for labelling. This approach has become relevant not only for our dialogue with investors subject to EU regulations, but also beyond European borders, where EU legislation is becoming a test case and a benchmark. We have been receiving an increasing number of calls from international investors - as well as from national market supervisory authorities - that ask us regularly and in detail about our progress in the operationalization.

> If non-financial disclosures are then properly set up – i.e. in a way the market can use, investors will be able to monitor how things are evolving in reality, helping to steer the process via efficient pricing of green finance.
>
> *Aldo Romani,EIB*

Jigme Shingsar (RBC): Zauresh, all of the pioneers or early issuers in the ESG space have been spending a lot of time on reporting and so on. As investors who have grown in sophistication, I sense that maybe we’ve hit peak volume in terms of information and disclosure. Are you seeing any changes in terms of what they’re looking for?

Zauresh Kezheneva (IFC): I basically agree with Aldo on standardization. I wouldn’t say that we’ve seen many differing questions; there are many similar questions but I think with more clarity and standardization introduced, investors’ inquiries are converging closer in terms of topics that they’re interested in.

Jigme Shingsar (RBC): Do you think frameworks are something that are flexible enough or does there need to be things coming out of the frameworks that need to be adjusted? Therefore, do people need to update their frameworks regularly?

Zauresh Kezheneva (IFC): I think frameworks need to be balanced and should consider inputs from both issuers and investors. They should be living documents, they should not be cemented, but rather adjusted as more knowledge is gained and disseminated throughout the market.

Aldo Romani (EIB): To add on a point, evolving legislation on sustainable finance is putting the green and sustainability bond frameworks in a new perspective that is instrumental also for the issuers' broader strive for compliance with non-financial disclosure requirements. In the transition to the new regulatory set-up, issuers are inevitably facing uncertainty not only as to the comparison between new and past classification criteria, but also with regard to the availability of information on both stocks and flows of their overall economic activities, with discrepancies across different categories of investment counterparties. At the same time, there may be questions on the suitability of some reporting indicators established by law to fully reflect the sustainability of investment portfolios. An example is the so called "green asset ratio" ("GAR"), which does not consider relevant categories of lending and investment activities.

At the EIB, we are currently assessing the best way to address these disclosures going forward, notably with regard to the taxonomy-based classification of EIB's assets. This cannot be only from the point of view of best banking practices, which typically consider only regulatory requirements (notably when the EIB is formally out of scope), it also needs to live up to stakeholders' expectations in the most effective way, possibly via additional voluntary reporting - exceeding the regulatory requirements wherever necessary to reflect well the sustainability of EIB's balance sheet

In the present and still uncertain phase of assessment, the CAB/SAB Frameworks assume a new and very significant value in the flow of information that goes from the Bank to its stakeholders. Developed organically over time, such frameworks provide a clear and already established perimeter for the dialogue, permitting focus on core aspects and their progress through time. In addition, the reliability provided by the auditors' reasonable assurance secures a degree of factuality that is unique among the reports otherwise issued by the Bank in this space – which are audited with limited assurance. In a nutshell, the CAB/SAB Frameworks have turned into an effective instrument for the management of stakeholders' expectations, and the build-up of their constructive understanding of the alignment process, while EIB's broader work on non-financial disclosures is still underway.

A secondary, but equally important potential use of the experience gained with the CAB/SAB frameworks, lies in the dialogue with EIB's clients on the lending side. The capacity of mediating dynamically between the regulatory requirements and the borrowers' actual capacity to deliver on those requirements, gauging gaps and structuring credible and monitorable actions within a predictable timeline, and using the logic and principles of the Taxonomy to make these actions intelligible to markets, supervisors and policymakers via a common language, are becoming increasingly important for all parties. Again, this is not only true within the borders of the EU, and in fact may even be more relevant for the provision of technical assistance beyond European borders. In these countries, EIB can provide unique intelligence on how to develop interoperability between European standards and local circumstances in cooperation with other development financial institutions, thereby facilitating European investments.

Jigme Shingsar (RBC): But would you say, that as investors hire more specialists and develop expertise, they will start going beyond seeking you as the seal of approval, but also asking you for more to substantiate about their own concerns?

