

Proposed Climate Action Strategy for Burlington

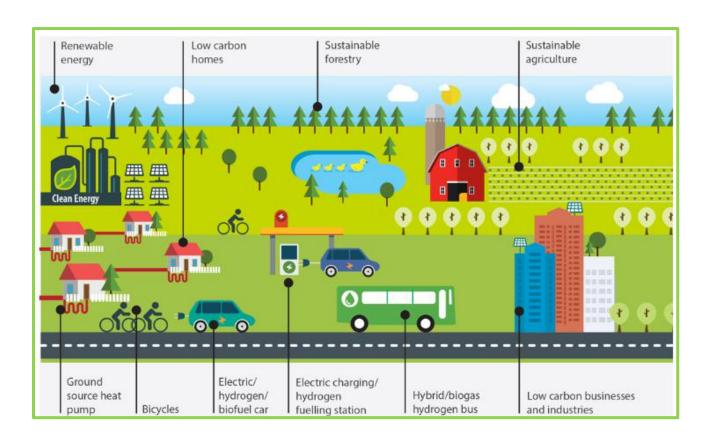


Photo credit: Ontario Climate Change Strategy (retired)

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1. Executive Summary

Climate change is the most critical threat facing Burlington. Its effects will continue to be more frequent, and severe, as it threatens everything around us; our homes, our infrastructure, even our health and well-being. Every day, new scientific data indicates the increasing urgency of climate action. Time is running out, and we have a small window of opportunity to curb the effects of climate change. The climate crisis calls for immediate action across the whole community, and a shift from our standard lifestyle choices and decision making into a more sustainable model that puts climate mitigation front and centre.

Mitigating climate change is the responsibility of the general public, organizations, businesses and industries at large, but they must be given sufficient tools from government in order to make more sustainable choices; choices which may not be easy and may initially be more costly, but are truly in the interest of a more sustainable future for our city and planet.

Our political and economic landscapes are shifting, often placing communities and local governments on the front lines of climate change battles. It is now up to communities to make the changes and adaptations needed to ensure their survival. Burlington has made several efforts to mitigate climate change through the Strategic Plan, the Official Plan and the Community Energy Plan among other initiatives. The current state of the environment calls for a "Made-In-Burlington" climate action strategy that identifies the City's local challenges, and acts on effective solutions in a timely manner. The forward focused plan takes into account the local and regional context, advancing opportunities for collaboration. Other neighbouring communities have made strong commitments to climate action; Toronto and Guelph are leading examples, and a number of strategies that they have applied can be adapted and implemented in Burlington.

The proposed Burlington climate action strategy includes 6 key action areas with associated targets, and for each action area, challenges are identified, and specific recommendations are included. The integration of effective, strategic communications with residents and all sectors of the community will be essential to realize necessary behavioral shifts, maximizing adoption, in order to achieve the identified results.

BurlingtonGreen is pleased to present this discussion paper to Council and we look forward to collaborating with the City to take action on this urgent, far reaching issue.

2. The Local and Regional Context

Communities across Canada are at the forefront of tackling climate change. Recent changes at the Provincial level and subsequent changes in policy and programs have hindered climate action efforts, and diverted money and resources away from climate change mitigation efforts. Municipalities are increasingly leading the way on the majority of climate action locally.

Burlington has and continues to cooperate with regional stakeholders in the fight against climate change. Local efforts include Burlington's Strategic Plan, the Official Plan, and the Community Energy Plan. On a more regional level, we are encouraged to see the partnerships between Burlington and key stakeholders in initiatives such as the Halton Climate Collective and the Bay Area Climate Change



Council. BurlingtonGreen was pleased to lead the way in inspiring the City to establish a Community Energy Plan, and our Executive Director sits on the Bay Area Climate Change Council. Additionally, BurlingtonGreen participates in the Halton Climate Collective. Our cross regional involvement has strengthened our understanding of climate change challenges in our community and has helped us identify areas for action.

While we applaud and value the initiatives mentioned above, we believe Burlington deserves and needs a climate action strategy that dovetails these efforts and puts the community on a fast track to take action now in key areas that are responsible for the majority of greenhouse gas emissions in the City.

