JARISLOWSKY FRASER

GLOBAL INVESTMENT MANAGEMENT

Climate-Related Financial Disclosures

INTRODUCTION

Our Commitment to Sustainable Investment

For over five decades, Jarislowsky, Fraser Limited (JFL) has invested in quality, sustainable businesses and advocated for corporate governance. We invest with a long-term perspective, adhering to a philosophy that values strong corporate governance, sound business practices and enduring competitive advantages. Environmental, Social and Governance (ESG) factors are woven into our bottom-up fundamental analysis as a lens that helps mitigate risk and identify sustainable business models. With a history of collaborative engagement, we have held companies accountable for the fair and equal representation of all stakeholders, urged management teams to focus on long-term value creation and contributed to the founding and development of leading governance and sustainability advocacy organizations.

Climate Change

Climate change is a significant source of both systematic and idiosyncratic uncertainties for investors, companies and broader society. Potential material impacts from climate-related changes in the physical, regulatory and economic environments could drive the transition to a lower carbon economy and/or alterations in the geographic and demographic landscape of countries. While the path towards climate change mitigation and adaptation is uncertain, we expect that it will likely create both risks and opportunities for investors. The following pages provide transparency around how Jarislowsky Fraser is identifying, assessing and managing potentially material climate-related issues within the context of our clients' portfolios. The process should be considered an iterative one, and is expected to evolve over time, along with the broader disclosure and data related to climate change. It is aligned with the Task Force on Climate-Related Financial Disclosures (TCFD) recommended framework: Governance, Strategy, Risk Management, Metrics & Targets.

JFL'S TCFD DISCLOSURES

Governance

Governance oversight and accountability for climate-related issues is distributed across several functional areas, from members of our Global Investment Team to the Sustainable Investment Committee to the firm's senior management. In addition, we have adopted a firm-wide Sustainable Investment Policy which sets out our core principles for the incorporation of sustainability risk and opportunities into our investment process.

Roles and Responsibilities

The following table reflects the responsibility for the oversight and analysis of climate-related issues:

Role	Oversight/Accountability	Assessment & Management	System Level Change & Collaborative Initiatives
Management Committee	✓		✓
Investment Strategy Committee	✓		
Portfolio Managers		✓	
Investment Analysts		✓	✓
Sustainable Investing Committee			✓

Legend:

Management Committee - The Management Committee is comprised of the firm's senior leaders and is responsible for Jarislowsky Fraser's strategic direction and long-term planning. The committee communicates and drives a culture of ethics, integrity and the long-term stewardship of client assets, while ensuring that the firm and our investment process are structured accordingly. This includes ultimate accountability for the firm's Sustainable Investment Policy, as well as approval of all key associations and collaborations.

Investment Strategy Committee (ISC) - Comprised of senior investment professionals who meet weekly, the ISC is our central risk and investment oversight body. Its main objective is to ensure continuity in the adherence to the firm's fundamental, low risk/high quality investment philosophy and disciplined investment process. The ISC is the final level of oversight to ensure that proper due diligence was performed and that the investment thesis is sound prior to the addition or removal of a company from the approved list. It is also responsible for setting investment strategy, overseeing the structure of all client portfolios, approving new stock and bond names and approving proxy voting recommendations.

The **Global Investment Team** is comprised of professionals with deep sector expertise on a global scale, many following a specific industry for years. Our team analyzes quality companies across the globe, with coverage divided between different geographic regions, allowing for multiple perspectives on a single industry. From an ESG perspective, the depth of analysis and historical relationship our analysts have with companies allow for a more nuanced and impactful view of our holdings than is possible if they were to simply use screens or databases. Proxies are voted by individual analysts, a practice that has been followed since the firm's inception. Analysts will engage with portfolio companies on a variety of issues determined to be potentially material to the investment thesis and long-term shareholder value creation, including ESG practices, policies and disclosures.

