



**Submitted Shovel Worthy Ontario Municipal  
Proposed Projects (as of June 5<sup>th</sup>, 2020)**



**Clean Air Partnership**

## **Shovel Worthy Municipal Projects (as of June 5<sup>th</sup>, 2020)**

A survey is being conducted to collect Ontario municipal shovel worthy projects that support post- COVID economic stimulus goals, climate goals, and other health and resilience benefits.

### **[About Clean Air Partnership](#)**

Clean Air Partnership (CAP) is a registered charity that works in partnership to promote and coordinate actions to improve local air quality and reduce greenhouse gases for healthy communities. Our applied research on municipal policies strives to broaden and improve access to public policy debate on air pollution and climate change issues. Clean Air Partnership's mission is to transform cities into more sustainable, resilient, and vibrant communities where resources are used efficiently, the air is clean to breathe, and greenhouse gas emissions are minimized.

### **[About Clean Air Council](#)**

The Clean Air Council (CAC) is a network of municipalities and health units that work collaboratively to combat air pollution and climate change. Since 2001, CAC members have worked to make our communities more liveable, competitive, and resilient through actions that reduce energy use, minimize greenhouse gas (GHG) and air pollution emissions, and make the movement of people and goods more efficient.

Ontario municipalities are working to address climate change and air pollution while also strengthening their economies. The policies needed to fight air pollution and climate change can also produce health benefits and economic growth, reduce costs, and improve social equity in our communities. The CAC presents an opportunity to take a cohesive approach, pooling research findings, expertise, and lessons learned while enabling actions that benefit our communities and beyond.

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**Name of Municipality**

City of Mississauga

**Please provide a short description of the proposed project.**

**Corporate Facility Upgrades using New Technologies**

Reducing (and/or eliminating) natural gas usage in corporate facilities is a crucial component of meeting our GHG reductions goals as outlined in the CCAP. There are a variety of upcoming opportunities to reduce natural gas consumption. For example, using thermal heating/cooling systems (e.g. DE in downtown), and advancing new technologies such as heat pumps and heat recovery systems in corporate buildings, facilities, and arenas (e.g. community centers, pools, etc.). For the City of Mississauga, the proposed projects are:

- A Heat Pump retrofit at Edward J. Dowling Transit Facility (Building B) Office Buildings. The design is complete - construction project delayed due to COVID.
- Iceland Arena - Air handling units are being replaced. There is potential to install a heat recovery unit at the ice plant.
- Burnhamthorpe and Carmen Corbassen Community Centers will be undergoing significant upgrades over the next 1-3 years. Current funding excludes the installation of waste heat recovery options.

**How is this project aligned with municipal Climate/Sustainability Goals?**

City's Climate Change Action Plan identifies the following action: Action #5: Advance Energy Efficiency and Climate Resilience of Municipally-Owned Buildings

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

No

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

**Please provide us with your name if we can contact you for more information on this project.**

Leya Barry

**Please provide us with your email if it is okay to contact you.**

leya.barry@mississauga.ca

**Name of Municipality**

City of Mississauga

**Please provide a short description of the proposed project.**

**Fleet and Equipment Electrification**

To achieve the objectives and targets of the Climate Change Action Plan, the City will need to electrify at least 50% of the light-duty Corporate and transit fleets and equipment by 2030 and convert the bus fleet to low and zero-emissions technologies. The City is currently pursuing opportunities to electrify the Corporate Fleet and Equipment - including light-, medium-, and heavy-duty fleet and equipment to reduce greenhouse gas emissions and improve air quality by investing in low carbon and fuel-efficient Fleet, Equipment and Infrastructure. For the period 2020-2030, there is an opportunity to electrify over 50% of the Corporate light-duty fleet and equipment and 100% of all light-duty (non-revenue) vehicles in the MiWay fleet.