3. Strengthening Targets

Ontario's new Environment Plan commits to achieving greenhouse gas emissions reductions in line with Canada's 2030 greenhouse gas reduction targets under the Paris Agreement. Under the Paris Agreement, Canada has committed to reducing GHG emissions by 30% below 2005 levels by 2030. New scientific developments are telling us that these targets are not ambitious enough, and we ask that Burlington commits to reductions that align with the recommendation in the IPCC's latest report of keeping global warming to maximum of 1.5° C above pre-industrial levels. This calls for a greenhouse gas emissions reductions target of about 45% from 2010 levels by 2030, reaching net zero around 2050¹.

This is no small task and requires commitment from all levels of government and stakeholders and all sectors of the community to come together and take bold action. Establishing a reductions target is the first step in the strategy, followed by identifying the key action areas and associated activities and commitments required to achieve the target.

4. Action Areas

In order for Burlington to achieve progress in climate action, climate change mitigation must drive all municipal decision-making. This calls for a complete transformation of the current decision-making framework, placing climate action as a top priority. A shift from the traditional framework to one that prioritizes our impact on the environment is necessary. The nested circle framework recognizes that social and economic activity occurs within ecological limits.



Photo credit: Future Oxford Community Sustainability Plan

¹ <u>IPCC Report, Summary for Policymakers</u>, pg. 14



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BurlingtonGreen has identified the following 6 action areas of Burlington's climate action strategy:

4.1 Transportation

Challenge: The City of Burlington has the highest car ownership per capita in the GTHA². This contributes to greenhouse gas emissions in the City and is a direct barrier to achieving Burlington's emissions reduction targets, in addition to escalating traffic issues and congestion.

The challenge of transportation is broken down into 3 key areas with separate recommendations: public transit, multi-modal transportation, and single use vehicles.

4.1.1 Public Transit:

Challenge	Recommendation
Proximity and location of services is fragmented across the City, making it difficult to implement effective transit services.	Align land use policies to locate major trip generators near rapid transit stations or along transit corridors.
Current transit service levels do not support reliance on public transit on a daily basis	 Advance new and improved local transit Improve transit reliability and speed using transit priority measures Provide easy connections and comfortable waiting areas throughout the network Support effective fares that encourage transit use Support transportation demand programs that are employer-, institutional-, and district- based
Weak regional transit connections.	Collaborate with relevant partners to achieve improved interregional transit within the GTHA.
Current fleet contributes to greenhouse gas emissions	Move to accelerate the shift to electric buses

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² COB 2014 Community Report, pg. 6

4.1.2 Multi-Modal Transportation:

Challenge	Recommendation
Walking and cycling routes are not continuous, have limited visual stimulation, and are not always safe for pedestrians and cyclists.	Stronger implementation of sustainable design guidelines that support an interesting and safe streetscape for people travelling on foot or bicycle, especially around major transit hubs.
Limited support for biking in the City.	 Implement a local public bike sharing program Provide bike stations with high-security parking and other amenities in the downtown and at transit stations Make it easy to combine cycling and transit trips.

4.1.3 Single-Use Vehicles:

Challenge	Recommendation
Limited electric vehicle infrastructure in buildings.	Strengthen electric vehicle supportive building regulations.
Limited public charging infrastructure	Align local budgets to provide and deploy more public charging infrastructure.
Services and amenities are dispersed across the City	Set targets in the municipal plan for driving distances and targets for trips under 5 km.

Our Ask:

- Direct the Department of Transportation Services to release the City's Transportation Plan, and ensure it aligns with the proposed Burlington Climate Action Strategy and includes actions and associated measures to achieve sustainable transportation options.
- Advance effective regulations to support electric vehicle infrastructure in buildings.

4.2 Buildings

Challenge: In Burlington, electricity and natural gas use accounted for 58% of the community's GHG emissions in 2016³. Inefficient buildings waste energy and water; are unhealthy for building occupants, and cause pollution and GHG emissions in Burlington, and beyond.