The Sustainable Investment Committee is a cross-functional team, consisting of professionals from both research and client service, with deep experience and knowledge of sustainable investing. The committee's mandate is to support the ISC and Management Committee in the implementation of the firm's Sustainable Investment Policy, through the development and sharing of research tools, sustainability solutions, ESG transparency and systems-level collaborations.

Sustainable Investment Policy

Jarislowsky Fraser's long-standing investment philosophy has focused on selecting companies with high-quality business practices and resilient growth profiles at reasonable valuations. Part of our investment analysis is to look at long-term risks and opportunities that are likely to be material to the investments, such as the sustainability of the economic moat and efficient use of scarce resources including the environment. In addition to company and portfolio specific risks and opportunities, we recognize that some risks are systemic and can impact entire markets to varying degrees. Our Sustainable Investment Policy was formulated to articulate our integration of these types of issues into our investment process through the following principles:

1. **Integrate the analysis of material ESG factors in our investment decisions**. ESG information is integrated into our bottom-up, fundamental analysis. ESG factors that are material to the investment prospects are discussed in industry reviews, as well as covered in individual company reports. Proprietary tools, such as our Business Practice Scorecard and Portfolio ESG&F Scorecard, ensure this is done systematically.
2. **Take an engaged ownership approach.** We seek constructive engagement with company management and Boards of Directors on material business concerns including ESG issues. This is further reinforced in our proxy voting decision-making: proxy voting is fully integrated into our investment process. Our global investment team meets to consider each proxy, and decisions are made in-house by the investment professionals.
3. **Encourage disclosure of information** that is relevant to the analysis of material ESG factors by companies where commercially reasonable. We believe this can create a race-to-the top in corporate stewardship practices.
4. **Collaborate** with other organizations, including PRI, CCGG, SASB and CDP, in order to advance sustainable investment practices for the benefit of all stakeholders.

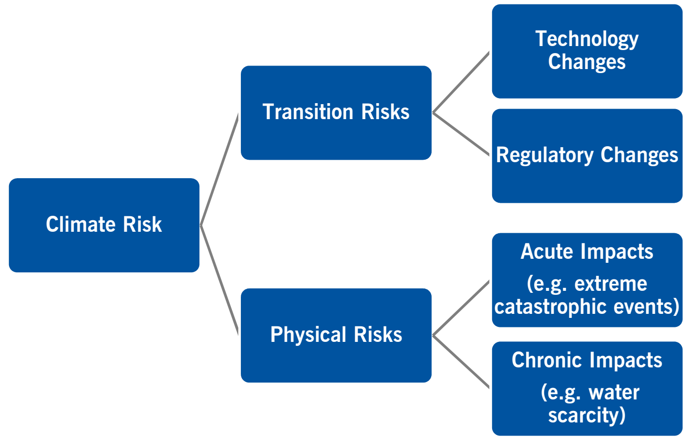
On a day-to-day basis the implementation of our Sustainable Investment Policy rests with the Global Investment Team, with oversight by the Investment Strategy Committee. With respect to climate change, analysts provide analysis of material climate-related risks and opportunities for certain sectors where this is most material. For example, a recent Energy Sector review and discussions of auto-related industries included detailed discussion of transition risk for the oil and gas sector, including potential changes in transport and energy technology. This analysis is presented to the Investment Strategy Committee, which oversees the composition of all JFL portfolios.

We recognize that some systemic risks related to climate change are more likely to materialize far into the future, and are not easily discounted or diversified. For this reason, we are involved in a number of industry initiatives and collaborative engagements aimed at developing a better understanding of stock-specific and systemic risks and opportunities, and management thereof, related to climate change. All collaborative engagements and initiatives are reviewed by the Sustainable Investment Committee, and approved by the firm's Management Committee.

STRATEGY

Climate Risks and Opportunities

The global mitigation and adaptation to climate change present both risks and opportunities. However, while the direction of change is understood, the pace, the precise form of change and the ultimate outcome are uncertain. The physical changes in the environment, such as potential increases in the frequency and severity of natural disasters, present a medium-term risk to certain types of businesses and regions. Longer term, chronic changes in the physical environment present potential systemic risks.



