

2018 GLOBE Climate Leadership Award

Large Municipal Trailblazer Award Application

Environment and Climate Change Canada (ECCC) in collaboration with GLOBE are recognizing and highlighting exceptional Canadian municipalities that are leading the way and are demonstrating innovative approaches in the fight against climate change.

Large Municipal Trailblazer Award

All applicants for the Small Municipal Trailblazer Award must be a Canadian municipality with more than 100,000 residents.

Instructions

Please answer all questions and note the word limit of each question. Once this form is complete, please save and submit a copy with your original video submission by e-mail to applications@theglobeawards.ca by **February 16, 2018, 6pm EST**.

For eligibility requirements, please refer to the general requirements and rules and the Small Municipal Trailblazer Eligibility Criteria. If you have further questions, please check our FAQs or email us at questions@theglobeseries.ca.

Section 1: Contact Information

Primary Contact:

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Secondary Contact:

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Section 2: Applicant Information

Municipality's Name: City of Guelph

Office Address: 1 Carden Street, Guelph, ON N1H 3A1

Does your municipality have less than 100,000 residents (Yes/No)? No

Please give a brief description about your municipality (300 words max)

Guelph is a city of more than 130,000 people located in southwestern Ontario, 100 kilometres west of Toronto. It was founded in 1827 by John Galt, who was a popular Scottish novelist and the superintendent of a British development firm called the Canada Company. Guelph's population is growing faster than the provincial or national averages. With an unemployment rate among the lowest in Canada, the City has a diverse economy that includes advanced manufacturing, biotechnology and agri-technology, and a significant education and public sector presence. Guelph consistently ranks as one of Canada's most liveable cities and boasts a low crime rate, a high rate of volunteerism, a vibrant arts and culture scene, and a thriving and historic downtown. It is also a city with strong environmental values. One of the largest cities in Canada to rely solely on groundwater, Guelph has a comprehensive water conservation and efficiency program, and residents consume significantly less water per capita than the provincial and national averages. Guelph also has one of the best waste diversion rates in Ontario, has its own organic waste processing facility, and was one of the first municipalities to implement a three-stream waste system for organics, recycling, and landfill-bound waste. Guelph was the first municipality to adopt a Community Energy Plan (CEP) ten years ago, backed up by a strong commitment to energy conservation and renewable energy.



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Section 3: Leadership in the fight against climate change

Please limit answers to 200 words or less.

1. Describe how your municipality demonstrates leadership in the fight against climate change.

In 2007, the City of Guelph committed to climate action and reducing greenhouse gas emissions by becoming the first Canadian municipality to create a CEP. Thanks in part to Guelph's leadership, more than half of Canadians now live in a municipality with a CEP.

Guelph has encouraged CEP adoption as a charter member of Quality Urban Energy Systems of Tomorrow (QUEST), and through memberships in the Ontario Sustainable Energy Association, ICLEI – Local Governments for Sustainability, and the Clean Air Partnership. Guelph achieved Milestone 5 of the Federation of Canadian Municipalities (FCM) Partners in Climate Protection program. Our climate change leadership is further demonstrated by awards from FCM (Sustainable Communities Award – Energy, 2014; Neighbourhood Design, 2018), as well as QUEST (Community Energy Builder Award – Local Government, 2015).

Internationally, Guelph participated in the Transatlantic Urban Climate Dialogue (TUCD) from 2012-2014 and is a member of the European Union International Urban Cooperation (IUC) program. Guelph plans to join the Global Covenant of Mayors for Climate and Energy, and will participate in the Global Mayors' Summit in Edmonton in March 2018.

2. Explain how your municipality is working to fight climate change in a way that is new or different from other municipalities (i.e. innovative approach to waste management, energy reduction plans, lower emitting transportation plans, etc.).