³ COB Energy and Greenhouse Gas Emissions 2016 Progress Report for Community & City Operations



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The City of Burlington's <u>Community Energy Plan (CEP)</u> outlines energy efficiency and greenhouse gas emissions reduction strategies including: behaviour change and a culture of conservation; energy efficiency; energy generation and security; and land use and growth. These targets will not reduce emissions to prevent global warming below 1.5° C, as currently recommended by climate scientists. We've identified the following challenges in the City's current Community Energy Plan.

Challenge	Recommendation
Current CEP is not comprehensive enough and too internally driven.	Replace current CEP with a broader Burlington Climate Action Strategy that is carbon focused.
Additionally, the community does not know about it or understand it.	Communicate Strategy /Calls for Action via a city-wide campaign that engages the community.
Current CEP emissions reductions targets are not ambitious enough	 Behaviour change and culture of conservation: increase target from 5% to at least a 10% reduction; add target date Energy efficiency: increase target from 4% by 2020 to at least 45% from 2010 levels by 2030, reaching net zero around 2050; have staff review feasibility of new goal and adjust as required; add sector-specific targets Energy generation and security: increase target from 3.5% to a more ambitious goal Land use and growth: review progress on goal and update target as necessary
A need for long-term emissions targets	 Set goal to have all new buildings net-zero emissions by 2050 Limits to be put on emissions for new builds in the short-term - the limits would be reduced annually until hitting "net-zero" by 2050 Incentives should be introduced to realize builders' adoption, in order to achieve net-zero target
Lack of new development resilience programs	Develop a resilience program (including a resilience checklist and City review) in order to assist developers in ensuring new builds are equipped to deal with the changing climate. Additionally, strengthen current Sustainable Design Guidelines , and elevate the



	requirement of significant components of the guideline from "voluntary" to "required".
Lack of homeowner resilience programs	 Engage the City of Toronto and the Insurance Bureau of Canada for learnings from the Home Resilience pilot program Develop homeowner resilience strategy based on learnings
A need for additional local dialogue on climate mitigation	Capitalize on existing local and regional partnerships to create opportunities and gain efficiencies. Build stronger networks with all community sectors including industry, organizations and faith groups.

- Expand the current CEP focus to a carbon-based Burlington Climate Action Strategy to better reflect the current challenges.
- Create a task force to periodically review and update the progress on the Burlington Climate Action Strategy, including publishing publicly-available user-friendly reports.
- Increase public education and awareness programs to improve communications on community energy reductions and progress on the Burlington Climate Action Strategy.
- Set goal to have all new buildings net zero carbon by 2050, while limiting emissions in the shortterm.
- Align the Burlington Climate Action Strategy targets to those of the latest IPCC report.

4.3 Local Biodiversity, Green Space and Urban Tree Canopy

Challenge: The challenge with Burlington's green space is two-fold:

- The need to update parkland dedication rates and service levels to meet the evolving needs of the City as it transitions into a more urban form.
- The need to increase the City's urban tree canopy in the urban boundary from its existing 17% level to a healthy 30% 50% as recommended by Environment Canada to support a healthy sustainable environment⁴, in addition to mitigating the implications of Emerald Ash Borer.

Challenge	Recommendation
Current policies in the Official Plan serve a	Develop a comprehensive parkland dedication strategy that includes a plan to prioritize and protect existing
suburban form of development.	green space, and secure additional green space to meet

