

Our ESG approach to fixed income investing

Core mission statement

One of the Mackenzie Fixed Income Team's core beliefs is that the tenets of environmental sustainability, social wellness and stable governance (collectively referred to as "ESG") are core factors of influence with the opportunity to impact the financial performance of corporate and government issuers. As forward-looking investors, it is critical that we are active advocates for enhanced accountability by assessing each issuer's adherence to policies and practices, which enables positive impact through economic development. As stewards of capital, we remain committed to ensuring we develop solutions that aim to deliver the best risk-adjusted returns for our clients while seeking to provide continuous contributions towards the elevation of local and global communities.

Our philosophy

The Mackenzie Fixed Income Team manages a broad range of strategies, from core government bond portfolios and flexible aggregate mandates to high-yield credit funds and sustainability-oriented mandates emphasizing labelled debt. The function of the team's ESG-oriented research varies depending on the allocation of the strategy, highlighting the relative materiality of various factors with respect to the issuer. We believe that just as credit risk assessments vary between industries, our process to analyze ESG factors should be uniquely targeted to suit the characteristics of individual issuers. In addition to providing clarity towards the standing of a specific credit, this methodology reduces the risk of exposure to "greenwashed" securities, where capital is directed in a manner immaterial to the business to provide the illusion of corporate social responsibility. Through this process, we ensure that each of our strategies considers ESG risk and opportunities in a manner that holistically balances the team's core ESG principles and unique investment objectives.



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We continue to embrace the belief that effective integration of ESG principles within the investment analysis process depends on the adoption of evolving technologies, the employment of diverse perspectives and the continued education of our team and our investors.

As the sophistication and availability of reported data continues to increase, so have the Mackenzie Fixed Income Team's integration strategies with respect to how we identify opportunities and create meaningful alignment with our team's thematic objectives. Our team continues to focus on the development of thematic solutions to support our growing core of sustainable products. Having developed proprietary quantitative models to determine dynamic and materiality-weighted ESG scores for corporate and sovereign issuers, our team is committed to the continued optimization of our ESG-oriented portfolio management strategies. Mackenzie's Fixed Income strategies possess increased tilts towards positive ESG scoring, alignment to the Paris Agreement and advancement of the United Nations Sustainable Development Goals.

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Mackenzie Fixed Income Team core ESG principles

- Analyzing securities through a targeted ESG assessment process may provide a unique opportunity to uncover hidden financial, reputational and operational risks.
- As climate change continues to intensify, equity and credit markets will increasingly adapt to reflect the growing risk to the global economy.
- Adopting a comprehensive ESG research and integration process provides investors with the ability to capitalize on emerging trends in sustainable debt issuance while avoiding the pitfalls of greenwashing and exposure to ESG laggards.
- Proactive engagement with debt issuers demonstrates increased commitment to promoting sustainability versus divestment or exclusion.
- Impact is achieved most effectively through a holistic and complementary approach that:
 - · Recognizes best-in-class performers.
 - Rewards issuers with positive ESG-linked momentum.
 - Supports credits with material sustainability-linked use of proceeds.

ESG integration across fixed income strategies

Our team of ESG integration leaders work directly within our team of analysts and portfolio managers to leverage quantitative ESG models developed to assess the standing of corporate and sovereign debt issuers. These models consider data from Mackenzie's proprietary ESG research, while also consulting data from global institutions such as the World Bank and the United Nations, in addition to sustainability-oriented third-party research organizations that include Sustainalytics and MSCI. Through a targeted approach catered to the individual issuer, our dynamic materiality maps help to ensure that absolute performance and momentum of an issuer are derived from themes that create the greatest influence within their respective industries. This methodology allows our team to target investments and engagements, while aiming to ensure that our sustainable solutions avoid exposure to greenwashed debt and ESG laggards. The Mackenzie Fixed Income Team believes there is no one-size-fits-all approach that will ever adequately address the ESG standing of corporations and governments, ensuring that our dynamic models are continually adapted to simultaneously optimize sustainability and investment performance.

