



# Green Project Support

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## Project Guidebook



Water  
Conservation



Waste Reduction  
and Diversion



Environmental  
Stewardship



GHG Emissions  
Reductions



Green Economy  
London

# Water Conservation Projects

Members are encouraged to set water reduction targets. These targets can be absolute or intensity based (e.g. m<sup>3</sup> of water per employee or sq ft).

Here are some water conservation projects that can be implemented with the Green Project support to help you reach a water reduction target:

- Low flow toilets installation;
- Waterless urinal installation;
- Faucet replacement, aerators, low flow shower installation;
- Low Impact Development project;
- Water and energy efficiency audit;
- Blue roof project.

The levels of recognition include:



Water

**10%+ Reduction**



Water

**20%+ Reduction**



Water

**30%+ Reduction**

## Low Flow/Dual Flush Toilets

Typically, low flow toilets will use between 3-4L of water per flush compared to the standard 6L toilet. This means there is a potential to reduce water usage from toilets by 50% or more, if you have an older toilet model. This project results in yearly water consumption reductions along with cost savings. Dual flush options are also great options as they can potentially save even more water depending on the model.

Resources:

- [What is a Low Flow Toilet?](#)
- [City Of London Water Conservation](#)
- [WaterSense](#)

## Waterless Urinals

Waterless urinals use gravity to flush instead of water. The outflow pipes connect to your building's conventional plumbing system. These urinals save water, reduce energy usage, and reduce emissions. The urinals are easy to clean and there is no need to maintain a flush control system, cistern, or water supply pipes.

Resources:

- [The Pros & Cons of Waterless Urinals](#)
- [The Best Waterless Urinals](#)
- [How Waterless Toilets Works](#)



## Water Bottle Refill Stations

Having a water bottle refill station at your workplace can reduce single-use plastic bottle waste and provide clean drinking water. A feature of many water bottle filling stations include a ticker that keeps track of the number of plastics water bottles saved from being disposed by using a refillable one.

These stations range in price from \$1,700 to \$5,000 depending of size and specific functions.

Resources:

- [Water Bottle Filling Stations](#)
- [Elkay Bottle Filling Stations](#)
- [Environmental Benefits](#)



## Water Audits

A water audit will identify your current usage from different processes, identify any leaks, and can identify areas where water could be reused. Projects can then be identified to reuse water where possible, fix any leaks, and create a plan to reduce the overall amount of potable water being used at your business.

Resources:

- [Enviro-Stewards - Water Conservation](#)
- [Customizing Water Efficiency Solutions for Industrial Manufacturers](#)

## Low Flow Faucets, Aerators, and Shower Heads

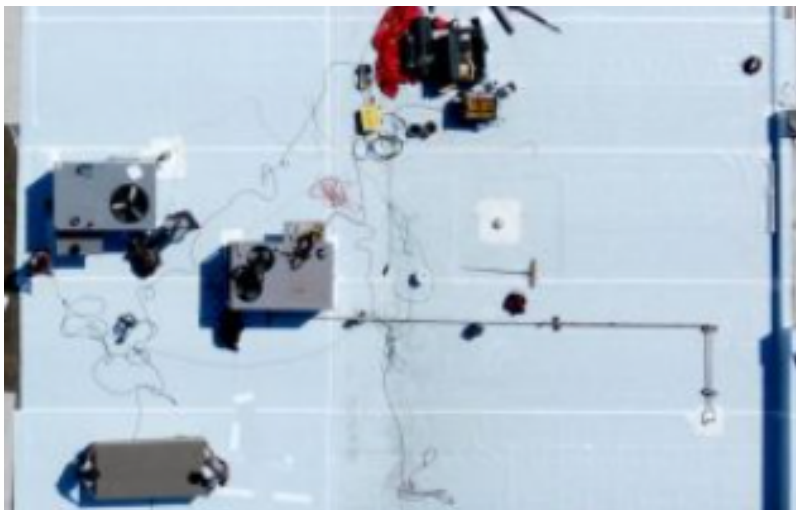
An aerator is an attachment that goes on your faucet to restrict the flow of water and reduce the amount of water used. Most newer faucets will have these, but not all are equal in flow rate. Look for 0.5 Gpm (1.9L per min). Most models you can attach to your current faucet.