⁴ Environment and Climate Change Canada



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	the evolving needs of the City as it transitions to a more compact urban form.
Lack of green space and biodiversity inventory and updated statistics on current tree stock across the City	Develop an accurate green space inventory and a comprehensive plan to prioritize and protect it.
Burlington's Urban Forest Management Plan is outdated	Update and release a new Urban Forest Management Plan that incorporates a tree canopy inventory; an evaluation of losses expected due to disease, damaged trees and development; a firm urban tree canopy target within the range of 30-40%; a comprehensive plan to replace lost trees and grow the canopy; ensures varied biodiversity that sustains habitats for a range of native fauna and flora; identify resources, budget and potential income sources to implement the plan
At 17% and shrinking, our urban tree canopy is far below the 30-50% coverage recommended for a sustainable environment. Insufficient tree canopy means higher risk for flood damage and a compromised capacity for carbon absorption.	Make a public commitment to establish an urban tree canopy target of 30-40%, with a specific target to be formally set as part of the next Urban Forest Management Plan
No protection for trees on private property, and the threat posed by development in established neighbourhoods.	Implement a practical, effective city-wide private tree by-law no later than 2020.
Green space on greenfield lands and on existing and future land assembly parcels is currently at risk of clear-cutting by developers. No protection exists prior to the site plan process, and the public may be unaware of these projects in time to offer their input.	 Revise by-laws to protect greenfield and assembled lands in established neighbourhoods from clear-cutting or excessive tree removal prior to development applications: 2019/20 Step up the notification process for development projects to ensure public engagement and input
Current site plan guidelines for green space protection are primarily voluntary.	Revise site plan guidelines to better protect mature trees on land to be developed. This can include providing adequate setbacks from existing trees to protect tree canopy and root zone, and requiring developers to replace removed trees with a 20-year equivalent canopy at their cost.
Lack of incentives available to residents to encourage tree planting on private property	Introduce a Tree Planting Program to engage Burlington residents in achieving the city's tree canopy target by partnering with regional organizations. One example includes: <u>Leaf's backyard tree planting program</u>
Lack of awareness in the community on the vital role green space plays in	Initiate a user-friendly widespread campaign of public education and information dissemination which can also include information about Emerald Ash Borer, the new



mitigating climate change and providing a	Urban Forest Management Plan and Private Property
natural habitat to local wildlife.	Tree Protection By-law

- Direct appropriate staff to conduct a natural assets and green space, tree inventory, and update and release the Urban Forest Management Plan. Ensure that funding is provided to accomplish this as well as the actions that are identified in the updated Plan
- Implement a city-wide private property tree bylaw by early 2020.
- Update the Official Plan policies to align with a Burlington Climate Action Strategy and a more compact urban form of development

4.4 City Growth and Land Use Planning

Challenge: Balancing Provincial growth targets and shifting the development within the urban boundary to a more compact urban form while balancing the needs of the environment, mitigating climate change, and ensuring a high quality of life for the residents of Burlington.

Challenge	Recommendation
Lack of climate change policies and decision making integrated across all policies, departments and planning documents	 Mandate greenhouse gas reduction targets in the Official Plan Update and strengthen supporting plans on special matters, for example: Urban Forest Management Plan, Transportation Plan, and Parks and Cultural Assets Master Plan among others.
Incomplete communities	 Establish a smart community development project that provides all features and elements of sustainable development, and realizes the "missing middle" vision of moderate intensification. Prioritize location and proximity of services and amenities to be more accessible and available to residents. Increase density in appropriate areas to gain efficiencies and feasibility.
Gaining public buy-in for smart intensification	 Improved and Increased public education and outreach User-friendly (relatable), benefit-focused messaging across Incorporate use of Burlington specific modeling as one example of user-friendly, effective engagement



Current development applications do not support climate change mitigation mandates	Strengthen Development agreements; incentivize zoning and subdivision applications to impose requirements to facilitate mitigation interventions in new development areas.
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- Include greenhouse gas emissions reduction targets in the Official Plan, and align the Official Plan to the Burlington Climate Action Strategy at the earliest opportunity.
- Strengthen the permitting and application process to mandate climate mitigation measures.
- Support and champion a smart community development project in the City.

4.5 Industry

Challenge: Industries that operate in Burlington, just like in the rest of the world, must adapt to the scarcity of non-renewable resources, while meeting new challenges in the face of climate change. In order to combat this challenge, the City will need to expect industry, existing and new, to operate responsibly by minimizing emissions, exercising responsible resource consumption and procurement, helping create and preserve green spaces, and encouraging employees to work and live in a more sustainable manner. Businesses are an important sector of the community in Burlington, and will play a vital role in reducing the City's greenhouse gas emissions. Burlington is open for business, to businesses that operate sustainably.

Burlington also lacks a visible, nurturing environment to foster green industries to provide products and services to mobilize the low carbon economy.