Aldo Romani (EIB): The aim of the EU regulatory framework is to facilitate sustainable investment via the definition of core criteria that focus on essential aspects of sustainability and are easy to use and to verify. This is ground-work that both establishes core comparability for the market at large and paves the way for further analyses of additional aspects relevant to specific investor constituencies. So, one thing does not exclude the other; on the contrary, it makes it more effective.

Now, European investors are required to produce evidence for the statements that they make on the investment products they offer to their clients. Even in Europe, there are a number of usability issues, inter alia because the various parts of the regulatory framework are not yet perfectly matched with each other. Exactly in this area, the role of an institution like the EIB is coming forward, because we have to operationalize on the ground, ascertain pragmatically the reality of our interlocutors on the lending side, organize available information in conformity with the logic and principles of the Taxonomy, and report thereon to the capital markets.

This is, by the way, an incremental process that is also supposed to provide systematic and trustworthy feedback to legislators and policy makers regarding the usability of the criteria that are being established. The law contemplates regular reviews and improvements of the taxonomy and the detailed assessment of usability is a core task of the upcoming second round of the EU Platform on Sustainable Finance. If it is not possible for committed institutions like ours or for others that are already advanced in this process to operationalize things, then something needs to change also on the side of the criteria themselves.

From this point of view, I think that the role of the Bank is developing into new fruitful directions. The provision of advisory and technical assistance needs to be articulated in a coherent and standardized fashion on behalf of all stakeholders: capital market investors, lenders and borrowers - within and outside the European Union, other multilateral institutions, and official authorities in charge of international cooperation. A revolutionary process is underway.

EIB's issuance and the associated fact-finding are a litmus test for this whole process and have already produced a number of acknowledgements. For example, we have been able to clarify in an unequivocal way that the technical screening criteria for substantial contribution used for CAB-allocations in 2020 were only partially aligned with the criteria proposed by the European Commission's technical expert group ("TEG") in the same year. We could thus close the gap in 2021 and further align the criteria with those of the climate taxonomy of January 2022 already in the course of last year. Our 2021 CAB-Framework, which is about to be published – with some delay due to the heavy analysis and assurance work involved – also compares in detail EIB's Environmental and Social Standards with the DNSH- and MS-provisions of the taxonomy regulation, yet another milestone on the path to gradual alignment with the EU Green Bond Standard. These inputs are being offered for consideration to the other business lines of the Bank and are equally appreciated by an increasing number of official authorities around the world.

Jigme Shingsar (RBC): With more headlines around energy pricing and shortages, are you getting more questions around Germany's overall approach? How are you managing that?

Piet Juerging (KfW): Our government announced a special fund of EUR200 billion in order to manage the energy crisis and to subsidize private households. KfW will take a role in this too. This doesn't mean that there are any additional funding needs for KfW. We are allowed to make use of the economic stabilization fund. With this fund, we are able to draw loans from the German government since October. We have done it already in small amounts, and we made use of this fund in 2020 and 2021 due to the COVID crisis. Essentially, the energy crisis is a different topic, but nothing new for KfW. It just underlines the strong relationship between the Federal Republic of Germany and KfW.

Jigme Shingsar (RBC): Randy, you focus a lot on reporting. Are investors asking for different things now than they used to? Is the focus more on the type of disclosure as opposed to just more disclosure?

Randy Ewell (The World Bank): I'm not the person who deals directly with that, but what I can say is we've always shifted to sustainability, we've always essentially kept it an open discussion. I think Zauresh touched on it. We recognize that these considerations are still largely fluid and the standards and metrics are fleshing themselves out between issuers and investors. Discussing what's happening in Europe, we are hearing our investors and understanding what they want to see. It's an ongoing discussion that we stay very open to. Internally, I think I mentioned the World Bank's project approval process as well as the project cycles. We have audit teams that go through what's being done, what's agreed to how it's performing though our project cycle. We collect a lot of data internally and are working on how to best coalesce and present the data in meaningful and useful ways.

Aldo Romani (EIB): In line with the logic of the new regulatory framework, we are trying to direct investors' attention to what is most relevant. As highlighted at length in the past years, the market at large will not be able to work with too much and too complex information on sustainability. It has therefore become increasingly important to convince our project experts that a distinction must be made between the essential conditions for eligibility and all the other output indicators that describe the project in a more extensive manner. Lending activities must be firstly and foremostly be assigned to a primary sustainability objective with clear and comparable information on why they contribute substantially to that objective. The rest is ancillary information completing the description of the underlying projects.