Timeline

- 2014 Initial ESG risk assessment framework developed with corporate governance scoring model Mackenzie Investments is a signatory for the United Nations Principles for Responsible Investing
- 2015 Initial development of sovereign ESG scoring models for global fixed income mandates
- 2016 Development of Mackenzie Fixed Income Team thematic ESG objectives
- 2017 Launch of the Mackenzie Global Sustainability and Impact Balanced Fund Mackenzie Investments joins the Responsible Investment Association of Canada
- 2018 Mackenzie Responsible Investment Committee is established
- 2019 Mackenzie establishes fixed income ESG engagement database Initial construction of Mackenzie ESG materiality maps for sustainable development themes Mackenzie endorses United Nations Women's Empowerment Principles
- 2020 Development of portfolio tools to assess climate risk exposure and carbon intensity Development of corporate ESG issuer scoring model Development of ESG exclusion policies through cross-asset class Responsible Investment Committee
- 2021 Launch of the Mackenzie Global Sustainable Bond Fund and ETF (MGSB) Launch of the Mackenzie Greenchip Global Environmental Balanced Fund Launch of the Mackenzie Global Green Bond Fund

Mackenzie Fixed Income chairs Carbon Innovation and Investment taskforce within Bank of Canada's Canadian Fixed Income Forum

Fixed Income Team manages Canadian Sustainable Bond Fund and Sustainable High Yield Fund for Climate **Action Portfolios**

- 2022 Investment in innaugural Outcome bond: Wildlife conservation "rhino bond" Launch of "Dear CFO" ESG labelled debt engagement program Development of green bond scoring framework
- 2023 Investment in world's largest debt for nature swap: Ecuador's Galapagos bond Development of ESG KPI scoring framework Mackenzie presents at UN COP 28 Conference
- 2024 Mackenzie Investments selected as Lead Sponsor for UN PRI Conference Lead investment in Amazon Reforestation-Linked Bond and Plastic Waste Reduction-Linked Bond



An ESG integrated security analysis process



ESG risk assessment (all strategies)

Our ESG integrated analyst teams select a security of interest from the team's investment universe, whether discovered through reverse inquiry, new issuance or secondary markets. Securities are screened by Mackenzie's Exclusionary Policies prior to consideration to eliminate exposure to controversial issuers and unethical activities, as determined by Mackenzie's Responsible Investment Committee.

Bonds are initially analyzed through their respective ESG scoring model to determine an issuer's absolute and relative standing, recent momentum and exposure to redflag controversies. This is performed concurrently with the credit research team's immersive financial risk analysis process.

All strategies consider an integrated investment thesis considering ESG scoring and risks, in addition to core credit assessment themes and macroeconomic developments.

Active investment & engagement (all strategies)

Analysts collaborate internally and with Mackenzie's Stewardship team to engage with particular issuers regarding ESG risks and opportunities to improve the standing of the issuer, quality of the credit investment and magnitude of sustainable impact.

Upon measured material improvement of ESG factors, leading to the improved valuation or rating of the credit, the Fixed Income Team typically begins to sell the position in favour of undervalued opportunities for ESG leaders and new sustainability-related or transition-oriented credits.

Impact analysis (sustainable strategies)

Sustainable funds are strategically rebalanced to ensure adherence to the Fixed Income Team's core thematic objectives, considering the United Nation Sustainable Development Goals [UN SDG] and Science Based Targets Initiative [SBTI]. These mandates are internally evaluated to ensure that thematic objectives are properly sized and constructed.

The thematic alignment of a bond's use of proceeds is determined. Issuers are reevaluated under strict inclusion criteria determined by the re-weighted materiality of key factors within individual sustainability mandates. These mandates aim to jointly prioritize investments in projects with significant forward-looking impact as well as issuers enabling transition through their operations and practices.