4.5.1 Sustainable Businesses:

Challenge	Recommendation
Businesses lack effective direction on climate action	 Prioritize the sectors that have the highest carbon and energy footprints to green their business and provide them with incentives to change. Provide businesses carbon assessments and recommendations for reducing their carbon footprint that also reduce their expenses and put them on a path to greater sustainability. Connect businesses with low-cost energy savings opportunities. Mandate water conservation assessments for water intensive manufacturing businesses. Provide businesses a guide to energy-efficient lighting solutions that businesses can buy from local Burlington suppliers.



	 Provide incentives for companies to create green spaces on their properties, including on the land as well as on the roof where appropriate.
Businesses lack effective direction on climate action	 Encourage businesses to assess how resilient they are to shocks and stresses caused by climate change. Establish a roundtable between BurlingtonGreen, the Bay Area Climate Council, City of Burlington, and local industry to establish dialogue and create awareness of opportunities to improve efficiency, waste diversion, and create green industry.

4.5.2 Attracting Green Industries:

Challenge	Recommendation
Attract green economy	Provide incentives to have green industries establish a business presence in Burlington: Renewable energy supply and installation (solar and wind) Sustainable building design Wastewater management Sustainable engineering Green finance and venture capital Low Impact Development design/landscaping
Commitment to low-carbon economy	Provide property tax incentives to companies that operate on a net-zero carbon basis
Sustainable Building Development	 Implement scorecard approach on Sustainable Building Development Guidelines and expedite building permits for companies that meet a threshold score. Criteria in the Sustainable Building Development Guidelines include tree canopy requirements, electric vehicle charging infrastructure, and availability of bicycle storage. Sustainable Building Development Guidelines should also incorporate LEED or comparable Certification.



Our Ask: In order for the City of Burlington to move forward with a successful Climate Action Strategy, it is essential that local industry and businesses actively participate and contribute to reducing greenhouse gas emissions. There are two facets to doing this:

- Ensure that the Burlington Climate Action Strategy provides existing businesses with the tools to be more efficient in resource use and disposal.
- Attract green industries -- Burlington can help to build a more sustainable future by
 providing green industries with incentives to operate in Burlington. This will not only be
 a benefit in the fight against climate change, but it will also provide new employment
 opportunities in the city.

4.6 Waste Management and Municipal Procurement

Challenge: Waste management has a severe impact on the environment. From soil and water contamination to the release of methane from landfills, the way cities manage their waste can significantly contribute to greenhouse gas emissions. A comprehensive waste reduction/conversion strategy for Halton must be part of Burlington's Climate Change Action Strategy, and it will be important for Burlington Councillors to ensure our City's goals are included as part of the next Region of Halton Waste Management Strategy. BurlingtonGreen proposes the following recommendations, which we have categorized as overarching, short, medium- and long-term strategies.

Food Waste

Challenge	Recommendation	
Overarching		
Current regional waste strategy does not address the urgency of climate change.	 Include climate change mitigation in the Solid Waste Management Strategy vision statement and throughout strategy. Consider climate change urgency when determining the timing of strategies that target its mitigation. 	
Short Term		
Food Waste Food waste is a growing challenge in Burlington. Wasted food that ends up in the landfill contributes to greenhouse gas emissions, and raises the total cost of waste management.	 Determine the current level of local food waste, and set a reduction target. Raise awareness on the issue of local food waste and its' direct link to climate change through targeted, solution-focused educational campaigns. Implement local food waste diversion programs that divert food waste from the landfill to residents facing a food crisis. 	
	 Increase customer service resources to implement a broadly-based as well as targeted outreach and public education campaign to supplement the existing online and telephone resources and waste calendar tools. In particular, dedicated resources are needed for multi-residential customers. 	



