

**Kingston Community Climate Action Fund – Applications Received  
During Fall 2021 Call for Proposals**

<b>Organization Name</b>	<b>Project Focus</b>	<b>Funds Requested</b>
Cycle Kingston	Valet Bicycle Parking	\$15,250.00
Extend-a-Family Kingston	Hydroponic Greenhouse	\$36,000.00
Sustainable Kingston	Water Garden	\$20,000.00

## **Application: Cycle Kingston – Valet Bicycle Parking**

### **Question - Provide a brief outline of your proposed project, including how it will meet the funds eligibility criteria**

Cycle Kingston launched a valet bicycle parking social enterprise - Bicycle Valet Kingston - in 2019 thanks to a grant from the Community Foundation for Kingston and Area. One goal of the project was to encourage more people to cycle to events in the city as opposed to driving their cars. We would like to expand the awareness and utilization of this non-profit service in 2022 and beyond. With the dramatic increase in interest in cycling that came out of the pandemic, and as our community recovers from the COVID-19 pandemic and more festivals and activities return, this is a prime opportunity to encourage cycling by providing secure, free bicycle parking at destinations.

Cycle Kingston had been offering free valet bicycle parking at community events for several years using volunteers and borrowed equipment. In 2019, the social enterprise was launched based on our highly successful Gear Up Recycled Bicycles model, where we provide youth employment opportunities in partnership with local youth-serving agencies. The start-up grant allowed Bicycle Valet Kingston to purchase mobile bike parking racks, assist with some staffing costs, and produce preliminary signage and branding materials.

In 2019, Bicycle Valet Kingston was contracted to provide secure parking at the Skeleton Park Music Festival, Arts Fest Kingston, Rockin' the Big House and other events in partnership with the City of Kingston and Downtown Kingston. We had plans to increase our activity dramatically in 2020, but the global pandemic shut down community events, festivals and social gatherings: Bicycle Valet Kingston essentially went on hiatus for 2020 as there were no events to service. In 2021, Bicycle Valet Kingston secured a contract with Downtown Kingston for the four summer long weekends to provide secure parking of the "Bistro on Ontario" event.

Cycle Kingston is seeking a grant of \$15,250 to enhance and expand Bicycle Valet Kingston and its services. The grant will provide funding to hire a part-time coordinator for 2022 to promote and coordinate more parking contracts, including recruiting and supporting employees. The grant will also include funding to purchase portable fencing required for the parking compound (until now, we ask our event partners to provide fencing), funds to be used for a variety of promotions, a branded canopy, branded flags for identifying the location, additional directional signage, vests to be worn by staff and volunteers, and re-usable, weather resistant bike-check tags (akin to coat check tags).

Assuming our community continues to open up public events, Bicycle Valet Kingston has identified the following list of events/activities where secure bicycle parking could be offered in 2022:

- Skeleton Park Music Festival
- Kingston Arts Fest in City Park
- Buskers Rendezvous
- Sports, like Queen's Gael's football, soccer, rugby
- City Hall Market, on Saturdays - weekly
- Memorial Centre Market, on Sundays - weekly
- Limestone City Blues Festival
- Movies in the Square
- Open Houses at City Works
- Fall Fair
- First Capital Day
- Canada Day
- Taste of Kingston
- Sheep Dog Trials
- Ribfest
- Kingston Pride
- Chilifest
- Doors Open Kingston

- Princess Street Promenade - and other street closure events
- Other festivals, events, and public activities

Bicycle Valet Kingston is a non-profit social enterprise, and charges a fee to the event organizer, which covers the costs of hiring and paying employees to staff the event, plus earn a modest profit. The proceeds are reinvested back into the enterprise, with any surplus used to support the main charitable work of Cycle Kingston, which is to provide safe cycling education programs. Cycle Kingston, which operates Bicycle Valet Kingston, is a registered Canadian charity in good standing, with \$5 million liability insurance, and is compliant with all employment and business standards.

