Retail’s Route to Net-zero Emissions
The Canadian Retail Sector and Effective Climate Governance

Dr. Janis Sarra | January 2022
ABOUT THE CANADA CLIMATE LAW INITIATIVE

The Canada Climate Law Initiative examines the legal duties of corporate directors, officers, pension fiduciaries, and asset managers to consider, manage, and report on climate-related financial risks and opportunities, advancing knowledge on effective climate governance practice. It is a collaboration of the University of British Columbia (UBC) Centre for Business Law and Osgoode Hall Law School, York University; and is the Canadian partner of the global Commonwealth Climate and Law Initiative, founded at Oxford University, United Kingdom.

The Canada Climate Law Initiative acknowledges that the UBC Point Grey campus is situated on the traditional, ancestral, and unceded territory of the xwməθkwəy̓əm (Musqueam) and is committed to working in partnership with Indigenous peoples on effective climate governance.

ABOUT THE AUTHOR

Dr Janis Sarra is Professor of Law, Peter A Allard School of Law, University of British Columbia, and Principal Co-Investigator of the Canada Climate Law Initiative. She was the founding Director of the National Centre for Business Law, Associate Dean of the Faculty of Law, and held the position of Presidential Distinguished Professor of the University of British Columbia from 2014 to 2019. She was previously a commercial arbitrator and is a member in good standing of the Law Society of Ontario/Barreau de l’Ontario.

ACKNOWLEDGEMENTS

Thank you to Ramesh Venkat, Joe Jackman, Niraj Hansoti, Doug Stephens, Peter Hlynsky, Sophie Merritt, Alex Cooper, Ellie Mulholland, Sarah Barker, and two anonymous reviewers for their helpful comments on a draft of this guide. Thank you also to Laurence Cattoire for the translation into French and to Sonia li Trottier, Helen Tooze, and Juvarya Veltkamp for production assistance.

The Canada Climate Law Initiative is financially supported by:
EXECUTIVE SUMMARY

The retail sector is a significant part of the Canadian economy, with total annual revenues exceeding CA$636 billion.

Climate change poses a systemic risk to retailers. The increasing frequency and intensity of acute events such as flooding and wild fires are destroying retail assets, disrupting supply chains and distribution channels, creating uncertainty in availability and pricing of raw materials, and increasing insurance costs.

The retail sector is a significant contributor to the carbon emissions that are causing these physical impacts. An estimated 10.5% of Canada’s greenhouse gas emissions are attributable to the retail sector. Approximately 95% of retail emissions are estimated to be Scope 2 and 3 emissions, the indirect emissions from the generation of purchased energy and all indirect emissions occurring in the retail value chain, including upstream and downstream emissions.

As a result of these emissions, retailers face significant transition risks due to changes in policy, emerging technologies that impact competitiveness, market risks regarding access to capital, and shifting consumer and other key stakeholder preferences. Canadian appellate courts have recognized that climate change is an existential threat to human civilization and the global ecosystem, with considerable economic costs. Retailers face increasing regulatory requirements to lower carbon footprints, engage in effective waste management, eliminate single-use plastics, and develop ethical supply chains.

Investors expect effective management of climate-related risks across value chains, asking retailers to adopt science-based targets for carbon emissions reductions that are just and equitable.

There is increasing litigation related to companies failing to mitigate the impacts of climate change, failure to adapt, insufficiency of disclosure regarding material financial risks, and ‘greenwashing’ – misrepresentation of the sustainability of the company, its supply chains, and/or the products being sold – with substantial fines being levied for retail misrepresentation.

The generations with increased purchase power, Millennials and Gen Z, are speaking with their retail dollars, signalling serious concern about climate change and demanding transparency regarding the carbon footprint of retail products and services. Retailers face significant reputational risk if their business strategies do not include ambitious climate action plans.

The massive shift to online retail, accelerated during the pandemic, is requiring new technologies for marketing and distributing goods, disrupting longstanding practices and raising new challenges for retailers’ carbon footprints.
As stewards of governance, directors and officers of retail companies have a legal duty to be proactive, and to critically evaluate and address the material financial risks and opportunities associated with climate change.

Directors have to be agile in acting in the best interests of the company to make it sustainable over the long term, which includes a business strategy to reduce emissions over the short, medium, and long term.

It is critically important that retail companies work with suppliers and distribution service providers to set targets for emissions reductions across the retail value chain and to measure progress in the transition to net zero.

In order to effectively address physical and transition risks, the G20-commissioned Taskforce on Climate-related Financial Disclosures (TCFD) recommends a series of measures for effective governance, risk management, strategic planning, and metrics and targets, in order to effectively identify and manage climate-related financial risks and opportunities. The TCFD recommends disclosure of all Scope 1 and 2 emissions and reduction targets irrespective of materiality, and recommends that Scope 3 emissions disclosure should be mandatory where material, which it is for virtually all retailers.

Canadian securities regulators and accounting standards setters are proposing new regulation to require transparency and comparability in the actions of companies in moving towards net-zero emissions. Directors should be asking their managers for financial metrics that allow them to measure and disclose material risks and opportunities in their financial statements.

The TCFD reports that a transition plan is key to overall business strategy. The plan should set out immediate, interim, and long-term targets and actions supporting the retailer’s transition. It should describe the oversight and accountability responsibilities within the retail company and should be anchored in climate-related metrics and targets designed to consider and help achieve specific targets in a retailer’s planned transition, with retailers annually reporting progress towards decarbonization.

There are numerous opportunities for retailers in the transition to a net-zero economy, including energy efficiency measures, reducing waste and moving to circular economic activity, taking advantage of rapidly developing in-store and online digital technologies, earning customer loyalty through buy-back and re-use services, and attracting investment dollars for innovative retail strategies.

New technologies being deployed to lower emissions through electrification of fleets and innovations in packaging and delivery can have huge emissions reductions outcomes. Lenders are offering credit facilities that allow retailers to reduce interest rates if they meet targets on energy and water use and carbon emissions reductions.

Climate initiatives and governance can reinforce a retailer’s strategic position and reputation and support its financial goals and competitive advantage.
This guide provides an accessible summary of the legal duties of retail directors and officers in the transition to a net-zero economy. It offers examples of best practice in climate governance in the retail sector. It includes a checklist of issues the board should be considering its governance oversight and strategic planning, its oversight of risk and of managers’ actions, and its ability to ensure relevant and material matters are consistently integrated across the company’s financial statements.

Climate governance is a dynamic area in which regulatory, shareholder, and key stakeholder expectations continue to elevate, with best practice one year becoming base expectation the next. Accordingly, directors and officers are well-advised to sharpen their focus and their business plans.
Table of contents

EXECUTIVE SUMMARY .................................................................................................. 2
I. INTRODUCTION ........................................................................................................... 6
II. CLIMATE CHANGE HAS BECOME CRITICALLY IMPORTANT FOR THE RETAIL SECTOR ............................................................................................................................ 9
   1. Physical Risks ...................................................................................................... 9
   2. Transition Risks ................................................................................................ 13
       2.1 Policy Risks ........................................................................................... 13
       2.2 Market Risks ......................................................................................... 19
       2.3 Technological Risks .............................................................................. 22
       2.4 Reputational Risks ................................................................................ 23
       2.5 Litigation Risks ..................................................................................... 26
   3. Opportunities ..................................................................................................... 30
III. THE LEGAL DUTIES OF DIRECTORS IN OVERSIGHT AND MANAGEMENT OF CLIMATE-RELATED FINANCIAL RISKS .................................................................... 33
   1. Directors’ Duties under Corporate Law ........................................................... 33
   2. Directors’ Duties under Securities Law ........................................................... 35
   3. Accounting Standards and Climate Change ..................................................... 38
IV. EFFECTIVE CLIMATE GOVERNANCE REQUIRES A PATHWAY TO NET-ZERO CARBON EMISSIONS .................................................................................................... 40
   1. Setting and Meeting Targets in Reducing Emissions ...................................... 41
   2. Transition Plans ................................................................................................ 44
   3. Increasing Energy Efficiency ........................................................................... 45
   4. Reducing Waste, Protecting Biodiversity, and Moving to Circular Economic Activity ....................................................................................................................... 49
   5. The Future of Retail Governance? ................................................................... 56
V. KEY QUESTIONS FOR DIRECTORS OF RETAIL COMPANIES ON OVERSIGHT OF CLIMATE-RELATED RISKS AND OPPORTUNITIES ............................................................ 59
   1. Governance Oversight and Strategic Planning ................................................ 60
   2. Oversight of Material Risks and Management ................................................ 62
   3. Reporting – Financial Statements ..................................................................... 63
Abbreviations ................................................................................................................. 65
I. INTRODUCTION

The Canadian retail sector is facing unprecedented challenges. Retailers have had to pivot during the COVID-19 pandemic to find new and innovative ways to get their products to consumers. They face growing impacts of climate change, with retail stores and warehouses being damaged or destroyed from acute climate-related events such as flooding and wildfires. There continues to be uncertainty associated with the physical and transition risks that are constantly changing and involve complex dynamics. Traditional backward-looking risk assessment models are no longer fit for purpose. Both the pandemic and climate crisis are disrupting supply chains and well-established distribution channels. There is a growing call on businesses to tackle climate change in a way that is just and equitable for everyone. Directors of retail companies have to be more agile than ever in how they act in the best interests of the company and work to make it sustainable over the long-term.

The retail sector is a significant part of the Canadian economy. The federal government reports that there were 230,784 retail companies in Canada. Of that group, there were 36,520 food and beverage retailers. Total retail revenues across Canada were CA$636.7 billion in 2019. The Toronto Stock Exchange (TSX) reports that as of September 2021, there are 76 consumer goods and services companies listed on the TSX with a market cap of over CA$283 billion and 42 issuers on the TSX Venture Exchange with a market cap of over CA$2 billion. Over the past few years, international brands have accelerated entry into Canada by opening standalone retail stores - 123 new brands from 2017 to 2020.

The climate-related physical and transition risks to the retail sector will manifest over different time horizons and in different ways across Canada’s diverse retail landscape. An estimated 10.5% of Canada’s emissions are attributable to the retail sector, if one counts retail buildings and transportation for supply and distribution.

---

2 Ibid.
4 CA$283,035,317,300 and CA$2,076,035,969 respectively, source: TSX October 2021, on file with author.
5 Craig Patterson, “International Retailers Entered Canada at a Rapid Pace Over the Past 12 Months”, Retail Insider, (7 January 2020), International Retailers Entered Canada at a Rapid Pace Over the Past 12 Months (List/Analysis) (retail-insider.com); Craig Patterson, “International Retailers Continue to Enter Canadian Market Despite Pandemic”, Retail Insider, (4 January 2021), International Retailers Continue to Enter Canadian Market Despite Pandemic [List/Analysis] (retail-insider.com).
That number may be greater as 95% of retail emissions are estimated to be Scope 2 and 3 emissions, not all of which are captured by current reporting.

Globally, the 2020 CDP Global Supply Chain Report found that Scope 3 emissions in the retail sector are, on average, 28.3 times greater than retailers’ Scope 1 and 2 emissions combined.7 The clothing industry is responsible for 10% of carbon emissions.8 The global apparel and footwear sector has a growing carbon footprint, given trends such as fast fashion and growing consumption in emerging middle-income economies.9 Waste is also a key aspect of unnecessary production that increases carbon footprints. One study reports that food loss and waste annually in the grocery retail sector is Canada CA$49.5 billion, which “equates to 3% of Canada’s 2016 gross domestic product (GDP) and would feed every person living in Canada for almost 5 months.”10

The significant carbon emissions for retailers’ value chain means that in order to meet commitments to reduce emissions, retailers will have to work ambitiously with suppliers, transportation services, and distribution service providers to reduce Scope 2 and 3 emissions. Scope 1 emissions are direct emissions from owned or controlled sources; Scope 2 emissions are indirect emissions from the generation of purchased energy; and Scope 3 emissions are all indirect emissions (not included in Scope 2) that occur in the value chain of the company, including both upstream and downstream emissions.11 For almost all Canadian retailers, Scope 3 emissions are the most significant climate-related risks.12

Investors are increasingly expecting more effective management of climate-related risks across the value chain of their retail and other portfolio companies, asking retailers to adopt science-based targets for near term and longer term emissions reductions. Yet, of the 1,422 companies that have signed up to meet science-based sustainability targets for emissions reductions to date, only 83 (5.8%) are retail companies.13
This guide offers a brief introduction to what directors in the Canadian retail sector should be considering as they engage with climate-related risks and opportunities and develop strategic plans to address climate change. While the legal duties of corporate directors and officers in Canada are clear, no matter in which sector the company operates, some challenges for retailers are unique. Part II discusses why climate change has become important for the retail sector, examining both physical and transition risks. Part III discusses the legal duties of directors in the oversight and management of climate-related financial risks and opportunities. Part IV turns to a discussion of effective climate governance in the pathway to net-zero carbon emissions, including the framework recommended by the TCFD of governance, risk management, strategy, targets, and metrics, that can place the company on the path to net-zero emissions or becoming climate positive. Part V concludes with some key questions directors should be asking their executives, managers, and accountants in order to start to shift towards effective climate governance.

Important to note at the outset, and beyond the scope of this guide, is that climate governance is an integral part of the corporate board’s consideration of environmental, social, and governance (ESG) factors affecting the business. Retailers increasingly understand the deep connections between climate governance and each aspect of ESG in creating future value. For example, managing climate-related financial risk, including mitigation, adaptation, and protection of biodiversity, intersects with governance to create opportunities for enhancing growth of the company. Integration of climate governance with equity, diversity, and inclusion can aid in attracting and retaining the brightest and most committed workforce and be responsive to rapidly changing consumer preferences in regard to whether products are ‘green’ and equitable.

For many retail companies, the COVID-19 pandemic accelerated pre-existing market and financial challenges or created new ones. Doug Stephens, in his book Resurrecting Retail, reports that by September 2020, 31 retail chains in North America had filed for bankruptcy or insolvency creditor protection; and the Canada government reports that 680 retail companies in Canada filed for insolvency in the past two years. At the same time, retail spending on masks, hand-sanitizer, home repair, and baking all increased as a means of consumers establishing a sense of safety and security during various waves of the pandemic. Retailers had the challenge of how to configure employees working at home for many functions and how best to protect employees in retail stores, especially the essential services retailers that were permitted to operate in 2020 and 2021. They are now dealing with new restrictions in early 2022 as the COVID case numbers reach new heights and will continue to have challenges for protection for retail employees and customers as the as the Canadian economy reopens. They are now concerned with protections for retail employees and customers

---

14 Climate positive means a retail company going beyond achieving net-zero carbon emissions to add environmental benefits and protection of biodiversity by removing more carbon from the atmosphere than its Scope 1, 2, and 3 emissions generate.


16 Stephens, ibid at 29, 33.

17 For a discussion, see ibid at 41-46.
as the Canadian economy reopens. Questions of effective climate governance need to acknowledge the uncertainties associated with retail post-pandemic in terms of social distancing and vaccination requirements, and whether consumers will limit retail spending if they are feeling physically unsafe or economically insecure due to the losses sustained during the pandemic.

II. CLIMATE CHANGE HAS BECOME CRITICALLY IMPORTANT FOR THE RETAIL SECTOR

Climate change has become a significant financial risk for companies, requiring their attention as a core business issue. For retail companies, climate change creates multiple risks regarding potential harm to physical assets such as stores and warehouses, product design and delivery challenges, uncertain supply chains, and the growing costs of insurance. Retailers are vulnerable to several types of climate-related transition risks—changes in policy, technological risk as emerging technologies impact competitiveness, market risks from changing investor priorities, litigation risk, and reputational risks tied to changing customer or community perceptions.18

1. Physical Risks

Physical risks resulting from climate change can be event-driven (acute) or longer-term (chronic) shifts in climate patterns. The Intergovernmental Panel on Climate Change (IPCC), which represents a consensus of over 800 scientists in 140 countries, reported in 2021 that “it is unequivocal that human influence has warmed the atmosphere, ocean and land”, creating widespread and rapid changes in the atmosphere, ocean, cryosphere, and biosphere.19 Climate change is already affecting every inhabited region across the globe, with increasing climate extremes, including cyclones, tropical storms, flooding, heatwaves, heavy precipitation, and in some regions, droughts.20 Every additional 0.5°C of global warming causes amplified impacts in frequency and intensity of acute events and chronic changes; and ocean and land carbon sinks are increasingly less effective at slowing the accumulation of carbon dioxide (CO2) in the atmosphere.21

In 2021, the IPCC produced a set of five new illustrative emissions scenarios covering the range of possible future developments, and under all emissions scenarios, global surface temperature will continue to increase until at least mid-century.22 Global warming of 1.5°C and 2°C will be exceeded this century unless deep reductions in CO2 and other GHG emissions occur in the coming decade.23 Even adopting scenarios with very low GHG emissions now, it will take 20 years to see discernible differences

---

20 Ibid at 10, 12, 15, 19.
21 Ibid at 23, 25.
22 Ibid at 14, 17.
23 Ibid.
in trends of global surface temperature begin to emerge. Many changes are already irreversible for centuries to millennia. The IPCC concludes that human-induced global warming must be limited to at least net-zero CO$_2$ emissions, along with strong reductions in other GHG emissions.

Canada is warming at twice the global rate. Mean global temperatures are already 1.1°C higher than pre-industrial temperatures. If the current warming rate continues, the world could reach human-induced global warming of 1.5°C as early as eight years from now, with Canada warming ever faster, resulting in serious consequences for economic activity, water and food security, and the health and well-being of countless individuals. The United Nations (UN) reports that climate-related disasters increased globally by 83% from 2000 to 2020. Increased frequency and severity of extreme weather events impact society’s adaptive capacity and ability to bear the costs of rebuilding and recovery after experiencing large losses. In Canada, increasing temperature and precipitation extremes are already contributing to the frequency and intensity of acute events such as floods, storm surges, wildfires, windstorms, heatwaves, and droughts. Severe weather damage in Canada caused CA$2.4 billion in insured losses in 2020.