Resources:

- [Low Flow Aerator](#)
- [WaterSense Label](#)
- [Tips for Implementing Low Flow Fixtures](#)

## Blue Roof Project

Blue roofs are an emerging rainwater collecting technology that stores stormwater on roofs. This solution can help with flood prevention, water and energy conservation, and reduce stormwater infrastructure costs. Enviro-Stewards offers an Affordable Smart Blue Roof (ASBR) system that can be installed on buildings. This system stores water on the roof from the rain to provide thermal benefits and be stored in a tank for water reuse. The technology of the roof can control when water is drained, store a predetermined amount of water, and flush the stored water to free up capacity. For more information on Enviro-Stewards and/or to consult with them, please visit their [website](#).



## Low-Impact Development

### Rain Barrels:

This project involves installing rain barrels on your building's downspout. If you have any type of landscaping, gardens, or potted plants on your property, then this a great opportunity to lower your water usage from tap water. Using a rain barrel can reduce water pollution by minimizing the storm water runoff which can collect pollutants from your landscape. Can be purchased at hardware stores and Costco.

Resources: [The London Green Directory - Water](#)

### Rain Gardens:

To decrease the amount of maintenance on your property, consider minimizing the amount of grass on your property. A garden bed filled with native and drought tolerant plant species can diversity your property making it more sustainable. It also keeps water from running to your property.

Resources:

- [Designing Rain Gardens](#)
- [London Middlesex Master Gardeners](#)

### Permeable Pavers:

Permeable pavers help stormwater infiltrate into the soil instead of collecting toxins and flooding the stormwater system. This can help to reduce flooding. With returning rainfall and snowmelt back into the groundwater table, these pavers support sustainable urban drainage systems.

Resources

- [LID Permeable Paving](#)
- [Brown's Enterprises](#)



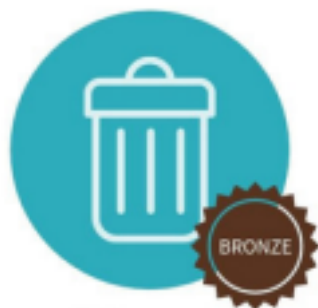
# Waste Reduction & Diversion Projects

Members are encouraged to set waste reduction and diversion targets. Ideally, you want to reduce as much as possible and then look at how to divert the remaining waste.

Here are some waste projects that can be implemented with the Green Project support to help you reach a waste reduction target:

- Waste audit and diversion strategy development;
- Organics/compost/recycling pick up program;
- Switch to biodegradable/eco friendly packaging options;
- Supply chain management.

The levels of recognition include:



Waste

20%+ Reduction  
50 %+ Diversion



Waste

40%+ Reduction  
60 %+ Diversion



Waste

60%+ Reduction  
70 %+ Diversion

## Waste Audit and Diversion Strategy Development

A waste audit is a systematic procedure to determine the quantity and composition of your waste stream. An audit will review operations and waste generation to identify the composition of your waste by examining how materials enter and exit your facility. It is a starting point to allow your business to make strategic decisions on how to allocate resources for source reduction and improved recycling programs.

A waste audit can help to develop a diversion strategy at your facility. Diversion projects include: recycling, construction waste disposal, EnviroDepots, e-waste recycling, TerraCycle, centralized waste systems, going paperless, supply chain management.

Resources:

- [Waste Audit in 5 Easy Steps](#)
- [A Guide to Waste Audits](#)
- [Waste Solutions](#)

## Supply Chain Management

This project involves your business taking steps to make your supply chain more sustainable. Your business takes steps to offset/mitigate impact within the supply chain which can involve switching suppliers, changing operations to involve more sustainable sourced materials, and conducting offset activities for GHG impacts that are unavoidable within the supply chain.