Education/outreach strategies could include providing signage to multi-residential units, working with such buildings to implement an ambassador High contamination rates program to help residents sort waste correctly, increasing regional presence at events and festivals, pop up booths at libraries so people can speak to regional representatives etc. and increasing social media presence and engagement. Implement a curbside inspection program and consider a Gold Box program to better evaluate waste stream contamination, provide educational feedback to residents and award recognition to residents who are 100% compliant in correctly sorting their waste. Increase capacity at the waste management site to inspect loads, ensure various waste products go to the correct depots, and help educate and direct customers. In making these recommendations, BurlingtonGreen recognizes that adding human resources may place a strain on existing Regional budgets. We believe, however, that the proposed additional resources can be funded economically through partnerships with local colleges and universities in a variety of internship and student work programs, many of which receive government subsidies to offset a major portion of the salary costs. Other regions have used these types of initiatives successfully. **Medium Term** Explore options for developing recycling and organic waste composting sites in Halton, and/or investigate Halton currently does not have its own possible co-investment partnerships with other nearby recycling and organic waste composting Regions. This would give the Region the opportunity to facilities. expand both capacity and control over the types of waste that can be diverted, in addition to decreasing emissions (and operational cost) from collection trucks. Other municipalities have imposed a ban on single use Plastics, single-use and packaging plastics. We are calling upon Burlington to show applications place an increasing strain on leadership and do the same. A ban could be phased in, waste facilities' capacity (whether beginning with plastic shopping bags and straws in 2020/21 to allow time for widespread public recycling or landfill) and add to the cost of managing waste. engagement and campaign adoption. This fits well with the thrust of the Region's June 2018 amendment to the short-term Solid Waste Management Strategy report, calling for a range of measures to reduce plastics pollution, including banning of some products. **Long Term**



A significant portion of multi-residential building and industrial and commercial waste is managed through contracts with private waste collection and disposal services. Voluntary compliance with waste diversion strategies is only partially successful, and diversion rates are difficult if not impossible to measure and manage, with a few exceptions governed through provincial legislation.	Develop a long-term phased-in approach to aligning waste management and diversion practices in these sectors through municipal by-laws that target the multiresidential and ICI organizations.
Waste management fleet is gas/diesel vehicles which add to carbon emissions.	Convert fleet to hybrid/electric vehicles.

- Enhance the Region's public education program to include and broadly promote circular economy, reducing consumerism, food waste, and ongoing improvements to help residents sort their waste correctly.
- Advocate at the regional table to secure recycling/composting facilities in Halton to align with the Burlington Climate Action Strategy.
- Reduce plastics entering the waste stream through targeted bans on single use plastics
- Introduce legislation to improve diversion rates in the multi-residential and ICI sectors
- Convert the waste management fleet to hybrid/electric vehicles
- Ensure all communications/education materials highlight the link between waste management and climate action.
- Update and mandate the City's Green Procurement Policy

5. Education, Awareness, and Milestones

Lack of effective public and stakeholder education and awareness is a recurring challenge reflected throughout our proposed strategy. The City must prioritize community awareness and education campaigns that go hand in hand with all the initiatives proposed here. The fight against climate change is now at the community level, and their understanding, commitment and buy-in are crucial for the successful adoption of climate mitigation strategies.

The Burlington community will respond well to and rally around a city-wide solution-focused campaign to reduce our greenhouse gas emissions and mitigate the impacts of climate change. Every emissions reduction achieved, every environmental policy implemented, and every tree planted will be tallied up and a running total will continually be communicated to the community, ensuring climate action stays top of mind and the first priority for the City and the community.

Setting a greenhouse gas reduction target is an important first step in the Burlington Climate Action Strategy, it will inform the direction of policies, decision-making and initiatives, and the milestones associated with each action area. Reporting to the community (and vice versa) on each milestone and on



progress on each action area will motivate the community and foster a sense of pride and responsibility across the City.

6. Conclusion

Climate change is here, and the time to act is now. At no time in our history has the phrase "think global; act local" been more true. It is without question time to call upon our City leaders to take up the challenge and develop a made-in Burlington Climate Action Strategy that will fulfill our city's <u>Blue Dot pledge</u> and put Burlington on the map as a leader in effectively tackling climate change. There is no greater 'gift' that you can provide to current and future generations than clean air to breath, safe water to drink, healthy food to eat and a stable climate to sustain life of all forms.

We appreciate the opportunity to share our input on climate action, and hope that the City will think carefully about the legacy it will leave the citizens of Burlington, and consider that true leadership begins with the courage to take the long view. The cost of doing anything less is too great a price to pay.

We look forward to further opportunities for dialogue and cooperation. Meanwhile, please let us know if you have any questions.

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&

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On behalf of the BurlingtonGreen Advocacy Team of volunteers

