

Overview of Business and Employers Climate Action



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Note to Reader

This supporting document (Overview of Business and Employers Climate Action) was developed to highlight the fact that London businesses are not just beginning to act on climate change but have been capitalizing on the business case for sustainability and climate action for some time. Identification and evaluation of which actions to include in the Climate Emergency Action Plan that can support climate action by private businesses and institutions requires an understanding of what has already occurred and is occurring in London. Important also is to establish an understanding of relevant national and global trends in sustainability and climate action in the private sector.

The details in this document will be of interest to:

- Individuals and community groups
- Businesses and business groups
- Institutions and networks
- Academia
- Energy stakeholders and service providers
- Government staff at all levels

Climate action requires efforts from all corners of society and this document identifies some of the strong actions and trends that can be found across the economy in London as well as identifies how common the pursuit of climate action is in the business community.

This document is connected with other supporting documents such as:

- the foundational strategies and plans affecting climate change that have already been taken to date by the City of London (supporting document #6, titled “Overview of City Plans and Strategies that Support Climate Action”);
- the highlights of some recent actions and leadership in the community (supporting document #8, titled “Overview – Community Actions”); and



- the roles and responsibilities of the Provincial and Federal governments (supporting document #9, titled “Provincial Government – Climate Change Information, Roles and Responsibilities” and supporting document #10, titled “Federal Government – Climate Change Information, Roles and Responsibilities”).

The work contained in this supporting document covers plans and strategies up to November 30, 2021. Additions may have occurred since that date.



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1. Introduction

Energy used by London's commercial buildings and industry account for almost 30 per cent of London's annual greenhouse gas emissions, with freight and fleet vehicles accounting for another 10 per cent. These are often called Scope 1 emissions for fossil fuel use and process-related emissions, and Scope 2 emissions for the use of electricity from the grid.

Businesses and employers also contribute indirectly to climate change through what are called "Scope 3" emissions, such as:

- Employees commuting to work by personal vehicles
- Employees using personal vehicles for work-related travel
- Employees using air travel for business trips
- Upstream GHG emissions from their supply chain
- Downstream GHG emissions from the disposal of their products at end-of-life

Note that one organization's (i.e., the customer's) "Scope 3" emissions is another organization's (i.e., the supplier's) "Scope 1 & 2" emissions. Employee commuting also contributes to London's community-wide Scope 1 emissions from fossil fuel use. This is discussed in more detail in section 2.2 below.

With the threat of climate change being brought to the forefront, employers both in London and around the world are taking steps to address their impact on the planet. Companies are recognizing how their operations impact the environment and climate change and are implementing ways to change how things are done to lower these impacts.

Climate change impact reduction efforts within companies are taking place on multiple fronts, including modifying processes and products to reduce direct emissions from production, changing raw material and feedstock options to lower impact ones, and improving the energy efficiency of product or service lifecycles (e.g., manufacturing, shipping, dealing with waste and product at end of life, etc.). These efforts may be driven by the desire to "do the right thing", the business case for sustainability is strong, and/or many consumers are demanding it.

It is relevant to all municipalities looking to take action on climate change to understand and look for opportunities and synergies in the actions already taking place in their local and regional economy on climate action. Furthermore, municipal governments often have significant purchasing power and can influence some parts of the economy towards climate action and sustainability.

2. Largest London Employers

To get an understanding of climate action happening in London's economy, research was conducted using the London Economic Development Corporation's (LEDC) Largest Employers list. This list provides descriptions of each employer, links to corporate social media, location maps, and a link to corporate websites. It is through these corporate websites that data was collected to understand efforts made towards climate change action by London's business community.

Using the LEDC list, the top 85 employers by number of employees in London were identified (companies employing over 200 workers). These companies operate in a diverse group of sectors including (but not limited to) health care, education, and manufacturing, and range from small to medium sized local businesses to local units of international corporations. To understand the state of the London business community's efforts to take action on climate change, public disclosures from the websites of the top 85 employers were reviewed and evaluated for indicators of climate change awareness and action.

The indicators selected to define climate awareness and action by London employers relate to at least one of two goals: reducing greenhouse gas emissions, and/or adapting to the physical and socioeconomic impacts of climate change already being experienced and expected in the future. The seven indicators identified and used are described below.

2.1. Presence of an Environmental/Climate Change/Sustainability Commitment

Companies that disclose an Environmental, Climate Change, or Sustainability Commitment provide customers, clients, shareholders and the public with a clear picture of the company's understanding of and accountability for their environmental and social impacts. These commitments outline companies' goals to combat climate change, reduce environmental impacts and/or improve their sustainability and are typically accompanied by a plan with actions to meet these goals. The action of committing to goals and planning to address climate change, environmental impacts and/or sustainability is often the first step towards making positive changes.

2.2. Commitment to Reduce GHG Emissions

When addressing climate change, often the first step many take is to identify and then aim to reduce the amount of greenhouse gases (GHGs) that are emitted into the atmosphere as a result of business activities.