**How is this project aligned with municipal Climate/Sustainability Goals?**

City's Climate Change Action Plan identifies Action #17: Reduce Emissions from the City's Corporate and Transit Fleet and the following sub-actions:

- 17-3: Electrify the light-duty transit vehicles and Corporate fleet and equipment and expand the use of renewable fuels
- 17-5: Replace the transit bus fleet with low or zero-emission vehicles

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

Between 2020-2030, there is an opportunity to electrify over 50% of the Corporate light-duty fleet and equipment and 100% of all light-duty (non-revenue) vehicles in the MiWay fleet. Together, this would lead to a reduction in Corporate greenhouse gases of ~1,300 t/eCO<sub>2</sub>.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

Improve resident health:

- Air quality improvements by reducing the localized emission of air pollutants;
- Reduced noise pollution due to the relatively silent electrical drivetrain;

- Reduction in the urban heat island effect (lowering peak summer temperatures), as EVs, emit only 20% of the heat emitted by internal combustion engine (ICE) vehicles;
- Strengthen the local economy and reduce operational costs:
- EVs cost less to operate and maintain than ICE vehicles;
- EVs can help support the optimal use of electricity generation by leveraging vehicle-grid integration technologies. This can help reduce net electricity system costs in Ontario, benefiting the City and Mississauga residents;
- Signal growth in the clean-tech sector. A strong commitment to fleet electrification will signal that Mississauga is a prime destination for innovative businesses.

**Please provide us with your name if we can contact you for more information on this project.**

Leya Barry

**Please provide us with your email if it is okay to contact you.**

leya.barry@mississauga.ca

**Name of Municipality**

City of Mississauga

**Please provide a short description of the proposed project.**

**EV Charging Infrastructure – Corporate**

28 dual-port Level 2 EV chargers (56 total EV connections) are currently proposed at the following locations for use by the City's light-duty corporate fleet vehicles:

- Chargers at Central Parkway will be for both change off vehicles, and route supervisor vehicles: 20 dual-port chargers capable of charging 40 electric vehicles
- Chargers at Mavis will be for Inspection vehicles: 5 dual-port chargers capable of charging 10 electric vehicles;
- Chargers at Malton will be for change off vehicles: 3 dual-port chargers capable of charging 6 electric vehicles;
- Additional charging infrastructure will be needed over the coming years to support the electrification of City Fleet and Equipment - including all corporate fleet vehicles, transit vehicles, and fire.

**How is this project aligned with municipal Climate/Sustainability Goals?**

To achieve the objectives and targets of the Climate Change Action Plan, the City will need to: electrify at least 50% of the light-duty Corporate and transit fleets and equipment by 2030; and install EV charging infrastructure (Level 1 or Level 2) at Corporate facilities where transit and Corporate light-duty fleet and equipment is stored/used.

City's Climate Change Action Plan identifies Action #17: Reduce Emissions from the City's Corporate and Transit Fleet and the following sub-actions:

- 17-3: Electrify the light-duty transit vehicles and Corporate fleet and equipment and expand the use of renewable fuels
- 17-5: Replace the transit bus fleet with low or zero-emission vehicles

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

Between 2020-2030, there is an opportunity to electrify over 50% of the Corporate light-duty fleet and equipment and 100% of all light-duty (non-revenue) vehicles in the MiWay fleet.

Together, this would lead to a reduction in Corporate greenhouse gases of ~1,300 t/eCO<sub>2</sub>.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

Improve resident health:

- Air quality improvements by reducing the localized emission of air pollutants;
- Reduced noise pollution due to the relatively silent electrical drivetrain;
- Reduction in the urban heat island effect (lowering peak summer temperatures), as EVs, emit only 20% of the heat emitted by internal combustion engine (ICE) vehicles;
- Strengthen the local economy and reduce operational costs:
- EVs cost less to operate and maintain than ICE vehicles;
- EVs can help support the optimal use of electricity generation by leveraging vehicle-grid integration technologies. This can help reduce net electricity system costs in Ontario, benefiting the City and Mississauga residents;
- Signal growth in the clean-tech sector. A strong commitment to fleet electrification will signal that Mississauga is a prime destination for innovative businesses.

