



Finding Value Across the Capital Structure

Limited Recourse Capital Notes

Limited Recourse Capital Notes, or simply LRCNs, are a growing segment of the Canadian fixed-income landscape that offer higher yields than comparable traditional investment-grade bonds.

Plainly, LRCNs are interest-bearing instruments issued by Canadian financial institutions that share similar characteristics with preferred shares. They provide bond investors with a natural higher-yielding debt option of familiar high-quality entities. To obtain these higher yields, investors must move down the issuer's capital structure. Higher yields are the result of higher associated risks, which include lower capital priority, increased complexity, lower liquidity,

and higher volatility than traditional bonds. At Fiera Capital, we believe LRCNs can play a return enhancement role in fixed-income portfolios, but a measured and disciplined approach is required.

Since the introduction of LRCN instruments in 2020, it has become abundantly clear this is not a homogenous asset class, evidenced by wide performance deviations – not only between issuers but also across LRCN securities of a single issuer. In some instances, the return profiles of LRCNs have been more emblematic of preferred shares or equities. Investors are left to ponder; Is it a bond? Is it a preferred share? Perhaps the correct answer is 'yes'.

LRCNs are more broadly considered 'Hybrid' instruments. They pay a healthy stream of income like a bond, while having periodic resets and receive similar capital treatment as preferred shares. It should

be clear, these are not your typical bonds. A disciplined approach with a sound understanding of both bond and preferred share mechanics is required to secure the benefits of these instruments. In our opinion, LRCNs should not be approached on a buy-and-hold or a passive basis only. Selectivity and active monitoring are required to ensure all risks are properly compensated. When LRCNs are added to a portfolio, they should be viewed as opportunistic positions and require continuous review.

The Evolving Canadian Fixed Income Market

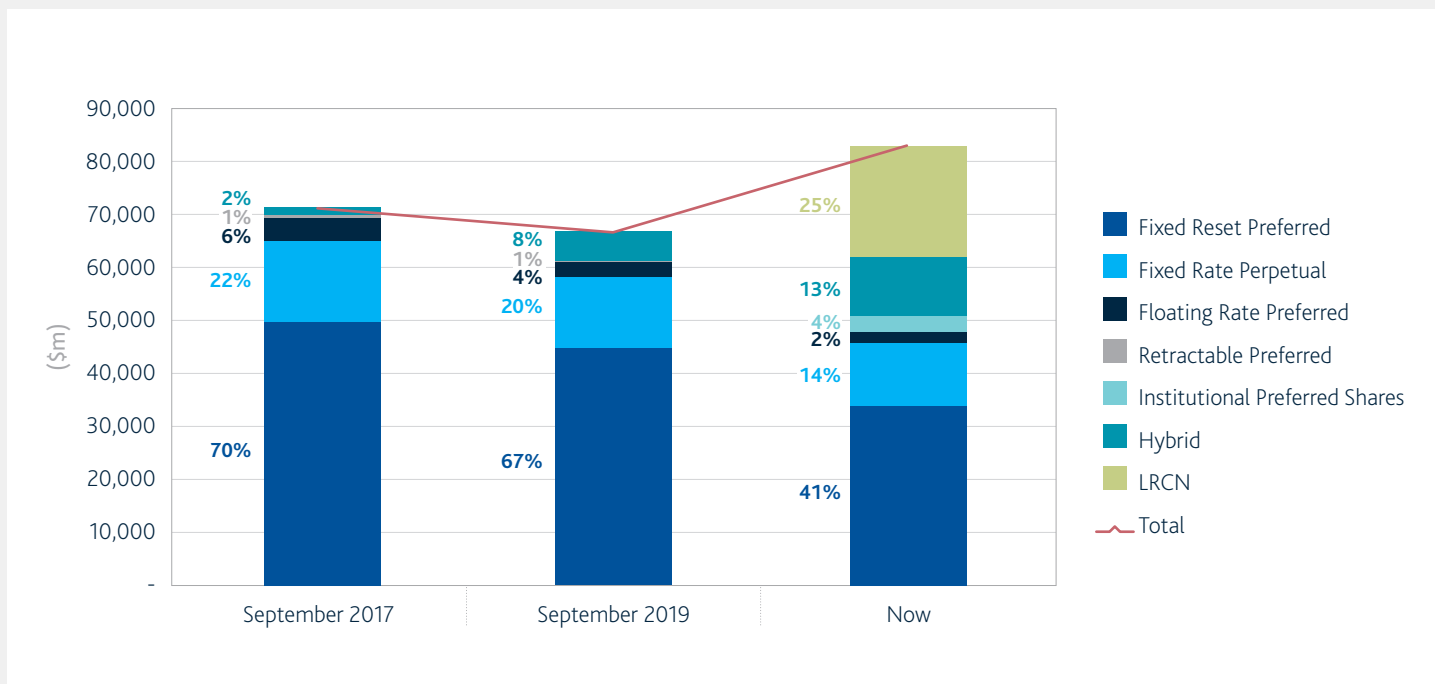
Canadian financial institutions have taken advantage of the shifting regulatory landscape to optimize their capital funding needs. LRCN and hybrid instruments hold a larger share of the deeply subordinated market in Canada, displacing traditional preferred shares in the process. LRCN market growth reflects a desire by the investor base to diversify from traditional financial institution debt holdings and