Greenhouse gas emissions can be broken down into 3 scopes, typically referred to as scopes 1, 2 and 3 emissions. Scope 1 emissions are defined as direct emissions from company-owned and controlled resources. These emissions can be broken down into 4 categories:

- Stationary Combustion includes fossil fuels used for heating sources and any fuels used for company operations.
- Mobile Combustion refers to emissions from burning fossil fuels in vehicles owned or controlled by a company.
- Fugitive Emissions are unintended greenhouse gas releases which can originate from cooling system refrigerant leaks or methane leaks from gas lines.
- Process Emissions are emissions that are released during industrial processes and on-site manufacturing by means other than burning fossil fuels.

Scope 2 emissions are defined as emissions released from the generation of purchased electricity, steam, heat and cooling.

Scope 3 emissions, in a broad sense, are all other indirect emissions linked to an organization's activities, both upstream and downstream in their product or service value chain. The following categories are associated with Scope 3 emissions:

Upstream Activities

- Business Travel: emissions created from air travel, rail, underground and light rail, taxis, buses and any business mileage using private vehicles.
- Employee Commuting: emissions created by vehicles being used to travel to and from the workplace.
- Waste Generated: waste sent to landfills and wastewater treatments.
- Purchased Goods and Services: upstream emissions from the production of goods and services purchased by the company in the same year, both purchases of production-related products (e.g., raw materials, parts) and non-production-related products (e.g., office supplies and IT support).
- Transportation and Distribution: emissions from transportation by land, sea, and air, and emissions relating to third-party warehousing.
- Fuel and Energy-Related Activities: emissions relating to the production of fuels and energy purchased and consumed by the reporting company, in the reporting year that is not included in scope 1 and 2.
- Capital Goods: final products that have an extended life and are used by the company to manufacture a product, provide a service or, store, sell and deliver merchandise such as buildings, vehicles, and machinery.

Downstream Activities

- Investments: equity investments, debt investments, project finance, managed investments and client services which have the possibility of contributing to GHG emissions.
- Franchises: businesses operating under a license to sell or distribute another company's goods or services within a certain location.
- Leased Assets: organization assets and assets related to other companies.
- Use of Sold Products: "in-use" products that are sold to the consumers.
- End of Life Treatment: how products are disposed of.

Understanding the complete scope of all Scope 3 emissions is very difficult. However, these emissions cannot be ignored. Some organizations address this by focussing on a smaller set of these activities, such as employee commuting or business travels. Other organizations use a more methodical approach, in which companies that have scope 3 emissions which go above 40 per cent of overall company emissions, requiring the company to create reduction targets which address a minimum of two-thirds of scope 3 emissions, based on the World Resources Institute's Science Based Targets initiative (SBTi).

2.3. Net Zero GHG Emissions Target

Net zero GHG emissions is a state in which the greenhouse gases going into the atmosphere are balanced by removal out of the atmosphere. This can be achieved in two ways: either by eliminating GHG emissions, or by offsetting any remaining GHG emissions with processes that remove carbon dioxide from the air.

Offsetting GHG emissions can be done in a variety of ways such as tree planting or through using technologies which capture carbon before it is released into the air or directly from the air and permanently transforming and/or storing it. Careful attention must be paid, however, that any offsetting project or mechanism is creating additional (i.e., the removals were not going to occur anyway) and permanent (i.e., the carbon removed will not "leak" or emit back into the atmosphere at a later date) removal of greenhouse gases from the atmosphere.

2.4. Zero Waste Target

When looking to be a more sustainable company, one way to improve is to reduce the amount of waste produced through day-to-day operations. The concept of zero waste may seem simple, but it has a variety of definitions. The Zero Waste International Alliance defines Zero Waste as:

"a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles,

where all discarded materials are designed to become resources for others to use. Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health”

By addressing ways of eliminating waste at different stages of production, less waste enters landfills, leading to less land being required for waste disposal, less raw materials being required to be sourced, and fewer GHGs being released into the atmosphere along the supply chain and lifecycle of those materials. Many companies have found relatively simple ways of eliminating waste from operations through initiatives like shifting customers from paper-based to paperless online billing and some companies have gone so far as to converting their products into services. Those companies that shifted to providing services instead of physical products to satisfy the same customer needs are on the leading edge of the circular economy.

2.5. Climate Adaptation Goals or Strategies

The effects of climate change already being observed around the world vary from region to region and the changes that the future holds are also expected to be regionally dependent. Some organizations recognize the risks associated with these existing and expected impacts from climate change and are actively taking steps to build resilience into their strategic and/or operational business planning.

These actions can include assessing supply chains for climate change vulnerabilities and potentially diversifying suppliers, conducting risk assessments on manufacturing and logistics facilities to bolster physical asset resilience, or accounting for shifting needs of a population based on expected climate change pressures. Companies embarking on these activities typically report on them to their shareholders. Documenting and communicating organizational priorities around climate change adaptation with goals and/or strategies can raise shareholder and market confidence and work to safeguard future organizational success against the effects of climate change.

2.6. Natural Heritage Protection, Conservation or Preservation Goals

UNESCO defines natural heritage as, “natural features, geological and physiographical formations and delineated areas that constitute the habitat of threatened species of animals and plants and natural sites of value from the point of view of science, conservation or natural beauty”. Goals of protecting natural features should work towards conservation (towards the proper use of nature), preservation (towards the protection of nature from use) and enhancement (increasing the quantity or quality of natural heritage areas).