**Please provide us with your name if we can contact you for more information on this project.**

Leya Barry

**Please provide us with your email if it is okay to contact you.**

leya.barry@mississauga.ca

**Name of Municipality**

City of Mississauga

**Please provide a short description of the proposed project.**

**EV Charging Infrastructure – Community**

Currently planning to install 22 Level 2 EV Connections between 2020-2021 for public use at the following locations: Central Library (10), Sheridan College Campus - South Parking Lot (6), and Streetsville Municipal Parking Lot (6). There is potential to install additional EV charging infrastructure for public use at a variety of locations in Mississauga, including Port Credit Arena and Library and Paramount Fine Foods.

**How is this project aligned with municipal Climate/Sustainability Goals?**

City's Climate Change Action Plan identifies the following action:

- Action 18-5: Install electric vehicle charging infrastructure at City-owned properties for us by employees and the general public.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

No

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).****Please provide us with your name if we can contact you for more information on this project.**

Leya Barry

**Please provide us with your email if it is okay to contact you.**

leya.barry@mississauga.ca

**Name of Municipality**

City of Mississauga

**Please provide a short description of the proposed project.**

**Cycling Network Improvements/Active Transportation COVID-19 Recovery Framework**

**How is this project aligned with municipal Climate/Sustainability Goals?**

The City's Climate Change Action Plan identifies the need to "Empower Low Carbon and Alternative Modes of Transportation" (Action #18)

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

On average, driving 1 km in your car costs \$13- \$20 dollars and \$6,000-\$8,000 per year to own and operate a motor vehicle. Active transportation, such as walking or biking have little to no costs.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

No

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

Active transportation benefits our: health, society, transportation system, environment, and economy. Reducing GHG emissions can lead to improved air quality through the reduction of common air contaminants (CAC's). Further reduced human exposure to toxic air contaminants, which are related to lung cancer, and avoided community impacts such as lower demand for transportation infrastructure.

**Please provide us with your name if we can contact you for more information on this project.**

Leya Barry

**Please provide us with your email if it is okay to contact you.**

leya.barry@mississauga.ca

**Name of Municipality**

City of Mississauga

**Please provide a short description of the proposed project.**

**Solar PV Installation**

Solar PV installations at Mississauga Valley CC, Clarkson CC, Paramount Fine Foods Centre, Erin Mills Twin Arena, Carmen Corbasson Community Centre. Installation of 5 solar PV systems along with the feasibility studies which will determine ways to reduce the emissions in each building. A total solar capacity of 2,681kW will be installed on the roofs of 5 facilities, which will achieve a reduction of 117 tonnes of GHG and will produce an annual net cost savings of \$576,000. The project will demonstrate the City's commitment to combat climate change and will show leadership and support of renewable energy.

**How is this project aligned with municipal Climate/Sustainability Goals?**

Yes, this action is part of the City's Climate Change Action Plan.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

A total solar capacity of 2,681kW will be installed on the roofs of 5 facilities, which will achieve a reduction of 117 tonnes of GHG and will produce an annual net cost savings of \$576,000.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

Renewable Energy Source; Reduces Electricity Bills; Diverse Applications; Low Maintenance Costs; Technology Development

**Please provide us with your name if we can contact you for more information on this project.**

Leya Barry

**Please provide us with your email if it is okay to contact you.**

leya.barry@mississauga.ca

**Name of Municipality**

Regional Municipality of Durham

**Please provide a short description of the proposed project.**

**Energy efficiency retrofits**

Energy efficiency retrofits at the Regional office and social housing facilities.

**How is this project aligned with municipal Climate/Sustainability Goals?**

Yes, the project is part of a Council approved Climate/Energy Action Plan.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

\$10 million in estimated project costs, which would stimulate the local economy. Feasibility studies are underway, and construction could begin in 2021.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

Significant electricity, gas savings and reduction of GHG emissions

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

The resiliency of municipal facilities. Reduced Municipal operating costs. Comfort for social housing residents.