Cycle Kingston has a successful relationship with ReStart Employment Services to recruit and train youth employees (5 years connecting students with our Gear Up social enterprise). Often, these youth are facing barriers to employment (i.e. lower levels of literacy, incomplete secondary school education, effects of marginalization, or lack of job experience). ReStart provides support and training, and we provide real jobs and real pay, along with mentorship of a caring adult. Over the past five years, we have employed over 15 youth through ReStart for our Gear Up Social enterprise.

Bicycle Valet Kingston would also consider hiring adults facing employment barriers, including those with physical or developmental disabilities who are less able to secure traditional fulltime employment. We have already had success matching an adult referred from VOCEC, and could approach VOCEC or organizations like KEYS as potential sources of staff for our bicycle parking services.

**Question - How will your proposed project reduce greenhouse gas emissions?**

By providing safe, secure destination bicycle parking at events, festivals and locations – and making people aware of this bicycle parking option – we will encourage and empower more people to cycle to events. As more events open to the public, and the interest in cycling continues to grow, we feel there is a great opportunity to empower citizens to cycle, which will have a direct – if modest at first – impact on reducing greenhouse gas emissions. This project also fits well with Active Transportation priorities established by the City of Kingston.

GHG emissions reduction:

With 20 events (20-days) of parking in 2022 resulted in 20 bicycles being parked, and assuming a 10km ride to the event, that would result in a reduction of 4000 kms of car travel, with an approximate GHG savings of about 700 kg CO<sub>2</sub>e (assuming 169 g CO<sub>2</sub>e/km). This number would increase as the number of events served increases.

This project is also scalable, in that Bicycle Valet Parking could be expanded to non-event related activities, for example, parking in a central location in downtown Kingston for work commuters. Additionally, with a presence at events, Cycle Kingston staff operating the bike parking will be able to talk to cyclists about safe cycling, provide route advice or cycling safety tips, and encourage cyclists to enroll in a safe cycling course which will further improve their confidence and competence as cyclists. This will make them more likely to replace car trips with bicycle trips, further offsetting GHG emissions.

**Q - Describe your project plan.**

A - With the CCAF funding, Cycle Kingston would purchase materials in the off-season to prepare for the upcoming events season. Early in the new year, 2022, Cycle Kingston would begin the process of hiring a staff member who would be the coordinator. The Coordinator would be in place by April 2022, and with the assistance of volunteers, would expand on the list of events mentioned earlier, and would begin to promote the Bicycle Valet Kingston service to event organizers. The coordinator would create promotional materials and utilize various media to promote the service.

The Coordinator, with assistance from experienced volunteers, would recruit staff members through existing partnerships with ReStart and new ones at VOCEC, KEYS and other employment services. Staff would be hired, trained and assigned to work at BVK events throughout the cycling season. Volunteers with Cycle Kingston who have

cycling education experience would provide training to staff so they can provide additional information on safe cycling to people at the events (whether they cycled there or not).

At each parking event, volunteers and staff would transport and set up a 30ft x 30ft bicycle parking fenced in compound, complete with directional signage, banner flags, a canopy tent and bike parking racks. During the events, cyclists will be directed to park their bicycles at the BVK compound for no charge (as a service provided by the event/festival). The customer would be given a "bike check tag", similar to a coat check, which they would return to get their bicycle (we would also record name and phone number, in case tags become lost).

The support for this initiative from the Kingston CCAF would greatly enhance the visibility and success of the Bicycle Valet Kingston social enterprise, not only directly reducing GHG emissions, but also encouraging increased cycling by providing a place for information.