The Green Infrastructure Ontario Coalition (2021) outlines the many benefits natural heritage has in a variety of contexts including physical and mental health, social wellbeing, and the economy. In a climate change sense, the protection and enhancement of natural heritage is beneficial for mitigation of climate change through removing carbon dioxide from the atmosphere through biomass growth and adaptation through cooling the ground via shade, storing water to attenuate flooding, and the prevention of erosion. Natural heritage protection and enhancement can also reduce the level of biodiversity loss that is a result of the changing climate in many regions.

2.7. Partnerships to Advance Climate Action

Collaborations between companies and municipalities, communities and/or non-profit organizations can be powerful arrangements in the fight to tackle climate change. These partnerships can enable the sharing of information, expertise and resources can be shared to discover community priorities and concerns surrounding climate change and often work towards achieving shared prosperity objectives. Companies that seek out and engage in these types of partnerships with communities and municipalities to jointly take action on climate change can help create more resilient communities and mobilize people and resources beyond their own assets and influence to affect positive change.

3. Results

The results of the review identified that many of London's top 85 employers have already internalized the need for action on climate change and/or sustainability. The tally of the number of top 85 employers in London addressing the indicators of climate awareness and action according to website information are provided on Table 1.

Table 1. Summary of Findings: London's Top 85 Employers' Climate Action Indicators

Climate Action Indicator	Number of Top 85 London Employers
Presence of an Environmental/Climate Change/Sustainability Commitment	34
Commitment of reducing GHG emissions	48
Net zero carbon emissions target	21
Zero waste target	12
Climate Adaption Goals or Strategies	26
Natural Heritage Protection, Conservation or Preservation Commitments or Goals	18
Partnerships with Municipal, Community or Non-Profit Organizations to Advance Climate Action	28
Overall – One or More of the Actions Above	54

These results indicate that significant climate change efforts are being made by major London employers, most reflected by a commitment to reduce greenhouse gas emissions (56 per cent). Although much is left to do, 64 per cent of the top 85 employers showed a commitment to at least one of the indicators on their website, meaning it is possible for more businesses to do the same and there is significant momentum in the business community supporting climate action.

It should be noted that the other 21 businesses may have internal documents that highlight climate awareness and actions. In that case, they would not be identified in this on-line review.

4. Green Economy London

Green Economy London (GEL) was established in May 2019. It is one of seven Green Economy Hubs across Ontario supporting networks of businesses to set and achieve sustainability targets. Areas of focus include energy and greenhouse gas reduction, waste diversion and management, water efficiency and environmental stewardship. Current members are identified on Table 2.

Table 2. Members of Green Economy London

Argent Electrical	London St. Thomas Assoc. of Realtors
Big Bike Giveaway	ManZia Energy
Bluestone Properties	McCabe
Booch	Michael Clark Construction
Carmina deYoung	MTE Consultants
Chippewas of the Thames First Nations	Museum London
City of London	New Leaf
Convertus	On the Move Organics
Cornerstone Architects	Pillar Nonprofit Network
Dispenser Amenities	Play Away
German Canadian Club	RBC Place London
German Solar Corporation	Relmagine Co
Goodlife Fitness	ReForest London
Goodwill	StormFisher Environmental
GreenTech Painting	Tepperman's
Heeman's	The Church Key Bistro Pub
Let's Talk Science	The Hearty Herbivore
Libro Credit Union	The Ice Box
London Brewing	The Root Cellar
London Chamber of Commerce	Trudell Medical International
London Community Foundation	Western Fair District
London District Construction Association	YMCA of St. Thomas-Elgin

5. Benefit Corporations (B. Corps)

Benefit corporations, or B. Corps, are defined as “businesses that meet the highest standards of verified social and environmental performance, public transparency, and legal accountability to balance profit and purpose” (B Lab, 2021). Evaluated for more than just the products produced, B. Corps work towards creating an overall positive impact on the world and understand the role corporations have in combatting climate change. The City of London is home to 3 B. Corps: Libro Credit Union, McCabe Promotional, and rTraction Canada Inc.

To reduce its impact on climate change, Libro Credit Union is working with its investors to educate them on responsible investing. Additionally, Libro is an active participant in a National Working Group in partnership with the Canadian Credit Union Association to develop and publicize measurements for credit unions to track and disclose their portfolios’ carbon-emissions impact. The credit union is currently working on addressing their carbon emissions and are creating goals and targets to reduce their overall impact on the planet.

Showing their commitment to being a force for good, McCabe Promotional has partnered with other Canadian B Corps to create Forest B, an old growth forest located in Alberta’s Capital Biosphere on 25 hectares of land owned by the Nature Conservancy of Canada (NCC) and Alberta Fish & Game Association (AFGA). The company has set a target of planting 57,000 trees of a variety of species including Trembling Aspen, Balsam Poplar, Paper Birch, White Spruce, and Larch which will support native animal and plant species. This effort will increase the number of trees available to collect carbon from the air and offset emissions.

rTraction is channeling its digital servicing strengths to help businesses in the community create lasting change which includes reducing client impacts on the environment. rTraction has worked with their local caterer to create waste reduction strategies and implement reusable catering supplies. The company continues to use their resources to implement changes to company operations while learning from other fellow B. Corps.