Guelph is pursuing 11 of 21 key municipal actions in Ontario's draft *Community Emissions Reduction Planning: A Guide for Municipalities*:

- The award-winning Guelph Innovation District Secondary Plan will concentrate development in

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areas appropriate for district energy and transit-accessible, exemplifying green/sustainable community design and development

- Guelph Transit increased ridership through route optimization and includes biodiesel in its fuel supply
- Full-time Transportation Demand Management program manager
- Cycling infrastructure received Share the Road Cycling Coalition Silver Award in 2014
- One of the first communities to install an electric vehicle charging station; City fleet has several hybrid gas-electric vehicles
- Guelph Energy Efficiency Retrofit Strategy (GEERS), slated for implementation following the CEI update, received 2015 QUEST Community Builder Award
- Nine City properties have solar PV arrays; Guelph has 49% more residential PV arrays/capita than provincial average
- Corporate Energy Management Plan (CEMP) leads by example: process efficiency improvements through LED lighting, arena ice plant enhancements, and efficient heating
- 575kW wastewater biogas-fueled cogeneration plant
- Clair Road Emergency Services Centre and Guelph Civic Museum are LEED Silver certified; major new facilities will be designed and constructed to that standard
- A thermal energy storage system, partly funded by students, cools University of Guelph buildings with clean, off-peak power

Section 3: Leadership Cont.

3. ***If applicable, describe how your municipality has committed to future action in the fight against climate change (e.g. targets to move toward % renewable energy, long-term programs that encourage sustainable developments, etc.)***

When Guelph's CEP (now the Community Energy Initiative, CEI) was created in 2007, there were no federal or provincial greenhouse gas (GHG) emissions reduction targets. The CEI aimed to reduce per-capita GHG emissions by 60% over 2006 levels by 2031.

When mapped onto the 2030 targets set by the other orders of government, the inferred CEI target lands

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in the middle. It is less aggressive (13% higher) than the provincial target, and more aggressive (21% lower) than the federal target.

The CEI update process has surveyed Guelph citizens for their opinions on what the new target should be. An overwhelming majority (80%) of Guelphites feel that the CEI target should lead those of other orders of government. The CEI update task force will take this into consideration when setting a new target; this will be announced when the update is published in May 2018.

Coincident with – but separate from – the CEI update process, there is a community movement in Guelph that is advocating for the City to move to 100% renewable energy. This may have some influence on CEI targets.

The City has a sustainability board, a Climate Change Office, and is updating the CEMP to align with ISO 5001.

Section 4: Impact

Please limit answers to 200 words or less.

4. Describe the impact that your municipality has had in the fight against climate change within your community, region and/or Canada.

Guelph has made significant wins against climate change:

- The 2.5 megawatt Eastview electricity generation plant is fueled by landfill gas. Without this plant, methane from anaerobic decomposition of waste in the closed landfill would seep into the atmosphere. By burning this gas in the generator, its climate change impact is reduced by a factor of 40 and electricity is provided for the local community.
- The 575kW cogeneration facility at the Guelph Wastewater Treatment Plant runs on renewable natural gas produced by anaerobic digestion of sewage sludge. This reduces emissions of methane, while reducing electricity and natural gas purchased from the grid.
- Canadian Solar is headquartered in Guelph – the only top-three global supplier of solar PV modules not based in China.
- Magna's Polycon manufacturing facility has an 8MW cogeneration plant supplying electricity



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and heat with lower emissions than if each were purchased separately from the grid. The 400kW cogeneration plant at the West End Community Centre provides similar benefits.

- Nine City properties have rooftop solar PV arrays; four have solar hot water systems. Guelph has 49% higher solar PV systems per capita than the provincial average.
- The CEMP has saved the City \$1.6 million in utility costs from 2013 through 2017.

5. How does your municipality measure impact and what is your municipality's quantifiable impact?

Some examples include: CO2 emissions (metric tons) per capita, % increase in energy efficiency, % of energy from renewable energy, waste diverted per capita, # of energy conservation projects, % increase in recycling, and more.

Guelph measures climate change mitigation impact by per-capita GHG emissions. As mentioned above, the target for this metric is a 60% reduction from 2006 levels by 2031. The CEI is in the process of being updated and an initial 2016 estimate of this metric is 38% lower than 2006. If this proves accurate, Guelph is nearly two-thirds of the way to its original target after only ten years of a 25-year plan.

Guelph also measures progress by per-capita reduction in energy consumption. An initial estimate indicates that this measure was 3% lower in 2016 compared to 2006, while the target is a 50% reduction by 2031. However, of the two major energy efficiency programs, one (district energy) is in a very early stage of implementation while the other (residential energy efficiency retrofits) has not yet been launched.