- Are the estimated costs in your proposed budget supported by quotes or some other form of proof?
  - Yes
- Have you applied to other sources for funding?
  - Yes
- Have you received or confirmed funding for this project from other sources?
  - Yes
- Can you provide proof of the funding upon request?
  - Yes
- When do you expect other sources of funding to be confirmed?
  - Use existing grant from CFKA plus contribution from organization.
- Do you have a letter of support from your organization's Board of Directors?
  - Yes
- Do you have a letter of commitment for formal partnerships?
  - No

**Budget**

Eligible Project Expense	Estimated Costs
Coordinator's wages 15hrs/wk. April to Sep 2022	\$7,180.00
Promotion: Discretionary funds for flyers, postage, print/ radio/ social media advertising	\$5000.00
Portable fencing for 30ft x 30ft enclosure: 15 portable 6ft barriers x \$168/ each	\$2,520.00
Canopy/ Flags/ Signage: 10' x 10' canopy w/ wall; 4 x 8ft teardrop flags w/ bases (\$250 ea); 8 coroplast directional signs (\$50 ea)	\$2,350.00
Vests: 6 branded, high visibility vests for use by staff and volunteers, at \$50 each	\$300.00
Bike-check tags: 100 re-usable double set of numbered tags, to replace paper tags	\$100.00
<b>A) Sub-total of eligible project costs:</b>	<b>\$17,450.00</b>
<b>Funding from other sources (if applicable):</b>	
Community Foundation for Kingston & Area - from 2018 grant (deferred)	\$1,200.00
Cycle Kingston contribution (from social enterprise revenue, donations and fundraising)	\$1,000.00
<b>B) Total Funding from other sources:</b>	<b>\$2,200.00</b>
(Subtract B from A):	
<b>TOTAL FUNDING REQUESTED from KCCAF</b>	<b>\$15,250.00</b>

## **Application: Extend-A-Family Kingston - Hydroponic Greenhouse**

### **Q - Provide a brief outline of your proposed project, including how it will meet the funds eligibility criteria**

Extend-A-Family Kingston's (EAFK) Diversity Garden is the heart of our program space. It is an accessible community and sensory garden designed with the vision of being a catalyst for a community development hub to encourage social connections as well as to increase participation and create opportunities for social intergenerational and cross-cultural interactions, recreation, exercise, and education.

This project incorporates a fully accessible Dunya hydroponic greenhouse to expand our garden space to grow a variety of fruits, herbs and vegetables year-round not just seasonally. This will help feed close to 500 individuals or 120 (4 people) families annually to start; and train 40 participants and volunteers in gardening.

Each Dunya hydroponic greenhouse is a self-contained environment that is climate controlled and scalable for hydroponic farming. Each unit is 100 square feet which will increase our existing community garden by 100% per unit. This addition of one unit will double our current community garden and significantly increase our yield of produce.

Our long-term vision is to add a total of 7 units which would increase the existing community asset by 700%. We have the physical space to accommodate the increase.

EAFK is committed to monitoring the success of this initiative; the Dunya hydroponic greenhouse provides for remote monitoring and data collection.

It meets the Kingston Community Climate Action Fund eligibility criteria as it:

- Supports reduce of Greenhouse Gases (GHGs) as with the Dunya Habitat hydroponic greenhouse EAFK will be able to grow produce year-round which lowers the carbon emission produced by transporting produce around the country
- It increases energy conservation as it has lower impact on landscape/aquatic ecosystems because it enables increased crop productivity with minimal carbon footprint, minimum land use, 90% less water and low energy consumption
- Reducing or diverting organic waste from landfill - EAFK will contribute produce to the Partners in Mission Food Bank and the Community Food Redistribution Warehouse to support community agencies addressing food insecurity
- Assisting with climate change adaptation and technology innovation. EAFK uses virtual reality in our programming and have explored incorporating virtual reality and robotics into the Dunya habitat

Dunya Habitats unique approach empowers change through integrating sustainable development, economic growth, social inclusion and environmental protection to ensure crop productivity.

### **Question - How will your proposed project reduce greenhouse gas emissions?**

The Dunya modular habitat is a self-contained environment that is climate controlled and scalable for hydroponic farming and will allow us to adapt to climate changes. It increases productivity and efficiency, enables growing produce quickly year-round, within various climate conditions without soil and with no pesticides.