6. Ivey Centre for Building Sustainable Value

A recent article published online by the Ivey Centre for Building Sustainable Value summarized research on the climate commitments of some large Canadian companies. The research focused on a desktop review of climate commitments made by 64 large Canadian companies (with at least 1000 employees) as of the end of September 2021, including net-zero targets and/or targets under the Science Based Targets Initiative. Of the 64 Canadian companies reviewed, 30 per cent had science-based targets and an additional 28 per cent are currently seeking approval for their science-based targets.

For GHG emission targets, 34 per cent of the companies referenced an absolute reduction in emissions and the remaining 66 per cent referenced either an emissions-intensity target or unspecified reductions. Emissions intensity reduction targets (i.e., reductions per unit product or per unit production) are often the goals of choice for industries which produce high levels of emissions, where these goals aim to address the inefficiencies within company operations rather than completely changing their processes. Additionally, only 33 per cent of the reviewed companies had targets or detailed plans to address at least a portion of their scope 3 emissions.

The Royal Bank of Canada (RBC) was the only one of the 64 companies reviewed that have operations in London. RBC committed to being carbon neutral in 2017 and has established a target of becoming net-zero (in lending) by 2050. By providing loans to companies that produce carbon emissions, this contributes to RBC's Scope 3 emissions. As part of the bank's carbon neutral commitment, they have committed to reducing their absolute emissions by 70 percent by 2025 (Scope 1 and 2 emissions and Scope 3 emissions from business travel), shifting to 100 per cent renewable energy by 2025, and then sourcing renewable energy credits and high-quality carbon offsets to account for emissions not eliminated.

7. Canada's Greenest Employers – London Focus

In 2020, London had 19 employers with local operations that were designated Canada's Greenest Employers (as selected by Mediacorp Canada Inc. as part of the Canada Top 100 Employers project). For the past 14 years, the Canada Top 100 Employers project has given special designations to employers that lead the nation in creating a culture of environmental awareness in their organizations. To be selected for this "Greenest Employer" designation, the following criteria are considered:

- companies that have developed unique environmental initiatives and programs;
- how successful companies of interest have been in reducing internal environmental impacts;
- how involved companies are in these environmental initiatives and how these companies themselves contribute; and,
- how much these environmental initiatives have shaped the companies' public identity and how it has led to attracting new employees and clients.

The 19 employers that have operations in London, along with some highlights of their achievements, are provided in Table 3.

Table 3. Canada's Greenest Employers - London Focus

Company Name	Achievements
Bell Canada	Bell Canada manages an e-waste collection program that has collected over 10 million devices since its inception and 2.5 million devices in the last year. Reduced GHG emissions by developing an improved video conferencing system to reduce commuting (created before the pandemic) and installed electric vehicle charging stations at various corporate locations.

Company Name	Achievements
Canon Canada Inc	Created the 'Branch Out' program that supports local environmental initiatives, funded through an internal toner recycling program. Adheres to the Canon Americas Environmental Charter which "seeks to harmonize environmental, economic and social interest in all business activities, products and services, offer products with lower environmental burden through innovative improvements in resource efficiency, and eliminate anti-social activities that threaten the health and safety of humankind and the environment". Canon head office is equipped with cost-saving environmental features such as motion sensor lights, a digester for food waste and drought-resistant plantings for water conservation.
The Co-operators Group Limited	The insurance group implemented impact investments; products that encourage customers to make greener choices (e.g., Discounts for hybrid and electric vehicles). The Co-operators is a founding member of the Corporate Knights 'Clean Capitalism' movement.
Desjardins	Desjardins funds green initiatives in real estate, auto insurance, and business and expanding its green investment portfolio including energy efficiency loans for commercial, industrial and agricultural business customers. The company also financially supports municipal recycling programs and introduced a company waste management program to properly recycle everything from paper to couches.
Emterra Environmental	The company has established local partnerships to promote waste reduction including hosting a zero-plastic challenge and using a subsidiary to help businesses properly recycle various items and a partnership with Natural Step Canada's Circular Economy Innovation Lab to work with businesses to create products and initiatives to eliminate waste from supply chains. Emterra has produced a new sanitizing solution to help essential businesses combat the pandemic. The company has reduced GHG production by using Compressed Natural Gas (CNG) trucks and is setting up CNG refueling stations.

Company Name	Achievements
Export Development Canada (EDC)	The company has a rooftop patio, green roof and is introducing two rooftop beehives. EDC's Green Team created a website to be transparent on the green aspects of the company (environmental tips, data from the building's waste audits, and information on green initiatives). The company held a Community Investment Day to participate in local environmental projects (shoreline cleanup, community garden, removal of invasive species).
Ford	Ford reduced manufacturing CO2 emissions by 30% between 2010-2017 ahead of their 2025 target and have set a new target of an absolute reduction of 18% by 2023. The company plans to spend \$11 billion by 2022 to develop and offer customers 40 hybrid vehicles, including 16 fully electric models. Ford has increased their use of recycled and sustainable materials in car production and partnered with companies to develop eco-friendly packaging.
The Home Depot	The Home Depot offers over 1,700 eco-friendly products including FSC certified wood products. In 1999 Home Depot issued its Wood Purchasing Policy, which required that they trace the origin of every wood product sold and shift away from buying wood from questionable sources to companies that practice responsible forestry. The company holds regular waste audits and ongoing energy-use reductions by adding roof top solar panels to 49 stores and building 3 LEED certified stores.
Killam Apartment Real Estate Investment Trust (REIT)	Killam Apartment REIT is investing \$5 million on an energy efficiency initiative and has set forth a greenhouse gas emission reduction target through the implementation of energy efficient appliances, water efficient fixtures, programmable thermostats, and low odour paints in its units. The company has created sustainability scorecards for landlords to promote and measure initiatives at each of the company's locations.