Below is a description of a variety of issues that we have considered over short-, medium- and long-term horizons:

	Definition	Description of material climate-related issues
Short term	0 to 3 years	• Regulatory changes • Acute physical risks • Inflection points in the rate of increase in efficiency and decline in emission intensity of some users of fossil fuels
Medium term	3 to 7 years	• Policy and regulatory directional changes • Changes to the physical environment and climate pattern (ex. Water availability) • Early changes to consumer and capital allocation behavior towards lower carbon economy and supportive infrastructure • Technological changes that change the economic viability and scalability of substitute, non-fossil fuel, sources of power
Long term	Over 7 years	• Transformation of the policy, public investment and regulatory environment for the future use of and development of new carbon-emission-intense capacity for power generation and transportation • Clear solutions in terms of substitute sources of energy that are economically viable and physically scalable in a timely fashion • Permanent and significant change in consumer behavior and capital allocation towards non-fossil-fuel-based products • Permanent physical changes, related demographic & migratory changes

Scenario Analysis

Jarislowsky Fraser is a bottom-up, fundamental, active manager. Our approach to assessing and managing climate-related issues reflects our focused, high-quality philosophy, as well as the concentrated nature of our portfolios. As such we do not typically use top-down scenario analysis as part of our stock selection and portfolio construction. However, in order to better understand the resilience of our investments, we will analyze portfolios and investments under a variety of different forward-looking scenarios.

The use of scenarios is particularly prevalent in the analysis of energy-related and more energy-intense industries where the price of energy is an important input into our individual company forecasts. From a climate change perspective, we currently reference several well established climate scenarios on key sectors:

Scenarios Considered	Review Process	Impact on Strategy
• IEA 450 Scenario (50% probability of limiting warming to 2 degrees) • NPS Scenario (Commitment made by Governments thus far. Implies 50% chance of limiting warming to 2.7 degrees)	Detailed discussions of these scenarios are undertaken by the entire Global Investment Team in order to understand the potential implications for individual companies in the portfolio and their valuations. Key sectors reviewed: • Energy • Utilities • Transportation	We believe that our current portfolios would be resilient in a reasonable range of 2-degree scenarios due to: • Management teams that are focused on long-term value creation through disciplined capital allocation and high-quality business practices; • Companies with high-quality asset bases that have the flexibility to respond to a changing environment within an appropriate time frame; • No exposure to thermal coal production. Limited exposure to coal fired power generation through diversified regulated utilities that also have a growing base of renewable power generation. • Limited direct exposure to segments of the auto parts industry that have a higher risk of disruption; • Selective exposure to oil and gas companies that are focused on lowering their own emissions, with an asset base that participates in a lower carbon economy through a diverse set of assets that includes natural gas and petroleum products at lower risk of disruption. Over time we may make adjustments to the portfolio based on, but not exclusively, a bottom-up view of the prospects for existing and future technologies, physical changes to the environment, public policy and regulations related to climate change and carbon emissions.

RISK MANAGEMENT

Process for Identifying Climate-Related Risks

As with all material investment risks, climate risk is integrated into our bottom-up, fundamental analysis by our in-house research team and supplemented by external research from a variety of sources. Our focus has generally been on the risks and opportunities that are material to our investment thesis for individual companies and broader portfolios related to a transition to a low-carbon economy. Potential regulatory and technological advancements, where material, are actively debated during regularly scheduled sector reviews and when assessing new and existing securities.

In addition, we have developed a number of proprietary tools to ensure this is done systematically:

- **Business Practice Scorecard** – In addition to their summary report and financial model, analysts also include a Business Practice Scorecard that summarizes relative and absolute assessments of common ESG factors that may or may not be noted explicitly in other analyses. Emissions management strategy, CDP Disclosure and Resource Efficiency are examples of the items assessed.