improve portfolio yields. The growing demand for this product is reflected in the composition shift in *Figure 1*. Over the last five years, the deeply subordinated capital market has shifted from preferred shares, which are largely owned by retail investors, to institutional bond investors, a move welcomed by regulators. LRCNs evolved from a concept in 2019 to 25% market representation in three short years – establishing their market presence through a pandemic no less.

The rise in demand does not mean automatic inclusion across fixed-income indices. In fact, LRCNs are not included in the main Canadian fixed-income market indices, such as FTSE Canada Universe Bond Index, because of their unique structures. Although LRCNs exhibit bond-like characteristics, they have their own nuances. For the time being, these instruments will remain out-of-benchmark for most bond investors that are tied to more traditional benchmarks, but tactical allocations could be beneficial for astute investors.

Figure 1

Canadian Deeply Subordinated Market



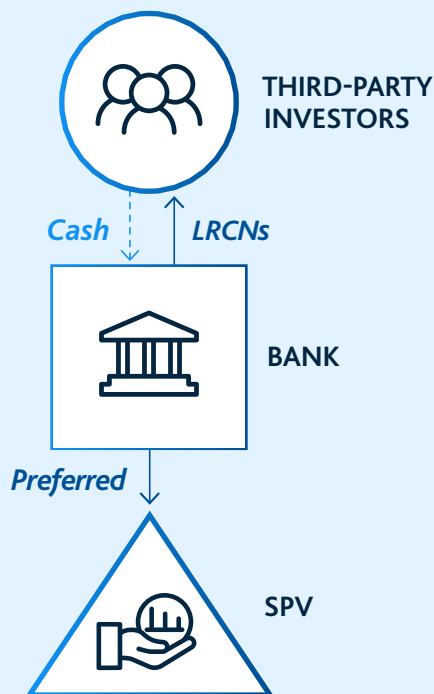
Source: Fiera Capital, Bloomberg, As of December 31, 2022

Understanding the Limited Recourse Capital Note Structure

Before diving into the nuances of these multifaceted hybrid instruments, let’s take a moment to understand what they are and how they work.

LRCNs represent the intersection of evolving regulations aimed at strengthening the Canadian financial system and investors’ continued appetite for higher yields. LRCNs are Additional Tier 1 (AT-1) capital securities with a structure that consists of two parts: 1) a subordinated interest-bearing LRCN bond with a term to maturity of no less than 60 years; and 2) a perpetual preferred share with Non-Viable Contingent Capital provisions¹ is issued and held in trust for the benefit of LRCN holders. LRCNs rank equal to preferred shares in a financial institution’s capital structure, as after all, at any point in time an LRCN investor may end up holding a preferred share. The exchange into perpetual preferred shares would generally only occur if the issuer missed an interest payment or does not redeem the LRCN notes on the maturity date and is to the disadvantage of the issuer. The exchange feature is essential for LRCN instruments to meet the strict requirements by regulators to be recognized as AT-1 capital. A bank’s LRCN structure is simplified in *Figure 2*.