Company Name	Achievements
KPMG	KPMG participates in various green initiatives for employees and customers to develop green strategies and reduce waste. KPMG has successfully diverted 95 percent of in-office waste. The firm provides professional sustainability services to help clients address and improve their own environmental and social impacts.
Labatt Brewing Company Limited	The company's employees have spearheaded numerous initiatives at facilities across Canada and helped reduce water use by 50% since 2006. Labatt Brewing Co.'s 2025 sustainability goals include a focus on agriculture, water stewardship, circular packaging (ensuring 100 per cent of packaging is returnable or recyclable), and climate action (which includes using 100 per cent renewable electricity and a full 25 per cent reduction in CO2 emissions by 2025) The company has hosted unique Water Kaizen and CO2 Kaizen events at its London and Halifax breweries to brainstorm water, energy, electricity and fuel-saving strategies.
Loblaws	Loblaws promotes products that use sustainable farming and fishing practices and has implemented various strategies to reduce food waste at retail locations, including "Flashfood," an online platform that advertises food items that are near expiration for a reduced price and food donations to local community organizations. Rooftop solar panels have been installed on over 50 stores, 2 distribution centres and the head office.
Lowe's	Lowe's sells over 5,000 labelled products determined to have lesser environmental impacts than comparable options as part of the company's ECO project. The company has extensive waste management programs at all locations, covering a variety of waste, including cardboard and paper, plastic wrapping, construction waste, metal, plastic bottles, mixed recyclables, hazardous wastes, organics, electronics, unused paint, batteries, lightbulbs and Styrofoam. The company has adopted a target to reduce GHG emissions to 40% below its 2016 levels by 2030 and is investing \$24 million in energy efficiency initiatives at its distribution centres and corporate stores across the country as a first step.

Company Name	Achievements
Manulife	Manulife has invested over \$14 million into renewable energy projects in North America since 2002. Many local partnerships toward fighting climate change including the development of rooftop gardens and beehives. Offers funds to companies that are working towards bettering the environment and society.
Rogers Communications	Rogers encourages its employees to reduce their car travel through the installation of bike racks at all locations, options to work from home, and new teleconference rooms. Many waste management programs have been implemented for both staff and customers. Examples include a 'Get Up and Get Green' program which encourages employees to properly sort their waste leading to the elimination of personal waste bins and the promotion of customers switching to e-billing. Rogers implemented an environmental compliance committee who meet quarterly to review the company's progress towards meeting their environmental goals.
Royal Bank of Canada	Many locations now equipped with green infrastructure such as solar panels, green roofs, and rainwater collection. Over 500 employees, dubbed "Green Champions", raise awareness and lead green initiatives such as car-free days, weekly organic produce deliveries, and other environmentally themed events. Ongoing programs exist to reduce the company's GHG emissions from all operational areas (new targets to reduce emission by 15% by 2023 over the baseline year of 2018).
Schneider Electric Canada Inc.	Schneider Electric has 3 zero waste to landfill manufacturing plants in Edmonton, Victoria and Brossard and has set a goal of 80% electrical power by 2020 and 100% by 2030. Organizes many employee-led environmental initiatives including a book share program and local park cleanups.

Company Name	Achievements
TD Bank Group	The company's 'TD Friends of the Environment Foundation' has provided over \$90 million to over 26,000 local environmental projects with employees actively involved, including tree plantings and green education initiatives. A strong focus on green investment includes financing for residential and commercial renewable energy products, low-carbon economy investment, and a dedicated green bond supporting low-carbon initiatives. Ongoing paperless banking initiatives. TD Canada Trust has two branches in London that are net-zero energy buildings.
TELUS	Tree planting program to offset its paper usage. Work flexibility programs to enable staff to work from home and reduce GHG emissions from commutes. Many TELUS locations, including the head office, are LEED-certified and feature green infrastructure such as rooftop solar panels, a rainwater collection system and green building controls.

8. Corporate Knights 2021 Global 100 – London Focus

London is home to operations of 13 companies listed on the 2021 Corporate Knights (CK) Global 100 most sustainable companies, which is a ranking that includes publicly traded companies grossing a minimum of \$1 billion annually. The list is determined based on the evaluation of companies according to 24 key performance indicators (KPIs) covering aspects including resource management, employee management, financial management, clean revenue & clean investment and supplier performance using publicly disclosed data.