Resources:

- [The Supply Chain Carbon Footprint Reduction Strategy](#)
- [The Ultimate Guide to Supply Chain Management](#)
- [Keys to Successful Supply Chain Management](#)
- [Carbon footprints in the Supply Chain](#)



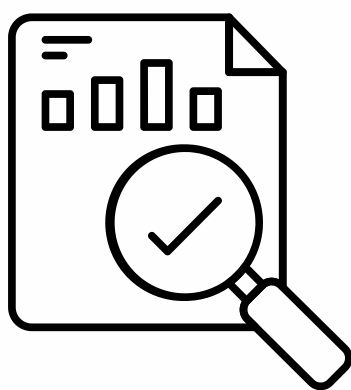
## Recycling Pick Up Program/Organics/Compost

Recycling is a great way to reduce waste sent to landfill. It demonstrates corporate social responsibility in businesses, minimizes volume of waste in landfills, and the overall GHG emissions released from landfills. If your hauler has separate recycling streams, it is important to sort your recycling properly to minimize contamination. Stream contamination can cause extra fees or denial of pick up from your hauler.

Here are some diversion projects for recycling that can be implemented:

- **Centralized waste systems:** This project involves taking away individual garbage cans at desks, rooms, and having a centralized waste and recycling collection area. These systems promote proper sorting of waste and lead to less contamination. It is a way to educate employees on proper waste recycling sorting.
- **TerraCycle:** TerraCycle offers free and paid recycling programs funded by brands, manufactures, and retailers around the world to help you collect and recycle your hard-to-recycle waste. The Zero Waste Box program allows you to recycle almost any type of waste. Check out their website to learn about their programs and what materials are accepted.

An outdoor composter is a great way to encourage all employees to help divert organic waste from the landfill. As much as 30% of all waste that goes into the landfill is organic and can be composted. Reducing the amount of waste that ends up in landfills can increase the lifespan. Organic material, such as kitchen scraps, plant material or paper can be disposed of even during the winter. Composters can be purchased in London from EnviroDepots. If you have a lot of compost, that would require a pickup service, there are companies that currently offer this including Waste Connections of Canada and Davidson Environmental.



# Environmental Stewardship Projects

Our members are encouraged to help showcase being stewards of the land, water, community, and native species of London and surrounding areas. Members can set environmental stewardship targets. There are both sponsorship and action projects that can be undertaken.

Here are some projects that can be implemented with the Green Project support to help you reach an environmental stewardship target:

- Employee engagement LOLA Bees hive sponsorship package;
- Installation of cycling infrastructure;
- Electric vehicle charger installation;
- Depave Paradise sponsorship;
- Employee tree planting and sponsorship;
- Pollinator gardens or community/corporate garden.

The levels of recognition include:

**2+ Projects**



**5+ Projects**



**8+ Projects**



**10+ Projects**



## Sponsorship Projects

### **LOLA Beehives:**

Opportunity for a company name on a hive or a beekeeping experience for staff. London Ontario Learning Apiary (LOLA) is an urban beekeeping project. This package has been designed to be as hands-on (or off) as desired with opportunities to follow the hive's progress through the season and to get involved in tending the bees. Click [here](#) for more information.

### **Sponsor Tree Planting:**

Option to sponsor a tree planting, or have your team partake in tree planting with ReForest London's assistance. If your business has land, ReForest London and its partners will supply everything else you need. Click [here](#) for more information.

## Action Projects

### **Native Plants/Pollinator/Community Gardens:**

Landscaping with native wildflowers and grasses help return the area to a healthy ecosystem. Use of native plants on business lands or on a land you have permission to access and maintain. It can replace an existing garden or create a new area. A pollinator garden is made up of native plants that are meant to attract pollinators. Pollinator numbers worldwide are declining and this can help provide habitat.

Community gardens and native plants increase our connection to nature, help educate our neighbours, and provide a beautiful, peaceful place to relax.

Employees can be involved in planning, design, creation, and maintenance of the garden.