It reduces the impact on landscape/aquatic ecosystems because it enables increased crop productivity with minimal carbon footprint, minimum land use, 90% less water and low energy consumption. All while producing 10-15 times more crop yield, 450 kg every with 4-6 weeks harvests, year-round growing in any climate condition.

The Dunya design helps address climate change greenhouse emissions.

For example, to yield 11,793 kg of lettuce using traditional farming methods, will need 4047 sq m of land, 5,925 m<sup>3</sup> of water over 6 months, 6-8 weeks to harvest at a cost of \$8,847. The same yield using a Dunya Habitat will use 221 sq m of land, 4 m<sup>3</sup> of water, can be harvested in 4-6 weeks at a cost of \$450.00.

We are pleased to work with the City of Kingston for direction and expertise on monitoring and measuring the impact of this project. The annual impacts of the project will be available as the Dunya hydroponic greenhouse is able to provide remote monitoring and data collection.

**Question - Describe your project plan**

Extend-A-Family Kingston is a registered charity providing individuals with disabilities, and their families with coordinating access to regional services, respite, inclusive programs and opportunities for personal growth, development and achievement of life goals.

EAFK will install one Dunya hydroponic greenhouse on our property at 361 Montreal Street which will increase the existing garden by 100 square feet, doubling the current growing space.

As member of the Kingston Community Garden Network through Loving Spoonful, EAFK donates to marginalized populations through Martha's Table as well as to individuals with disabilities and their families. This expansion incorporates hydroponic farming to expand growing a variety of fruits and vegetables year-round. It will help feed close to 500 individuals or 120 (4 people) families annually to start; and train 40 participants in gardening.

This additional harvest from year-round yield will allow us to provide fresh healthy food supports to increase our support to vulnerable populations. We will contribute produce to the Community Food Redistribution Warehouse to support community agencies addressing food insecurity.

EAFK supports vulnerable populations (youth, individuals with disabilities and their families, Indigenous peoples) that have been hard hit by the pandemic in terms of social isolation and food insecurity. Statistically, 1 in 8 households in the Kingston, Frontenac, Lennox & Addington area live with food insecurity. The additional pressures of COVID-19 have disrupted food productions, distribution and increased food prices and has increased the number of households who are experiencing food insecurity. This proposed extension will allow us to maintain our garden program 365 days of the year and will provide participants with programming in a pandemic resilient way.

EAFK is committed to social investment to support people with disabilities and other marginalized populations. They will benefit from social engagement, education and training about gardening to create opportunities for employment and/or volunteering.

Our vision is to continue to collaborate with Indigenous communities to enable sharing of traditional teachings and providing traditional herbs that can be grown year-round.

We will initially start to share information about the garden and events with our existing partners and continue to grow new partnerships.

The project will meet all COVID-19 health and safety standards and requirements. The garden has signage outlining Kingston, Frontenac, Lennox & Addington Public Health COVID-19 protocols. Support staff will monitor changes to protocols for community gardens and ensure they are followed through proper screening, sanitizing, social distancing and record keeping.

- Are the estimated costs in your proposed budget supported by quotes or some other form of proof?
  - Yes
- Have you applied to other sources for funding?
  - No
- Do you have a letter of support from your organization's Board of Directors?

- Yes
- Do you have a letter of commitment for formal partnerships?
  - No

**Budget**

<b>Eligible Project Expense</b>	<b>Estimated Costs</b>
Facility Construction/Renovation - Hydro installation and foundation	\$8,000.00
Equipment Purchase	\$35,000.00
Labour to install	\$5,000.00
<b>A) Sub-total of eligible project costs:</b>	<b>\$48,000.00</b>
<b>Funding from other sources (if applicable):</b>	
Extend-a-family Kingston	\$12,000.00
<b>B) Total Funding from other sources:</b>	<b>\$12,000.00</b>
(Subtract B from A):	
<b>TOTAL FUNDING REQUESTED from KCCAF</b>	<b>\$36,000.00</b>



## Application: Sustainable Kingston - Rain Garden

### Q - Provide a brief outline of your proposed project, including how it will meet the funds eligibility criteria

The Kingston Frontenac Housing Corporation Rain Garden Project is an exciting initiative that will reduce Greenhouse gases and help negate downstream flooding while beautifying affordable housing properties in Kingston.