Company Name	Ranking	Achievements
Schneider Electric	1	Established 6 long-term commitments to sustainability (climate, resources, trust, equality, generations, and local) in line with the United Nations Sustainable Development Goals. Committed to carbon neutral operations by 2025 with offsets and 2030 without, a carbon neutral end-to-end footprint by 2040, and a net zero carbon supply chain by 2050. Committed to a net zero biodiversity loss in company operations by 2030.
Stantec	5	49% of Stantec's gross revenue in 2020 aligned with the United Nations Sustainable Development Goals that the company's operations directly impact. Committed to set a 1.5°C science-based emissions reduction target and pledged all company operations to become carbon neutral by 2022.
McCormick	6	Pledged a 20% reduction in greenhouse gas emissions from facilities and a 16% absolute reduction in greenhouse gas emissions by 2025. Sustainable packaging pledges of a 25% reduction in the company's carbon footprint from packaging and 100% circular plastics packaging by 2025. Pledged to source all herbs and spices in the company's portfolio sustainably, beginning with 100% of their branded iconic ingredients.

Company Name	Ranking	Achievements
Canadian National Railway Co	10	Emissions and energy efficiency accomplishments include 40 per cent reduction in locomotive carbon emissions intensity since 1993, 15 per cent less fuel use per gross ton mile transported compared to industry average, 33 per cent carbon emissions reduction from electricity at key rail yard properties since 2011. Waste management accomplishments include approximately 90 per cent of waste diverted from landfills in 2018 and sent instead for reuse or recycling. Biodiversity and Land Management accomplishments include the planting of over 2 million trees in North America since 2012 as part of forestry restoration associated with rail construction.
Rexel SA	11	Accomplishments include a 40 per cent reduction in carbon emissions, over 1,258 million euros in energy efficiency equipment sales in 2020, and providing power to over 3.1 million electric vehicles all over the world. Promoting responsible practices across the value chain with suppliers and customers.
Akzo Nobel NV	28	Stated 2030 sustainability goals include GHG reductions by 50 per cent, zero waste, 100 per cent renewable electricity, 30 per cent energy reduction, and 100 per cent recycled water.
ABB Ltd	33	2030 target to become carbon neutral and encourage its customers to reduce their carbon emissions by 100 megatons. 2030 target for 80 per cent of the company's products to have circular waste and a goal of zero waste to landfills from the company.
Johnson Controls International PLC	38	From 2017 through 2020, Johnson Controls International PLC reduced their energy intensity by 5.5 per cent and greenhouse gas emissions intensity by 26.1 per cent. Adopted a new 2025 strategy (from 2017 baseline) to reduce 25 per cent of energy and greenhouse gas intensity, a 10 per cent reduction in water use at stressed locations, and to make 25 per cent of manufacturing locations landfill-free.

Company Name	Ranking	Achievements
Transcontinental Interactive	45	Instituted an updated paper purchasing policy to promote the use of paper with maximized post-consumer and de-inked recycled fibres and paper made with pre-consumer recovered fibres or alternative fibres in place of virgin wood fibres. Where virgin wood fibres are required, preference is given to fibres from responsibly managed forests. 2020 Corporate Sustainability Report outlines goals for a 5 per cent reduction in GHG emissions and a zero hazardous waste to landfill goal in operating sites.
Bank of Montreal	47	Adopted a three-pronged carbon neutral strategy: 1) reduce emissions from business travel and energy use in buildings, 2) invest in renewable energy, 3) purchase high-quality voluntary carbon credits to close remaining gap. BMO announced a 2020 goal to match 100 per cent of their electricity usage with electricity produced from renewable sources across global operations including investment in Renewal Energy Certificates. This is expected to support the generation of nearly 400,000 MWh of renewable electricity each year. Recognized for enterprise-wide commitment to creating a sustainable future through sustainable finance, including by committing to mobilize \$400 billion for sustainable finance by 2025.
TELUS	54	Established carbon neutrality goals, including to use 100 per cent renewable or non-emitting sources for electricity generation at all company facilities by 2025 and to reach net carbon neutrality for company operations and improve energy efficiency by 50 per cent over the current level by 2030. Established waste reduction goals, including to reduce real estate-generated waste by 65 per cent by 2025 and by 85 per cent by 2030, reduce warehouse-generated waste by 95 per cent by 2030, and reduce network materials-generated waste by 85 per cent by 2025 Developed the TELUS Pollinator Fund for Good which invests in start-ups looking to “change the world for good”.

Company Name	Ranking	Achievements
Sun Life Financial	69	Committed to invest \$20 billion in new sustainable investments over the next 5 years, particularly in assets and businesses that support the transition to a low-carbon and more inclusive economy. Engaging in climate action with over 100 carbon-emitting companies.
Canadian Tire	99	Provides customers opportunities to make greener choices with branded products such as Noma (efficient temperature regulation systems) and Yardworks (eco-friendly ice melt). Implemented a Structural Packaging Test (SPT) which reduces product damage rates and transportation needs, reducing GHG emissions. With the increase in demand in e-commerce, the company continues to use the recently implemented 60-foot intermodal shipping container, increasing productivity and efficiency while reducing transportation demands and GHG emissions.

9. Global Trends

In September 2019 at the UN Secretary-General Summit, it was announced that 87 international companies had signed the 1.5°C pledge first introduced at High Ambition Day at the United Nations Climate Conference of the Parties (COP25). This pledge is aimed at achieving a maximum global temperature increase of 1.5°C above pre-industrial levels and, in line with the 2015 Paris Agreement, aims for companies to set targets to achieve net-zero emissions by 2050. This pledge sparked the race to change company operations to reduce their impact on the planet and since the announcement of the 87 pioneering companies, the number of companies that have signed on to the pledge doubled to 177 in less than 2 months.