Canadian appellate courts have recognized that climate change poses an existential threat to human civilization and the global ecosystem, with considerable economic and human costs. The Supreme Court of Canada has held that establishing minimum national standards of GHG price stringency to reduce GHG emissions is of national concern to Canada as a whole.

What does it mean for Canadian retailers? Extreme temperature changes can damage retail, storage, and distribution premises and prevent access. Acute events disrupt operations and supply chains, and create employee safety concerns. The Insurance Bureau of Canada reports that flooding in Canada caused annual average economic

---

24 Ibid at 30. Especially changes in the ocean, ice sheets, and global sea level, with changes being irreversible on centennial to millennial time scales in global ocean temperature and deep ocean acidification: ibid at 28.
25 Ibid at 36.
26 Government of Canada, Canada’s Changing Climate, (2019), at 84, 125, Canada’s Changing Climate Report (hereafter Canada’s Changing Climate).
28 Canada’s Changing Climate, note 26 at 119. IPCC 2018, note 27 at 81.
30 Canada’s Changing Climate, note 26 at 119.
losses of over CA$1.2 billion, of which CA$800 million are uninsured.\textsuperscript{34} If acute events continue at this pace, insurance will become prohibitively expensive for some businesses and there is risk that it may become unavailable in some high-risk areas in the future. A 2019 S&P report observed that weather is already a significant swing factor in a retail company’s results.\textsuperscript{35}

Retail companies face significant indirect impacts from supply chain disruption, uncertainty in the availability and pricing of raw materials at risk, and changes in water quality and availability. Risks facing Canadian retailers are exacerbated when many of their suppliers are in countries that are feeling climate impacts even more, as it alters the availability of raw material.\textsuperscript{36} Climate risks affect supply chain management in that they increase the cost, and variability of cost, of producing goods and services; disrupt the delivery of goods and services in a speedy and timely fashion; can reduce the quality of goods and services provided; and increase the uncertainty and magnitude of supply chain disruptions.\textsuperscript{37} Depending on the region of Canada or globally from which retailers purchase their products, there are risks from drought and rising costs of inputs such as agricultural production and clean water for manufacture of food, drink, and apparel.

Acute events can hamper the availability of raw material and energy supply to retailers. For example, the atmospheric rivers and devastating flooding in British Columbia in November 2021 disrupted supply chains across western Canada, including two rail lines and four major transportation routes, “leaving truck drivers stranded, grocery store shelves stripped of food and access to the country’s largest port blocked.”\textsuperscript{38} The same month, storms washed out parts of the Trans–Canada Highway in Newfoundland and Labrador, and retailers experienced difficulty in moving goods throughout the province.\textsuperscript{39} Chronic physical risks, such as rising temperatures or changing rainfall patterns, can alter the yield of agricultural commodity inputs and degrade infrastructure.\textsuperscript{40}

Rising temperatures are resulting in diseases appearing in regions that have never had exposure to them, because the warming allows the diseases to spread, these risks varying based on the disease, region, extent of temperature change, and degree of adaptation.\textsuperscript{41} Risks for some vector–borne diseases are projected to increase with


\textsuperscript{36} David Wei and Marshall Chase, Climate + Supply Chain, The Business Case for Action, BSR Climate Nexus Report, (September 2018), at 8, BSR_Climate_and_Supply_Chain_Management.pdf, (hereafter Climate + Supply Chain).

\textsuperscript{37} Ibid at 9.

\textsuperscript{38} C Parker, “Major flooding in Canada leads to widespread supply chain disruptions”, Washington Post, (18 November 2021).

\textsuperscript{39} Retail Council of Canada, “Storm affects supply chain in Newfoundland and Labrador”, (24 November 2021), Storm affects supply chain in Newfoundland and Labrador – Retail Council of Canada.

\textsuperscript{40} Climate + Supply Chain, note 36 at 9.

\textsuperscript{41} Janis Sarra, From Ideas to Action, Governance Paths to Net Zero (Oxford, OUP, 2020) at 25, hereafter Sarra, Governance Paths to Net Zero).
warming to 1.5°C, including shifts in their geographic range.\textsuperscript{42} In addition to the devastating effects on people, zoonotic diseases (travelling from animals to humans) can also reduce supply chain resources (materials and labour), and the resultant pandemics can seriously affect the purchasing power of consumers. Urban development and climate change are also considered to be factors in growing transmission of zoonotic diseases, the United States (US) Centers for Disease Control and Prevention estimating that three-quarters of new or emerging diseases that infect humans originate in animals.\textsuperscript{43}

One study notes that “structured assessment of the supply chain can help companies prioritize hot spots that offer the greatest opportunity for creating supply chain resilience – including areas of high GHG emissions and areas of high climate vulnerability. These priorities are identifiable parts of a supply chain where performance in managing climate risks will impact supply chain concerns about cost, speed, quality, and uncertainty.”\textsuperscript{44} It suggests that supply actions include:

- Internal action - working with teams in procurement and related functions to improve requirements and processes to more successfully consider climate impacts in sourcing and procurement decisions.
- Supplier action - setting requirements and encouraging suppliers to reduce their emissions, develop adaptive capacity, and participate in programs with these goals.
- Collaborative action - joining, leading, or starting initiatives with other businesses and stakeholders on a commodity-focused, industry-focused, or community-focused basis.
- Once actions are identified, companies need to prioritize and ensure this prioritization relies on a robust rationale.\textsuperscript{45}

It is also important to set targets and begin to track progress quantitatively, or if not yet possible, then qualitatively. For example, food, beverage, and agriculture companies can set targets that focus on sustainable agriculture training for farmers, or investments in research and development for suppliers to breed drought-resistant crops.\textsuperscript{46} Then retailers can evaluate the impact of supply chain actions and adjust actions and targets over time, the metrics helping a company understand the outcomes and impacts of its actions in reducing climate-related physical risks.\textsuperscript{47}


\textsuperscript{43} Centers for Disease Control and Prevention, “Zoonotic Diseases”, (2021), Zoonotic Diseases | One Health | CDC (hereafter CDC): Zoonotic diseases are caused by harmful germs like viruses, bacterial, parasites, and fungi. John Vidal, "Destroyed Habitat Creates the Perfect Conditions for Coronavirus to Emerge”, \textit{Scientific American}. (18 March 2020), Destroyed Habitat Creates the Perfect Conditions for Coronavirus to Emerge – \textit{Scientific American}.

\textsuperscript{44} Climate + Supply Chain, note 36 at 14.

\textsuperscript{45} Ibid at 15.

\textsuperscript{46} Ibid at 16.

\textsuperscript{47} Ibid at 6, 17.
Physical risks to the retail sector will continue to grow for the foreseeable future and retail companies will have to engage in adaptation strategies in addition to trying to do their share to reduce carbon emissions. In many instances, the long term chronic physical effects on the retail market are not yet known, such as the impact on employees and consumers of sustained heat waves and growing pollution due to global warming or long term changes to the availability of key inputs for supply chains.

2. Transition Risks

Carbon emissions are a prime driver of rising global temperatures and, as such, are a key focal point of regulatory and market responses. Transitioning to a net-zero carbon economy will entail extensive policy, legal, technology, and market changes to address the mitigation and adaptation required. ‘Climate mitigation’ refers to efforts to reduce the sources of GHG emissions and reduce actual emissions, or to enhance the absorption of gases already emitted, thus limiting the magnitude of future warming. ‘Adaptation’ refers to adjustments in ecological, social, or economic systems in response to climate impacts, including processes and structures to moderate potential damage or to benefit from opportunities associated with climate change. The most vulnerable regions, companies, and communities are those that are highly exposed to hazardous climate change effects and have limited adaptive capacity. Countries with limited economic resources, low levels of technology, poor infrastructure, and inequitable access to resources have little capacity to adapt and are highly vulnerable.

Key issues facing retailers include growing consumer and regulatory demands to lower carbon footprints, engage in more effective waste management, eliminate single-use plastics, and develop ethical supply chains.

2.1 Policy Risks

Policy actions in regard to climate change continue to evolve, including Canada’s international commitment to reach net-zero emissions by 2050, carbon-pricing mechanisms to reduce GHG emissions, shifting energy use toward lower emission sources, adopting energy-efficiency solutions, encouraging greater water efficiency measures, and promoting more sustainable land-use practices. As discussed in Part III.2, Canadian securities regulators have proposed new regulation to require transparency in the actions of companies in moving to net-zero emissions. Retailers

48 Ibid; IPCC, ‘Impacts of 1.5°C’, note 42.
49 Sarra, Governance Paths to Net Zero, note 41 at 14–15.
51 Ibid.
52 Ibid.
53 KPMG, “The ESG agenda for retail and consumer businesses”, (December 2020), The ESG agenda for retail and consumer businesses (assets.kpmg).
must understand and manage changes to policy requirements. One retail expert has observed that companies will show a higher level of commitment to mitigating climate change if governments put in place more regulation, forcing companies to comply; however, legislation to drive material change can take years and needs careful attention to standards because, even with it in place, companies may only choose to meet the minimum requirements.

One policy change is carbon pricing. Effective 2019, every jurisdiction in Canada has placed a price on carbon emissions, with federal minimum standards, allowing provinces and territories to use the federal pricing system or adopt their own pricing system tailored to local needs but meeting national stringency standards. The price on carbon is aimed at internalizing the cost of carbon emissions to businesses, creating incentives for reducing emissions.

The Canadian Net-Zero Emissions Accountability Act requires the setting of national targets for the reduction of GHG emissions based on the best scientific information available, promoting transparency, accountability, and action in relation to achieving the targets of net-zero emissions in Canada by 2050. The Government of Canada must set national emissions reduction targets at five-year intervals for 2030, 2035, 2040, and 2045. It must develop GHG emissions reduction plans that have targets, strategies, and measurement of progress, and must take into account the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The statute has implications for retail companies that supply governments through procurement processes.

At the November 2021 United Nations (UN) Conference of the Parties meeting (COP26) in Glasgow, 103 countries committed to the Global Methane Pledge to reduce methane emissions by 30% by 2030, and Canada is a signatory to the pledge. Methane is responsible for approximately 30% of the global rise in temperatures to date and accounts for about 13% of Canada’s total GHG emissions. While methane emissions reductions from oil and gas will be a priority, agriculture and landfills are among the largest sources of methane emissions. Given how ambitious the targets are, Canadian farmers and industry partners will need to take action to reduce emissions, sequester carbon, and make their operations more sustainable, which will affect supply chains in the food sector.

Policy and regulatory changes regarding environmental issues more broadly are also likely to have an effect on retailers. Plastics production has a significant carbon

---

57 Ibid, s 6.
58 Ibid, ss 9, 10.
60 Government of Canada, ibid.
footprint. The World Economic Forum reports that half of global plastic production is for single use and less than 10% of all plastic waste ever produced has been recycled.\textsuperscript{61} Globally, over 150 million tonnes of this waste ends up in landfills annually, and increasingly, enters our rivers, streams, and oceans as microplastics and litter.\textsuperscript{52} The Canadian government reports that Canadians throw away 3 million tonnes of plastic waste annually, only 9% of which is recycled, meaning that the vast majority of plastics end up in landfills and about 29,000 tonnes annually finds its way into our natural environment.\textsuperscript{63} The vast majority of plastic packaging is made from oil and gas, emitting GHG from ‘cradle to grave’.\textsuperscript{64} In April 2021, Moody’s warned that lack of progress in reducing plastics will result in a hit to supermarket share prices, given both environmental and health concerns.\textsuperscript{65}

In May 2021, the federal government issued an order to enable banning certain single-use plastic items, adding plastic manufactured items to Schedule 1 of the Canadian Environmental Protection Act.\textsuperscript{66} It enables the government to take regulatory action in support of reaching Canada’s zero plastic waste goal, banning harmful single-use plastics where warranted and supported by science, and establishing minimum recycled content requirements.\textsuperscript{67} Reducing plastics and retaining materials in a circular economy reduces GHG emissions.\textsuperscript{68} Municipalities are also adopting bylaws to reduce single-use plastics and other waste.\textsuperscript{69}

Governments at the federal, provincial, territorial, and municipal level have worked through national action plans for extended producer responsibility (EPR) towards greater responsibility to manage products at their end-of-life, including transforming product stewardship initiatives into full EPR programs, such as taking back bottles, apparel hangers, and packaging.\textsuperscript{70} EPR programs identify end-of-life management of products as the responsibility of producers, but these costs can be passed on to

\textsuperscript{63} Government of Canada, “Canada one-step closer to zero plastic waste by 2030”, (7 October 2020), Canada one-step closer to zero plastic waste by 2030 - Canada.ca.
\textsuperscript{64} ClientEarth, Material Issues, Big Food and the rise of plastic-related risk, Investor brief, (September 2021) at 3, material-issues-big-food-and-the-rise-of-plastic-related-risk.pdf (clientearth.org) (hereafter Big Food investor brief).
\textsuperscript{65} The Grocer, “Moody’s: supermarket share prices at risk due to slow progress on plastic”, (28 April 2021), cited in Big Food investor brief, ibid at 8.
\textsuperscript{66} Retail Council of Canada, “Federal order published to enable banning certain single-use plastic items”, (13 May 2021), Federal order published to enable banning certain single-use plastic items – Retail Council of Canada.
\textsuperscript{67} Communication from Environment and Climate Change Canada. The proposed regulations to ban or restrict certain single-use plastics is expected to be published in the Canada Gazette, Canada’s Action on Plastic Manufactured Items, Plastic Waste & Pollution and Single Use Plastic – Livingston International (livingstonintl.com).
\textsuperscript{68} Environment and Climate Change Canada, A proposed integrated management approach to plastic products to prevent waste and pollution, (2019), proposed-approach-plastic-management-eng.pdf.
\textsuperscript{69} See for example, Montréal Regulation Prohibiting the Distribution of Certain Single-Use Plastics: Retail Council of Canada, “Montreal updates single-use plastics regulations”, (August 2021), Montreal updates single-use plastics regulations – Retail Council of Canada.
retailers, who then must recover the costs in pricing of goods and services sold. The retail and production sectors have worked with governments to support development of consistent EPR programs and set targets for plastics collection, recycling, and recycled content requirements. Product stewardship and EPR programs can result in provincial or municipal environmental fees, which impact retail costs, but they are viewed as key to a circular economy. Provinces are expanding existing EPR programs to cover more materials, including textiles, paper, and cardboard packaging.

Another policy risk for retail is regulatory sanction for ‘greenwashing’. The Canada Competition Act prohibits deceptive market practice, creating sanctions for companies that make environmental claims to the public that are false or misleading in a material respect in order to promote their products. The Consumer Packaging and Labelling Act requires that prepackaged non-food consumer products bear accurate and meaningful labelling information and prohibits the making of false or misleading representations to consumers. The Textile Labelling Act requires that consumer textile articles bear accurate labelling information and prohibits the making of false or misleading representations. The Competition Bureau of Canada has warned businesses that if they portray products and services as having more environmental benefits than they truly have, they may be found to be engaging in illegal greenwashing. Businesses should avoid vague claims such as ‘eco-friendly’ or ‘safe for the environment’ as the Bureau will enforce violations of the Competition Act, Consumer Packaging and Labelling Act, and the Textile Labelling Act for environmental claims that are false, misleading or not based on proper testing. Before making environmental claims, retailers should make sure that the claims are accurate and specific on how they are environmentally beneficial. Failure to do so may mean regulatory sanction and significant reputational harm.

In the US, the Federal Trade Commission has issued green guides that offer retailers guidance on marketers’ use of product certifications and seals of approval, claims about materials and energy sources that are renewable, and carbon offset claims. It lists more than twenty cases where it has identified greenwashing. For example, Nordstrom, Bed Bath & Beyond, Backcountry.com LLC, and J C Penney were ordered to pay penalties totalling US$1.3 million for falsely labelling rayon textiles as made of bamboo.

---

72 Competition Bureau, Government of Canada, “Calling it “organic”, “green” and “eco-friendly” isn’t enough, that’s greenwashing, and it’s against the law”, (January 2017), It’s not easy being green. Businesses must back up their words. - Canada.ca (hereafter Competition Bureau).
73 Competition Act, RSC 1985, c C-34, as amended, s 74.01.
74 Consumer Packaging and Labelling Act, RSC 1985, c C-38.
75 Textile Labelling Act, RSC 1985, c T-10.
76 Competition Bureau, note 72.
77 Ibid.
78 Ibid.
For retailers operating internationally, it is important to be aware that regulators are seeking to reduce greenwashing through various regulations, such as the European Union (EU) Taxonomy for Sustainable Activities, the EU Guidelines on Reporting Climate-related Information, the EU Sustainable Finance Disclosure Regulation, aimed at discouraging greenwashing in the financial sector, and the proposal for an EU Corporate Sustainability Reporting Directive. The EU also introduced ‘double materiality’, asking managers to assess how sustainability issues affect the company’s business and how the company’s actions impact people and the planet. In November 2021, the European Commission tabled its plan to introduce mandatory due diligence for products sold on the EU market to make sure they are not linked to deforestation or forest degradation. Effective 2021, companies need to collect information about the products they have placed on the EU market to confirm they are not linked to deforestation, including taking “adequate and proportionate mitigation measures, such as using satellite monitoring tools, field audits, capacity building of suppliers or isotope testing” to confirm the product’s origin.