A more specific metric is rooftop solar photovoltaic systems per capita as a measure of the rate of local, renewable energy deployment in the City. Although Ontario has a much higher value for this metric than other provinces due to the MicroFIT program, Guelph has a value 49% higher than even the provincial average, making it a national leader on this measure.

Section 5: Community engagement in the fight against climate change

Please limit answers to 200 words or less.

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6. Describe if and how your municipality engages its residents in regards to mitigating climate change?

The City has a Community Engagement Framework, policy and dedicated staff who plan and execute engagement opportunities. The City has held these engagement conversations with the help of many volunteers through:

- Presentations to local community groups and service organizations including the Rotary Club, the Guelph-Wellington Men's Club and Canadian University Women
- Presentations to local faith-based organizations
- Lunch-and-Learn presentations at local businesses including Canadian Solar and Danby
- Guest lectures at the University of Guelph in the faculties of Engineering, Geography, and Environmental Sciences
- Presentations to local Grade 10 students in the Community Environmental Leadership Program (CELP), Grade 12 students in the Headwaters program, and junior high school geography students within the City
- Elementary school visits encouraging Grades 3-6 students to pursue energy efficiency, water conservation, and active transportation through the superhero-themed Planet Protector Academy
- Presentations and exhibitions at local events and festivals including the Local Food Festival, eMerge Guelph Eco-fair, the Guelph Resilience Festival, civic celebrations such as Canada Day, etc.
- Presentations and exhibitions at local community-focused venues such as community centres, shopping districts, library locations, downtown core, etc.
- Using paper-based and online surveys to obtain feedback on specific programs (GEERS) and the CEI in general

7. Does your municipality engage local businesses and organizations on its efforts to fight climate change? If so, please describe.

In the initial years of the CEI, the local business community was engaged through the Mayor's Task Force on Community Energy. A similar group was convened in 2016 to lead the CEI update, later renaming itself Our Energy Guelph (OEG). It includes members from the following organizations:

1. The City of Guelph
2. The University of Guelph
3. The Guelph Chamber of Commerce

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4. Guelph Hydro Electric Systems Inc.
5. Union Gas
6. Canadian Solar
7. Polycon (a Magna company)
8. Reid's Heritage Homes
9. Fusion Homes
10. eMerge Guelph (a local environmental non-profit enterprise)
11. Guelph Solar (a local solar PV and solar hot water system installer)
12. Tradeforce Tech (a local provider of energy efficiency services)
13. Clean Cut Energy (a local provider of sub-metering services)
14. Siemens Wind Energy
15. Ramboll Inc.
16. The Ontario Ministry of Energy
17. Natural Resources Canada

This group has in turn engaged local businesses and organizations through Lunch-and-Learn sessions, an online survey, and one-to-one stakeholder interviews. After the CEI update is delivered, the group plans to transform into a non-profit service provider modeled on Sustainable Waterloo Region. This entity will provide ongoing leadership in the implementation of the CEI.

8. Discuss if and how your municipality engages in regional, provincial, national and/or global initiatives in the fight against climate change.

Guelph participates in Ontario's Independent Electricity System Operator (IESO) regional planning process, and is one of two municipal representatives on the IESO Data Strategy Advisory Council. Guelph is a member of the Clean Air Partnership and the Ontario Sustainable Energy Association, and launched the Municipal Energy Managers Community of Practice.

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Nationally, Guelph is a member of ICLEI – Local Governments for Sustainability and participates in its annual Livable Cities Forum. Guelph is a founding member of QUEST and initiated the QUEST Ontario Caucus Municipal Working Group.

Guelph participated in the United Nations Environment Program's District Energy in Cities Initiative and was profiled in the 2015 global report. From 2012-2014, Guelph participated in the Transatlantic Urban Climate Dialogue, a three-nation collaboration including the Free University of Berlin, George Mason University, the North Virginia Regional Authority, the City of Bottrop, and the City of Stuttgart. Guelph participates in the city-to-city pairing initiative of the EU International Urban Cooperation program, will participate in the 2018 ICLEI World Congress in Montreal, and will soon join the Global Covenant of Mayors for Climate and Energy. We will also participate in the Global Mayors' Summit prior to the 2018 Intergovernmental Panel on Climate Change meeting in Edmonton.