Figure 2



Mechanics of LRCNs

It is complicated. As mentioned, LRCNs are issued with a minimum 60-year maturity with semi-annual interest payments like a traditional bond. LRCNs rank pari-passu with preferred shares, meaning they are lower in the capital structure than senior bail-in bonds and subordinated debt, but higher than common equity. In terms of pricing, LRCNs trade similarly to fixed-reset preferred shares, with the same factors – namely the Canadian 5-year rate and the credit tone – impacting spreads and expected returns. In fact, we view LRCNs as being similar to fixed-reset preferred shares, though with added liquidity, and with interest payments rather than dividends.

Now the hitch. Every 5-years after issuance, the issuer is presented with an option to:

- > redeem/call the bond with limits; or
- > reset the coupon at prevailing rates for next 5 years (Government of Canada 5-year yield plus initial fixed spread).

Historically, Canadian bank and insurance debt with call-features has been priced to the first call-date, as there is typically limited economic and regulatory incentive for them not to call the bond. However, unlike other forms of Non-Viable Contingent Capital, LRCNs do not lose capital treatment over their life – they are potentially callable but could equally be extended into perpetuity. The Canadian bank regulator also has a key role in the call decision as their approval for redemption is required and will be based on various factors, such as the current carrying cost relative to the replacement cost. To summarize, the issuer will only be able to call the existing LRCN and replace it with a newly issued LRCN if it makes economic sense for the issuer barring all other requirements of the regulator being met. Complexity requires diligence, we stress the need to understand the factors that will drive the regulator’s decision to approve a call and, most importantly, to understand how market dynamics of fixed reset spreads levels could materially impact the economics of replacing or extending a security past the call date.

Extension risk is real for LRCNs, which elevates the potential for volatility. Bond investors have rarely had to assess issuers with this type of economical decision-making clout, but this is familiar territory for preferred share investors. Portfolio managers with combined expertise in both credit and preferred shares are well-suited to navigate this developing and complex universe. To be fair, the LRCN market is still ‘Under Construction’, which raises the potential for volatility, but also creates opportunities for astute investors.

¹ Requires conversion into common equity to absorb losses in a failed financial institution

Based on the above and our extensive experience in preferred shares, we believe we can make reasonable assumptions about which securities have a higher probability of being called at future dates and are more likely to exhibit volatility characteristics more aligned with traditional bonds.

Resolution in Time of Stress

Canadian bank and insurer AT-1 capital is not unique. Regulations aimed at improving the loss-absorbing capital of banks have been implemented across developed markets. However, there can be a unique treatment of AT-1 capital in a restructuring or non-viability event, which unfortunately is learned the hard way. In March 2023, the AT-1 securities of Credit Suisse (approximately US\$17 billion²) were entirely wiped out when the Swiss Banking Regulator – after years of scandals and weak earnings - restructured the entity and forced it to merge with UBS, while Credit Suisse’s equity holders retained some value. This left many investors asking questions about whether a similar outcome could arise in other jurisdictions, including Canada, where if similar treatment were to occur, existing holders of AT-1 capital may find themselves in a disadvantageous position in terms of recoverable amounts.

Importantly, Canadian banks have strong existing capital positions, a high level of profitability, and are generally well diversified, which lowers the likelihood the AT-1 securities are exposed to a similar impairment scenario. Also, Swiss AT-1 instruments generally are structured to absorb losses through a full and permanent write-down to zero in a non-viability event, which leaves investors with a total loss. This is in stark contrast to Canadian LRCNs, which are expected to be converted into common equity based on a prescribed formula. Furthermore, to help ease any investor anxiety, the Office of the Superintendent of Financial Institutions (OSFI) unequivocally reconfirmed its guidance regarding AT-1 securities.

In effect, OSFI confirms that AT-1 holders are entitled to a more favorable economic outcome than existing common shareholders in the remote scenario that a bank is obliged into resolution, meaning that existing common shareholders would be the first to suffer losses. This would have been the intuitive expectation of AT-1 holders generally, however, the Credit Suisse saga shows that security-specific features play an important role and that Bank Regulators are also a variable risk to account for. As an example, the prospectus of specific Credit Suisse AT-1 securities included language stating the regulator had the power to trigger a full write-down of the notes while sparing equity investors from a total loss. Impaired capital is the ultimate risk, highlighting the necessity for in-depth credit research as well ongoing monitoring of exposures. OSFI’s additional guidance should help ease concerns related to Canadian financial institution AT-1 capital following the events surrounding Credit Suisse.