**Please provide us with your name if we can contact you for more information on this project.**

Andrew Wismer

**Please provide us with your email if it is okay to contact you.**

andrew.wismer@durham.ca

**Name of Municipality**

Regional Municipality of Durham

**Please provide a short description of the proposed project.**

**Solar PV Installation**

Solar PV Installations at Regional headquarters and a Long Term Care Facility.

**How is this project aligned with municipal Climate/Sustainability Goals?**

The project is not identified in a Council-approved plan, but it meets Council approved objectives.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

\$1.1 million in estimated project costs, which would stimulate the local economy. Construction could begin in 2021.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

Significant GHG reductions anticipated.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

Reduced municipal operating costs.

**Please provide us with your name if we can contact you for more information on this project.**

Andrew Wismer

**Please provide us with your email if it is okay to contact you.**

andrew.wismer@durham.ca

**Name of Municipality**

Township of Huron-Kinloss

**Please provide a short description of the proposed project.**

**Solar Installation**

50 000 kWh Solar Array located at the back of the property of the Ripley-Huron Community Centre. The project would provide an electricity neutral Arena / Community Centre.

**How does this project aligned as part of your municipality's Climate/Sustainability Goals?**

The project is identified as an action within a Council approved Climate/Energy Action Plan.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

50 000 kWh off the grid.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

Diversion of savings to other GHG reduction projects; Compounded savings and stabilize property tax rates to serve the residents better, and showcase the opportunity for residents to complete their projects at home.

**Please provide us with your name if we can contact you for more information on this project.**

Mike Fair

**Please provide us with your email if it is okay to contact you.**

mfair@huronkinloss.com

**Name of Municipality**

Town of Caledon

**Please provide a short description of the proposed project.****Sollar Installation**

The Town of Caledon proposed to install a 35.84kW solar photovoltaic (PV) system on the rooftop of its main administrative facility and connected to Hydro One's net metering program. Town Hall has been identified as one of the Town's highest energy-consuming facilities and has been subject to aggressive energy conservation measures and operational improvements. The next step to achieve optimum energy performance is for the building to generate its electricity through rooftop solar PV's, an action that aligns with the Town's Corporate Greenhouse Gas Reduction Framework. A recent solar PV net-metering feasibility study determined that the roof of Town Hall can support a 35.84 kW solar PV system containing 112 PV modules, generating approximately 40,000 kWh annually.

**How is this project aligned with municipal Climate/Sustainability Goals?**

Reducing energy and greenhouse gas emissions from Town facilities is a priority for the Town of Caledon. This project aligns with the Town's recently updated Corporate Greenhouse Gas Reduction Framework, which sets a target of 24% reduction in greenhouse gas emissions below 2017 levels by 2024. Council approved the Framework in June 2019.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

A twenty-year financial assessment was completed for the proposed 35.84 kW solar PV system and resulted in avoided electricity costs and cumulative savings annually. In the first year of operation, the capacity factor is 1125 kWh/kW, or 40,320 kWh/year.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

Town Hall is responsible for emitting approximately 106 tonnes of carbon dioxide equivalent per year. This project would offset 15.3 tonnes CO<sub>2</sub>e annually.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

This project has a number of co-benefits, including the use of Town Hall as a demonstration site for other Town facilities as well as businesses and residents in the community. Besides, the ability of Town Hall to generate its own electricity helps enhance resiliency with the ability to generate electricity during power outages. Reducing GHG emissions associated with on-peak

electricity generation would also help improve air quality.

**Please provide us with your name if we can contact you for more information on this project.**

Alexandra Service

**Please provide us with your email if it is okay to contact you.**

alexandra.service@caledon.ca

**Name of Municipality**

Town of Caledon

**Please provide a short description of the proposed project.****Building Automation System**

This project would involve the installation of a Building Automation System for Albion Bolton United Community Centre. The system would be programmed at the time of the installation to control the facilities of rooftop units and domestic hot water. Currently, only localized controls are in operation for existing systems.