- **Portfolio Carbon Footprint** – Included as part of our internal quarterly risk review, the portfolio carbon footprint compares both overall and sector level emissions vs. benchmarks, as well as a listing of the highest emitting companies (to the extent data is available) in the portfolio. The goal of the risk review is to make the Investment Strategy Committee aware of the risk exposures in each portfolio, and to potentially trigger a discussion of a company's overall emissions-management strategy, the expected future direction, relative risk exposure to current and future regulatory changes, and how that risk is reflected in the assessment of the risk-adjusted returns for the company.

- **ESG&F Heatmap** – Our proprietary portfolio-level heatmap records a variety of environmental, social, governance and financial indicators of quality. Companies' CDP Scores are included in this heatmap. Companies that do not disclose to CDP are flagged and assessed for potential engagement, depending on the materiality of climate risk to the business model.

Corporate Engagement

Throughout the firm's history, Jarislowsky Fraser has taken an engaged approach to share ownership. We seek constructive engagement with company management, and in some cases the Boards of Directors, on material business concerns including ESG issues. Our preference is for constructive dialogue, preferring to be viewed as a credible shareholder with whom management teams seek counsel.

Our analysts routinely engage with management on matters related to climate risk. This includes discussions around emissions management strategies, carbon pricing, and business resiliency. For example, in 2018, we engaged directly with three companies on climate policy/risk management, and four companies on emissions targets and goals.

We are also involved in a number of industry initiatives and collaborative engagements, including:

PRI-Coordinated Engagement on Climate Change Transition for Oil & Gas Companies: We are a member of the Working Group and are acting as co-lead investor with a European oil & gas company.

The goals of the engagement are:

i. To explore how companies are comprehensively assessing their exposure to climate-related transition risks.

ii. To ensure companies are planning appropriate actions in response to future policy and technological shifts which may limit their ability to exploit their assets (i.e. under a 2 degree scenario as per the Paris Climate Agreement).

iii. To better understand how companies are evaluating future capital expenditure and production, as well as the governance behind this decision-making.

iv. To encourage improved disclosure aligned with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

PRI-Coordinated Global Engagement on Methane. We are an Advisory Committee member and lead investor with three North American oil & gas companies. The goals of the engagement are:

1. To strengthen investor understanding on methane risk exposure in global portfolios.
2. To understand best practice in managing methane risks and to transfer these learnings across companies.
3. To encourage energy and utility companies to improve their management and reduction of methane emissions and to disclose their progress.

In addition, we are a signatory to the **Montreal Declaration on Climate-Related Financial Risks**.

Proxy Voting

Reflecting our long-standing commitment to advancing corporate governance, proxy voting is fully integrated into the investment decision-making process:

- Equity research analysts are responsible for reviewing and recommending all proxy votes
- Each proxy is discussed with the Investment Strategy Committee (ISC)
- Decisions are made in house by the investment professionals
- Engagement, when necessary, is led by the research analyst

During the 12 months ended June 30, 2018, we supported two out of three climate-related proposals:

- Noble Energy – After engaging with the company and observing that requests were becoming more focused on higher level TCFD-like disclosures and topics more likely to inform our investment thesis, we supported a proposal requesting that the company "Assess Portfolio Impacts of Policies to Meet a 2 Degree Scenario".

- Berkshire Hathaway – We supported a proposal to Report on Methane Emissions Management, including reduction targets. Comprehensive disclosure of the company's methane reduction policies, including performance metrics and oversight mechanisms, would enable shareholders to better understand how the company is managing its methane emissions and assess the effectiveness of the company's related efforts.