Active Security Selection in LRCNs

At Fiera Capital, the Integrated Fixed Income team emphasizes credit research, as well as seeking to understand the nuances and complexities of security structures. The below table illustrates the importance of this multi-pronged approach by revealing just how different actual performance can be across LRCN securities of the same issuer.

The clear conclusion is that credit spreads and return performance can differ greatly across securities. *Table 1* provides the 2022 performance for two Royal Bank of Canada LRCNs issued about 10 months apart. The top row is the inaugural LRCN issue with a 4.5% coupon and a spread reset level of 4.137%. This was issued only months after the Covid pandemic unfolded and was at a time when the average spread on a five-year RBC bail-in was 0.88%. In a previous note on LRCNs, we stated “should credit sentiment improve and demand for LRCNs remain robust, it will be realistic to see issuers come to the market with a lower fixed spread.” Fast-forward a year and RBC issued an LRCN with a coupon of 3.65% and a reset spread of only 2.665% or 147 basis points lower than their original issue. In June 2021, a five-year RBC Bail-in bond had a spread of 0.65%, clearly an improvement in credit tone.

² Bloomberg Financial LP

Table 1

Issue	Issue Date	Call Date	Reset Level	Yield to Call	Spread YTC	Spread to Maturity	QTD Spread Performance	YTD Spread Performance	QTD Absolute Performance	YTD Absolute Performance
RY 4.5%	07/28/2020	10/24/2025	413.7 bps	7.53%	374 bps	412 bps	+15 bps	+182 bps	0.98%	-7.62%
RY 3.65%	06/04/2021	10/24/2026	266.5 bps	12.28%	890 bps	397 bps	+171 bps	+525 bps	-3.42%	-18.66%

For illustrative purposes. Data as per December 31, 2022.

Past performance is not a guarantee of future results. Inherent in any investment is the potential for loss. There is no guarantee that these results will be achieved.

In general, the prevailing credit conditions at issuance will influence the long-term performance outcome of the two securities, as expected. In 2022, credit spreads materially widened as the Bank of Canada and the US Federal Reserve embarked on an aggressive rate hike campaign. Although the credit profile of the issuer is the same and they occupy the same terrain within the capital structure, the extension risk is much higher for the more recently issued instrument given its lower reset spread in this example (*Table 1*). As such, it has been penalized more uncompromisingly by investors.

We can use historical spread data to analyze the relative attractiveness of spreads at the time of issuance. Given the importance the fixed spread plays in the assessment of extension risk, we can make reasonable probability assumptions of an issuer’s ability to redeem an LRCN and issue at a more favourable cost at a future date. *Table 2* breaks down the historical credit spreads into quartile ranges, whereby 25% of the monthly observations over the past 10 years fall into one of the four buckets. This is a simple exercise to help establish credit tone at issuance. If too favourable, it lowers the probability of similar conditions prevailing at a future date and vice versa.

Table 2

Quartile	Historical 10 Year Canadian Corporate Mid-Term Credit Spread Ranges
Quartile 1	< 130 bps
Quartile 2	130 bps to 142 bps
Quartile 3	142 bps to 167 bps
Quartile 4	> 167 bps

Source: Fiera Capital and FTSE Global Debt Market Indices

Past performance is not a guarantee of future results. Inherent in any investment is the potential for loss. There is no guarantee that these results will be achieved.

Returning to the two LRCNs in *Table 1*, the RBC 4.5% LRCN was issued when credit spreads were close to 180 basis points or more formally fourth-quartile spread levels. i.e. at least 75% of the time, spreads trade tighter. Conversely, the RBC 3.65% LRCN was issued when credit spreads were close to 120 basis points in June 2021, which indicates spreads have historically traded wider at least 75% of the time. The issuer in this example certainly took advantage by locking in favourable financing in the latter, however, from an investor’s perspective, the probability that the issuer will be able to redeem at the five-year call date is significantly diminished. As investors price these nuances over time, one trades with the duration of a five-year bond and the other has transitioned from trading as a five-year to more appropriately as 60-year duration bond. Clearly, the risk profile is significantly different between these two securities.

In short, the performance deviation is not based on subordination (same), default risk (same), term to first call (close). The performance differential falls squarely on the 147 basis point differential between reset levels and the declining probability that the second bond will be called at the five-year reset window.