A distinction must be made between the essential conditions for eligibility and all the other output indicators that describe the project in a more extensive manner.

Aldo Romani, EIB

In the upcoming 2021 CAB Framework, we have thus started separating the two sets of information in the attempt to highlight what is essential from a substantial contribution perspective. This approach is also key to standardization, which in turn is instrumental for the proper functioning of the market. In the end, it is a coherent application of the green use-of-proceeds bond approach, which concentrates on accountability of what you claim to already do well to establish a monitorable keyboard for your further action over time. This approach puts core aspects in front for everybody's own assessment. In the more holistic ESG approach, you inevitably need the authority of a third party – at the cost of comparability - to verify ESG relevancy based on a much broader set of parameters.

Jigme Shingsar (RBC): Anthony, you mentioned some theme bonds, when do you find that you have to change your reporting or impact reporting? Essentially your system is set up, it's just a different theme – does it create new challenges or new questions? Or is it fairly easy to meet the disclosure that they're looking for?

Anthony Ostrea (ADB): I talked earlier about how we have a two-prong approach. We have our green and blue bond framework, and then we have our thematic bonds, which are health, gender, water, and education. As you said, it's a continuous process of trying to add new themes now. We get questions from investors during meetings on each particular theme since at least this year, we've predominantly been issuing in thematic format, primarily gender bonds and health bonds. The one thing that I did want to highlight during this call is although these thematic issuances may not have the framework such as our green and blue bond, when we set up these themes, they go through the same rigor we did when we did set up the green bond framework.

Initially, it goes through the process of meeting with specialists where we look at our projects and we figure out if a project is appropriate for a particular theme. There is also tracking of these projects, reporting in the form of a newsletter that we put out every year for all our themes. There have been questions from investors during our meetings just drilling down on these particular themes. We have been scheduling calls with investors as well as our sector specialists to illuminate some of the data. It's a well-oiled process where when we come up with a new theme, it goes through the same rigor as what we've done in prior themes.

Jigme Shingsar (RBC): Thank you, David. Any new changes you want to add? When you go down this road, do you sometimes bring in the sector specialist to answer questions?

David Abensur (IADB): From our side, it's a similar story. There is a lot of information, and everything is published on our website. The main problem for investors is trying to figure out the data, too much data becomes cumbersome. We are aiming to present our available data in a more friendly way for SDB in a new report that we should be releasing during late 2023/early 2024.

> The main problem for investors is trying to figure out the data, too much data becomes cumbersome.
>
> *David Abensur, IADB*

Jigme Shingsar (RBC): Before I end the ESG section, anybody else have any other comments?

Aldo Romani (EIB): I would like to underline that in my view it is the responsibility of a funding officer or product developer on the funding side to spearhead the required clarification and simplification process. I see this very much as a business opportunity as well, also for the intermediaries. In this respect, RBC has been such a good partner to us, showing full understanding and providing us with substantial support in disseminating core information in different parts of the world. A key element of EIB's growing recognition beyond the borders of the European Union has been the consistency with which we have jointly and timely raised awareness about on the investor value of this assumption of responsibility on the funding side. The AUD and the CAD markets have been exemplary in this respect.

As described earlier, the material cascading effects of this capital market centered approach on the lending side of the Bank are becoming increasingly apparent. The green, social and sustainability bond market segment is delivering results and will increasingly do so thanks to the injection of additional transparency, and comparability promoted by sustainable finance legislation and its operationalization on the ground. This will benefit issuers, investors, intermediaries and end users of the funds at the service of facts rather than words in the pursuit of sustainable development. In this regard, it is at this stage essential to explain that the upcoming EU regulation on European Green Bonds is establishing a touchstone against which to improve the capacity of this market segment to prove the sustainability claims in the real economy over time. This is the condition for the effective use of the EU Green Bond Standard as benchmark for the gradual improvement of the status quo.