- Royal Dutch Shell – We voted against a proposal requesting that Shell set and publish targets for GHG Emissions. In this case, we were concerned that the proposal as defined could put the company in a less competitive position versus peers or subject it to targets reasonably outside of its control. Ultimately, we viewed management as best placed to make the appropriate decisions to balance long-term objectives. In addition, our analysis concludes that the company is taking a number of proactive and industry-leading measures on this front. To that end, in December 2018, the company announced plans to set short-term targets as part of a long-term ambition to reduce the Net Carbon Footprint of its energy products, and plans to link these targets to executive remuneration. This announcement, and intention to incorporate disclosure against these targets into its financial reporting, is the first of its kind in the oil & gas sector.

METRICS AND TARGETS

Carbon Intensity

Broadly speaking, the carbon intensity of our portfolios is materially lower than their respective benchmark indices. While carbon intensity does not directly measure all aspects of climate risk, the exercise of measuring our portfolio carbon intensity is an important step. Understanding the inherent limitations to the data (particularly in emerging markets where data coverage is fairly low), we feel it provides a lens through which to view the climate-related impact of our investments, as well as where companies could potentially be exposed to possible changes in emissions regulation.

Portfolio Carbon Intensity

Index/Portfolio Name	Data Coverage	Carbon Intensity Relative to Index	Tons of CO2e/$M Revenue
Canadian Equity			
JF Canadian Equity Fund	77%	-37%	220.2
JF Fossil Fuel Free Canadian Equity Fund	75%	-76%	85.0
S&P/TSX Composite Index	73%	-	348.1
Global Equity			
JF Global Equity Fund	81%	-63%	64.4
JF Fossil Fuel Free GlobalEquity Fund	81%	-67%	57.5
MSCI World Index	76%	0%	174.6
U.S. Equity			
JF U.S. Equity Fund	81%	-74%	42.4
S&P500 Index	75%	0%	165.8
International Equity			
JF International Equity Pool	81%	-40%	109.1
JF ESG EAFE Fossil Fuel Free Model	82%	-43%	103.9
MSCI EAFE Index	83%	0%	182.8
Emerging Market Equity			
JF Emerging Market Equity Fund	41%	-79%	70.1
MSCI Emerging Market Index	41%	0%	339.5
Fixed Income (Corporate Component)			
JF Bond Fund	90%	-43%	107
JF Fossil Fuel Free Bond Fund	92%	-90%	17.9
FTSE TMX Canada Universe Bond Index	88%	0%	188.0

As at March 31, 2019

Targets

Given a lack of empirical evidence to support a direct link between portfolio alpha and emissions, we do not set portfolio emissions targets on our core portfolios. However, we do generally view lower energy use (a driver of lower emissions) as a source of margin expansions and resilience for some companies and encourage the efficient use of scarce resources. Moreover, in response to growing client interest and demand, we launched a suite of Fossil Fuel Free Funds in 2017. In addition to leveraging our firm's proven active management and company engagement to drive enhanced corporate stewardship, the JF Fossil Fuel Free Funds aim to increase stakeholder alignment, deliver a materially lower carbon footprint and provide increased exposure to green bonds as an important mechanism to finance the energy transition.

SUMMARY

- Jarislowsky Fraser invests in quality, sustainable businesses, with a long-term perspective and integrated ESG analysis.
- We identify, assess and manage climate-related issues through our governance, investment selection and risk management practices.
- Our firm has a long-standing history of corporate engagement, seeking to constructively discuss issues including climate change with management teams at the companies in which we invest, as well as voicing our opinions through our rigorous proxy-voting process. We view this as an integral part of our investment stewardship on behalf of all stakeholders.
- Our investment philosophy and focus on quality is consistent with an above-average sustainability profile, including lower carbon footprints.
- Jarislowsky Fraser is committed to encouraging the adoption of TCFD aligned reporting, to support the efficiency and resiliency of capital markets.

April 2019

Carbon intensity refers to greenhouse gas emissions expressed as tons of CO2 equivalent per year. This number is then scaled to revenue in order to develop comparable emissions intensity. Scope 1 emissions refer to direct greenhouse gas emissions from company operations. Scope 2 emissions refer to emissions from purchased electricity. Emissions for government bonds are not included due to lack of available data.