France has enacted a corporate duty of vigilance law that places a due diligence duty on large French companies and requires them to publish an annual vigilance plan. The plan must include reasonable measures to allow for risk identification and prevention of severe violations of human rights and environmental damage resulting directly or indirectly from the operations of the company, its subcontractors, and


81 EU Taxonomy for Sustainable Activities, into force on 12 July 2020, EU taxonomy for sustainable activities | European Commission (europa.eu).
84 In a recent report, the Global Sustainable Investment Alliance erased $2 trillion from the European market for sustainable investments after anti-greenwashing rules were introduced by the EU in March 2021; Tim Quinson, “Pressure is increasing on fund managers to show they’re being truthful with customers about what they’re selling” and “Regulators Intensify ESG Scrutiny as Greenwashing Explodes, Bloomberg, (1 September 2021), Yellen’s FSOC Deems Climate Change Threat to Financial Stability – Bloomberg (hereafter Quinson).
87 Kira Taylor, “Europe proposes mandatory due diligence to stop deforestation in supply chains”, Euractiv, (17 November 2021), Europe proposes mandatory due diligence to stop deforestation in supply chains – EURACTIV.com.
88 Ibid.
89 La LOI n° 2017-399 du 27 mars 2017 relative au devoir de vigilance des sociétés mères et des entreprises donneuses d’ordre, LOI n° 2017-399 du 27 mars 2017 relative au devoir de vigilance des sociétés mères et des entreprises donneuses d’ordre (1) - Légifrance (legifrance.gouv.fr). The Law applies to French companies with more than 5,000 employees in the company’s direct or indirect French-based subsidiaries and with more than 10,000 employees if including direct and indirect subsidiaries globally, Art L 225-102-4.
suppliers with whom it maintains an established commercial relationship.\textsuperscript{90} Measures include risk mapping and a system to monitor the effectiveness of measures implemented. A court can order the company to comply with its vigilance obligations, including ordering it to develop a vigilance plan, improve its vigilance measures, and/or impose a penalty for each day of non-compliance.\textsuperscript{91} The law also provides for civil liability; harmed individuals can bring a civil lawsuit to seek monetary damages resulting from a company’s failure to comply with its vigilance obligations where compliance would have prevented the harm. Since the law was adopted in 2017, there have been eight cases alleging violations.\textsuperscript{92}

Germany’s \textit{Lieferkettensorgfaltspflichtengesetz (Act on Corporate Due Diligence in Supply Chains)} will come into force January 2023.\textsuperscript{93} It obligates companies with 3,000 or more employees to take appropriate measures within their supply chains “to prevent or minimize risks related to human rights or the environment or end the violation of duties related to human rights or the environment.”\textsuperscript{94} Companies must establish a risk management system; define internal responsibility for compliance; carry out regular risk analyses; implement preventive measures in the company’s own business and activities of subsidiaries, if the parent company exerts decisive influence, and vis-à-vis its direct suppliers; take remedial actions if a violation has occurred or is imminent; set up an internal complaints procedure; and establish due diligence procedures regarding risks associated with indirect suppliers, which will be applied when the company has substantiated knowledge of a violation.\textsuperscript{95} Failure to meet requirements could lead to fines up to €800,000.\textsuperscript{96}

Regulators are also starting to require companies to develop transition plans. For example, the United Kingdom (UK) government has announced that it will incorporate transition plans into the UK’s Sustainability Disclosure Requirements and strengthen requirements to encourage consistency in published plans and increased adoption by 2023.\textsuperscript{97} The TCFD has issued guidance on such transition plans, discussed in Part IV.2.

\textsuperscript{90} \textit{Ibid, Art L 225-102-4.}
\textsuperscript{91} \textit{Ibid.}
\textsuperscript{92} \textit{See the discussion under litigation risk.}
\textsuperscript{93} \textit{Act on Corporate Due Diligence in Supply Chains.}
\textsuperscript{94} \textit{Ibid, art. 1, §§ 1, 3. Abiola Okpechi, “German Supply Chain Act: Due Diligence Is a Growing Business Imperative”, Assent, (2021). German Supply Chain Act: Due Diligence Is a Growing Business Imperative (assentcompliance.com). The Act initially applies to German-based companies with more than 3,000 employees and foreign-based companies of the same size with registered German branches. In 2024, the size requirement applies to 1,000 employees.}
\textsuperscript{96} \textit{Ibid, as well as a three year exclusion from public contracts. For companies earning more than €400 million in annual turnover, fines can reach up to two percent of worldwide turnover.}
These regulatory developments are critically important for Canadian retailers operating in European markets to understand, but similar regulation is being considered in many jurisdictions globally, which will directly affect supply chains. Canadian legislators are studying all these international developments with a view to how to enhance the regulatory framework for climate mitigation and adaptation in Canada.

2.2 Market Risks

The Bank of Canada reports that climate change “looms as a potentially large structural change affecting the economy and the financial system.”98 Lenders are increasingly considering climate-related risks as they make decisions to lend to retailers. Climate change may result in unexpected re-evaluation of assets in debt and equity securities.99

On challenge for the retail sector is that some parts of the sector face a highly-pressurized margin reality of retail today, where investment in sustainable development is likely to be perceived simply as incremental cost and detrimental to their achieving returns on income. The last decade of retail in North America focused on cost reduction and efficiency, as competitive intensity and the burden of digitizing has required outsized capital investment without immediate corresponding returns. While many retail leaders acknowledge the value and importance of these emissions-reducing initiatives on a human level, they have faced challenges in persuading senior executives and the board of directors. Yet all the market signals now are that there are financial, competitive, and reputational benefits for an ambitious climate action plan.

Investors with more than US$121 trillion in assets have signed the Principles for Responsible Investment, a commitment to integrate ESG issues into their investment decisions.100 Research by accounting firm PwC also shows that 77% of institutional investors plan to stop purchasing non-ESG products by 2022.101 At COP26, almost 500 financial institutions with US$130 trillion under management committed to financing the transition to net-zero emissions.102 They are committing to align their debt and equities portfolios by investing in retail and other companies that are taking meaningful steps to decarbonize. Retail and other companies need to be aware of these shifting sources of capital and potential opportunities.

---

99 OSFI, Navigating Uncertainty in Climate Change, Promoting Preparedness and Resilience to Climate-related Risks (January 2021), at figure 4, Navigating Uncertainty in Climate Change – Promoting Preparedness and Resilience to Climate-Related Risks (osfi-bsif.gc.ca).
101 PwC, “ESG during and post COVID-19 world”, (January 2021), ESG during and post COVID-19 world (pwc.com).
BlackRock, which manages US$3.6 trillion of investments in securities, including CA$275 billion of assets in Canada, has its largest investments in retailers such as Apple Inc, Microsoft Corporation, and Amazon.com. Blackrock CEO Larry Fink’s letter to its portfolio companies in 2021 said:

There is no company whose business model won’t be profoundly affected by the transition to a net zero economy... As the transition accelerates, companies with a well-articulated long-term strategy, and a clear plan to address the transition to net zero, will distinguish themselves with their stakeholders – with customers, policymakers, employees and shareholders – by inspiring confidence that they can navigate this global transformation. But companies that are not quickly preparing themselves will see their businesses and valuations suffer, as these same stakeholders lose confidence that those companies can adapt their business models to the dramatic changes that are coming... we are asking companies to disclose a plan for how their business model will be compatible with a net zero economy – that is, one where global warming is limited to well below 2ºC, consistent with a global aspiration of net zero greenhouse gas emissions by 2050. We are asking you to disclose how this plan is incorporated into your long-term strategy and reviewed by your board of directors.

In 2020, BlackRock examined 440 of its carbon-intensive portfolio companies, representing approximately 60% of the global Scope 1 and 2 emissions, and of these companies, it voted against the election of 64 directors and put 191 companies ‘on watch’, expanding its focus to over 1,000 companies in 2021. BlackRock has stated that those companies risk votes against directors unless they demonstrate significant progress on the management and reporting of climate-related risk, including their transition plans to achieve net-zero emissions.

Financial institutions are also shifting their debt portfolios, which may affect retail access to capital. Global growth of sustainable debt issuances, including green bonds and loans and sustainability-linked bonds and loans, has grown from less than US$100 billion in 2015 to US$730 billion in 2020, according to a 2021 report from DBRS Morningstar. Sustainability-linked loans are growing in Canada. For example, in 2019, Maple Leaf Foods Inc agreed to amend its existing credit facility with BMO Financial, which will “allow Maple Leaf Foods to reduce the interest rate on the lending facility if it meets targets on electricity use, water use, solid waste, and continuing to reduce its carbon emissions in line with its achievement of net carbon

---

103 13F filing for Q2 2021, BlackRock Inc. – Portfolio Holdings (13F, 13G) (fintel.io); BlackRock Canada, BlackRock in Canada | About BlackRock.
105 BlackRock Client Letter | Sustainability.
106 Ibid.
107 Jameson Berkow, “How sustainable debt is turning corporations into climate leaders”, Bloomberg. (29 October 2021), How sustainable debt is turning corporations into climate leaders - BNN Bloomberg (hereafter Berkow).
neutrality." More than a dozen Canadian companies have followed suit, with Canada’s sustainable corporate debt market expected to hit CA$20 billion this year. Another example is that Teck Resources Limited executed a US$4 billion sustainability-linked revolving credit facility in 2021, under which “the price paid by Teck will increase or decrease based on the company’s performance in reducing carbon emissions, improving health and safety, and strengthening gender diversity in its workforce”. It aligns the credit facility with Teck’s goals of reducing carbon intensity by 33% by 2030 and becoming carbon neutral across operations by 2050.

The 2020 CDP Global Supply Chain Report found that about 94% of companies with science-based targets include Scope 3 emissions. Setting targets to reduce emissions throughout the value chain (Scope 3) is becoming a new business norm. Supply chain emissions can be reduced by optimizing a retailer’s own production processes, making different purchasing decisions to favour low-carbon products or services, purchasing from suppliers with a low carbon footprint, and engaging with suppliers to reduce emissions across the value chain.

As ESG commitments increase, including climate risk management, one survey found that six in ten institutional investors view greenwashing as their top concern with their integration of ESG factors into investment decisions. The lack of reliable and standardized ESG information to date has made it difficult to evaluate the quality of ESG-compliant actions. The development of global sustainability accounting standards, discussed in Part III.3, will begin to mitigate this risk considerably.

The reality is that the market risk of equal importance to climate change in the retail sector is the rise of what Stephens calls ‘apex retail predators’ like Amazon, Alibaba, JD.com, and Walmart, all of which have massively increased their market share of retail since the start of the pandemic and accelerated their move into insurance, banking, and finance as part of an “integrated retail consumer experience”, subjects well beyond the scope of this guide. However, it is important to note that how

---


109 Berkow, note 107.


111 Ibid.

112 CDP Global Supply Chain Report, note 7.

113 Science-based Targets, “Setting targets to reduce emissions throughout the value chain (Scope 3) is becoming a new business norm”, (November 2018), SBT_Value_Chain_Report-1.pdf (sciencebasedtargets.org).

114 Ibid at 21.


117 Stephens, Resurrecting Retail, note 15 at 66, 71, 73, 103, For example, Amazon’s market capitalization had a 70% growth in value to $1.7 trillion in only seven months in 2020, and Alibaba’s Ant Financial is valued at $150 billion, which exceeds that of Goldman Sachs, ibid at 103.
Canadian retail companies deal with these massive market shifts intersects with how they address challenges and opportunities in respect of climate change.

2.3 Technological Risks

Technological risks are important to the retail sector. Technological innovations that support the transition to a net-zero carbon, energy-efficient economic system will have a significant impact on the retail sector. The development and use of emerging technologies such as renewable energy, battery storage, carbon capture and storage, and waste reduction will affect competitiveness, production and distribution costs, and the demand for products and services from consumers. The massive shift in the past two years to online retail is requiring new technologies for marketing and distributing goods, disrupting longstanding practices.

A 2021 study by MIT reports:

Over the last quarter of a century, no asset class in real estate has seen more transformation than the retail sector, due to advances in technology, innovations in the supply chain and ever-advancing changes in consumer behavior. Where once consumers flocked to suburban shopping malls and the brick-and-mortar stores of city streets, ecommerce – combined with next-day delivery capability – has completely altered how we purchase all forms of goods. Coinciding with this transformation, climate change across the globe has now reached a point where it is unquestionably impacting our environment, economy and resiliency as a society. The question we must now ask is which of these forms of consumer behavior leads to lower carbon emissions, and is better for the world in which we live.

New technologies are being developed and deployed to help lower GHG emissions, including delivery fleet electrification, drones, and autonomous vehicles, although they need to be deployed in conjunction with postal and other services that already have a broad delivery reach. Innovations in how packages are boxed or returned can have huge emissions reductions outcomes, MIT reporting that in both traditional e-commerce and combined retail strategies, boxes account for some of the largest carbon pollutants in the ecosystem, and removal can have some of the greatest reductions in retail carbon emissions, up to 36% percent of total e-commerce emissions. It reports that by reducing 80% of cardboard boxes for e-commerce and replacing them with the GHG emissions of paper bags, it will reduce 50% of e-commerce excess-GHG attributed to returns.

---

118 TCFD Final Report, note 54 at 6.
120 Ibid at 13.
121 Ibid at 16.
122 Ibid at 14.
As retailers gain understanding of the embodied carbon of packaging, they have the opportunity to make different choices regarding plastics, cardboard, and/or 100% recycled materials. There are both risks and opportunities associated with transport logistics in getting products from suppliers to warehouses, retail stores, and consumers. Retail trade is closely linked to emissions created by costly transport of products as a significant source of GHG emissions.

A number of technological developments will reduce emissions, such as bundling packages, locker use whereby last delivery is to a local centralized location, reducing much of the 'last-mile' carbon footprint, and better locations logistics to distribute packages from. The MIT study also reports that advanced technologies such as Reality Capture and Image Recognition can allow consumers to more accurately size products before they purchase, leading to fewer returns and thus a lower carbon footprint.

Post-pandemic, there are uncertainties associated with the extent to which there will be a return to in-store shopping, but there is no question that in-person retail will shift with emerging digital in-store technologies that compete with the online customer experience, including digital purchases in store, autonomous shopping carts that follow the consumer around the store, and curb-side pickup. There are also shifts in supply and demand for technologies to be responsive to changing consumer expectations for ease and accountability of shopping and the ability to access timely product information on the carbon footprint of items they are purchasing as they are looking at products in the store.

### 2.4 Reputational Risks

Climate change is increasingly a source of reputational risk tied to changing customer and community perceptions of a retailer’s contribution to, or detraction from, the transition to a net-zero carbon economy. Retailers are facing rapidly shifting consumer preferences and face reputational risk if their business strategies do not address climate change. In the retail food sector, consumers are increasingly pressuring retailers to reduce single-use plastics, shift from recyclable to reusable materials, and minimize food wastage and spoilage. The generations that are increasing in purchase power, Millennials, Gen Z, and soon, Generation Alpha, are very concerned about climate change and waste, and are more likely to be skeptical about green

---

125 Ibid.
126 Ibid at 14, 17.
127 Ibid at 13.
marketing claims, seeking information to substantiate claims. Accounting firm Deloitte’s 2021 Canadian food consumer survey found that 71% of consumers are concerned about the source of their food for health, ethical, and carbon footprint related reasons, and 61% are concerned with excessive packaging in the retail sector. There are growing reputational risks in selling products associated with deforestation, land-use change, and emissions-intensive animal products. Consumers are demanding change, with Gen Z and Millennials at the forefront of these requests. NYU Stern’s Center for Sustainable Business completed extensive research into US consumers’ actual purchasing of consumer packaged goods (CPG), using data from bar codes of products purchased: it found that 50% of CPG growth from 2013 to 2018 came from sustainability–marketed products. Products that had a sustainability claim accounted for 16.6% of the market in 2018, US$114 billion in sales. Products marketed as sustainable grew 5.6 times faster than products that were not.

With reputational risks also come opportunities. A study by IBM and the National Retail Federation reports that 40% of consumers are now ‘purpose-driven’, willing to pay a premium for products and services that align with their values, including reducing climate impacts and supporting sustainability. It found that 77% of consumers want sustainable and environmentally responsible products and support recycling; 72% seek out natural ingredients; and 71% are willing to pay a premium for brands that practice sustainability and environmental responsibility and the traceability of their products. Almost 80% of Gen Z and Millennials have purchased or want to purchase pre-owned products, and a growing number are trying renting products. IBM and the National Retail Federation found that 90% of consumers are aware of new shopping technologies and are keen on experimenting with the latest tools that are responsive to their needs. A growing segment of the consumer population expects to see retailers making efforts to reduce carbon emissions and to do so in a manner that is fairer and more equitable.

130 Deloitte, note 128.
131 M Clark et al, “Global food system emissions could preclude achieving the 1.5° and 2°C climate change targets”, Science Vol 370, No 6517, (6 November 2020). S Jessop and J Spring, “Retailers, investors urge Brazil to scrap bill seen boosting deforestation”, (4 May 2021), Reuters. Retailers, investors urge Brazil to scrap bill seen boosting deforestation | Reuters. Good Food Institute, “Plant-based meat for a growing world”, (2019), GFI-Plant-Based-Meat-Fact-Sheet_Environmental-Comparison.pdf, which reports that Plant-based meat uses 47 percent–99 percent less land than conventional meat and emits 30%–90% less GHG than conventional meat, and more than 70% less water.
133 Ibid.
134 Ibid.
136 Ibid at 5,7, 8.
137 Ibid at 11.
for a broader set of employees, customers, suppliers, and distributors, embedding diversity, equity, and inclusion in their climate action plans. The risk of retail companies failing to take ESG factors into account are significant, as both employees and customers want to see ethical, responsible companies.¹³⁸

A 2020 survey of 3,000 people across eight countries found that 70% of survey participants said they were more aware now than before the pandemic that human activity contributing to climate change threatens the planet and, in turn, threatens humans.¹³⁹ More than two-thirds responded that economic recovery plans should make environmental issues a priority and 87% said retail companies should integrate environmental concerns into their products, services, and operations to a much greater extent than they have in the past.