Randy Ewell (The World Bank): Just to add to that, I think for us, given our business and who we lend into, I have a lot of sympathy for the EU approach. It's important that some of the lending we do will be benefiting a bit of Transition bonds from one to the other. I think what's important to us is that what's happening is trending and moving the world in the right way. What we want to do is pull investors, issuers and others into the community and not disincentive participation. Some of the projects we may lend into in South Asia, for example, could have far greater global climate benefits but not qualify or classify as a green project in certain taxonomies. The trajectory is important- having this community of regulators or the community of the green bond principles or the other principles, as well as the investors agree on what sort of approach moves us all forward.

Jigme Shingsar (RBC): Moving onto CAD, Alex, why don't you kick off

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with what we experienced in the CAD market this year and what we think is going on, and then we can go into some questions with some of the panelists.

Alex Caridia (RBC): In terms of CAD of the Maple market, like most other markets, we've seen lower issuance volume, totaled C$6 billion versus around C$10 billion last year. We have 8 deals YTD versus 16 deals last year. If I look at the year, most of the issuances were concentrated in January and February, and we've seen a couple of issues over the last month, but most of the year was pretty quiet, and it's been mentioned a few times by various people on this call that the arbitrage levels from CAD back to LIBOR or whatever reference rate haven't really been competitive.

Nevertheless, I think there have been a couple of good developments. One is that there's been an increase in the breadth of issuers. All participants on the call here are what I'd call the regular issuers. This year, we've seen some of the second tier names came into the market.

Another point worth highlight is that, 7 out of the 8 deals that have come to the market have been ESG, which underlines the strong demand from Canadian investors for the product. Typically we'll price an ESG deal slightly through the non-ESG deal and in the secondary market, they tend to trade even further through.

When you look at some of the domestic issues like the large ESG issuers down here, Ontario and Quebec, they trade anywhere from 3 to 5 bps through their non-green curve in the secondary market. We've also seen Government of Canada issued a C$5 billion green bond, their inaugural green bond. Canada also issued a Ukraine support bond recently.

I think in terms of spreads, like most other markets, spreads have trended wider.

> We found that the windows in CAD tend to close up pretty quickly versus other markets.
>
> *Anthony Ostrea, ADB*

Jigme Shingsar (RBC): Just continuing the theme of the last topic of ESG, there's no question there's a competitive advantage for ESG-themed issuance of any sort, and investors are really looking forward to that.

Alex Caridia (RBC): On the domestic side, investors are certainly willing to pay a little bit more for an ESG themed bond. The Canada deal came in 2bps through the curve. Most Ontario and Quebec deals priced a little bit through the curve as well. Similarly, we had a City of Toronto long dated Green Bond, which was also tighter than where they would've come in had it not been green. There are more domestic investors that have green specific or ESG-specific mandates. From a pricing perspective advantage, and also just from a book diversification perspective, we'll see more domestic uptake for ESG.

Jigme Shingsar (RBC): David, you mentioned that the very first benchmark Sustainable Development Bond IADB issued was in CAD, while you haven't been so active this past year, do you think you'll be able to come back to this market soon?

David Abensur (IADB): This ties up with the fact that we are a USD based institution. Everything gets swapped into USD. So unfortunately, we did not have the opportunity to issue CAD this year, but it is important to highlight that CAD is a strategic market for us, and we want to maintain our presence. CAD has been in the right path in past years, but unfortunately, we did not manage to issue this year. Our first SDB bond was a Canadian bond reflecting the fact that Canadian investors are very keen in bonds that have a positive impact. Last year, we issued CAD bonds on a 5-year tenor and a tap of the August 2027.

Jigme Shingsar (RBC): Anthony, you've been very active and the Gender theme has really played well for you in the CAD and other markets. Any comments in terms of how it fits into your plan? All plans are variable in this environment, but do you expect to be back in this market?

Anthony Ostrea (ADB): Short answer had been mentioned by another participant. It is a strategic market for the ADB as well. The last two years have actually been pretty good for us in CAD. Prior to last year, I think it had been a number of years since we were in the market, not for the lack of trying. Like I just mentioned earlier, we do benchmark all markets against USD. It just so happened that in prior years that cost efficiency in CAD didn't really stack up nicely versus USD. We found that the windows in CAD tend to close up pretty quickly versus other markets.

Just to give you some numbers, last year we did about C$2.35 billion across 5 and 7-year tenors. This year, the 3-year tenor has worked well for us, so we did one in January, and the second one in late August. Total fund raised this year was C$1.45 billion. Both were gender bonds. It is something that we would like to keep the momentum going into the New Year.