A patient seeker will be satisfied in due time

We firmly believe that bond investors looking for return and yield enhancements should consider LRCNs as a non-core allocation to a traditional fixed-income strategy. As we have demonstrated, investors need to discern across securities to ensure compensation is commensurate with risk and have an established framework for identifying hazards.

Fiera Capital’s Integrated Fixed Income team applies rigour and informed judgment into their analysis of credit and preferred share issuers. Given the wide range of potential outcomes for LRCNs and the volatility contribution the asset class can have on a bond

portfolio, the team has reserved LRCNs as a tactical trade that has opportunistically represented a small percentage across various bond strategies benchmarked to FTSE Canada indices. Depending on the strategy’s investment objectives and target tracking-error range, the weight of LRCN and other hybrid securities should be expected to be between 0% and 5% of a bond portfolio.

As a demonstration of patience, we declined to invest client capital in this developing market during the initial dash for yield as these new instruments were introduced to the market in July 2020. We had done the credit work and understood the structure, but the market tone and technicals have a tendency of guiding valuations significantly off course. This is especially true for new forms of debt that are not widely understood and have limited trading history. While portfolios continued to benefit from allocations to the hybrid market outside of LRCNs, we forfeited the early benefits as this developing market performed well into 2021. As the LRCN market developed and credit tone improved, issuers continued to come to

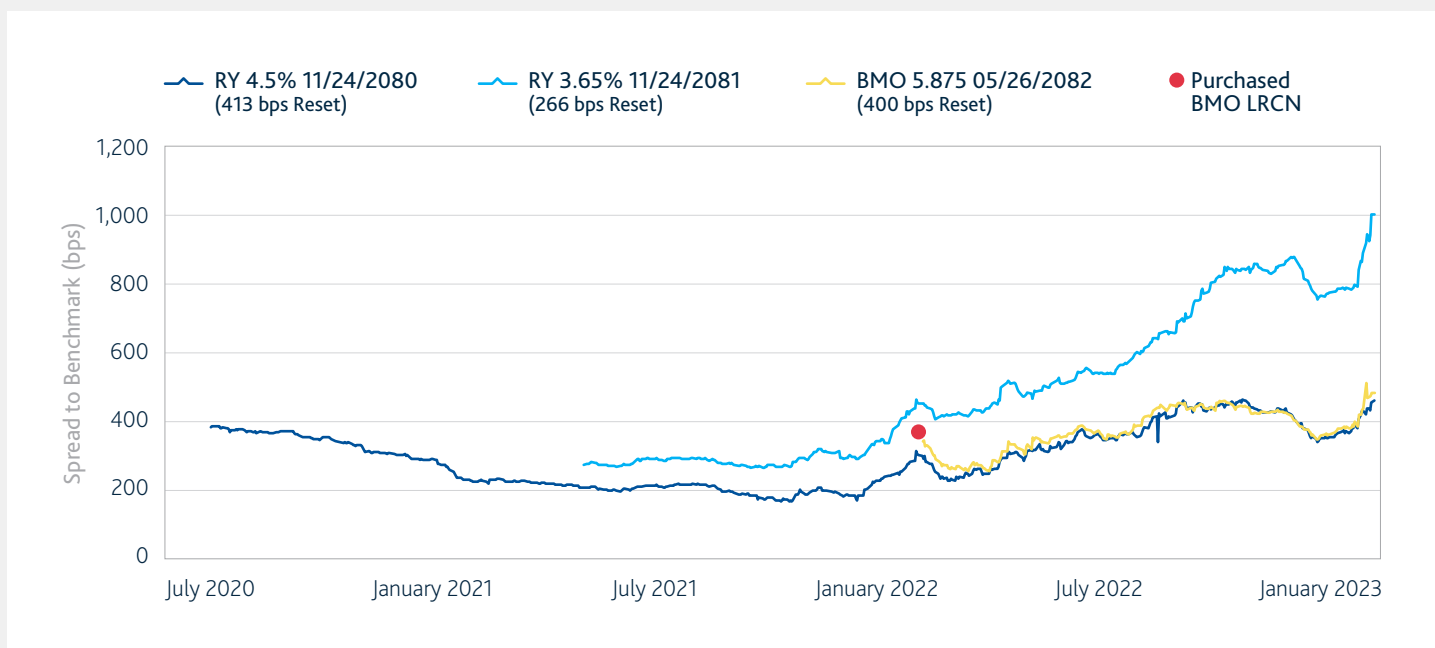
market and were well received by investors. Perhaps they were too well-received in our opinion. Sure, they offered higher yields, but perhaps the risk was misunderstood.