9. *If applicable:* Does your municipality communicate to its community about its climate change action and why it is important? If so, please describe.

The City of Guelph communicates through the community engagement methods described in the response to Question 6 above. In addition, the Manager of the Climate Change Office for the City provides regular status reports to Council, published for viewing by the general public via the City's website. Major milestone events are accompanied by media releases, coordinated by the City's Communications Department.

Further, OEG has engaged in a comprehensive social media campaign through Twitter, Facebook, LinkedIn, and Instagram. The group also has a website where relevant content is posted. The OEG Facebook page went from zero to 200 followers in two months and the Facebook advertising campaign reached 90,303 people with a total of 245,566 impressions. The group's Twitter feed gained 141 followers, while producing 137 retweets, 170 link clicks, and 75,700 impressions.

These efforts were critical to drive completion of the Community Vision Survey, which is guiding the process of setting CEI targets and selecting specific actions to achieve those targets. Together with community engagement actions, OEG was able to exceed the threshold of 400 surveys considered necessary for statistical significance. This will ensure that OEG's implementation actions are anchored in solid community support.

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Section 6: Applicability & Adoption.

Please limit answers to 200 words or less.

10. Have others adopted or applied your municipality's action to help further the fight against climate change? If so, please describe.

The most significant way that other communities have followed Guelph's lead is by creating CEPs. Guelph was the first municipality in Canada to create one, and ten years later more than half of Canadian citizens now live in a municipality that has developed a CEP. Guelph has contributed vigorously to forums such as QUEST to disseminate the lessons we've learned pertaining to how to develop and implement a CEP. In 2014, Guelph's achievement was recognized by FCM through a Sustainable Communities Award in the Energy category.

GEERS, which received an award from QUEST in 2015, aims to use Local Improvement Charges to expand the market for residential energy efficiency retrofits. Similar programs are under way in Toronto (the Home Energy Loan Program) and Halifax (Solar City program). Many other municipalities are looking to Guelph to demonstrate a successful implementation of this type of program.

Regarding climate adaptation and resilience, the City of Guelph has implemented a storm water fee. This will fund the necessary infrastructure improvements to handle extreme weather events such as heavy rainfall, flooding, and extreme temperature fluctuations. Other municipalities in Ontario are either considering or are implementing similar measures.

11. How could other municipalities or organizations adopt or apply your municipality's action to help further the fight against climate change?

The principal way other municipalities can adopt Guelph's climate change action is by developing and implementing a CEP. Guelph continues to innovate in this regard, and the upcoming CEI update will mark the launch of a new community-based organization that will continue implementation of CEI programs. If this approach is successful, we expect other communities to imitate it for their CEP implementations. They can also adopt their own versions of programs such as GEERS, as well as corporate measures such as storm water fees, a corporate energy management plan based on ISO50001, and mandating LEED Silver for new buildings.

A critical way to reach carbon reduction goals is by planning and designing new communities to be less

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dependent on energy. Guelph is leading the way with the Guelph Innovation District Secondary Plan, which received the 2018 FCM Sustainable Communities Award in the Neighbourhood Design category. The award highlights the plan as a model for other municipalities, effectively encouraging them to use it as an example that will help them achieve sustainability goals. Other communities are welcome to employ similar planning principles (compact, walkable communities; mixed use zoning; integrated energy distribution networks) to those used in this plan.

Section 7: Video Submission Instructions

Create an original 30-45 second video on how your organization is demonstrating action, innovation and leadership in combating climate change. To submit your video, please choose

OPTION 1:

- **Attach it to your application email. If the file is too big to send via email, go to Option 2.**

OPTION 2:

- **Go to www.dropbox.com**
- **Sign up or log in**
- **Upload video**
- **Click 'Share' on the right hand side of the uploaded video and share with submissions@theglobeawards.ca**

Video Format Tips:

- **File format: We recommend using the MP4 or MOV format**
- **File size: 1GB max**

Videos must be uploaded at the same time as your application form. The deadline for uploading your application and video is February 16, 2018, 6pm EST.