Jigme Shingsar (RBC): Randy, you'd like to do large liquid benchmarks, do you feel that's viable and do you expect to be back in this market?

Randy Ewell (The World Bank): Canada is our neighbor, and we have made a point of being intentional about looking for opportunities in CAD. For the past 12 years we've done large size benchmark issuances in the Canadian market, and we fully intend to continue our commitment to that strategic presence. Unfortunately, for much of this past year pricing was offside and due to market volatility demand was not stable. We are now seeing some trends in the right direction and we hope to be active in the not too distant future. The CAD investors have been great supporters of IBRD's themed sustainable development bonds.

Jigme Shingsar (RBC): Randy, could you comment on the maturity preferences and maybe your aspirations in terms of growing the curve further out?

Randy Ewell (The World Bank): We are always happy when we can achieve duration in our funding. We maintain a redemption profile that we're very mindful of and take care to equalize these funding buckets so that we're not simply funding redemptions but loans. Our projects are long dated, so we like to fund long when it works.

Jigme Shingsar (RBC): Any comments from IFC? You've been able to sort of pop up in the CAD market at least once a year.

Zauresh Kezheneva (IFC): CAD market is important to us. In the last few years on average, CAD funding represented 4% to 5% of our funding program. We have also noticed an increased interest from Canadian investors in ESG which is very heartening to see, not just specifically from investors that have green or social mandates, but from the general crowd. It feels like in the CAD space, ESG is becoming quite mainstream. In January 2022, we issued a social bond which was well received. Our presence in the CAD market corresponds well to our strategic view in terms of types of products that we are offering and in terms of investor base.

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>
> *Zauresh Kezheneva, IFC*

Jigme Shingsar (RBC): Piet, do you expect CAD as one of the projects you'd like to see next year?

Piet Juerging (KfW): Definitely, we managed to issue in the last two years. That'll be a goal for next year again. By looking at this year, we just accomplished to issue C$500 million via conventional bond. At least we got it done to be subscribed. I'm pretty sure that especially for CAD, it will be helpful to add the green label to it to get a bigger size deal done. So, a C$1 billion green bond will be one of our goals for 2023. Unfortunately, with CAD, it's a bit more difficult, the market depth isn't there, so that 3 or 4 issuers can easily sweep into the market, which is causing a problem.

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>
> *Piet Juerging, KfW*

Jigme Shingsar (RBC): Last but not least, EIB, you have the flexibility to do a lot of markets. Will you have the flexibility to come back to CAD, particularly with something that's green or sustainable?

Jorge Grasa (EIB): I hope so, like all the other participants, the CAD market is an important market for EIB. In 2022, it was the fifth ranked currency for EIB, a similar position to last year's. We really hope that we are able to do a similar successful deal next year as we did at the beginning of this year, which was C$1.4 billion. As I was pointing out, we also have to consider that we need to go a little bit longer than three years, I hope that five or seven years also opens at some point, and we can access that market.

Jigme Shingsar (RBC): One of the questions that's come up quite frankly is liquidity. Alex, just a comment on the investor base in CAD on market liquidity here, and what you see in terms of trends.

Alex Caridia (RBC): Taking a step back, if I look at public sector Canada Complex, it's probably one of the most liquid markets in the world. I'm talking specifically provincials and CMBs, where you can trade all the way out to 30 years with C$200 to C$300 million on less than 1bp bid offer. I think that doesn't hold true for the Maple market, just by the virtue of its size and the smaller issuance volume. It's fair to say that liquidity in the Maple market has improved over the last few years as issuance has started ramping up. Two or three years ago, Maple bond traded anywhere from pretty wide sort of 3 to 4, maybe even 5bps depending on the line, I think we're now looking at 2 or 3bps in terms of a typical bid offer. A Maple bond, which compared to some of the larger markets, such as USD, still seems pretty wide, but it's definitely come in a long way from where we were a few years ago.

> Maple issuers are not as liquid as some of the other CAD public sector products or some of the larger markets, but it's definitely trending the right way.
>
> *Alex Caridia, RBC*

As more domestic investors have started to re-engage in the product, a lot of them obviously got burned on the product in the past and have had long memories. We're seeing those investors re-engage and that's obviously helping liquidity. I guess in a nutshell, I'd say it's not as liquid as some of the other CAD public sector products or some of the larger markets, but it's definitely trending the right way.