Also in 2020, more than 100 businesses signed a statement acknowledging that the pandemic and climate crises are interconnected and must be tackled jointly, committing to divest from fossil fuels and invest in low-carbon, resilient solutions to prioritize green jobs and sustainable growth, calling on governments to match their efforts with a recovery plan aligned with reaching net-zero emissions well before 2050.¹⁴⁰ Consumer-facing information is being increasingly scrutinized for its integrity. Forbes magazine reports that it is crucial for retail companies to embrace transparency in any claims regarding sustainability:

With many people spending on average 12 hours per day in front of a screen, customers can research anything they want. It’s as though each business lives in a glasshouse. With a few strokes of the keyboard, anyone can find out if an organization has unethical labor practices or unfair hiring standards. They can also prove if a retailer fails to adhere to the values that it preaches. And within minutes, customers can share such harmful information with thousands—perhaps millions—of other people. Today’s consumers shop with their values and reward companies that take these principles seriously. And evidence suggests that inclusive, diverse and environmentally sustainable companies have an even better chance of taking a share of consumer spend. Customers want more details about the products they are buying than ever before. In the food world, the farm to fork movement has been popular for some time. Recent research proved that this will only continue: More than two-thirds (68%) of consumers agree that they are going to continue to limit food waste post-crisis. A similar mentality is migrating into apparel and home goods as well. Consumers demand information about their clothing and bedding, including the raw materials to make them, where they were manufactured and how they were transported. Having a digitally connected supply network that

¹³⁸ Jill Standish, “The Human Element: People Need To Be Front And Center In Retailers’ ESG Commitments”, Forbes Magazine, (9 September 2021), The Human Element: People Need To Be Front And Center In Retailers’ ESG Commitments (forbes.com) (hereafter Standish).
leverages technologies like artificial intelligence, Internet of Things and other traceability solutions is not only more cost-efficient and less wasteful, but can also communicate sustainability details directly to the customer. Such technological platforms possess the power to become a new form of marketing unto itself.\(^\text{141}\)

The fact that during the COP26 meeting in November 2021, millions of consumers globally marched to express concern that governments and businesses were making hollow commitments on climate change, is evidence that consumers are watching, and willing to act on their concerns.\(^\text{142}\)

Retail executive Joe Jackman observes that another reputational risk is that, increasingly, employees want to work for companies that support their communities and espouse similar values, especially the younger generation of workers; thus, having robust climate governance in place supports talent retention and becomes another rallying point for employees.\(^\text{143}\) He notes that since the pandemic, people are putting much more emphasis on what they can control within their immediate circle, seeking out what retailers’ mission or purpose is and how they are meeting those commitments as part of their employment and consumer choices.

### 2.5 Litigation Risks

There is increasing litigation related to the failure of companies to mitigate impacts of climate change, failure to adapt, and the insufficiency of disclosure around material financial risks or misrepresenting environmental credentials. As the value of loss and damage arising from climate change grows, litigation risk is also likely to increase.

In the retail sector, litigation risk can arise under securities law, corporate law, and/or consumer protection legislation. For publicly-traded retail companies, securities regulation in Canada is tightening with respect to disclosure of climate-related risks,\(^\text{144}\) and retailers that fail to disclose material risks and strategies to address them could be subject to regulatory sanction or civil lawsuits by investors. In the US and Europe, regulators have commenced investigating and charging companies for misrepresenting the extent of their sustainability disclosures.\(^\text{145}\) The US Securities and Exchange Commission (SEC) formed a task force in 2021 aimed at investigating potential misconduct related to companies’ sustainability claims and is working on a new disclosure rule to require enhanced climate disclosures by issuers.\(^\text{146}\)

---

\(^{141}\) Standish, note 138.  \(^{142}\) Libby Brooks \textit{et al.}, “‘The time for change is now’: demonstrators around the world demand action on climate crisis”. \textit{The Guardian}, (6 November 2021).  \(^{143}\) Joe Jackman, “Jackman Pink Paper: Serving Today’s Values-Driven Consumer”, (2021), http://insights.jackmanreinvents.com/article/serving-todays-values-driven-consumer.  \(^{144}\) See the discussion in Part III.2.  \(^{145}\) For example, the US Securities and Exchange Commission and BaFin, Germany’s financial regulator, recently initiated a probe into allegations that Deutsche Bank AG’s DWS Group asset-management arm has been misstating the environmental credentials of some of its ESG-labeled investment products; Quinson, note 84.  \(^{146}\) SEC, “SEC Announces Enforcement Task Force Focused on Climate and ESG Issues”, (4 March 2021), SEC.gov | SEC Announces Enforcement Task Force Focused on Climate and ESG Issues; and SEC, “
Oatmilk company Oatley is facing three securities class actions on behalf of all purchasers of American Depositary Shares during a specified period in 2021. They allege that Oatley and its directors and officers made materially false and misleading statements about sustainability and financial metrics in an initial public offering (IPO) that raised US$1.4 billion in May 2021. Two months after the IPO, a short seller published a report that Oatley had engaged in improper accounting practices and greenwashing, which caused the market price to drop and resulted in the class actions. The case is ongoing, with the US District Court in October 2021 ordering the filing of additional information to allow it to determine whether to consolidate the class actions and appoint lead plaintiff.

Recent lawsuits on greenwashing indicate a sea change in how investors are seeking to hold retailers accountable. Truth in Advertising reports more than 20 ongoing lawsuits against US retailers as of April 2021 under competition, consumer protection, and advertising legislation. In the Tide litigation, the US National Advertising Division recommended that Tide modify its plant-based claims on its product labels to avoid conveying the unsupported message that the laundry detergent is 100% derived from plant-based ingredients. A week after Tide agreed to implement the decision, a class action suit was filed against the company, alleging petroleum was involved in the cleaning components and the branding and packaging of the product is deceiving and defrauding plaintiffs and consumers; that lawsuit still pending.

Other retail examples include a lawsuit alleging that Coca-Cola is in violation of the US Consumer Protection Procedures Act for falsely advertising itself as sustainable and environmentally friendly while generating more plastic pollution than any other product.

Public Input Welcomed on Climate Change Disclosures, (March 2021), SEC.gov | Public Input Welcomed on Climate Change Disclosures.


MinterEllison, “To green or not to green? Navigating ‘greenwash’ risks in climate change targets & sustainability credentials”, (October 2021), MinterEllison Spotlight on Greenwashing (4).pdf. See National Consumers League v Wal-Mart Stores, Inc, No 2015 CA 007731 B, 2016 WL 4080541, at 1, (DC 22 July 2016) in which the Court held that Walmart’s "aspirational statements" were not actionable, although other claims based on detailed information about auditing programs could proceed: the case subsequently settled. See also B Hill v Roll Internat Corp, 195 Cal App 4th 1295, 1301, 128 Cal Rptr 3d 109, 113, (2011), where the California Appeals Court concluded that no reasonable consumer would be misled to think that the green drop on Fiji water represents a third party organization’s endorsement or that Fiji Water is environmentally superior to that of the competition.


company globally. Chiquita was sued for marketing representations on its website regarding its environmentally safe business watercourses: and the Court allowed claims for unfair and deceptive trade practices and breach of express warranty to proceed. Consumers sued Keurig, alleging that the disposable coffee pods were not recyclable in a practical way, the Court concluding that the claims were adequately pled under the reasonable consumer test. The company manufacturing and selling Banana Boat sunscreen is being sued in two class actions pursuant to US competition law, false advertising law, the Consumers Legal Remedies Act, and for civil damages for falsely, misleadingly, and deceptively marketing its sunscreen as ‘reef friendly’ when it contains ingredients that are harmful to coral reefs and marine life. A class action against Allbirds, filed in June 2021, alleges the company is misleadingly claiming that its running shoes have a low carbon footprint, and is falsely claiming to use sustainable and humane practices to get wool from sheep.

In France, the major supermarket retailer, Casino, is being sued by a coalition of NGO and Indigenous peoples following a field investigation by NGO Envol Vert, which found that Casino’s suppliers regularly purchase beef from three slaughterhouses involved in deforestation and land-grabbing activities in the Amazon and Brazil’s Cerrado savannah eco-region. Indigenous organizations are seeking compensation for the damage caused to their ancestral lands and the impact on their livelihoods. These cases illustrate how litigation risks are increasing.

Accounting firm EY Canada reported in 2020 that the retail, health, and consumer goods sector has one of the lowest scores for both coverage and quality of climate-related financial disclosures. It assessed the coverage and quality metrics on the basis of how they align with the TCFD recommendations. On average, retail companies covered less than half of the TCFD recommendations, with risk management disclosures being the least covered. EY found that, generally, disclosures were comprised of high-level discussions and most companies did not provide a detailed description of the board’s responsibility for oversight of climate-

---

154 Earth Island Institute, “Earth Island Institute Files Lawsuit Against Coca-Cola for False Advertising”, (June 2021), Earth Island Institute Files Lawsuit Against Coca-Cola for False Advertising :: Earth Island Institute, case is pending in the District of Columbia Superior Court.


157 Consumers Legal Remedies Act (Cal Civ Code §§ 1750, et seq.

158 Condrey et al v Edgewell Personal Care Brands, LLC 21-cv-7100, CD Cal (September 2021), Condrey-v-Edgewell-complaint.pdf (truthinadvertising.org); Moran et al v Edgewell Personal Care, LLC 21-cv-7689, ND Cal (September 2021), Moran-v-Edgewell-complaint.pdf (truthinadvertising.org).

159 Dwyer et al v Allbirds, Inc 21-cv-5238, SD NY (June 2021), pleading (truthinadvertising.org).


161 Ibid.

162 Mathew Nelson, Why the consumer goods and health sector lags on climate disclosures”, EY Canada, (1 June 2020), Consumer goods & health – climate disclosures | EY Canada.

163 Ibid, the sector was analyzed as part of the 2019 EY Global Climate Risk Disclosure Barometer report.

164 Ibid.
related risks and opportunities. The majority of retail companies did not describe how processes for identifying, assessing, and managing climate-related risks were integrated into the organization’s overall risk management. Less than half of those companies disclosed their Scope 1, 2, and 3 GHG emissions, and many disclosed no information on emissions.

The EY report found that retail companies are not utilizing climate scenarios, which is reducing their ability to stress test exposure to climate risks and assess resilience in a future decarbonized economy. EY found that while retail companies are attempting to provide an estimation of the financial impact of climate-related risks and opportunities, estimations are still not integrated into companies’ financial statements. Less than 10% of the assessed companies provided some form of quantitative estimation of the financial impacts of their climate-related risks and opportunities. While the EY analysis does not specifically separate out Canada, it finds that the UK, France, and Australia retail sectors have been more effective in disclosure and governance, meaning that the Canadian companies examined are lagging. Each of these findings creates openings for lawsuits by investors as their expectations that climate risks are being managed are increasingly viewed by courts as reasonable.

Unrelated to the retail sector, but certainly important to note is the recent court decision in the Netherlands regarding Royal Dutch Shell, in which the District Court of The Hague recognized that 85% of Royal Dutch Shell’s emissions were Scope 3 emissions, the Court ordering it to reduce the CO₂ emissions of its entire corporate group of 1,100 companies by 45% by 2030 across Scope 1 to 3 emissions, as compared with 2019 levels. The Court expressly held that the standard of care included the need for companies to take responsibility for reducing Scope 3 emissions, especially where these emissions form the majority of a company’s emissions.

In the US, there are a growing number of class actions alleging that companies gave materially false or misleading statements to investors regarding their management of investments based on carbon emissions and potential for stranded assets, and while results to date are mixed, a number of cases are now proceeding through the appellate courts. A number of investors and other organizations have developed scoring metrics that grade companies on their emissions reductions performance.

---

165 Ibid.
166 Ibid.
167 Mathew Nelson, “Limited progress has been made in addressing climate-related financial disclosures”, EY Canada, (27 April 2020), Addressing climate-related financial disclosures | EY Canada (hereafter Nelson).
168 Ibid.
169 Ibid.
171 Ramirez v Exxon Mobil Corp et al, Civ No 3:16-CV-3111-K (Dist Crt Northern District of Texas).
172 Henriques, note 151.
3. Opportunities

One opportunity is the potential for the retail sector to access new sources of capital. The Glasgow Financial Alliance for Net Zero (GFANZ), representing 40% of the world's financial assets, have agreed to finance the transition to net-zero emissions over the next 30 years. GFANZ announced that access to capital will require companies to use science-based guidelines to reach a 50% emissions reduction by 2030 and net-zero emissions by 2050. It means adjusting business models, developing credible plans for the transition, and then implementing them. Retail companies that fail to consider these new opportunities may face reduced access to and a higher cost of capital and/or insurance.

IBM and the National Retail Federation report that mobile technology and social media have led to a fundamental shift in shopping, creating new opportunities for the retail sector: reporting that today’s ‘always-on consumers’ come highly informed with specific demands pertaining to price, ingredients, delivery options, and production methods. They report that 71% of consumers now shop whenever and wherever the mood strikes them, in ‘micro-moments’, often while doing other tasks. Technology allows them quick access to product information. For example, Farmer Connect is a blockchain platform that connects coffee growers, traders, roasters, and consumers, enabling them to share data, growing the coffee market, and incentivizing sustainability practices: the platform tracks each step of the coffee’s journey from co-op to cup, allowing consumers to see their coffee’s production journey. Technologies can help provide transparency of production methods and traceability of source materials, and demonstrate retailers’ commitments to sustainability.

IBM and the National Retail Federation advise that since consumers are willing to pay a premium or change behaviour to reduce environmental impact, it is important to offer options that provide trade-offs between supply chain cost, service, and environmental impact. For example, in the last-mile delivery from fulfillment center to home, trade-offs can reduce variable logistics cost while enabling the consumer to participate in initiatives that reduce emissions or otherwise help maintain a healthy planet. In the food and beverage industry, discarded food can be given a second life by partnering with farms and kitchens to turn work-in-process and semi-finished goods that would normally be discarded into nutrient-rich by-products such as animal feed, protein flour, or beverages. They recommend that retailers explore how to use automation to handle repeatable tasks, such as counting inventory on store shelves, to free up time for store associates, improve the in-store experience, and provide services that help simplify consumers’ lives.

---

174 Ibid.
175 IBM and NRF, note 135.
176 Ibid at 1–2.
177 Ibid at 7.
178 Ibid at 9.
179 Ibid at 9.
180 Ibid at 9.
181 Ibid at 13.
At the November 2021 COP26 meeting, major retail companies announced that a key way to reduce retailers’ environmental impact is to provide resale and refurbishment services.\textsuperscript{182} The examples in Part III illustrate how retailers are taking advantage of these opportunities.

Another opportunity is through mitigation of insurance costs. The UN-convened Net-Zero Insurance Alliance includes insurers and reinsurers committed to accelerating the transition to net-zero emissions economies by transitioning their underwriting portfolios to net-zero GHG emissions by 2050.\textsuperscript{183} The commitment includes engaging with clients on their decarbonization strategies and net-zero transition pathways, and offering insurance and reinsurance products that support low-emission and zero-emission technologies and nature-based solutions that are key to the net-zero transition.\textsuperscript{184}

There are also opportunities for retail companies through resource efficiency in distribution and transportation processes, circular economy strategies, adoption of low-emission energy sources, development of new products and services, access to new markets, and building resilience along the supply chain. According to the International Energy Agency (IEA), in order to meet global emissions-reduction goals, countries will need to transition a major percentage of their energy generation to low-emission alternatives such as wind, solar, wave, tidal, hydro, and geothermal.\textsuperscript{185} As part of this transition, the IEA recommends that no new oil and gas fields and no new coal mines or mine extensions be approved for development.

Retailers that innovate and develop new low-emissions products, services, and production processes may improve their competitive position and capitalize on shifting consumer preferences. One example is consumer goods and services that place greater emphasis on a product’s carbon footprint in its marketing and labelling. Climate resilience means that retail companies are developing adaptive capacity to respond to climate change to better manage the associated risks and seize opportunities. Opportunities related to resilience may be especially relevant for retailers with long-lived fixed assets or extensive supply or distribution networks; retail companies that depend critically on utility and infrastructure networks or natural resources in their value chain; and retailers that may require longer-term financing and investment.

There are also opportunities in sustainable procurement. By collaborating with its supply chain, a retailer can improve access to raw materials and work to proactively engage suppliers to identify and address supply side issues caused by climate change.

\textsuperscript{182} Nicole Silberstein, “Sustainability in Action: IKEA, Crocs, UGG Expand Reuse and Resale Offerings”, (5 November 2021), Sustainability in Action: IKEA, Crocs, UGG Expand Reuse and Resale Offerings - Retail TouchPoints.


\textsuperscript{184} UN Net-Zero Insurance Alliance, (2021), NZIA-Commitment.pdf (unepfi.org).

The Sustainable Apparel Coalition has developed the Higg Index, a suite of tools for the standardized measurement of value chain sustainability.\textsuperscript{186} It is comprised of a core set of five tools that together assess the social and environmental performance of the value chain and the environmental impacts of products, including water use, carbon emissions, and labour conditions. Retailers, manufacturers, governments, and consumers can use the Higg Index to inform sustainability strategies and drive collective industry transformation.\textsuperscript{187}

For example, REI Co-op, a US gear and cycle retailer, has used the Higg Index to support its financial goals and competitive advantage; it has made sustainability a central part of its ethos and value proposition to consumers, directly linking sustainability investments with monetization.\textsuperscript{188} REI Co-op's climate governance reinforces its strategic position and reputation. The Higg Index provides REI Co-op's brands and manufacturers with a standardized platform, each 'module' assesses aspects of the product lifecycle, to provide a tool to set targets and monitor the sustainability actions of its brand partners, linking brand performance, financial returns, and impacts on the planet. Each year, more than 70% of REI Co-op's annual profits are invested back into the outdoor community through dividends to REI members, employee profit-sharing, and investments in non-profits dedicated to the outdoors, garnering the company 20 million lifetime members.

Over 110 countries representing 85% of the planet’s forests signed the COP26 Glasgow Leaders’ Declaration on Forests and Land Use, committing to halt and reverse deforestation by 2030.\textsuperscript{189} Financial institutions covering over US$8.7 trillion of global assets under management have committed to move away from portfolios that invest in high deforestation-risk agricultural commodity supply chains and towards sustainable production, accelerate actions that incentivize greater transparency and sustainability in the supply chain, support smallholder farmers to participate in markets, and drive new technology and innovation.\textsuperscript{190} Retailers need to stay current in these developments and assess how they may present new opportunities for managing climate-related financial risks in their supply chains.