With these goals at the forefront, along with the increased public awareness of climate issues and more frequent extreme weather conditions, companies are being pressured to make drastic changes. Below are some of those bold moves being made by companies, using their influence to make change.

9.1. Divestment from Fossil Fuels

Divestment in its simplest form is simply getting rid of stocks, bonds and other investments which are unethical. Through a climate change lens, this means removing investments and sponsorships that are contributing to the fossil fuel industry, resulting in limiting the industry's resources to expand and continue "business as usual" which is creating massive amounts of fossil fuel emissions. According to Forbes, "Divestment seeks to stigmatize fossil fuels and raise uncertainty around their continued use, to reduce the financial desirability of fossil assets". When companies choose to divert their investments elsewhere, this gives the public an idea of what the company values and could lead to the public questioning and changing their view on the industries losing funding.

Harvard University has taken the step of divesting from legacy investments in private equity funds with holdings in the fossil fuel industry. In a statement from the President of the University, "Given the need to decarbonize the economy and our responsibility as fiduciaries to make long-term investment decisions that support our teaching and research mission, we do not believe such investments are prudent". The school has not made any new commitments to these limited partnerships since 2019 and has no intention to do so.

The Ford Foundation has also implemented a new investment strategy: "protect the planet by ending investment of further assets in the endowment into fossil fuels and seek opportunities to invest in alternative and renewable energy in the future". The foundation has pledged to invest in funds that address the threat of climate change and

support the transition to a green economy.

9.2. Climate Risk Disclosure Requirements

When looking to invest in industries, banks have created requirements for companies to disclose any climate risks associated with company actions or projects. Not only is investing in risky projects (e.g., off-shore oil and gas exploration) contributing to furthering the impacts of climate change, but it also shines a negative light on those that do invest in these projects.

The Bank of Montreal (BMO) considers the environmental, social and governance (ESG) impacts in decision-making and activities relating to financing and lending. The bank has made a commitment to restrict funding for any project or transaction that involves mining exploration or development in the Arctic National Wildlife Refuge (ANWR) and business activity affecting UNESCO World Heritage Sites or High Conservation Value Forests. Additionally, BMO has sector-specific financing guidelines which highlight potential environmental and social risk factors which require enhanced due diligence, escalations and exception processes.

CIBC regularly assesses the environmental and social risk for all their major business clients. The bank has implemented Environmental and Social Credit Risk Management (ECRM) standards and procedures to identify relevant risks in credit evaluation and financing and to exercise additional due diligence, depending on the level of risk. The ECRM group reviewed 787 transactions (valued at over \$18 billion) for environmental and social risks in 2020. Transactions posing significant risk are assigned to a senior team for further review and for those flagged for having unacceptable risk factors, CIBC engages the companies involved to discuss mitigation measures that will enable risks to be reduced and transactions to proceed.

9.3. Renewable, Low-to-Zero Carbon Electricity Generation

Another major step towards climate action is transitioning operations to run on renewable, low-to-zero emissions electricity. This transition will reduce the amount of greenhouse gases emitted into the atmosphere associated with fossil fuel use for energy production.

Sony is currently on the “Road to Zero” with the goal of powering all international sites through 100 per cent renewable sources by 2040 as part of the international RE100 initiative in which participating companies pledge to 100 per cent renewable power by 2050. To achieve this goal, Sony has made progress in various locations, including in Japan, where Sony has bought Green Certificates and is powered by renewable

sources. In 2017, Sony contracted the Tokyo Electric Company to directly purchase 100 per cent hydroelectric power. In Europe, through direct purchases and certificates, 100 per cent renewable energy has been achieved. In North America, renewable energy and direct purchasing continues to increase at various locations.

Shell is actively shifting their business into the renewable energy sector by investing in zero-carbon energy solutions. The company has invested in wind projects in the US and the Netherlands and is exploring opportunities worldwide, including in the North Sea. Shell has also invested in one of the largest solar energy producers in the US and expanded renewable asset ownership in Asia. With the new acquisition, Shell is looking to provide clean and reliable electricity to homes and businesses in Africa and Asia.

9.4. Electrification of Transportation

Providing and supporting affordable and accessible electric transportation is another major step companies are taking to combat climate change. This step addresses a major contributing factor to greenhouse gas emissions while also aiming to provide a solution that is accessible to all.

General Motors (GM) is adapting to the need for electric vehicles through the development of the Ultium Platform. This new platform features a modular battery- with a wireless battery management system, and drive unit combinations which are flexible (yet affordable) enough to build a wide range of trucks, SUVs, crossovers, cars, and commercial vehicles. Current electric vehicles in production are the 2022 Chevrolet Bolt EUV, the GMC Hummer EV (first all-electric super truck), and the Cadillac Lyriq (SUV). Through partnership with Honda, GM is developing two new electric vehicles with Honda handling the interior and exterior, and GM to handling the vehicle architecture. In addition to the development of new electric vehicles, GM will be offering special pricing for Uber drivers on electric vehicles and accessories, making the switch to electric vehicles more affordable for those using their vehicles to earn a living.