Jigme Shingsar (RBC): Randy, you've got a fair amount of data given some of the very large liquid benchmarks you've done. Is there any comment in terms of any sort of changes or revolutionary interest of investor base, and whether you're getting any sort of different or specific questions around your CAD issuance around liquidity or pricing?

Randy Ewell (The World Bank): I've had some recent discussions with several CAD investors and I'm hearing that they'd appreciate high quality triple A SSA investment opportunities. There's been a fair bit of provincial issuances and other things, and the market at the moment certainly has its limitations but it seems like it's moving in the right direction.

Jigme Shingsar (RBC): Would you say in terms of the investor base then, Randy, traditionally there's obviously been a lead investor component of treasury demand. Do you see that evolving a little bit or maybe, still being important, but maybe less reliant on that as the key source of domestic demand?

Randy Ewell (The World Bank): I think we need less. It does feel like in the past year, the international investor base for CAD issuances has participated less in the CAD market. Whether that holds into next year remains to be seen. Certainly for us, we value the diversity of our investor base and like to appeal as broadly as possible. Some of the themes do get some investors involved who may not have otherwise been involved just on the margin.

Jigme Shingsar (RBC): It's interesting your comment around international investors maybe being less active. On one hand I guess there's been less issuance as well, but Alex, on the other hand, would you say in CAD we've seen more international demand but it has been the interest in CAD more broadly, rather than in SSAs, and maybe that will filter through to the SSA market over time?

Alex Caridia (RBC): I guess broadly so, I don't think it's necessarily picked up between last year and now, but generally, over the last few years we've seen an increase in international interest. I guess I've put that into a couple of different buckets. One would be the Asian real money demand, Japan in particular. There's been times where the hedge back to JPY has been very attractive and they've been very active. There's also the central bank component, which has been relatively steady, but maybe increased over the last few years as well.

Jigme Shingsar (RBC): I think many of the issuers in the SSA or the Maple space have a bigger name recognition in the international markets than the provincials. As a result we've seen decent international demand for Maples that we don't see for provincials, but obviously having a balanced investor base is key. Anthony, last year you were one of the more active issuers in CAD, and then this year you've had some very nice issuances as well. Any sort of changes in the investor base, or is it sort of fairly stable in terms of the kinds of investors buying your paper in CAD?

Anthony Ostrea (ADB): Not dramatically different – I think over from last year we've had a healthy percentage of light or dark green investors, which has probably been more or less the same. The components in terms of international versus domestic is also roughly the same. In terms of good support from bank treasuries, I echoed the comment that we would like to see more support outside the bank Treasuries, but no major changes that we've seen at least from last year.

Jigme Shingsar (RBC): Piet, any comments on your experience with the CAD market? If you were able to move to green, maybe do you expect a significantly different investor base than what you saw for your outing this year?

Piet Juerging (KfW): The experiences we made or the comparison between green and conventional bonds is that with green bond, the participation of bank treasuries is way higher. Whereas in our conventional bond, the majority has been allocated to central banks. I would go with Alex's statement that international interest is building up in the recent years. However, I would say that 2022 have been rather difficult for international investors because of increased volatility and spread movements in the market. I would say that some international investors have been reluctant to invest in CAD, as Alex mentioned the Japanese investors. From my point of view on a FX basis, it doesn't make a lot of sense right now to invest in CAD, but I'm still hopeful for January.

Jigme Shingsar (RBC): Are there any comments on CAD distribution, what you'd like to see, what you think might happen, or what you think would make a difference in terms of expanding the CAD market for you?

Jorge Grasa (EIB): I would like to see more domestic participation as my colleagues are commenting. It's very much focused on some Bank Treasuries participating there, and a few names that also are pretty keen on adding some green label. At the beginning of the year we did see a little bit participation from central bank rather than domestic accounts. Let's hope that a wider variety of domestic accounts will look again at the Maple market. It will also be good if bank treasuries can look beyond five years instead of sticking to three to five years.