**How is this project aligned with municipal Climate/Sustainability Goals?**

Identified in the Town's Corporate Greenhouse Gas Reduction Framework (2019 - 2024), where the Town has adopted a target to reduce corporate energy use by 15% below 2017 levels by 2024, and corporate emissions by 24% by 2024. We are also in the process of updating our Community Climate Change Action Plan, with long term reduction targets to 2050, where we will strive for low-carbon corporate operations.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

This project will involve the Town's facility staff, project management staff, local HVAC staff, a building automation system specialist, and potentially a third party to ensure the BAS is scheduled in an energy-efficient way.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

We estimated that this project would have 1448 tonnes of CO<sub>2</sub>e reduction by 2051.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

This retrofit will allow for reduced operating costs of this facility. In particular, controlling energy costs is very important to the long term financial stability of the Corporation, because this is a cost that has increased annually. In reducing energy use, this makes the Town less vulnerable to the increases in energy costs. This, in turn, will allow for funds across the Corporation to be invested elsewhere, to further support the Town of Caledon's service levels to residents and the community. The Building Automation system will improve the overall comfort of the facility, including community members who use this facility. Many different

internal uses will benefit from more adaptable control over systems. For example, if there are discomfort issues, it will be much easier to adjust the temperature setpoint through Online access to the system controls. Besides, the system will provide more flexibility to schedule temperature setpoints to allow for different facility uses. The Town's Corporate Energy Team also does promotion and awareness with the public on the various energy conservation measures being undertaken by the Town. By adding smart controls to this facility will allow for innovation in how the building operates.

Most importantly, staff will be equipped with the tools to better respond to occupant complaints to ensure comfort, and address any anomalies in the facility's energy consumption. Most importantly, this system will report to staff in real-time energy consumption, run time and temperature to allow for more informed building operations. This project will also allow for future improvements for controlling the facility's energy consumption beyond HVAC and DWH to control lighting and other factors.

**Please provide us with your name if we can contact you for more information on this project.**

Cristina Guido

**Please provide us with your email if it is okay to contact you.**

cristina.guido@caledon.ca

**Name of Municipality**

Town of Caledon

**Please provide a short description of the proposed project.**

**Electric truck for fleet Pilot Project**

The Town would like to purchase and pilot an electric truck for its fleet. The purpose of this pilot will be to inform the potential uses, opportunities and challenges associated with the use of electric vehicles beyond electric cars. This builds on the existing program the Town has for converting its smaller vehicles to electric/hybrid vehicles. Currently, the Town has 5 electric vans and plans to purchase additional EVs for staff use. The Town has also supported the community use of electric vehicles by installing 13 community EV charging stations (two level 3's and eleven level 2's). Seeking opportunities to replace larger diesel trucks to EV's is a natural step, as the Town continues to explore opportunities to reduce emissions from its fleet.

**How is this project aligned with municipal Climate/Sustainability Goals?**

In 2019, Council passed the Town's Corporate Green House Gas Reduction Framework (2019-2024). One of the goals is to reduce emissions from fleet 30% by 2024 since fleet makes up 42% of corporate emissions according to our 2017 GHG inventory. In 2020 the Town will be implementing a Corporate Green Fleet Strategy, where one of the main drivers to lower fleet emissions will be by bringing on alternative fuel/electric-powered vehicles. Increasing sustainable transportation in the community is also a goal of the Town going forward. We are hoping to increase the number of EV chargers in the community and implement other benefits to EV owners. In addition, this project also has the opportunity to promote the use of EV and trucks throughout the community as an educational tool to increase the adoption of electric vehicles throughout the community. This transition to electric vehicles would reduce emissions in the transportation sector, thereby contributing to the Town's GHG reduction targets overall.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

Electric Trucks are a very new and innovative technology that has recently been introduced to the market. Through the purchase of an electric truck, staff will be directly supporting a market transformation of a new wave of EV types.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