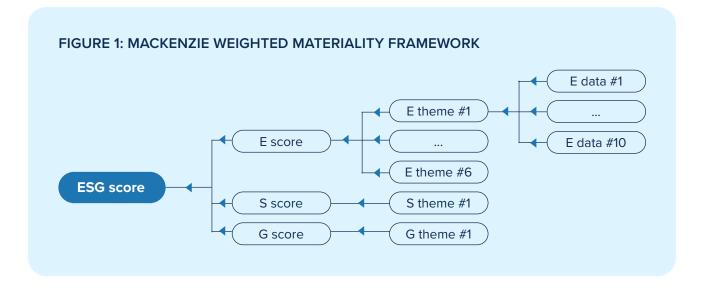
Materiality maps

Materiality maps developed by the Mackenzie Fixed Income ESG research analyst group provide our team with the opportunity to focus on meaningful ESG concerns in each industry sector. This methodology provides our team with a top-to-bottom framework in which our models are constructed and tilted towards analyzing performance in material categories. The Mackenzie Fixed Income Materiality Map was developed with consideration towards the Sustainability Accounting Standards Board (now within the International Sustainability Standards Board), leading academic research and Mackenzie's existing proprietary research models.

The Mackenzie Fixed Income Materiality Map is designed as a weighted distribution tree that first considers the materiality weightings of core E, S and G pillar scores before weighting designated themes within each of the individual ESG pillars. The Mackenzie Fixed Income Corporate Materiality Map considers the weights of 17 responsible investing themes outlined

below and 94 back-tested data points considered over a period of one to five years. Similarly, the Mackenzie Global Fixed Income Sovereign Materiality Map considers 85 unique data points comprising 12 unique sovereign sustainability directives. These maps provide the weightings for each data point within the eventual ESG pillar scores, which are used to determine appropriate risk premiums for individual credit issuers.

Inconsistent reporting of material data is a critical topic addressed by the Mackenzie Fixed Income Team's engagement processes, with the team strongly believing that transparent disclosure is a critical pillar of ESG performance and risk mitigation. Disclosure benchmarks vary across global markets owing to evolving dispersion in regulatory reporting standards. Failure to disclose material data points is penalized within the team's scoring models through the imposition of a negatively scored proxy, limiting the issuer's ability to secure funding without an audited commitment to significant improvement.





ESG integration in portfolio construction

The Mackenzie Fixed Income Team's proprietary ESG scores for corporate and sovereign issuers are applied throughout the investment research and portfolio construction process, used as a factor in screening protocols, as well as when determining relative allocation weights. Issuers with favourable ESG standing will benefit from the adoption of a green or sustainable premium, and our portfolio management strategies allow us to benefit by investing in securities that offer a preferred risk-return relationship owing to the mitigation of ESG risks by best-in-class issuers.

By analyzing the relative valuation of credits through their respective spreads, we actively seek out issuers with valuations that do not reflect best-in-class ESG fundamentals. As such, we believe that the performance of the credit will improve through the application of sustainable debt premiums and the improved re-rating of an issuer because of strong ESG risk-mitigation capabilities. However, an attractive credit with poor ESG standing may also be considered if our research team believes that we may drive improvement in a material manner, whether through sustainable use of proceeds or a targeted engagement strategy. Any credit in this category must demonstrate meaningful commitments to enhancing their ESG capabilities and integration, with examples including the setting of reduction targets approved by the Science Based Targets Initiative, commencement of a labelled debt program, and ensuring adherence to rigorous reporting and transparent disclosure standards.

Once we have seen a positive change in the performance of the credit, often through the market's recognition of ESG opportunities and risk mitigation, the Fixed Income Team will evaluate the case to sell the credit. This occurs when the team believes that the sustainability impact of the credit has been sufficiently executed, and that the credit reflects what the team believes is a fair-to-high valuation. Our various ESG-oriented solutions balance the role of funding sustainable investment throughout the investment cycle while ensuring the adherence to our credit research philosophies. In all cases, throughout the investment process, we fundamentally strive to provide the best risk return ratio for each of our strategies, and believe that in every investment, appropriate compensation for the risk profile is paramount.

When constructing portfolios, the Mackenzie Fixed Income Team applies a multi-faceted approach to determine allocations to both labelled sustainable solutions and non-labelled, ESG-integrated products. Given their unique objectives, each product is designated their own tilts towards thematic United Nations Sustainable Development Goals, assessed with respect to credit issuers and use of proceeds, respectively. These objectives are developed by the Mackenzie Fixed Income ESG leadership group, in consultation with the directives of the Mackenzie Responsible Investment Committee.