RBC offers its clients a Clean Energy Vehicle Program. This program provides special financing rates on select clean energy vehicles from partner companies: Chevrolet, Chrysler, Tesla, Kia, Hyundai.

9.5. Zero Waste/Circular Economy Efforts

Reducing waste sent to landfills contributes to climate action through limiting the need for landfill expansions, reducing GHG emissions from landfills, reducing the need for raw materials (thus limiting raw material sourcing and production-related emissions, land use and biodiversity impacts) and generally increasing material efficiency. The end goal of zero waste efforts is the creation and propagation of a circular economy, where resources are indefinitely utilized.

Apple is contributing to the circular economy through the engineering of a 100 per cent recycled aluminum alloy that can be recycled indefinitely while maintaining performance and durability and using 100 per cent recycled aluminum in the enclosures of many devices. When virgin aluminum is required, Apple works with suppliers to source aluminum smelted primarily with low-carbon sources of electricity.

Proctor and Gamble (P&G) have taken steps to reduce the amount of waste the company produces. With a long-range goal of making all products with 100 per cent reusable/recyclable packaging, P&G is on the right track with 86 per cent of products currently complying enroute to the interim goal of 90 per cent compliance by 2030. These efforts were advanced through P&G partnering with TerraCycle and SUEZ to develop the world's first recyclable shampoo bottle made of 25 per cent recycled beach plastic.

9.6. Net Zero GHG Emissions

As discussed earlier in this report, net zero emissions is defined as a state in which the greenhouse gases going into the atmosphere are balanced by removal out of the atmosphere. Companies striving to achieve net zero emissions will support the reduction of the overall amount of GHGs emitted into the atmosphere by industry, however “net zero by 2050” goals have recently attracted some skepticism.

The researchers from the London-based Ivey Centre for Building Sustainable Value critique the net-zero emissions target commonly set by companies to reduce and offset emissions from a selected baseline with a common target year of 2050. This long-term goal generates skepticism as it stretches beyond the typical term of any current organization's management team. Furthermore, by providing the option of offsetting company emissions to achieve such a goal, this leads to the impression that companies are taking the “easy way out” by simply spending money on offsetting measures rather than making the necessary changes to reduce their emissions. If, however, companies committing to net zero emissions create actionable plans with near-term projects and strive to remove emissions from their operations instead of relying on offsets, their contributions to climate change mitigation can still be significant.

Dow is one of the largest chemical production companies in the world and has announced its plan to build the world's first net zero carbon emissions integrated ethylene cracker and derivatives site with respect to scope 1 (direct emissions by company) and scope 2 (indirect emissions from the production of the electricity or heat used) GHG emissions located in Fort Saskatchewan, Alberta. This will enable the company to produce and supply approximately 3.2 million metric tons of certified low- to zero-carbon emissions polyethylene and ethylene derivatives and would decarbonize approximately 20 percent of Dow's global ethylene capacity while growing polyethylene

supply by about 15 percent. In addition to the environmental benefits, this could represent one of the largest job-creating investments in Alberta in over a decade.

In 2019 Maple Leaf Foods became the first major carbon neutral food company in the world. Also in 2019, Maple Leaf Foods was one of just three animal protein companies globally and the only food company in Canada to set science-based targets that were aligned with the goals of the Paris Agreement on Climate Change and approved by the Science Based Target initiative (SBTi). Maple Leaf Foods neutralizes all Scope 1 and 2 emissions and a portion of their Scope 3 emissions. The Scope 3 emissions in the offset program include supplier emissions arising from animal production and packaging equivalent with the product volumes of Maple Leaf brands that display their Carbon Zero logo.

Microsoft has been a carbon neutral company since 2012 but is looking to do more through the goal of becoming carbon negative by 2030 and by 2050, Microsoft will remove from the environment all carbon emitted by the company, either directly or by electrical consumption, since its founding in 1975. To reach this goal, the company created a \$1 billion Climate Innovation Fund to accelerate the global development of carbon reduction and removal technologies. Furthermore, Microsoft pledged to reduce their Scope 1 and 2 emissions to near zero by the middle of the decade through energy efficiency work and reaching 100% renewable energy by 2025. Measures to reach 100% renewable energy include zero carbon power and diesel-free electricity generation, zero carbon transport, improving operational efficiency in buildings, and improving energy efficiency in datacenters. Finally, Microsoft has also pledged to reduce the company's Scope 3 emissions (indirect emissions from all other activities the company is engaged in) by more than half. Actions towards this 2030 goal include improving supplier emissions data tracking, improving supplier emissions reporting and extending the carbon fee to Scope 3 emissions.

10. Conclusion

Through the review of local to global business community efforts on climate change presented in this report, it is clear that employers within London and in many parts of the world are taking steps to address their impact on the planet and increase their resilience to face a changing climate. Strong voluntary climate actions emerging from the global, national and local business communities point towards a readiness for collective action to further advance society's efforts to combat climate change.

It is encouraging to see that London's business community is taking initiative on its own and it should be inferred that action from all levels of government to advance these efforts even further will be embraced. London is ready for a community-wide Climate Emergency Action Plan to strengthen and deepen efforts toward mutual climate action goals.

11. Resources

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