The Community Climate Change Action Plan has a theme area focused on transportation measures to achieve greenhouse gas emissions reductions. Transportation emissions are the largest source of community greenhouse gas emissions in Caledon. The Town's inventory shows that the transportation sector is responsible for 42% of corporate emissions. There are specific

actions within the Town's climate change action plan that encourage the use of alternative fuel types. Transitioning the Town's corporate fleet to alternative fuel types would support this action area.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

This project has the opportunity to educate the community and public on the use and benefits associated with electric vehicles and trucks. This would include communicating information on the range of the truck, and how this varies through the seasons in an effort to encourage community adoption of EV's and reduce range anxiety. Second, this project also has the opportunity to reduce significant air pollution emitted through the combustion of diesel fuel. According to Health Canada, diesel engine exhaust is a "complex mixture of hundreds of chemicals." Diesel fuel engines also are a significant source of particle pollution, creating over 100 times more particle emissions than standard gasoline engine vehicles. Besides, long term exposure to diesel exhaust can have other health effects such as asthma.

This project has a significant opportunity to promote behaviour change both corporately and in the community to support the adoption of electric vehicles. Corporately, by demonstrating the opportunity for an electric truck to support the regular activities required by roads and fleet staff to senior managers and Council holds, the potential to expand the conversion of additional diesel trucks to electric across the corporation. From a community perspective, the Town will be able to promote and actively communicate the opportunities and benefits of operating and owning EV's. This could help the public overcome common misperceptions with respect to range anxiety. In addition, by placing appropriate signage on the truck (stating, i.e. this is an electric vehicle) would help educate the diverse uses and appearance of EV's and demonstrate the Town's commitment to climate change mitigation to the public.

The electric truck, as noted above, is a very new technology that has recently been introduced into the market place. Supporting the purchase of the truck and communicating opportunities and challenges with the manufacturer would directly inform future improvements to the vehicle for future models and maintenance. Electric trucks are currently not produced on a mass scale. Therefore this pilot project has the opportunity to contribute a market transformation, informing the use directly and range of electric trucks in real-life applications.

**Please provide us with your name if we can contact you for more information on this project.**  
Craig Stephens

**Please provide us with your email if it is okay to contact you.**  
craig.stephens@caledon.ca

**Name of Municipality**

The City of Oshawa

**Please provide a short description of the proposed project.**

**Environmental and Risk Assessment**

The City is currently undertaking an environmental and risk assessment investigation on the Raleigh Yard site. The inquiry will assess groundwater and soil conditions. The goal of this project will be to implement and undertake the recommendations from the assessment to allow the City to continue to plan the use of the site.

**How is this project aligned with municipal Climate/Sustainability Goals**

This project aligns with the Oshawa Strategic Plan.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No. It will require the retention of contracted services and consultants.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

No

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

Improved stormwater management and health of creek/wetland.

**Please provide us with your name if we can contact you for more information on this project.**

Susyn Korbak

**Please provide us with your email if it is okay to contact you.**

skorbak@oshawa.ca

**Name of Municipality**

The City of Oshawa

**Please provide a short description of the proposed project.**

**Removal and replacement of deficient sidewalk slabs**

**How is this project aligned with municipal Climate/Sustainability Goals?**

This project aligns with the City's Active Transportation Master Plan and the Oshawa Strategic Plan.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No, it will require the retention of contracted services.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

No. Reduce automobile use and carbon emissions.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

This project will improve the City's sidewalk network, reduce the risk of injury to pedestrians and will promote active transportation throughout the City.

**Please provide us with your name if we can contact you for more information on this project.**

Susyn Korbak

**Please provide us with your email if it is okay to contact you.**

skorbak@oshawa.ca

**Name of Municipality**

The City of Oshawa

**Please provide a short description of the proposed project.**

**Converting existing gasoline fleet vehicles to propane**

Funding would assist with costs associated with conversion and installation.