> Let's hope that a wider variety of domestic accounts will look again at the Maple market.
>
> *Jorge Grasa, EIB*

Alex Caridia (RBC): On the bank treasury point, there have been some bank treasuries that have been trying to push (duration) out longer, but just in terms of the comment around the books, they seem to be fairly bank treasury heavy, it's also a little bit of a self-fulfilling prophesy with issuers often making a treasury order a condition of a mandate. So it's hard to argue that banks need to bring an order but actually we'd rather see other investors, right? I know that the bank treasury demand would probably be lower for sure, if that wasn't a part condition of the mandate.

Jorge Grasa (EIB): I guess that we like to build some kind of foundation in our deals and that is given by the support from the bank treasuries. And once books are open we try to grow the transactions to have other kind of investors. But I would say that bank treasuries are very helpful to be able to access this kind of market, so we don't really have anything negative to say about that. But it's true that it would also be helpful that all the domestic participants also support this market.

Jigme Shingsar (RBC): Zauresh, I know CAD is something that you always keep an eye on. In particular, do you feel like there's any sort of prospects to reduce our reliance on certain parts of the demand that we've relied on as essentially at least in the building block? Are you having more investor engagement away from bank treasuries, for example?

Zauresh Kezheneva (IFC): We do have a regular investor engagement with general investors. I guess on my Christmas wish list, I would want more of every kind of demand: more bank treasuries, more central bank demand and more demand for green or social bonds from asset managers. As of now, we don't have enough data to draw specific trends. At least in the last issues, we saw more Canadian investor participation and less of central banks, which was the opposite in prior years. It would be great to see more depth and longer issuance windows, and may the basis be always in our favor!

Jigme Shingsar (RBC): To the people with some of the larger programs, I would suggest that perhaps making more of a commitment to the CAD market in terms of maintaining a presence, and mimicking to the extent possible, some of the domestic issuers, may help generate some of this liquidity, which could reduce the premium versus a CMB. That's something I would throw out, I don't expect an answer on this panel.

Aldo Romani (EIB): As a matter of fact, in the past couple of years our sustainability funding has been able to raise the share of Canadian investors in the books quite substantially - to around 40% in the large transaction that we did at the beginning of 2021. This, combined with the strong central bank demand that we saw at the beginning of 2022, shows that indeed the CAD market can also be a source of good diversification.

Jigme Shingsar (RBC): You mentioned the SRI and the ESG premium. Do you think that's just going to persist for the time being just because there isn't enough supply?

Alex Caridia (RBC): I think so and more broadly, there's 10 provinces here, and obviously it's a big, active, liquid market, and only two of them issue in green or ESG. The largest issuer, CMB, have been working on a framework for quite some time, which is well known, but it doesn't feel like it's anytime soon. In the absence of a lot of domestic ESG supply, investors will look to some of the people on the call here, and the maple market more broadly for that. I think there'll be more demand than there is supply in our market right now as more investors come in with specific ESG mandates.

I'd see the premium in the secondary market to stay where it is going forward. So anywhere 3 to 5bps for some of the provinces. In the maple market, I'd see a similar dynamic.

Jigme Shingsar (RBC): I think we've got through the bulk of what we were looking to do. Are there any concerns or what are you thinking about for next year?

Zauresh Kezheneva (IFC): We hope to have a new calendar year with longer issuance windows and more opportunities for everyone, despite volatility. Regarding opportunities, as the year opens, we expect investor interest to put cash to work, so we will be monitoring that interest and continue our investor engagement work. We will continue diversifying our funding across different currencies and markets and thank our investors for their support.

Jigme Shingsar (RBC): So if there's a concern, it's really volatility more than anything at this point.

Anthony Ostrea (ADB): The worries for next year might be a lot similar to this year. When you look at what played this year, geopolitics was a concern, COVID hasn't gone away really, although it's getting better. Inflation, monetary policy tightening, we're hopeful some of these may abate but if it doesn't, then it might be a repeat essentially of this year where you have heightened volatility, and as aforementioned, issuance windows that are compressed or not as frequent as in past years.

This year we managed to navigate the program throughout these concerns by trying to minimize our outings in the market. For example, in USD, we did 3 dual-tranche outings. This also plays nicely into our barbell approach to calibrate our average maturity, the sweet spot being 4.5 to 5 years. So this year we were lucky to do a few of these longer tenor benchmarks including a 10 year and a 15 year EUR trade. All of these allowed us to issue in the front end, including in CAD. That's why we were able to do the two 3 year CAD deals this year. At the end of the year, our average tenor was around 5 years.