There are opportunities for retail companies to demonstrate their commitments to climate and other ESG concerns, but integrity in advertising is important. In an ad campaign, Nike showcased Colin Kaepernick as one of the NFL players who kneeled during the national anthem before NFL games to protest police brutality resulting in the deaths of unarmed black Americans; its ads sparked a boycott of Nike, but also increased Nike’s value by US$6 billion within weeks.\textsuperscript{191} At the same time, the ad drew attention to Nike’s long history of using sweatshops to produce its sneakers and the

\textsuperscript{186} Sustainable Apparel Coalition, The Higg Index, The Higg Index – Sustainable Apparel Coalition.
\textsuperscript{187} Ibid.
\textsuperscript{189} UN News, “World leaders, corporations at COP26, take major step to restore and protect forests”, (2 November 2021), World leaders, corporations at COP26, take major step to restore and protect forests | | UN News.
\textsuperscript{190} Ibid.
\textsuperscript{191} Alex Abad-Santos, “Nike’s Colin Kaepernick ad sparked a boycott — and earned $6 billion for Nike”, Vox, (24 September 2018), Nike has made $6 billion since its Colin Kaepernick ad – Vox.
fact that Nike resiled from its agreement with international labour organizations to remedy myriad labour rights violations in its supply chain.\textsuperscript{192} A recent video juxtaposing Nike’s support of Kaepernick against Nike’s sweatshop labour received over 2.7 million views.\textsuperscript{193} Retailers need to ensure that their messaging to customers is consistent and really does advance the goal of a just transition.

### III. THE LEGAL DUTIES OF DIRECTORS IN OVERSIGHT AND MANAGEMENT OF CLIMATE-RELATED FINANCIAL RISKS

#### 1. Directors’ Duties under Corporate Law

Directors and officers of retail companies have the same duties as all corporate directors and officers in Canada. They have both a duty of care and a duty of loyalty, often referred to collectively as fiduciary obligation, to act in the best interests of the company.\textsuperscript{194} These common law obligations have been enshrined and strengthened in statutes across Canada.

For example, the \textit{Canada Business Corporations Act (CBCA)} specifies that directors and officers must exercise their powers and discharge their duties acting honestly and in good faith with a view to the best interests of the corporation; and they are to exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances.\textsuperscript{195} When acting in the company’s best interests, the directors and officers of the corporation may consider, but are not limited to considering, the interests of shareholders, employees, retirees and pensioners, creditors, consumers, governments, the environment, and the long-term interests of the corporation.\textsuperscript{196} The \textit{CBCA} creates defences to various potential liabilities under the statute if the director has exercised care, diligence, and skill, including reliance in good faith on financial statements given by corporate officers, auditors, or other professionals.\textsuperscript{197} Given the extensive scientific, financial, and regulatory evidence on climate risks, these duties require directors to consider any material risks to the best interests of the company, to assess their business plans for the risks, and to devise strategies to manage the risks.

In interpreting the scope of directors’ and officers’ duties under Canadian corporate law, the caselaw has been consistent for almost 20 years. The Supreme Court of Canada (SCC) has been clear that where cases alleging breach of directors’ duties come before it, the court will assess the decisions and conduct of directors against an objective standard of what a reasonably prudent person would do in comparable...


\textsuperscript{193} H Bomberguy, (2021), https://www.youtube.com/watch?v=06yy88tLWlg.


\textsuperscript{195} \textit{Canada Business Corporations Act}, RSC 1985, c C-44, as amended (hereafter \textit{CBCA}), section 122 (1), (2).

\textsuperscript{196} \textit{Ibid}, \textit{CBCA} section 122 (1.1) states: Every director and officer of a corporation shall comply with this Act, the regulations, articles, by-laws and any unanimous shareholder agreement.

\textsuperscript{197} \textit{Ibid}, ss 123(4) and 5.
circumstances.\textsuperscript{198} This objective standard means that a director’s personal views on climate change are irrelevant. Given that climate-related risks are now widely recognized by the courts and governments, directors have a duty to identify and ensure effective oversight of management of the company’s exposure to those risks.\textsuperscript{199}

The SCC has held that, from an economic perspective, the best interests of the corporation means the maximization of the value of the corporation.\textsuperscript{200} Directors can take into consideration the prevailing socio-economic conditions, and the “establishment of good corporate governance rules should be a shield that protects directors from allegations that they have breached their duty of care.”\textsuperscript{201} In \textit{BCE Inc v 1976 Debentureholders}, the SCC held that it will assess whether directors acted in the best interests of the corporation, having regard to all relevant considerations, and that where conflict arises between the interests of various stakeholders of the company, it falls to the directors to resolve them in accordance with their fiduciary duty to act in the best interests of the corporation, viewed as a “good corporate citizen”.\textsuperscript{202} The SCC held that in each case, the question is whether, in all the circumstances, the directors acted in the best interests of the corporation, including, but not confined to, considering the need to treat affected stakeholders in a fair manner, commensurate with the corporation’s duties as a responsible corporate citizen.\textsuperscript{203}

These findings relate directly to exercising a duty of care in respect of climate-related risks. As stewards of governance, directors and officers of retail companies have a duty to be proactive, and to critically evaluate and address the material financial risks and opportunities associated with climate change.\textsuperscript{204} Boards must ensure their managers are giving them the most effective information on these risks and opportunities, to allow them to devise short, medium, and long term strategies for the business.\textsuperscript{205} Balancing these different time horizons, risk factors, and different stakeholders is a key responsibility of directors and officers, and as information on climate risk continues to become available, these decisions can be complex.\textsuperscript{206}

In a leading Canadian legal opinion, Carol Hansell writes that directors need to be proactive:

Since there can be little doubt that directors are aware of climate change risk, they must inform themselves of the risk that climate change poses

\textsuperscript{198} Peoples Department Stores Inc (Trustee of) v Wise, [2004] 3 SCR 461 (SCC) at 491; BCE Inc v 1976 Debentureholders, [2008] 3 SCR 560 (SCC) at paras 36–8 (hereafter BCE).


\textsuperscript{200} Peoples Department Stores Inc (Trustee of) v Wise, note 198 at para 42.

\textsuperscript{201} Ibid at para 64.

\textsuperscript{202} BCE, note 198 at para 81.

\textsuperscript{203} Ibid at para 82.

\textsuperscript{204} Sarra, CD Howe, note 199 at 4.

\textsuperscript{205} Ibid.

\textsuperscript{206} Ibid.
to the corporation and how that risk is being managed. If this information is not already included in management reports to the board, the board should direct management to deliver the necessary information to them. Making room in the board agenda for regular reports from management on climate change risk is an important part of the board’s oversight of risk, but also sends a clear message to management that climate change risk is a priority. 207

This legal opinion mirrors legal opinions in Australia, the US, Singapore, Japan, India, and Hong Kong, meaning that directors globally are recognizing these duties. 208 Failure to act on both material risks and opportunities from climate change leaves retail companies and their fiduciaries vulnerable to charges that they have breached their duties to the company. 209

2. **Directors’ Duties under Securities Law**

Publicly-listed retail companies must comply with Canadian securities law, and our securities regulators have stated that climate change is now a mainstream business issue and companies must disclose material climate risks and how they are managing them. 210 The Canadian Securities Administrators (CSA) have cautioned that boilerplate disclosure is no longer acceptable; directors should be asking their managers for financial metrics that allow them to measure and disclose material risks and opportunities. 211 Even if the company is only beginning to develop a capacity to measure carbon emissions, it must disclose material risks identified and its efforts to measure and manage them. 212

The continuous disclosure obligations of publicly-listed companies set by National Instrument 51–102 Continuous Disclosure Obligations are aimed at improving the
quality, reliability, and transparency of public disclosures.\textsuperscript{213} CSA Staff Notice 51-358 Reporting of Climate Change–related Risks states that omitting or misstating material information in required continuous disclosure documents can lead to the board, management, and the company itself facing potential risks, including litigation, enforcement, or other regulatory actions such as an order to refile continuous disclosure documents.\textsuperscript{214} Directors must be satisfied that adequate procedures are in place for review of the company’s public disclosure of financial information derived from its financial statements, and must periodically assess the adequacy of its procedures.\textsuperscript{215} As Hansell has observed, directors should be aware that their decisions about disclosure under securities law are regulatory requirements not protected by the business judgment rule.\textsuperscript{216}

In October 2021, the CSA issued Proposed National Instrument 51-107 Disclosure of Climate–related Matters, aimed at enhancing transparency in capital markets regarding GHG emissions, including the need for serious reductions and the scaling up of sustainable finance.\textsuperscript{217} Canadian investors have long asked securities regulators to require more consistent and comparable information to help them make informed investment decisions.\textsuperscript{218} The proposed Instrument will create greater fairness among publicly–listed companies and allow investors to compare company to company and year over year in making decisions as to invest, continue to invest, or shift their investments to more sustainable finance.

The proposed National Instrument was prompted in part by the CSA’s review of 48 Canadian publicly–trading companies in 2021, primarily from the S&P/TSX Composite Index.\textsuperscript{219} It found that while the volume and quality of climate–related disclosures has generally improved, it is limited and lacks specificity; for example, while 68% of the risk disclosures provided a qualitative discussion of the related financial impacts, 25% of risk disclosures did not address the financial impact at all, and no issuers quantified the financial impact of the identified risks.\textsuperscript{220} This latter failure may place these companies in violation of accounting standards identified under international financial reporting standards that require disclosure of material climate–related financial risk.\textsuperscript{221}


\textsuperscript{214} CSA SN 51-358, note 211 at 7.

\textsuperscript{215} Audit Committees, note 213 at 11.

\textsuperscript{216} Hansell, note 207.


\textsuperscript{218} See for example, Canada, Expert Panel on Sustainable Finance, Final Report, (2019), Expert panel sustainable finance – Canada.ca.

\textsuperscript{219} Proposed NI 51-107, note 217.

\textsuperscript{220} Ibid.

The proposed National Instrument will require companies to disclose aligned with the four core elements of the TCFD recommendations: specifically, disclosing the board of directors’ governance oversight of, and management’s role in, assessing and managing climate-related risks and opportunities. The current draft creates a ‘comply-or-explain’ system, but that may change after the CSA consults with investors. Under this framework, issuers will be required to disclose their short, medium, and long term strategies to manage material physical and transition risks and opportunities and the impact on their business, strategy, and financial planning. The proposed Instrument does not currently require disclosure of climate scenario testing that allows companies to assess the resilience of their strategies within different climate-related scenarios. Issuers will be required to disclose how the company identifies, assesses, and manages climate-related risks and how these processes are integrated into their overall risk management.

Under the proposed National Instrument, companies will have to disclose the metrics and targets regarding climate-related risks and opportunities where the information is material. The CSA is consulting on whether issuers should be required to disclose their Scope 1, 2, and 3 GHG emissions and the related risks or only Scope 1. As noted in the introduction, Scope 1 covers direct emissions from owned or controlled sources; Scope 2 covers indirect emissions from the generation of purchased electricity, heating, and cooling the company consumes; and Scope 3 includes all other indirect emissions that occur in a company’s value chain. The CSA's materiality requirement does not keep pace with the TCFD’s latest recommendations, which suggest that there should be targets and measurement metrics for all Scope 1 and 2 emissions irrespective of materiality.

Mandatory TCFD-aligned disclosure has already been introduced in eight countries such as the UK and New Zealand, and has been endorsed by over 100 governments and regulators globally. New Zealand, in enacting its legislation in October 2021, removed the ‘or explain’ part of comply-or-explain as the Parliament concluded there needs to be a level playing field on disclosure. Former Bank of Canada Governor Mark Carney has said investors and lenders need to know that a company has a net-zero target that covers Scope 1, 2, and 3 emissions, including short and medium term...
milestones to monitor progress in the transition, urging companies to invest to reduce emissions in their supply chain to meet Scope 3 net-zero emissions targets.\(^{227}\)

The proposed National Instrument contemplates a phased-in transition of the disclosure requirements, with companies subject to a one-year transition and venture start-up companies subject to a three-year transition phase, the CSA suggesting that if the proposed Instrument comes into force by December 2022, these disclosures would be included in annual filings due in 2024 and 2026.\(^{228}\)

Privately-held Canadian retail companies do not have to meet these securities law disclosure requirements; however, they are required to disclose material information to their shareholders on an annual basis, and given the growing materiality of climate risk, such financial information is increasingly material.\(^{229}\)

3. Accounting Standards and Climate Change

All Canadian publicly-traded companies must comply with International Financial Reporting Standards (IFRS) in their financial reporting.\(^{230}\) Many other Canadian retailers have adopted IFRS. The IFRS Foundation has made clear that the standards require disclosure of material climate-related risks “when the effect of those matters is material in the context of the financial statements taken as a whole”, advising that “information about how management has considered climate-related matters in preparing a company’s financial statements may be material with respect to the most significant judgments and estimates that management has made.”\(^{231}\)

The IFRS Foundation published specific guidance in 2020 on climate disclosure across 11 accounting standards.\(^{232}\) It means that internal accounting and audit functions need to identify and account for material climate-related risk, and it is only a matter of time before external auditors will raise climate issues as a 'key audit matter'. IFRS are principles-based, which leaves room for retail companies to determine what is material to their business. The disclosure standards under IFRS and Canadian securities laws align in specifying that “information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions of the primary

---


\(^{228}\) Proposed NI 51–107, note 217.

\(^{229}\) CPA Canada, with contributory funding from Natural Resources Canada, is conducting a multi-year initiative to support enhanced climate-related disclosures with a focus on the TCFD recommendations, Climate change disclosure and decision making. Publications cpacanada.ca.


users of financial statements." Thus, directors of retail companies need to be aware of the company’s obligations under these accounting standards, as well as the market challenges that might arise from their investors.

In November 2021, the IFRS Foundation announced the establishment of a new International Sustainability Standards Board (ISSB) to develop a comprehensive global baseline of high-quality sustainability disclosure standards to meet investors’ information needs, working closely with the International Organization of Securities Commissions (IOSCO). This development is very positive as it should eliminate the need for retail companies to select among the current ‘alphabet soup’ of sustainable reporting standards. The ISSB will develop sustainability disclosure standards, including disclosure requirements that address companies’ impacts on sustainability matters relevant to assessing enterprise value and making investment decisions. The ISSB will merge with Value Reporting Foundation, which issues the Sustainability Accounting Standards Board (SASB) standards, and the Climate Disclosure Standards Board (CDSB) by mid-2022. The ISSB will have a multi-location structure, including an office in Montréal responsible for key functions supporting the new Board.

Climate-related disclosure standards will be the first priority. IFRS released two prototypes that will help accelerate the development of the ISSB’s standards, a climate prototype and a general requirements prototype. For example, with respect to the retail sector, the Technical Readiness Working Group’s prototype proposes, for consideration by the ISSB:

For Scope 3 greenhouse gas emissions, the entity shall provide an explanation of the activities included within the disclosed metric. For example, an online retailer may be exposed to risks or opportunities related to the greenhouse gas emissions arising out of third-party transportation and distribution services purchased by the reporting entity for outbound logistics of products sold to customers. The retailer may determine that information about such emissions is material to the users of its general purpose financial reports in their assessment of its enterprise value. Therefore, the retailer will explain how the emissions information provided by entities in its supply chain has been included in the determination of Scope 3 greenhouse gas emissions.

The ISSB is expected to consult publicly on proposals for the global climate-related disclosures standard in 2022.

---

233 IFRS 2020, ibid at 6.
234 IFRS Foundation, IFRS Foundation announces International Sustainability Standards Board, consolidation with CDSB and VRF, and publication of prototype disclosure requirements, (3 November 2021), IFRS – IFRS Foundation announces International Sustainability Standards Board, consolidation with CDSB and VRF, and publication of prototype disclosure requirements (hereafter IFRS Foundation).
235 IFRS Foundation, ibid.
236 ISSB, Climate-related Disclosures Prototype, (November 2021), Prototype Climate-related Disclosures Requirements (Climate Prototype) (ifrs.org);
Prototype General Requirements for Disclosure of Sustainability-related Financial Information.
237 Ibid at para 14.
238 Ibid.
IV. EFFECTIVE CLIMATE GOVERNANCE REQUIRES A PATHWAY TO NET-ZERO CARBON EMISSIONS

Canada and the rest of the world need to move swiftly from current carbon emissions to net-zero emissions. ‘Net-zero emissions’ means shifting to technologies and energy systems that do not produce carbon emissions, and balancing any remaining emissions by absorbing an equivalent amount from the atmosphere. A recent scientific study reports that achieving the net-zero emissions needed to stabilize the climate requires both acceleration in the use of non-carbon energy sources and a rapid decline in the global share of fossil fuels in the energy mix. Failure to effectively manage the transition to net-zero carbon emissions could affect the solvency of companies, including in the retail sector. Given the broad scientific and policy consensus on climate-related financial risk, there is considerable urgency that retailers act now to contribute to the mitigation needed. It requires a significant shift in capital and infrastructure investments, and the directors need to have the skills and information to manage this transition.

The TCFD recommended that directors focus on four key pillars: governance, strategy, risk management, and targets and metrics. In terms of governance, directors should have effective oversight of the company’s management of climate-related risks and opportunities. They should be ensuring that executives are assessing and managing climate-related risks and opportunities and reporting to the board on a regular basis. There should be specific strategies to tackle the actual and potential impacts of climate-related risks and opportunities on the company’s business plan and financial planning over the short, medium, and long term. In terms of risk management, directors should have effective oversight of the company’s processes for identifying, assessing, and managing climate-related risks. The directors and officers need a clear plan for the resilience of the company, taking into consideration different climate-related scenarios, including a net-zero emissions scenario. Companies should act now, familiarizing themselves with the scenario-analysis process, including the analytical choices they may face. They should ensure that these processes are integrated into the company’s overall strategic and business plans.