**How is this project aligned with municipal Climate/Sustainability Goals?**

The project aligns with the City's Corporate GHG Reduction Plan.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No, it will require the retention of contracted services and the purchase of the equipment.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

Propane fuel has a lower carbon content than conventional gasoline and diesel fuel. When used as a vehicle fuel, propane can offer life cycle greenhouse (GHG) emissions benefits over conventional fuels, depending on vehicle type, age, and drive cycle.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

This Will result in lower operating and maintenance costs over the lifespan of the vehicles offset by the upfront costs to convert fleet vehicles to propane.

**Please provide us with your name if we can contact you for more information on this project.**

Susyn Korbak

**Please provide us with your email if it is okay to contact you.**

skorbak@oshawa.ca

**Name of Municipality**

The City of Oshawa

**Please provide a short description of the proposed project.**

**Extending existing trail**

This project is extending the existing Harmony Creek Trail, which entails the detailed design and construction of 3 new paved links.

**How is this project aligned with municipal Climate/Sustainability Goals?**

This project aligns with the City's Active Transportation Master Plan and the Oshawa Strategic Plan.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No. Trails contribute to generating sports tourism and increased tax revenues from new residential developments in their vicinity.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

No. This project will aid in the City's efforts to reduce greenhouse gas emissions by reducing automobile use and carbon emissions.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

This project will enhance the City's recreational trail system and will promote active transportation throughout the City.

**Please provide us with your name if we can contact you for more information on this project.**

Susyn Korbak

**Please provide us with your email if it is okay to contact you.**

skorbak@oshawa.ca

**Name of Municipality**

The City of Oshawa

**Please provide a short description of the proposed project.**

**Community bike-share service**

This project would entail the introduction of a community bike-share service within the City of Oshawa to be implemented in stages. Phase 1 will focus on providing 150 to 300 bicycles to service downtown, post-secondary institutions and the Waterfront Trail. Depending on the uptake of Phase 1, Phase 2 will be implemented to expand the bike-share service to the rest of the City.

**How is this project aligned with municipal Climate/Sustainability Goals?**

This project aligns with the City's Active Transportation Master Plan and the Oshawa Strategic Plan.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No. Bikeshare programs have a positive effect on business activity and new spending at neighbourhood businesses, which are located along bike routes and bike docking stations.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

Reduce automobile use and carbon emissions.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

A community bike-share service will be a valuable program for the community and will complement the City's efforts to: promote a healthy lifestyle; provide a useful, affordable and convenient active transportation choice to commuters, students, recreational riders and visitors that will integrate with the existing public transit system; test the use, effectiveness and overall utilization of a bike-share service and support economic growth through the creation of new commercial activity and tourism within Oshawa.

**Please provide us with your name if we can contact you for more information on this project.**

Susyn Korbak

**Please provide us with your email if it is okay to contact you.**

skorbak@oshawa.ca

**Name of Municipality**

The City of Oshawa

**Please provide a short description of the proposed project.**

**Replacement of rooftop HVAC units**

This project is to replace both rooftop HVAC units (RTUs) at the Oshawa Executive Airport with more energy-efficient and environmentally friendly units.

**How is this project aligned with municipal Climate/Sustainability Goals?**

This project will result in energy savings and, subsequently, GHG reductions. The project is aligned with the Corporate Facilities Energy Management Plan objectives as well as the City's Draft Community GHG Reduction Plan.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No, it will require the retention of contracted services and the purchase of the equipment.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

The project is expected to result in 30,700 kWh consumption savings and 15.9 kW demand savings.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

Will reduce operating costs and cleaner air/ reduced smog improving health.

**Please provide us with your name if we can contact you for more information on this project.**

Susyn Korbak

**Please provide us with your email if it is okay to contact you.**

skorbak@oshawa.ca

**Name of Municipality**

The City of Oshawa

**Please provide a short description of the proposed project.**

**Delpark Rink Dehumidification Unit Replacements**

This project is to replace 2 rink dehumidification units at Delpark Communities Centre with more energy-efficient and environmentally friendly units.