Jigme Shingsar (RBC): Thank you, EIB, any concerns? EUR swap spread compression? Any particular concerns?

Jorge Grasa (EIB): One concern is the volatility in the market that make issuance windows to remain very short. You have to be very precise on which days you want to access the market. Also, Central Banks are going to stop hiking rates at some point, or the ECB will start QT this year and the question is what the effect will be on EIB's spreads, if the energy crisis is going to be over or is going to restart again. Presumably, we will speak again in August or September about what's going to happen in winter 2023-24. I think it's going to be a little bit of remix of what we have been seeing this year.

David Abensur (IADB): We have similar concerns. During COVID, most central banks decreased rates and did quantitative easing. Now central banks are increasing rates and doing quantitative tightening simultaneously. The world is moving into one direction, there could be more potential dislocations of the financial markets, like what happened in the UK with the pension funds. In addition, if for example, the conflict in Ukraine escalates further or there is a potential surprise related to the pandemic, these events could adversely impact the financial markets.

Randy Ewell (The World Bank): I think everyone has already kind of said it I mean, I think what we can all hope for a bit of stability and less volatility. There still are a lot of things out there that could sort of shake things up and hopefully we're near the terminal rate.

It does feel like things are improving but we still have the war in Ukraine and how that conflict may continue to affect the markets, but I'm hopeful. There's a lot of overlapping issues that are affecting our countries that we lend into but this is our mission. This is when the World Bank has steps forward and remains a strong partner for development. When the markets are turbulent, we remain a strong partner. We likely have a lot of work ahead of us. Wishing everyone a good holiday season and a happy new year, and we should all just hope everything goes well.

Jigme Shingsar (RBC): Seems Hope for more stable markets is the plan. From my perspective, I agree in terms of hoping for longer issuance windows. Well this brings us to the end our discussion - I appreciate everyone taking a lot of time out to do this. We will circulate the transcript as soon as possible. Thank you again for your business, your trust and for being such great partners for RBC.

SELECT RBC-LED TRANSACTIONS IN 2022

Green Bonds and Sustainable Finance

Toronto	C$300,000,000	4.40% Green Bond due 2042	AA/Aa1/AA	Joint Bookrunner	November 2022
CDPQ	C$1,250,000,000	3.80% Inaugural CAD Green Bond due 2027	AAA/Aaa/AAA	Joint Bookrunner	November 2022
Ontario Teachers' Pension Plan	C$1,000,000,000	4.450% Inaugural Green Bond due 2032	AAA/Aa1/AA+	Joint Bookrunner	November 2022
Ontario	C$1,000,000,000	1.55% Green Bond Due 2029	AA(L)/Aa3/A+	Joint Bookrunner	October 2022
CPP Investments	C$1,000,000,000	3.0% Green Bond Due 2028	AAA//Aaa/AAA	Joint Bookrunner	August 2022
Québec	C$1,000,000,000	3.65% Green Bond Due 2032	AA(L)/Aa2/AA-	Joint Bookrunner	May 2022
Canada	C$5,000,000,000	2.25% Inaugural Green Bond due 2029	AAA/Aaa/AAA-	Joint Bookrunner	March 2022
PSP	C$1,000,000,000	2.600% Inaugural Green Bond due 2032	AAA/Aaa/AAA	Joint Bookrunner	February 2022

Maple Offerings

KBN	C$500,000,000	3.80% Green Bond due 2027	- /Aaa/AAA	Joint Bookrunner	November 2022
ADB	C$700 million	3.80% Gender Bond due 2025	-/Aaa/AAA/AAA	Joint Bookrunner	August 2022
KFW	C$500,000,000	1.75% Senior Notes due 2025	AAA/Aaa/AAA	Joint Bookrunner	February 2022
BNG Bank	C$300,000,000	1.8% Sustainable Bond due 2025	- /Aaa/AAA	Joint Bookrunner	February 2022
The World Bank (IBRD • IDA | World Bank Group)	C$1,500,000,000	1.0% Sustainable Bond due 2027	AAA/Aaa/AAA	Joint Bookrunner	January 2022

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