FIGURE 2: THE MACKENZIE FIXED INCOME TEAM AIMS TO CREATE FUNDS THAT CONSIDER THE AMPLIFIED INFLUENCE OF LABELLED DEBT, WITH PUBLISHED TARGETS ON ALLOCATION TOWARDS SUSTAINABLE DEBT.

	Objective allocation	Present allocation
Mackenzie Global Green Bond Fund	67+% Green bonds	70% Green debt, 11% Sustainability debt, 2% Sustainability-linked debt, 1% Transition debt 14% ESG leaders debt
Mackenzie Global Sustainable Bond Fund	50+% Labelled debt	42% Green debt, 6% Social debt, 20% Sustainable debt, 6% Sustainability-linked debt, 1% Transition debt, 25% ESG leaders debt

Present non cash allocation as at end of Q2 2024.

Corporate issuer engagements

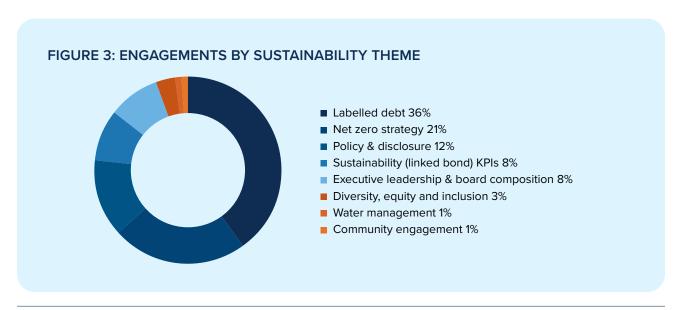
The Mackenzie Fixed Income Team is committed to engaging with issuers on critical ESG concerns throughout the duration of our investments. Starting from our initial executive meetings with corporate issuers, our team is dually focused on addressing ESG risks and controversies that threaten the success of global stewardship initiatives, as well as the financial and reputational stability of issuers. Following the United Nations' Principles for Responsible Investing's recommendations on the value of strategic engagements, Mackenzie's contributions resulted in increased disclosure and accountability with engagements spanning an expansive range of sustainability themes, investment sectors and geographies. Since 2018, the Mackenzie Fixed Income Team has conducted more than 600 engagements with management teams, highlighting concerns with respect to factors such as workplace safety, executive diversity and the transition away from high-emission energy sources such as thermal coal.

Our team has been engaging in reverse-interest engagements in which our team has proactively expressed interest in financing targeted sustainable debt projects. It is our core belief that innovation is required across all sectors, and that the strategic investment in issuers with positive momentum and sustainable use of proceeds within sectors with high ESG risk exposure will support and enhance the transition to improved

social standards and a decarbonized economy. The Mackenzie Fixed Income Team's continued engagement with issuers who presently score poorly has led to the issuance of sustainable and green labelled debt oriented towards the decarbonization of corporate operations and increased investment in renewable energy technologies.

Beginning in 2022, the Mackenzie Fixed Income Team launched their flagship "Dear CFO" engagement program. Reflecting the team's intention to collaborate with issuers to address highly material considerations relating to risks both towards and resulting from a company's operations. Through this program, members of both the fixed income credit research and ESG leadership team work with company executives to discuss the creation of quality sustainability reporting, KPI targets, and use of proceed considerations. This approach, alongside the aforementioned reverse inquiry program has enabled the Mackenzie Fixed Income Team to position ourselves as anchor investors in both initial and future issuance programs from leading Canadian and global companies.

As of July 2024, the "Dear CFO" program has outwardly committed nearly \$2 billion (CAD) towards inaugural sustainable fixed income issuance. Issuers within the program have seen over \$10 billion (CAD) in downstream labelled debt issuance.