Kingston Frontenac Housing Corporation has agreed to host four rain gardens, at a cost of \$20,000, on four different properties that include 28 Cliff St., 37 Cassidy St., 63 Curtis Cres., and 129 Van Order Drive. Should this project be approved, the GHG-reducing rain gardens will be installed and designed by a local landscape architect with the help of Sustainable Kingston volunteers.

KFHC and Sustainable Kingston reserve the right to change the location of any of the four rain gardens due to environmental changes or at KFHC's discretion.

In preparation for this application, Sustainable Kingston engaged Brendan McKee (OALA, CSLA) of Bombus Ecoscapes to properly assess and cost this project, which is scalable, has sustained impacts and has the co-benefit of supporting affordable housing in Kingston.

Rain gardens improve the environment by:

- Allowing the soil to naturally filter and remove some pollutants from rainwater before it goes into groundwater aquifers
- Preventing/reducing flooding by decreasing the amount of rain pouring over macadam and so forth (all impermeable surfaces) into storm sewers which then flow into rivers and streams, swelling them above flood stage
- Providing habitat for birds, beneficial bugs and butterflies
- Conserving water by reducing a need for irrigation of land near a rain garden
- Cleaning water\*

\*source: <https://dengarden.com/>

### Question - How will your proposed project reduce greenhouse gas emissions?

According to Georgia Tech, the average energy requirement for surface water treatment is 220 kWh/MGa. Kingston has 1,102 mm of rainfall per year. A 5m<sup>2</sup> rain garden in Kingston would have 5.51m<sup>3</sup>, or 1,455.59 gal, of rainfall per year, which would take 93.22kWh to process. Assuming the rain garden fully diverted the water from entering the treatment process, 0.0028 tCO<sub>2</sub>e would be reduced per garden or 0.0112 tCO<sub>2</sub>e for the four gardens. Over a 30-year period, each rain garden could sequester 0.084 tCO<sub>2</sub>e or 0.336tCO<sub>2</sub>e for four gardens.

### Question - Describe your project plan

If approved, Sustainable Kingston will engage Bombus Ecoscapes to begin the design stage in cooperation with Kingston Frontenac Housing Corporation. If Bombus Ecoscapes is unavailable at that time, SK will engage another qualified landscape architect.

Once the sites have been confirmed by both KFHC and the landscape architect on the project, Sustainable Kingston will solicit volunteer gardeners to help with all stages of the rain garden installation process under the direction of a landscape architect.

Following installation, Sustainable Kingston volunteers will continue to maintain the rain gardens under the direction of the landscape architect.

- Are the estimated costs in your proposed budget supported by quotes or some other form of proof?
  - Yes

- Have you applied to other sources for funding?
  - No
- Do you have a letter of support from your organization’s Board of Directors?
  - Yes
- Do you have a letter of commitment for formal partnerships?
  - Yes

**Budget**

<b>Eligible Project Expense</b>	<b>Estimated Costs</b>
Rain Garden design (provided by Bombus Ecoscapes) (x4)	\$6,000.00
Site preparation + installation: removal of existing vegetation to bring to rough grade (x4)	\$4,000.00
Site preparation + installation: grading of basin (x4)	\$4,800.00
Site preparation + installation: laying of stone, etc. at downspout and basin overflow	\$1,600.00
Site preparation + installation: planting	\$1,200.00
Maintenance (provided by Bombus Ecoscapes)	\$2,400.00
<b>A) Sub-total of eligible project costs:</b>	<b>\$20,000.00</b>
<b>Funding from other sources (if applicable):</b>	
<b>B) Total Funding from other sources:</b>	<b>N/A</b>
(Subtract B from A):	
<b>TOTAL FUNDING REQUESTED from KCCAF</b>	<b>\$20,000.00</b>