**How is this project aligned with municipal Climate/Sustainability Goals?**

This project will result in energy savings and, subsequently, GHG reductions. The project is aligned with the Corporate Facilities Energy Management Plan objectives as well as the City's Draft Community GHG Reduction Plan.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

No, it will require the retention of contracted services and the purchase of the equipment.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

The project is expected to result in considerable energy savings and will be tied into the CHP Plant. The unit's capacities are at 12,000 CFM and 13,000 CFM.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

Will reduce operating costs and cleaner air/ reduced smog improving health.

**Please provide us with your name if we can contact you for more information on this project.**

Susyn Korbak

**Please provide us with your email if it is okay to contact you.**

skorbak@oshawa.ca

**Name of Municipality**

Township of Hornepayne

**Please provide a short description of the proposed project.**

**Expansion and upgrades to Community Arena**

The expansion will include the addition of a fitness facility, seniors' space and library - all accessible and of adequate space which we don't have now - as well as new bleachers with storage/office space underneath, new workshop/Zamboni room. The new build would include built-in energy efficiencies above the standard—application currently in the ICIP.

**How is this project aligned with municipal Climate/Sustainability Goals?**

Although the Township has not yet completed its Municipal Energy Plan, our forward-thinking Council is all about long-term sustainable planning. Sustainability means fiscal responsibility and using money wisely. We have had an Energy Task Force in operation for the last year and are still exploring ways in which to make our entire community more energy-friendly. Our ageing infrastructure is not energy efficient at all.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

This project would not create additional jobs - it is all about consolidating municipal operations into one area to reduce overall energy use and impact on the environment as well as providing better space for ratepayers to use.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

No

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

This project would have a substantial social impact in our community. The library is currently in the Council Chambers, which has taken over the Seniors' space, leaving them with nothing. Neither area is accessible, each having a set of stairs to get to. The Fitness Facility is in the curling club clubroom and has been for almost 10 years - this is unacceptable and a big issue in our small community. The arena expansion would solve a whole lot of issues in our community and, at the same time, provide new, energy-efficient space.

**Please provide us with your name if we can contact you for more information on this project.**

Stacey Rendell

**Please provide us with your email if it is okay to contact you.**  
edo.hpayne@bellnet.ca

**Name of Municipality**

Township of Hornepayne

**Please provide a short description of the proposed project.**

**Building a net-zero multi-use facility for municipal operations**

It would consolidate administration, public works, fire department and library while including a new fitness facility, an emergency operations centre and a seniors' space.

**How is this project aligned with municipal Climate/Sustainability Goals?**

Although the Township has not yet completed its Municipal Energy Plan, our forward-thinking Council is all about long-term sustainable planning. Sustainability means fiscal responsibility and using money wisely. We have had an Energy Task Force in operation for the last year and are still exploring ways in which to make our entire community more energy-friendly.

**Do you have estimates on the local economic development/job creation opportunities associated with this project?**

This project would not create additional jobs - it is all about consolidating municipal operations into one building to reduce overall energy use and impact on the environment using a net-zero concept.

**Do you have estimates on greenhouse gas reduction associated with this project that you can provide?**

A conceptual new building of 12,000 square feet can replace the existing functionality and include an area for expansion. The new building is estimated to consume 69,200 kWh of electricity per year and produce 5,300 kg CO<sub>2</sub>e of greenhouse gasses. This is a reduction of 88,800 kWh of electricity and equates to 6,900 CO<sub>2</sub>e of greenhouse gas savings per year.

**Please provide a brief description of the other co-benefits (not mentioned above) that would result from this proposed project (health, resiliency, etc.).**

Other benefits include increased operational efficiencies, healthier buildings (current buildings have stagnant air, are not accessible, cold in winter, hot in summer), improved morale and mental health.

**Please provide us with your name if we can contact you for more information on this project.**

Gail Jaremy

**Please provide us with your email if it is okay to contact you.**

jaremy.hpayne@bellnet.ca