Investing in innovation

The Mackenzie Fixed Income Team has been globally recognized for their leadership in the development and execution of unique impact-focused debt structures. In this process, the Mackenzie Fixed Income Team has sought to dispel the misguided assumption that investors must choose between doing well and doing good. This commitment has been exemplified via both capital commitment as anchor investors in the world's first outcome bonds as well as continued sponsorship of industry-wide research towards the eventual development of Canada's first carbon linked bond program.

Through collaboration with issuers, dealers, and industry partners, the Mackenzie Fixed Income Team seeks to invest in transactions which offer investors enhanced access to innovative opportunities to enhance returns through the mispricing of sustainability linked risks and opportunities. These transactions, through rigorous research and diligent reporting, have proven that impact cannot only be measured, but also maximized and monetized.

With a specialized approach considering both issuer risk and instrument impact, the team has a proven record of investing in transactions which have jointly generated sustainable alpha and positive change.

2022 Wildlife conservation bond: Rhino Bond

The world's first Outcome Bond saw investors forgo regular coupon payments in exchange for a contingent payment linked to the population growth of critically endangered Black Rhinos. Since issuance, the population has grown by over 15%, nearly doubling peak expectations and delivering outperformance for investors.

2023 **Ecuador debt for nature swap: Galapagos Bond**

The world's largest debt for nature swap saw Ecuador exchange deeply distressed bonds for new financing with the support of global development finance agencies. This transaction reduced both the volume and cost of debt for Ecuador while directing over 450 million dollars (USD) towards funding marine conservation efforts in one of the world's most ecologically significant regions: the Galapagos Islands.

Amazon Reforestation Bond 2024

In a partnership between the World Bank and Mombak, this bond reduces coupon payments in order to direct capital towards reforestation efforts in the Amazon rainforest. Investors will receive a supplemental revenue streamlinked to the sale of carbon removal credits generated from the successful delivery of the program.

Measuring impact in sustainable fixed income

The Mackenzie Fixed Income team employs a distinct sustainable investing methodology to measure and optimize the impact derived through our strategies. Our ESG and credit analyst teams are responsible for analyzing the status of the respective issuer relative to industry peers and a broad market benchmark, highlighting best-in-class performance or potential sources of material red-flag risk. In addition to our core issuer assessment, our proprietary models assess the impact created by a credit's designated use of proceeds.

Our team is unique in our decision to measure our impact in a dual capacity. We recognize that, contrary to equity investment, labelled debt contains the possibility to invest in individual targeted sustainability initiatives as well as in (or alternatively, to) the respective debt issuer. Our collection of sustainable fixed income products places a known emphasis on investing in labelled debt, with our Mackenzie Green Bond Fund and Mackenzie Global Greenchip Balanced Fund allocating over 70% of fixed income towards green bonds as of the second guarter of 2024. Our Mackenzie Sustainable Bond Fund continues to embrace the growth of labelled debt, with allocation

to a more diverse spread of sustainable fixed income instruments including green, sustainable, social and sustainability-linked debt. Our team has positioned ourselves as industry leaders through our integration of increasingly sophisticated methodologies that balance these dual objectives. This strategy enhances the ability of our portfolios to improve sustainability by investing in present innovators while also directing our investments expressly towards transformative change.

The issuer ESG assessment empowers our team to invest in issuers with an established best-in-class position as a known innovator with high ESG scores and low carbon emissions. Jointly, the use of proceeds and KPI target analysis may be likened to investing in issuers who, either through capital expenditures or use of proceeds, have established high integrity transition programs to materially reduce their carbon footprint and subsequently improve their ESG standing and credit quality. The Mackenzie Fixed Income Team has carefully considered both positions by treating our sustainable strategies as dual-strategy products, with an understanding that both methodologies are integral in traversing the path to net-zero.



ESG champions

Issuers with strong ESG performance within their sector, known for active engagement on material issues and measured commitments to advancing the UN Sustainable Development Goals.

Investing in transition

Issuers with targeted objectives towards evolving the ESG principles of their organization, despite a potentially weaker present-day ESG Score.

Our solution

Balanced exposure to present-day best-in-class issuers and innovative transition-oriented initiatives with moderate-term time horizons.



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