Retailers’ Scope 3 emissions are primarily the Scope 1 and 2 emissions of their suppliers and service providers. However, that fact does not alter the duties of retail company directors to manage climate-related financial risks. Retailers will need to find the requisite reductions upstream in the supply chain and should set supplier...
engagement targets to drive adoption of science-based targets for their suppliers’ emissions in their supply contracts.\textsuperscript{246}

Disclosing climate-related risks will require collaboration across the sustainability, risk assessment, finance, operations, and investor relations functions of the retail company.\textsuperscript{247} It is important for retailers to assess the business impacts and opportunities of climate-related risks.

The examples in the next part highlight some of the issues particularly important to the retail sector and a few of the strategies being used by different retailers to enhance their governance of climate-related issues.

\section{1. Setting and Meeting Targets in Reducing Emissions}

Since the majority of carbon emissions in the retail sector are Scope 3 emissions involving supply chains and distribution channels, it is critically important to set targets for emissions reductions across the retail value chain. Directors should understand and have oversight of the metrics used by the company to assess climate-related risks and opportunities in line with its strategy and risk management process, including Scope 1, 2, and 3 emissions. As noted above, the TCFD recommends disclosure of all Scope 1 and 2 emissions and targets for reduction irrespective of materiality. It recommends that Scope 3 emissions disclosure should be mandatory where it is material, but recommends that companies disclose Scope 3 emissions as best practices.\textsuperscript{248} There should be clear targets for emissions reductions and a mechanism to assess performance against targets.\textsuperscript{249}

The S&P 2019 Retail Report identified increasing consumer preferences for traceability of product sources and transparency regarding carbon footprints, with increased focus on clearer and meaningful labelling, reporting that transparency and fairness for suppliers and customers influence retailers’ public image.\textsuperscript{250} Targets that are disclosed to consumers and tracked to measure progress will align with both investor and consumer expectations.

\textsuperscript{246} Ibid.
\textsuperscript{247} Nelson, note 167.
\textsuperscript{248} TCFD, 2021 updated guidance, note 18 at 14–18.
\textsuperscript{249} WRI and SBTi, note 9; TCFD Final Report, note 54.
\textsuperscript{250} S&P Retail Report, note 35; for example, it reports that France’s government passed various regulations including a ban on plastic water bottles in school canteens, plastic straws, and hot-drink stirrers, animal welfare regulations, and wide environment–friendly practices.
The Retail Council of Canada has observed that emissions inventories can be a great tool for retailers to better understand the type and quantity of GHG emissions being generated on-site and throughout supply chains, as an aid to developing reduction strategies that have a multitude of benefits, including reducing climate risks, improving brand relevancy and reputation, providing data for corporate responsibility reports, and highlighting areas where operational performance can be improved, in turn helping reduce overall costs.251

A 2021 report reveals that in shipping a product via airplane over a distance of 1,000 kilometres, a parcel’s individual carbon footprint can be six to eight times higher than if it were shipped via ground freight.252 Retailers can thus reduce emissions by shipping by ground freight. Companies can avoid further emissions in their supply and distribution chains by prioritizing lightweight packaging to reduce fuel burn in vehicles, and prioritizing primary and secondary packaging with high recycled content.253 For example, Etsy, an e-commerce hosting website, became the first major online shopping retailer to offset 100% of its Scope 3 carbon emissions from shipping.254

The Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Standard provides a methodology that can be used to account for and report emissions from companies of all sectors.255 The Retail Industry Leaders Association has developed a working summary of some sources for GHG emissions factors, data, and methodology relevant to retailers who are developing a company GHG inventory, as aligned with the GHG Protocol scope categories.256

The World Resources Institute and Science Based Targets initiative (SBTi) have published guidance to mobilize apparel and footwear companies globally to set ambitious, but practical, science-based GHG emissions-reductions targets for their operations and supply chains.257 The targets will increase consistency across companies’ targets in the sector; identify barriers and provide recommendations; provide examples of best practices; and highlight opportunities for companies to collaborate in reducing emissions.258

SBTi monitors commitments by firms for emissions reductions and progress towards targets. For example, Holt Renfrew Stores has emissions-reduction targets approved

251 Retail Council of Canada, “Intro to emissions inventories and reduction strategies”, (3 June 2020), Intro to emissions inventories and reduction strategies – Retail Council of Canada.
253 Ibid.
254 Ibid.
257 WRI and SBTi, note 9 at 2.
258 Ibid at 7.
by the SBTi, committed to reducing absolute Scope 1 and 2 GHG emissions by 65% by 2030 and absolute Scope 3 GHG emissions by 28% by 2030 (from a 2019 base year), and committed to having 67% of its suppliers of goods and services and upstream and downstream transportation adopt science-based targets by 2025.\textsuperscript{259} Levi Strauss & Co has committed to reducing absolute Scope 1 and 2 GHG emissions 90% by 2025 and to reduce absolute Scope 3 emissions from purchased goods and services 40% by 2025 from a 2016 base year.\textsuperscript{260}

Vancouver-based Mountain Equipment Company (MEC) is working to minimize its carbon footprint from shipping products, prioritizing lower impact modes of freight. For overseas shipments, the majority of MEC Label products are shipped as ocean freight, and it uses rail as much as possible to move containers from the port to distribution centres, to minimize the use of trucks. It tries to reduce multiple shipments by consolidating loads for MEC label and other brands.\textsuperscript{261}

MEC reduces its carbon footprint by having virtual meetings with factories when it can. To further reduce emissions, its head office and stores offer safe bike parking and showers, are close to public transit hubs, and some locations have electric vehicle charging stations.

Patagonia is working on altering emissions across its entire supply chain, recognizing that 95% of its emissions come from its supply chain and materials manufacturing.\textsuperscript{262} It makes the point that it has to invest in its supply chain in order for transition to occur, financing energy and carbon audits for partners that focus on reducing coal and other carbon-intensive fuels used in the manufacturing of its materials.\textsuperscript{263} Patagonia has committed to being carbon neutral by 2025, reporting that:

\begin{quote}
The clothing industry is responsible for a whopping 10 percent of global carbon emissions—more than the combined emissions of international flights and maritime shipping. Every part of the clothing industry contributes to the climate crisis in some way. Most clothes are made in factories that rely heavily on energy from coal and gas. Synthetic materials, such as polyester, are especially carbon intensive, but even clothes made from natural fabrics, like hemp or cotton, strip soil of nutrients and release carbon trapped in the ground into the atmosphere, further warming our planet. If business continues as usual, the clothing industry is expected to need three times as many resources to keep up with consumer demand by 2050. If we’re to keep Earth livable in the future, the clothing industry must change. At Patagonia, approximately 95 percent of our carbon emissions come from our supply chain— the term that textile manufacturers use to describe everything from the crops
\end{quote}


\textsuperscript{260} Ibid at 9.

\textsuperscript{261} MEC, \textit{Packaging and transportation | MEC}.

\textsuperscript{262} Patagonia, “The Climate Crisis Is Our Business”, Climate Goals - Patagonia.

grown to make yarn, to shipping finished clothes to warehouses, stores
and our customers’ front steps. To reduce Patagonia’s impact on people
and the planet, we are working toward becoming carbon neutral across
our entire business, including our supply chain, by 2025.264

The UN-affiliated Fashion Industry Charter for Climate Action Circular Fashion
System Commitment requires signatories to commit to 30% aggregate GHG emission
reductions in Scope 1, 2, and 3 based on the Greenhouse Gas Protocol Corporate
Standard265 by 2030 against a baseline of no earlier than 2015.266 It supports global
transition to low−carbon transport by giving preference to low−carbon logistics, and
supports the movement towards circular business models as a decarbonization
strategy.

2. Transition Plans

Transition plans will be critically important for the retail sector. The TCFD reports
that a transition plan is key to overall business strategy that lays out a set of targets
and actions supporting transition to a low−carbon economy.267 The TCFD
recommends that effective governance means the plan should describe the approval
process, oversight, and accountability responsibilities within an organization,
including the role of the board and senior management in overseeing the plan.268
Transition plans should be anchored in climate−related metrics and targets, designed
to consider and help achieve specific targets in an organization’s planned transition.269
Progress against targets should be regularly tracked using appropriate metrics. The
plan should articulate specific and credible initiatives and actions the company will
undertake to effectively execute and reach regular milestones in decarbonization.270
The TCFD also recommends that a transition plan be reviewed at least every five
years and updated if necessary to ensure continued relevancy and efficacy to the
overall strategy planning process.271

Under governance, the TCFD reports that it is essential that the board approves the
transition plan and climate−related targets, and oversees its implementation; ensures
senior management has responsibility and accountability for execution of the
transition plan, and the responsible parties have adequate authority and access to
resources to ensure effective execution. Remuneration should be aligned with the
company’s climate goals, and the board should receive regular status reports,
periodically reviewing and updating its activities, metrics, and targets. The company
should be transparent in reporting on its transition planning goals and performance to

Neutrality Goal – Patagonia.
265 The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard provides requirements
and guidance for companies and other organizations preparing a corporate−level GHG emissions
266 UNFCCC Fashion Industry Charter for Climate Action, Circular Fashion System Commitment, About the
Fashion Industry Charter for Climate Action | UNFCCC, UNITED NATIONS (unfccc.int).
267 TCFD, 2021 updated guidance, note 18.
268 Ibid at 41.
269 Ibid.
270 Ibid.
271 Ibid.
external stakeholders, including financial aspects, performance against targets, impacts on the retail business, and updates to the plan; and the organization’s reporting should be subject to independent review or third-party assurance.\footnote{Ibid at 42.}

In respect of strategy, the TCFD recommends that the company align its transition plan with its overall business strategy, describing how it will achieve targets in defined time horizons, alignment to relevant regulatory mandates and sectoral decarbonization strategies. The transition plan is to describe the company’s assumptions, particularly around transition pathway uncertainties and implementation challenges.\footnote{Ibid.} The transition plan should describe how the company intends to take up new opportunities as it transitions: outlining short and medium term tactical and operational plans, and describing how related actions address material sources of GHG emissions, with current and planned initiatives to reduce climate-related risks and increase climate-related opportunities.\footnote{Ibid.} The TCFD also recommends that the transition plan describe the supporting financial plans, budgets, and related financial targets, using multiple scenario analyses to test achievability of the transition plan and associated targets.\footnote{Ibid.}

Under risk management, the TCFD recommends that the transition plan describe the assumptions, uncertainties, risks, and challenges the organization faces in successfully executing its transition plan.\footnote{Ibid.} The transition plan should describe metrics the company will monitor to track progress against plans and targets, including related operational and financial performance metrics, and industry-specific or organization-specific metrics.\footnote{Ibid.} The transition plan should include quantitative and qualitative targets: indicate the type and scope of GHG emissions included as well as the extent of GHG emissions across territories, timeframes, or activities; explain how metrics and targets in the transition plan are based on widely-recognized and transparent science-based methodologies, and specify the dates when targets are intended to be reached, the plan’s time horizon, and the relative contribution of reductions, removals, and offsets for achieving GHG emissions reduction targets.\footnote{Ibid.}

### 3. Increasing Energy Efficiency

Another key component to decarbonization is for retailers to increase the efficiency of their energy use. SASB’s Sustainability Accounting Standard for Multiline and Specialty Retailers and Distributors observes that companies in this sector, including department stores, mass merchants, home products stores, and warehouse clubs, require significant amounts of energy for their retail facilities and warehouses.\footnote{SASB, Sustainability Accounting Standard for Multiline and specialty retailers and distributors, (2018), at 5, Multiline and Specialty Retailers & Distributors (sasb.org). SASB has separate standards for the Food Retailers & Distributors (FB-FR), Drug Retailers (HC-DR), E-Commerce (CG-EC), and Apparel, Accessories & Footwear (CG-AA) industries.} It
reports that fossil fuel–based energy production and consumption contribute to significant environmental impacts, including climate change and pollution, and it is becoming increasingly important for companies to manage their overall energy efficiency and their access to alternative energy sources, which can have financial implications through direct cost savings that are particularly beneficial in this sector. The IEA reports that global demand for wind and solar energy is rapidly increasing, forecasting that renewable energy will account for 90% of the energy sector’s expansion in 2021 and 2022.

Retail companies are adopting renewable energy to reduce their carbon footprints. A growing number of retail companies with physical stores are shifting to meet their energy requirements with rooftop solar panels. In the UK, Meadowhall’s installation of 3,418 solar panels atop its retail shopping centre generates 770,000 kilowatts of solar energy a year, the equivalent to the electricity use of 230 average UK households, and the annual CO₂ savings is equivalent to taking 175 cars off the road.

Québec–based fashion store Simons created and uses a net-zero solar-powered, 80,000 square-foot space at Galeries de la Capitale in Québec City and uses 27 geothermal boreholes drilled into the ground under the parking lot with a pump that then uses thermal heating or cooling from the ground to control the store temperature, depending on the season.

MEC has been a retail leader in energy efficient buildings, having the first two retail stores in Canada that comply with the Natural Resources Canada C2000 Green Building Standard, which acknowledges buildings that achieve a 50% reduction in energy consumption over conventional structures. MEC has created energy savings through LED lighting, motion sensors to turn off lights in unoccupied areas, and sawtooth-shaped roofs and high windows that let in as much natural daylight as possible. In some stores, MEC has incorporated energy-efficient features such as geo-exchange systems in concrete floor slabs to provide radiant heating and cooling, ventilation that uses natural convection and prevailing winds to maintain temperature and air quality, and onsite solar energy panels in some stores.

Patagonia is pushing its suppliers to increase energy conservation and convert to renewable energy in their operations, investing in regenerative organic agriculture
and reforestation to capture and store carbon. Its environmental profit & loss metric (EP&L) calculates the carbon, water, and waste costs of every item it sells, using the metric to drive product choices, identify and prioritize improvements, and reduce energy consumption, creating a mechanism that “holds us accountable to our customers, and the planet”.

In 2020, IKEA product production achieved a 15.5% reduction in its carbon footprint in absolute terms compared to baseline 2016, due primarily to the increase in renewable energy, phase-out of coal-based energy, and enhancing energy efficiency. The solar installations in its Alberta stores reduce IKEA’s annual energy use in the province by 25%. IKEA Group announced a €200 million investment to accelerate renewable energy investments in production and to remove CO₂ from the atmosphere through forestry and other land-use projects. IKEA is committed to becoming climate positive by 2030, reporting that to accomplish this goal, it will need to take responsibility to halve the climate footprint of the total IKEA value chain by 2030 by drastically reducing GHG emissions and transforming into a circular business; working towards electrification, 100% renewable energy, and continually improving energy efficiency; and using more materials and food ingredients with a low carbon footprint.

A growing number of retail stores are installing EV charging stations at their stores, incorporated into pre-existing car parking spaces. Only 17,000 electric cars were on the road in 2010 globally, by 2020, there were 10 million. The charging stations are aimed at increasing dwell time at retail stores and reducing the carbon footprint of customers travelling to the stores. Retailers are negotiating agreements with the provider for a repayment structure for the charging stations.

In a 2021 survey of 7,000 retail consumers globally, McKinsey & Company and the World Economic Forum found that more than 70% of survey respondents want delivery of goods to shift to electric or hydrogen fuel-cell plug-in hybrid electric vehicles for long-haul trucking and intracity transport, and more than 40% said they would pay a premium to enable this shift. Consumer sentiment will likely increasingly affect energy decisions of the entire supply chain. The Canadian-based Transition Accelerator is studying how to reduce transport emissions, noting that

291 Roche, note 284.
292 IKEA Sustainability Report Y2020, note 290.
295 See for example, M de Prez, “Brent Cross shopping centre to offer 236 EV chargers”, Fleet News, (14 May 2021), Brent Cross shopping centre to offer 236 EV chargers | Electric fleet news.
296 McKinsey & Company, Mobility investments in the next normal, (March 2021), Mobility investments in the next normal | McKinsey.
heavy trucks account for 40% of freight movement in Canada but generate nearly 90% of freight-related GHG emissions.\textsuperscript{297} It reports that transition and energy systems need to conceptualize what a viable net-zero energy system could look like in the future, which should include hydrogen fuel cell trucks and battery electric trucks, advocating a transition approach where policy design and investment are focused on accelerating sector-level change, including decarbonizing electricity generation, developing and deploying net-zero fuels to replace fossil fuels in situations where electrification is difficult or expensive, and enhancing energy efficiency to meet the net-zero energy needed to fill demand.\textsuperscript{298}

Within retail energy efficiency planning is a live question about the future mix of online and in-store retail. The World Economic Forum reports that the increase in online retail in the first half of 2020 was equivalent to that of the previous ten years.\textsuperscript{299} Research by Sequoia Partnership found that up to 11 times more fuel is required to deliver a single product to a customer’s house by traditional delivery van, compared with delivery to a store where consumers pick up the goods.\textsuperscript{300} Tracking these metrics allows the retail company to make informed decisions regarding distribution strategies.

A study by Barbeau et al from Bensadoun School of Retail Management at McGill University in 2021 found that the retail shift to e-commerce was accelerated by the pandemic, retailers adopted more online retail technologies, much of that activity expected to remain post pandemic.\textsuperscript{301} The study notes that the pandemic expanded e-commerce’s environmental footprint in transportation, returns, and packaging.\textsuperscript{302} The authors suggest that while e-commerce has the potential to advance environmental sustainability by reducing promotion-related in-store printed paper and inventory waste, custom deliveries increase carbon footprints.\textsuperscript{303} They observe that 65% of carbon emissions from physical retail stores come from consumers travelling to stores, and carbon emissions can only be reduced if multiple orders are pulled together into a single trip by the consumer or deliverer, requiring utilizing the most efficient route and employing a scheduling strategy that serves a proximity-assigned set of consumers.\textsuperscript{304}

Barbeau et al suggest that pickup points have the potential to reduce emissions, but only when there is a compact distribution of stores or pickup points that consumers

\textsuperscript{297} Transition Accelerator, (2021), Transportation – Transition Accelerator.
\textsuperscript{300} JLL, “Valuing retail in its global journey to Net Zero Carbon”, (July 2021), at 7, Where is retail in its ESG journey to Net Zero Carbon? (jll.ca).
\textsuperscript{302} Ibid.
\textsuperscript{303} Ibid.
\textsuperscript{304} Ibid.
can access by walking or cycling, which is often not the case. The authors also note that returns factor into the sustainability equation in a significant way, the return rate for online items is three times higher relative to physical retail. They suggest that the most energy-efficient way to return packages is for delivery companies to slightly alter their usual routes to collect them, and the worst option is to return orders in-person at the retail location.