We did not begin to allocate client capital until we could more accurately decipher the winners from the losers and were confident our clients were being appropriately compensated for the risk. *Chart 1* shows the spread history of the two securities from *Table 1* above, as well as our first foray into the asset class in select bond portfolios in March 2022. Widening spreads in 2022 lifted reset spread levels on newly issued LRCNs, lowering extension risk and the potential for outsized contribution to portfolio volatility.

In early 2023, credit was in high demand and performed well. The rally in credit spreads drove our decision to reduce exposure to LRCN securities, as spreads to call had compressed through our targeted levels. The reduction was timely. In early March 2023, credit markets were significantly impacted by the US regional banking woes, as

Chart 1

Evolution of Select LRCN Spreads³



Source: Fiera Capital, Bloomberg Financial LP, as of March 27, 2023

³ Spread-to-call

well as the restructuring of Credit Suisse. LRCN spreads materially widened in response, underscoring the importance of accounting for the risk of high volatility, which can be amplified in different ways. This episode of high volatility helps to reinforce the importance of understanding how these securities can be impacted when a financial institution goes into a resolution. While we acknowledge the risks of the instruments, we remain comfortable with modest positions in portfolios. Risk needs to be calibrated to a manageable size so that portfolios can hold on to the benefits even in periods of elevated volatility while maintaining overall tracking error within targeted levels for a given strategy.

We incrementally enhanced portfolio yield while controlling risk through active security selection and limiting portfolio exposure to any given issue and issuer due to the subordinated nature of this debt. This opportunistic allocation has contributed to added value across client portfolios.

Wrapping it Up

Limited Recourse Capital Notes are an evolving segment of the Canadian fixed-income landscape that offer higher yields than traditional investment-grade bonds. Sharing bond and preferred share characteristics, this asset class has unique risks that investors need to fully understand before they can benefit from an allocation. At Fiera Capital, we believe LRCNs can play a return enhancement role in fixed-income portfolios, but a measured and disciplined approach is required. LRCNs require selectivity and are best considered as an opportunistic position that should be properly sized within portfolios. Investors need to understand that dynamic adjustments may be required when key factors change. An approach that properly monitors key factors, such as reset spread dynamics and regulatory rulings surrounding call decisions, should be favoured. Assuming these recommendations are properly followed, we believe that LRCN securities can offer investors attractive return attributes that can benefit Canadian dollar fixed-income strategies over a medium-term horizon.



Nicolas Normandeau
Portfolio Manager, Fixed Income



Jasper Beerepoot
Associate Portfolio Manager and
Head of Credit Research, Fixed Income



Jason Carvalho
Senior Capability Specialist, Fixed Income

fiera.com

Important Disclosure

Fiera Capital Corporation (“**Fiera Capital**”) is a global independent asset management firm that delivers customized multi-asset solutions across traditional and alternative asset classes to institutional, retail and private wealth clients across North America, Europe and key markets in Asia. Fiera Capital trades under the ticker FSZ on the Toronto Stock Exchange. Each affiliated entity (each an “**Affiliate**”) of Fiera Capital only provides investment advisory or investment management services or offers investment funds in the jurisdictions where the Affiliate and/or the relevant product is registered or authorized to provide services pursuant to an exemption from registration.

This document is strictly confidential and for discussion purposes only. Its contents must not be disclosed or redistributed directly or indirectly, to any party other than the person to whom it has been delivered and that person’s professional advisers.

The information presented in this document, in whole or in part, is not investment, tax, legal or other advice, nor does it consider the investment objectives or financial circumstances of any investor.

Fiera Capital and its Affiliates reasonably believe that this document contains accurate information as at the date of publication; however, no representation is made that the information is accurate or complete and it may not be relied upon. Fiera Capital and its Affiliates will accept no liability arising from the use of this document.

Fiera Capital and its Affiliates do not make recommendations to buy or sell securities or investments in marketing materials. Dealing and/or advising services are only offered to qualified investors pursuant to applicable securities laws in each jurisdiction.