All these reports and best practices examples confirm that energy efficiency is a key component in retailers transitioning their business to net-zero emissions.

### 4. Reducing Waste, Protecting Biodiversity, and Moving to Circular Economic Activity

A fundamental premise of retailers adopting climate change initiatives is the realization that these initiatives will have meaningful and beneficial impact for the company and its reputation, given growing investor and consumer demand for climate positive businesses. Key for retailers is being able to easily measure, track, and execute the initiatives that support the transition to net-zero emissions. Governments, investors, and the retail sector are increasingly committed to reducing waste, protecting biodiversity, and shifting to circular economic activity.

McKinsey & Company report that the apparel industry is a significant contributor to biodiversity loss and apparel supply chains are directly linked to soil degradation, conversion of natural ecosystems, and waterway pollution. A US study by retail logistics company Optoro found that 2.25 million tonnes of retail returns end up in landfill every year. Barbeau et al report that “On average, the equivalent of 5,600 fully loaded 747 jets of returned items end up in the US landfills each year.” Packaging is estimated to contribute 22% of the total carbon emissions of an online order, much greater than physical retail packaging. Materials used are often difficult to recycle, and not the most environmentally-friendly option, considering that retailers in stores encourage customers to carry items in reusable shopping bags.

Barbeau et al found that the Canadian food industry took a huge step backwards during the pandemic with a return to plastic instead of reusable containers; and, as in many sectors, dramatically increased their waste output from use of personal protective equipment. The huge increase in e-commerce for food, fashion, and technology generated a mountain of packaging waste and a rise in carbon emissions. However, they also suggest that the same food delivery apps that generate packaging waste

---

305 Ibid.
306 Ibid at 3.
307 Ibid.
310 Ibid.
311 Barbeau et al, note 301 at 4.
312 Ibid.
313 Ibid.
create the opportunity to nudge consumers toward a more climate-friendly diet, which could ultimately reduce emissions.\textsuperscript{314}

Retail companies are increasingly focusing on reducing waste and single-use plastics within operations, using more sustainable packaging, and embedding more sustainable materials in product designs.\textsuperscript{315} Retailers are using post-consumer recycled shopping bags and hangers. For example, Holt Renfrew has set a goal to improve its waste diversion rate to 85% in all its stores by the end of 2024.\textsuperscript{316}

MEC has embedded circular economy principles for well over a decade. It has a responsible sourcing policy and supplier code of conduct that covers MEC label products and products from other brands it sells.\textsuperscript{317} MEC has worked to cut down or cut out packaging for products when they’re shipped from factories, and uses recyclable materials so members can recycle packaging instead of it ending up in landfill. All of the cotton in MEC label products is organically grown, using less energy and less water, resulting in fewer nutrients leaching from the soil.\textsuperscript{318}

Since 1997, MEC has operated an online outdoor gear swap to recycle used outdoor gear and clothing. Until the pandemic, it was operating in-store gear repair services, and now it has created guides and videos to assist customers to repair and maintain gear.\textsuperscript{319} All of MEC’s #ClimbGreen products are made from more sustainable materials or offer a particularly long service life; for example, its dynamic ropes are bluesign\textsuperscript{*} certified, which means 89% less water used, 63% less CO\textsubscript{2} emitted, and 62% less energy and chemicals used during manufacturing, compared to traditional rope.\textsuperscript{320} The bluesign designation requires that toxins aren’t released into air, water, or on land, and workers are not harmed by chemicals they’re handling.\textsuperscript{321} Consumers are paying attention to these disclosures in making purchasing choices. In 2021, 80% of MEC’s label products are bluesign approved, and its goal is to make that 100% by 2025.\textsuperscript{322}

MEC circular economic activities are also aimed at improving the lives of workers in the supply chain. Its goal is to have 50% of MEC label clothing made in a Fair Trade Certified™ factory, which signifies that an item was made by people in safe and healthy

\textsuperscript{314} Ibid.
\textsuperscript{315} See for example, Holt Renfrew, note 259, which is “consciously curated” a product line offering more socially responsible products in stores using materials from certified/verified sustainable sources by the end of 2025.
\textsuperscript{316} Ibid. Holt’s has developed Green Build Guidelines for design, visual, and construction teams that outline requirements for sustainable building materials and products that are good for the planet and that cultivate healthy indoor air quality.
\textsuperscript{317} MEC, Sourcing and supply chain | MEC.
\textsuperscript{318} Sophie Merritt, “Our Sustainability Goals for MEC Label Products”, MEC, (1 April 2021), Our sustainability goals for MEC Label products (hereafter MEC, Our Sustainability Goals).
\textsuperscript{319} MEC, Repairing and reusing products | MEC.
\textsuperscript{320} MEC, “Stronger Together: Sustainability Goals from Brands and Partners”, (6 April 2021), Stronger together: sustainability goals from brands and partners: sustainability goals from brands and partners | MEC (hereafter MEC, Stronger).
\textsuperscript{321} MEC, “What the heck is Bluesign?” (16 March 2020), What the heck is Bluesign? | MEC, Bluesign acts as an independent verifier, deploying chemists, engineers and technical specialists to trace each textile’s path along the manufacturing process, (2021), bluesign\textsuperscript{*} – solutions and services for a sustainable textile industry.
\textsuperscript{322} MEC, Our Sustainability Goals, note 318.
working conditions, where workers receive additional money for the items they made, have a voice in their workplace, and women are treated equally. For each certified product, MEC pays an added premium and these funds go to a worker-managed bank account. A worker-led Fair Trade committee votes and decides how to use the funds, and to date, they have been used to pay bonuses, improve community transportation or access to healthcare, water filters, language classes, and to purchase basic household appliances.

MEC has set some ambitious circular economic targets. Its goal is that by 2023, 50% of the polyester in MEC label products will be made from recycled content, and by 2030, the goal is 100%. By turning recycled plastic water bottles and fishing nets into outdoor gear and clothing, MEC gives old products a second life. MEC reports:

When you choose something made with recycled content, you’re diverting waste out of the landfill and keeping it out of oceans. But the benefits don’t stop there. Recycling waste – like single-use plastic bottles, fishing nets or even carpets – means you don’t need to create as many new raw materials, which also saves energy and water.

Your options for recycled fibres just keep growing as technology improves. Along with synthetics like recycled polyester and nylon, there are recycled natural fibres like cotton, down and wool. MEC Label’s current focus is to use more recycled synthetic fibres, since this is where we see the biggest impacts and challenges. We use recycled fibres in everything from fleece jackets and base layers to sleeping bags and running shorts.

We know that recycling is only one part of the solution to the problem of waste. The most important consideration? Reducing waste in the first place. Gear rentals reduce the need for new gear, gear repairs extend the life of existing items, and the products made by MEC Label are designed to last.

MEC sells clothing by Arc’teryx, which has committed to reducing its GHG emissions intensity by 65% by 2030, approved by the Science-Based Targets Initiative. Another brand MEC sells, North Face, is one of the largest apparel brands to set science-based targets to reduce the carbon impact of its products by 30% by 2030.

---

324 MEC, Fair Trade Certified, ibid.
325 MEC, Our Sustainability Goals, note 318.
326 MEC, “Recycled Content”, Recycled content | MEC.
327 MEC, Stronger, note 320.
328 Ibid.
MEC invites its customers to take a 'green self-tour' in its stores, showcasing features such as rainwater collected from the roof and stored in an underground cistern that provides water for non-potable uses; composting toilets that reduce wastewater and provide fertilizer for its rooftop garden; landscaping that uses non-invasive, drought- and salt-tolerant species, and plants that encourage bird and insect populations; reclaimed materials, such as steel beams or timber from log booms; and purposeful ponds (bioswales) around stores for storm and rainwater management. Integrating its circular economy principles in its marketing and interactions with customers creates a sense that their purchases are helping generate more just and climate friendly economic approaches to retail. Both MEC and Patagonia use the sushi roll method of packaging to eliminate the use of polybags from the manufacturers to on-site retail.

While hundreds of North American shopping centres closed during the pandemic, a new approach to retail centres is beginning to appear, one that embraces net-zero carbon emissions and a circular economic and cultural approach. Burwood Brickworks Shopping Centre in Australia is the first retail centre to achieve the Living Building Challenge Petal Certification, certified carbon neutral under the Australian Government’s Climate Active Carbon Neutral Standard. It has a 2,500 square metre rooftop urban farm; its 1mw of rooftop solar panels power the entire shopping centre; and it has its own water treatment facility able to filter rainwater for use in the centre, and then recycled water is captured, treated, and re-used. It is developing a net-zero carbon roadmap with ambitious targets for Scope 2 and 3 emissions. All utilities are to supply 100% renewable energy by 2023. It is adopting science-based targets for the entire business to be net-zero carbon emissions by 2028. All new projects must reduce potable water demand by at least 55% and all non-potable water uses over a year now must be met by a reclaimed and/or recycled water source. Its goal is zero waste by 2030, and in 2020, it was recycling 90% of construction materials from landfill on all new build projects. Importantly, Burwood Brickworks has integrated apartments, homes, and townhouses that are part of this sustainable vision, creating a new community hub and gathering place as part of the brickworks.

UK supermarket Tesco, in partnership with Loop, has launched a trial of its zero-waste shopping service in ten stores, enabling consumers to buy common household goods in reusable packaging that can be returned to stores to be used again (dish soap, condiment containers, etc), with the aim of allowing consumers to return and

---

329 MEC, Green buildings | MEC.
330 See for example, Patagonia Baselayer Packaging - by Capsule / Core77 Design Awards.
331 Green Street reports that mall asset values have fallen approximately 45% from 2016 to 2021 and the poorest performing will close, Green Street’s 2021 Sector Outlooks: Seeing the Forest and the Trees.
335 Ibid.
336 Burwood Brickworks, (2021), Burwood Brickworks New Apartments at 70 Middleborough Road, Burwood East - realestate.com.au.
reuse packaging to reduce the demand for single-use plastics.337 The retailer estimates that if customers switch just three products in their weekly shop, packaging would be reused more than 2.5 million times a year.338 While hundreds of such boutique stores exist, the adoption by a major retail grocery chain has the potential to massively scale up reduction of waste.

Patagonia has committed to use only organic and regenerative organic cotton and recycled materials in its apparel by 2025, stating:

Switching to recycled and renewable inputs is a big part of the solution, as is the development of low-emission dyeing techniques and biobased and biodegradable materials. To date, we’ve made significant progress on recycling the high-quality polyester and nylon we use in many of our best products. In 1993, Patagonia was the first outdoor clothing manufacturer to transform trash into fleece, and this fall, 69 percent of all materials used in Patagonia products will be recycled. By using recycled materials in this one season alone, we are reducing our carbon footprint by 20,000 tons of CO₂e—that’s like taking 4,200 cars off the road for one year.339

Patagonia links its climate commitments to protection of nature and social justice.340 Its website encourages its customers to engage in a range of petitions and other actions to ‘build back’ following the COVID-19 pandemic without fossil fuels, to protect biodiversity, and to link climate justice with racial justice, and it has aligned itself with hundreds of environmental, social justice, church, and other organizations, winning a huge customer following as a result.341

Retail companies can also look to shifting product sourcing to a more local supplier mix to reduce transportation costs and maintain agility; strengthen supplier partnerships to drive product innovation toward environmental sustainability; and focus on digitizing sourcing to improve predictive analytics for production.342 The Sustainable Apparel Coalition reports that sustainability must be central to post-pandemic decision-making in the retail sector, accelerating transparency in retailers’ sustainability measures.343 It suggests that retail companies must take advantage of

---

337 Kate Hardcastle, “Ahead Of The UN Climate Conference, Here’s How Retailers Are Combating Climate Change”, Forbes, (30 September 2021), Ahead Of The UN Climate Conference, Here’s How Retailers Are Combating Climate Change (forbes.com).
338 Ibid. There are already approximately 320 independent zero/low waste stores across the UK.
340 It joined a coalition of Navajo Nation, Ute, Ute Mountain Ute, and Zuni nations challenging the legality of the president’s action to cut Utah’s Bears Ears National Monument by 85% and Grand Staircase-Escalante National Monument by half in US District Court for the District of Columbia: Patagonia, “Hey, How’s That Lawsuit Against the President Going?”, (2018), Hey, How’s That Lawsuit Against the President Going? – Patagonia.
341 Public Lands and Waters Are under Threat – Patagonia Action Works.
342 Barbeau et al, note 301 at 5.
digitalization, innovative business models, and end-to-end solutions in order to assess and demonstrate positive environmental and social impact to stakeholders.\textsuperscript{344}

In 2021, Sobeys Inc initiated a materiality assessment to identify and prioritize climate and other ESG issues most important to its stakeholders, canvassing customers, suppliers, investors, and employees.\textsuperscript{345} It reviewed grocery and retail industry leading practices and sustainability reporting frameworks and is now reporting according to the SASB Food Retailers & Distributors Standard to provide investors clearer information on how it is managing its long-term sustainability.\textsuperscript{346} Sobeys found high demand for setting a target for eliminating single-use plastics and reducing packaging.\textsuperscript{347} It will be interesting to see how this mapping is reflected in the company’s strategies going forward.

Aldi is the top-ranked grocery retailer for sustainability in the US, according to a study published by online sustainability platform Brightly, based on five factors – plastic bag usage and packaging materials, waste reduction pledges, recycling offerings in stores, use of renewable energy, and carrying sustainable product lines.\textsuperscript{348} Consumers are reading these platform metrics and making choices to shop where these stores are available in their region.

There has also been tremendous growth in the number and value of smaller companies that sell products where their main point of differentiation is the low level of impact the product has on the environment. Small retailers are starting out with the circular economy in mind. For example, Canadian retailer Ten Tree uses environmentally sustainable materials, with careful attention to water use, waste, and carbon emissions.\textsuperscript{349} It plants ten trees for every purchase made, and to date has planted over 67 million trees.\textsuperscript{350} Toronto based lark inc is a retailer of beverages with a circular sales strategy: it sells its beverages in refillable glass bottles, sealed with ultra-thin, non-toxic water soluble labels; it delivers, picks up and sterilizes bottles for reuse, and its beverages use only water sourced from an Ontario spring that is tested and government regulated, lowering its carbon footprint.\textsuperscript{351}

\begin{thebibliography}{99}
\bibitem{344} Ibid.
\bibitem{346} Ibid. See also Sobeys, “materiality”, Materiality (sobeys.com).
\bibitem{347} Ibid. The three biggest issues were diversity, equity and inclusion; plastics and packaging; and community investment. It also conducted a National Food Waste consumer-education campaign in 2020 to improve consumer sustainability including using reusable grocery bags and food storage containers, ending single-use plastic, reducing waste, increasing composting, replacing old appliances and fixtures with energy-efficient certified models, see Feeding Families, Not Landfill, https://corporate.sobeys.com/corporate-responsibility/food-waste/.
\bibitem{348} S Hirsh, “Find Out Which Major Supermarkets Are the Most and Least Sustainable”, Green Matters, (17 June 2021), Which Supermarkets Are Most Sustainable, From Aldi to Trader Joe’s (greenmatters.com).
\bibitem{349} Ten Tree, (2021), Sustainable Clothing by tentree® | Shop Organic + Plant 10 Trees | tentree CA®.
\bibitem{350} Ibid.
\end{thebibliography}
Nova Scotia retailer Faire Child won an innovation award for its environmentally-friendly fashion design, with responsibly created, entirely recyclable, collections. Its ‘cradle-to-cradle process’ starts with procurement of 100% recyclable textiles that it transforms into superior-quality garments; and the process finishes when the garment is returned to the company for recycling at the end of its useful life.

In 2019, IKEA Canada launched a buy-back program in all its Canadian stores. Customers apply to sell their gently-used IKEA products back to the retailer, in exchange for store credit. IKEA then gives the product a second-life through resale or donation as part of its commitment be a fully circular business by 2030. In 2021, more than 1.8 million products were given a second life at IKEA Canada through repackaging and resale. In November 2021, IKEA Canada launched a month-long ‘Green Friday’ campaign, offering an alternative to the ‘black Friday’ sales, IKEA announcing that it is trying to shift the conversation to show how sustainable living can be affordable for everyone, inviting Canadians to close the loop on circularity, first encouraging customers to sell-back their IKEA products and then offering special promotions to shop pre-loved items within the retailer’s circular hub (As-Is) section. IKEA is piloting new models that offer furniture as a rental service rather than ownership. Its goal is to become a climate positive business by 2030 and it is engaging with suppliers and working in social business partnerships to reduce emissions and protect biodiversity.

Random Acts of Green is a small Canadian company working with 100 companies to bring businesses and people together in an online community, including an app, social media platforms, webinars, and website, to empower collective climate action between consumers and companies. Other organizations are monitoring retailers for their commitments to the environment.

In order to protect biodiversity, McKinsey & Company recommend four strategies for apparel retailers: scale up innovative materials and processes to improve the sustainability of materials used, including organic cultivation and regenerative techniques; invest in scaling up the commercial availability of innovative fibers that protect biodiversity; engage with suppliers through education, targeted investment,
and stricter accountability to establish basic certification standards at scale in supplier countries that lack the resources, knowledge, and regulation to monitor and track the chemicals they use; educate consumers about what they can do to minimize the impact of their actions on biodiversity loss, for example, changing washing-machine settings to cold express cycles can reduce microfiber shedding by 57%. McKinsey & Company note that overproduction of clothing is estimated to be 20% annually, of which a quarter ends up in landfills or is incinerated without ever having been worn, so production amounts need to be better controlled.\textsuperscript{359} It recommends factoring biodiversity impacts into financial reporting and being proactive in engaging with governments on meaningful biodiversity regulation, observing that biodiversity will become an even greater concern for consumers and investors in the near future.\textsuperscript{360}

Similarly, food retailers can make a difference to biodiversity in terms of where and how they source produce as well as through their packaging and transportation decisions. It requires systematically evaluated direct and indirect impacts on biodiversity, and then express goals for beginning to address protection of biodiversity. The Business and Biodiversity Resource Centre issues guidance on how companies can begin to document and address protection of biodiversity.\textsuperscript{361} The EU has a comprehensive biodiversity strategy for 2030, aimed at protecting nature and reversing the degradation of ecosystems.\textsuperscript{362} Other governments are just beginning to follow suit.