Past performance of any fund, strategy or investment is not an indication or guarantee of future results. Performance information assumes the reinvestment of all investment income and distributions and does not account for any fees or income taxes paid by the investor. All investments have the potential for loss.

This document may contain “forward-looking statements” which reflect the current expectations of Fiera Capital and/or its Affiliates. These statements reflect current beliefs, expectations and assumptions with respect to future events and are based on information currently available. Although based upon what Fiera Capital and its affiliates believe to be reasonable assumptions, there is no guarantee that actual results, performance, or achievements will be consistent with these forward-looking statements. There is no obligation for Fiera Capital and/or its Affiliates to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise.

Strategy data such as ratios and other measures which may be presented herein are for reference only and may be used by prospective investors to evaluate and compare the strategy. Other metrics are available and should be considered prior to investment as those provided herein are the subjective choice of the manager. The weighting of such subjective factors in a different manner would likely lead to different conclusions.

Strategy details, including holdings and exposure data, as well as other characteristics, are as of the date noted and subject to change. Specific holdings identified are not representative of all holdings and it should not be assumed that the holdings identified were or will be profitable.

Certain fund or strategy performance and characteristics may be compared with those of well-known and widely recognized indices. Holdings may differ significantly

from the securities that comprise the representative index. It is not possible to invest directly in an index. Investors pursuing a strategy like an index may experience higher or lower returns and will bear the cost of fees and expenses that will reduce returns, whereas an index does not. Generally, an index that is used to compare performance of a fund or strategy, as applicable, is the closest aligned regarding composition, volatility, or other factors.

Every investment is subject to various risks and such risks should be carefully considered by prospective investors before they make any investment decision. No investment strategy or risk management technique can guarantee returns or eliminate risk in every market environment. Each investor should read all related constating documents and/or consult their own advisors as to legal, tax, accounting, regulatory, and related matters prior to making an investment.

United Kingdom: This document is issued by Fiera Capital (UK) Limited, an affiliate of Fiera Capital Corporation, which is authorized and regulated by the Financial Conduct Authority. Fiera Capital (UK) Limited is registered with the US Securities and Exchange Commission (“**SEC**”) as investment advisers. Registration with the SEC does not imply a certain level of skill or training.

United Kingdom – Fiera Real Estate UK: This document is issued by Fiera Real Estate Investors UK Limited, an affiliate of Fiera Capital Corporation, which is authorized and regulated by the Financial Conduct Authority.

European Economic Area (EEA): This document is issued by Fiera Capital (Germany) GmbH (“**Fiera Germany**”), an affiliate of Fiera Capital Corporation, which is authorized and regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin).

United States: This document is issued by Fiera Capital Inc. (“**Fiera U.S.A.**”), an affiliate of Fiera Capital Corporation. Fiera U.S.A. is an investment adviser based in New York City registered with the Securities and Exchange Commission (“**SEC**”). Registration with the SEC does not imply a certain level of skill or training.

United States - Fiera Infrastructure: This document is issued by Fiera Infrastructure Inc. (“**Fiera Infrastructure**”), an affiliate of Fiera Capital Corporation. Fiera Infrastructure is registered as an exempt reporting adviser with the Securities and Exchange Commission (“**SEC**”). Registration with the SEC does not imply a certain level of skill or training.

Canada

Fiera Real Estate Investments Limited (“Fiera Real Estate”), a wholly owned subsidiary of Fiera Capital Corporation is an investment manager of real estate through a range of investments funds.

Fiera Infrastructure Inc. (“Fiera Infra”), a subsidiary of Fiera Capital Corporation is a leading global mid-market direct infrastructure investor operating across all subsectors of the infrastructure asset class.

Fiera Comox Partners Inc. (“Fiera Comox”), a subsidiary of Fiera Capital Corporation is a global investment manager that manages private alternative strategies in Private Credit, Agriculture and Private Equity.

Fiera Private Debt Inc. (“Fiera Private Debt”), a subsidiary of Fiera Capital Corporation provides innovative investment solutions to a wide range of investors through two distinct private debt strategies: corporate debt and infrastructure debt.

Please find an overview of registrations of Fiera Capital Corporation and certain of its subsidiaries by following this link:

www.fieracapital.com/en/registrations-and-exemptions