In all this circular economy activity, consumers and investors will be scrutinizing retailers’ claims regarding emissions reductions and elimination of waste. It is essential that the retail sector act ambitiously in its climate governance, but not overstate its activities and leave itself vulnerable to reputational or litigation risk.

5. The Future of Retail Governance?

There are many challenges for the future of retailers, well beyond the scope of this guide, and best left to the experts.\textsuperscript{363} Given these complex challenges, retail boards of directors must ensure good governance and financial sustainability, balancing environmental sustainability commitments and regulatory requirements.

Some challenges for the future of the retail sector are particularly relevant to climate governance. The first is developing strategic planning that accounts for the massive market shift to online shopping. Many retail locations for many years were developed to take advantage of commuters to offices and other urban hubs, in terms of retail sales during their commute and lunch breaks as key marketing opportunities.\textsuperscript{364} As companies reduce commercial and office space to limit their carbon footprints, much of that retail foot traffic has disappeared. One need only walk through the downtown

\textsuperscript{359} McKinsey & Company, note 308.
\textsuperscript{360} Ibid.
\textsuperscript{361} Business and Biodiversity Resource Centre, Food & drink sector – wildlife (biodiversity) information (businessandbiodiversity.org).
\textsuperscript{364} Stephens, Resurrecting Retail, ibid at 45.
Toronto core at lunchtime to see the drastic decrease in consumer retail foot traffic. Even with the reopening of offices, a majority of businesses are adopting hybrid work at home/office models, which may affect retail sales traffic.

However, with extensive vaccination programs, consumers are returning to stores. Stephen observes that:

Consumers are reverting back to stores when they’re able to and thus e-commerce numbers have been modifying from the levels we saw at the outset of the pandemic lockdown. That said, we can expect to see a larger level of annual percentage growth in online spending because consumers have been more broadly acclimated to their online options and because retailers en masse have improved their capabilities. China’s economy crossed the 50% threshold of e-commerce as a percentage of the total retail economy in 2021, and it is plausible that North America could see upwards of 30-40% of retail conducted digitally by the end of this decade.\textsuperscript{365}

As urban planners adopt policies to curb urban transportation emissions with more bike lanes and pedestrian cores, retail companies will need to adjust to these zoning changes as well as accommodate different types of modes, such as bicycle racks. Bike Share Toronto offers 24/7 access to 6,850 bikes and 625 stations across 200 km\textsuperscript{2} of Toronto.\textsuperscript{366} These new forms of urban transportation will affect access to physical retail locations.

The growing phenomenon of pop-up stores allows companies to test new store locations by offering consumers an ‘opening’ type experience, while reducing short term retail carbon footprint.\textsuperscript{367} Stephens observes that Alibaba uses physical stores as part of an integrated digital retail consumer market, offering a range of stores that include food halls for younger professionals, farmers’ markets set-up for bulk buying, and neighborhood-based food stores, all integrated with its mobile app so that shoppers can gather information in stores, pay, and have purchases delivered.\textsuperscript{368} Shopping malls are being redesigned so that all the retail stores and restaurants are linked to one app for customer convenience.\textsuperscript{369}

A number of studies have suggested that the future of Canadian retail is a balance between online and in-store options using digital technologies such as a ‘digital assistant’ and a combination of points of service that create pleasant in-store experiences and ready access to actual purchase online or in person through technology, partnering with or acquiring companies with strong physical footprints to enhance the online/off-line experience.\textsuperscript{370} Both climate change concerns and the

\textsuperscript{365} Doug Stephens, email correspondence, 6 December 2021, on file with author.
\textsuperscript{366} https://bikesharetoronto.com/.
\textsuperscript{367} Stephens, Resurrecting Retail, note 15 at 74.
\textsuperscript{368} Ibid.
\textsuperscript{369} Ibid.
\textsuperscript{370} See for example, Frost & Sullivan, “Personalization will be Key to the Post-pandemic Customer Experience Journey”, (15 June 2021), Personalization will be Key to the Post-pandemic Customer
pandemic have altered consumer expectations regarding service and the carbon footprint of how products get to them. Frost & Sullivan observe that the pandemic has resulted in significant changes in consumer behaviour, with consumers seeking safer, contactless, and connected retail environments, and that technologies such as augmented and virtual reality, artificial intelligence, machine learning, and natural language processing will take centre stage in the near future. Top retail technologies will include healthcare wearables, retail scanning and payment apps, and technologies for pathogen-reduced retail spaces. Businesses are increasingly investing in digitization to create positive online shopping experiences by engaging with customers on issues such as sustainability and commitments in respect of diversity, equity, inclusion, and climate positive production.

In-person shopping will continue for consumers who love to select their fresh produce, feel and try on clothing, and test the sturdiness of products, and retail stores are beginning to offer the convenience of scan purchasing in retail stores, ‘frictionless shopping’ without the checkout queue. These technological developments that digitally scan consumer actions within stores will also have implications for employee job security, monitoring concerns, risk of digital theft of customers’ financial information, and further collection of consumer data, all issues retailers will have to grapple with as they also try to manage their climate risks and opportunities.

In mitigating climate-related risk, retailers will need to develop decarbonization strategies to transform how the business operates, which will involve adopting new technology-led solutions and business models that can reduce operational carbon footprints and deliver profitable business growth. Using behavioural data through artificial intelligence will allow companies to offer ‘hyper-personalization’ of the individual ‘consumer journey’, using analytics to help retain customers and allow for product upselling. Use of customer behaviour analytics is expected to grow by 20% by 2025. Healthcare delivery is moving toward consumerization and patient-centric models that use personal health data to understand a patient’s daily behaviour and motivating factors, and modify retail engagements accordingly.

Stephens observes that many shopping malls are likely to perish, but others will redesign to create an entire ecosystem experience for customers, offering interconnectivity with all the stores in a mall, using one app that can access products and brands, offering shoppers digital discovery tools, cultural events or ‘happenings’,
mobile checkout, and one-hour delivery for shoppers within a specified radius, likely by autonomous delivery modes. He views the future of the shopping centre as “a boundless, connected platform that exists simultaneously in both the physical and digital worlds” offering commerce across multiple online and in-person channels, as well as purpose-based and circular economy retailers that attract consumers interested in sustainability and a just transition. He suggests that:

New retail, however, puts the consumer at the center of an ecosystem that is completely integrated across formats, experiences, and platforms. The ecosystem itself is essentially a bubble of experiences or habitats that customers can engage in, from shopping and entertainment to social networking and payments. Once customers are in the ecosystem, the emphasis is on providing convenience and customization (informed by data) and allowing for a contribution or interaction from customers: feedback loops allow customers to communicate vital information back to the brand, which can then be plowed back into its value proposition to add even more value to customers.

Stephens uses one example of an ‘online pure-play retailer’ partnering with a chat platform company to allow users to message one another, social network, hail rides, and purchase consumer goods all on the same app. The company redesigned its logistics to monitor click surges and whenever clicks on a product surged above the norm in a given market area, the company knew that about 2.7 days later (the average amount of time that customers weigh various options or conduct further research), a corresponding increase in orders would follow: so the company moves the product into that market area and then has capacity to deliver very quickly. Aside from being an interesting example, one observation is that such bulk shipping may reduce the carbon footprint of a retail company if done effectively.

These varied strategies illustrate that the retail sector is in a state of evolution well beyond climate change governance, but the move to net-zero emissions, circular economic activity, and protection of biodiversity will necessarily be integral to a reimagining of the retail sector, given regulatory changes and changing investor and consumer preferences.

V. KEY QUESTIONS FOR DIRECTORS OF RETAIL COMPANIES ON OVERSIGHT OF CLIMATE-RELATED RISKS AND OPPORTUNITIES

Climate change and its impacts are a growing financial risk and directors and officers of retail companies have a duty to identify and manage material climate-related risks and opportunities in the best interests of the company and its stakeholders in the short, medium, and long term. It is important that directors recognize that there is

380 Ibid at 78.
381 Ibid at 80–82.
382 Ibid.
uncertainty in respect of climate financial impacts because the trajectory of global warming will be determined by the complex interplay of government policy, business decisions, litigation outcomes, and pressures by civil society. Inaction is not an option, as it increases the likelihood of regulatory sanction or civil lawsuits.

Climate risk disclosure is not a check-the-box-exercise that can be satisfied with generic and vague risk disclosure. Companies must ensure that disclosure meaningfully reflects their estimate of climate-related regulatory, physical, and operational trends. While there is no one-size-fits-all model, the directors should ensure that reviews of climate risks and opportunities are reflected in different organizational processes and that they are provided with adequate information and expertise (internal and external) to make informed decisions.

It is critically important to stress test the resilience of the retailer’s business model. The board of directors is responsible for oversight of the company’s overall business strategy and financial reporting, including ensuring that relevant climate risks and opportunities are integrated into the assumptions underlying accounting estimates and disclosed appropriately in the notes to the financial statements.

Proxy advisory services company Glass Lewis reports that beginning in 2021, some companies are placing management proposals on their ballots that ask shareholders to vote on their climate transition plans; yet it observes that boards cannot abdicate decisions on a company’s long-term climate strategy to shareholders, and investors should be careful to ensure boards are providing information concerning the board’s role in setting climate strategies and overseeing their implementation.

Failure to meaningfully decarbonize may result in financial impacts being seriously under-estimated. Climate change presents issues that affect business strategy, risk oversight, and financial performance in the short, medium, and long term. In order to discharge their oversight responsibilities, boards and their audit committees need to satisfy themselves that appropriate processes are in place to facilitate the flow of information needed for informed decision making.

In this regard, best practice gathered from multiple sources suggests the board should consider asking itself the following questions:

1. Governance Oversight and Strategic Planning

   o How should we integrate climate change into our board governance structures?

---

384 Audit Committees, note 213.
385 Ibid.
As directors, do we have the appropriate skills and expertise needed for a robust assessment of the climate-related financial risks and opportunities for our company and their relevance to risk management, accounting and financial statements, including how our retail business strategy should adapt?

While climate change is the responsibility of the full board, do we need to allocate responsibility for its oversight to several board committees or does it warrant a dedicated sustainability sub-committee?

Does the board (and relevant committees) agenda permit adequate time for issues associated with climate change to be considered?

How do management and the board gain and maintain an appropriate level of understanding of the foreseeable risks and opportunities associated with climate change for a company operating in our sector, markets, and geographical regions?

Is the climate risk assessment conducted by management and the board sufficiently broad to encompass the breadth and interconnectedness of climate risk? Does it consider risks to and impacts on suppliers and financiers?

How does the company determine which of these foreseeable risks may have a material impact on financial position, performance, and prospects, and how do we assess the potential impact of these issues on the key drivers of risk and opportunity? On what basis are risk appetites set and these issues prioritized?

What is our policy position, do we need a specific policy on climate change?
  - Has the board adopted a climate action plan with appropriate resources to meet targets, measure progress, and report accurately? Is the action plan embedded throughout the company and its supply chain?
  - How do we set appropriate metrics for the assessment of relevant climate-related issues in the context of our business?
  - What are appropriate targets for our management of those risks within short, medium, and long term time horizons – and on what basis do we consider that these targets are credible? How do we verify our progress against the targets? Has the company set a baseline year against which to measure and report emissions reductions?
  - Do we have a transition plan as recommended by the TCFD?

Are our board remuneration structures aligned with our strategic approach to climate change?

How should consideration of climate change be integrated into our normal strategic planning processes?
  - Are the assumptions and methodologies we apply fit for their forward-looking purpose?
o Is the board aware of how our company’s investors, creditors, and other capital providers are factoring climate-related risks into their investment and voting decisions?

2. Oversight of Material Risks and Management

o How have climate-related issues been considered and integrated within our prevailing risk management framework?

o Who is responsible and accountable for execution of the company’s policy and strategy on climate change at a management level?

o Are we satisfied that we have the right executive leadership in place for the strategic direction we want to take with regard to climate change?

o What governance processes are in place to ensure that emerging risks and opportunities are captured, assessed, verified, and reported to the board?
  o Based on our company’s identified purpose and goals, has the board set science-based targets for Scope 1, 2, and 3 emissions reductions for managers to implement?
  o Has the board asked management to give its best estimate of any forecasted changes in consumer, supplier, and competitor behaviour expected to result in positive or negative changes in the volume or price of future sales?
  o Is the board satisfied that the company is respecting federal guidance on environmental labels and claims in Canada?

o Have the potential risks and opportunities to our strategy been stress-tested across scenarios representing the plausible range of climate futures, including a pathway to net-zero emissions?
  o On what basis have we determined that the scenarios are appropriately robust, science-based, and internally consistent?

o Is the board confident that management is considering new technologies and logistics systems to reduce emissions and keep pace with changes in the retail sector?
  o What consideration has management given to the impacts of climate change on our e-commerce business, and integrated online and in-store systems and platforms to support our core business?
  o How is management mitigating risks of service interruption due to acute and chronic climate events?
  o Has management considered different transportation modalities to ensure that it is using the most energy efficient and least carbon emitting supply and distribution channels?

o How is executive remuneration linked to the company’s achievement of its climate-related targets?
o Has external expertise been applied to our analysis of climate-related issues? If not, are we satisfied that our internal capabilities are robust?

o Is the company engaging with retail consumers at multiple points of interaction to communicate the company’s strategies to reach net-zero carbon emissions?

o Has the company directed appropriate resources to collecting accurate data that will assist in developing emissions reductions plans?
   o Is the company negotiating energy efficiency and emissions reductions data into commercial leases and supply contracts to access that data?

o Is the company negotiating requirements for emissions reductions targets in supply contracts?

o How do we communicate our purpose and commitment to transition to net-zero emissions to customers and key stakeholders?

3. Reporting – Financial Statements

o What assessment has been undertaken to ensure that relevant and material matters disclosed in the management discussion and analysis (MD&A) are consistently integrated across the company’s financial statements?

o Which climate change–related variables are material to the accounting estimates in our financial statements: have they been considered and applied in determining these estimates; and have relevant assumptions been applied consistently?

o When climate change is a significant factor in a value–in–use calculation, is the disclosure providing an explanation of the key assumptions used in impairment testing, depreciation rates, decommissioning, restoration liabilities, and forecast effects on the company’s future cash flows?

o Which material climate–related assumptions (and associated uncertainties) are material to investors’ reasonable understanding of our financial statements, and thus warrant disclosure in the notes to the financial statements – even where there is no quantitative impact on the relevant accounting estimate?

o Are our financial disclosures aligned with TCFD recommendations on governance, strategy, risk management, and metrics and targets that are decision–useful for a reasonable investor? Do these disclosures address risks and opportunities for both our business model and value chain, and our approach to their management – over defined short, medium, and long term time horizons?

o Is the board satisfied that the company is appropriately reporting key climate–related targets such as targets related to emissions reductions, water and energy usage, and climate–related biodiversity impacts, including for the full
upstream and downstream value chain, where appropriate, in line with financial goals and financial loss tolerances?

- Have we systematically evaluated direct and indirect impacts on biodiversity, are we monitoring key data and indicators, and which global reporting standards are met by the company regarding biodiversity?

- Are directors confident that management has factored expected government action, such as carbon pricing, standards to decarbonize activities, or income tax related changes, into estimates of future cash flows and the discount rate?

- Have any climate-related issues been raised as 'key audit matters' by our external auditors? To what extent has the audit committee engaged in dialogue with the external auditor to evaluate audit quality of climate-related risk and performance disclosure?

- Is the audit committee assessing and reporting to the board the company’s disclosure of avoided-GHG-emissions through the entire product life cycle, addressing whether the target is absolute or intensity based, time frames over which the target applies, base year from which progress is measured, and key performance indicators used to assess our progress against targets?

- Is the board, on advice of the audit committee, confident that the financial statements, and other continuous disclosure documents integrate climate-related assumptions in the accounting estimates and disclose management’s assessment of material climate-related risks and opportunities to current standards required by Canadian securities regulators, corporate law, accounting standards, and stock exchange listing requirements?

Climate governance is a dynamic area in which regulatory, shareholder, and key stakeholder expectations continue to elevate, with best practices one year becoming base expectation the next. Accordingly, directors and officers are well-advised to sharpen their focus and their business plans.
Abbreviations

CBCA  Canada Business Corporations Act
CDSB  Climate Disclosure Standards Board
CO2  carbon dioxide
COP26 United Nations Conference of the Parties meeting November 2021
CPG  consumer packaged goods
CSA  Canadian Securities Administrators
EP&L  environmental profit and loss
EPR  extended producer responsibility
ESG  environmental, social, and governance
EU  European Union
GDP  gross domestic product
GFANZ  Glasgow Financial Alliance for Net Zero
GHG  greenhouse gases
IEA  International Energy Agency
IFRS  International Financial Reporting Standards
IOSCO  International Organization of Securities Commissions
IPCC  Intergovernmental Panel on Climate Change
IPO  initial public offering
ISSB  International Sustainability Standards Board
MEC  Mountain Equipment Company
SASB  Sustainability Accounting Standards Board
SBTi  Science Based Targets initiative
SCC  Supreme Court of Canada
SEC  Securities and Exchange Commission (US)
TCFD  Taskforce on Climate-related Financial Disclosures
TSX  Toronto Stock Exchange
UK  United Kingdom
UN  United Nations
UNDRIP  United Nations Declaration on the Rights of Indigenous Peoples
US  United States