### Resources:

- [In the Zone Gardens](#)
- [London Middlesex Master Gardeners](#)
- [Pollinator Pathways Project](#)

## **Installation of Bike Infrastructure:**

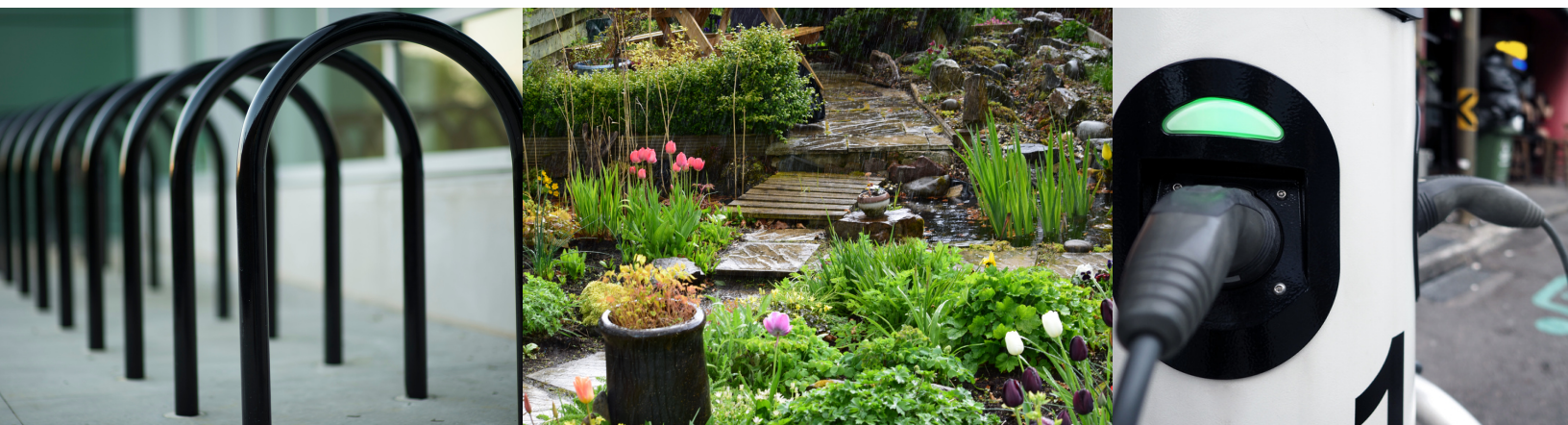
The average Canadian spends approximately twelve full days a year commuting between home and work. This can impact employees' happiness and is a significant contributor to your organization's carbon footprint. Consider installing bike racks which can help your employees switch to bicycle commuting. The installation of bike lockers can provide secure bike parking options for those who cycle to work. For more information, click [here](#).

## **EV Charging Station:**

Install an EV (electric vehicle) charging station at your business to help increase the availability of localized charging opportunities at workplaces. Transportation accounts for a quarter of Canada's GHG emissions, half of which comes from passenger cars and light trucks. A charging station in the parking lot promotes environmental awareness amongst employees and visitors to your facility. The benefits include generating revenue, raising your public profile, reducing carbon emissions, getting ahead of the curve, and helping to accelerate Canada's low-carbon transition.

In addition to Green Project funding, there is currently an EV Charger Incentive Program launched by Green Economy Canada and funded by National Resources Canada. The program will reimburse up to 50% of the cost of installing EV charging infrastructure (up to \$100,000). Visit the funding page [here](#) to learn more about this incentive program and how to apply.

\*\* For a full list of projects and more information on setting stewardship targets, please review our full guide [here](#)\*\*



# Emissions Reduction Projects

Members are encouraged to set GHG emission reduction targets. Here are some GHG emissions reduction projects that can be implemented with the Green Project support to help you reach an emission reduction target:

- Activity sensors for lighting;
- Increased insulation;
- Weather stripping and air curtain;
- High efficiency window replacement;
- LED lighting retrofit (installation or audit costs);
- Renewable energy project (solar/geothermal);
- Condensing electric tankless water heater;
- Air-source heat pump.

The levels of recognition include:



GHG

**20% + Reduction**



GHG

**40% + Reduction**



GHG

**60% + Reduction**

## Activity Sensors for Lighting Installation

Install occupancy/activity sensors in rooms where lights are often left on and are unoccupied. This helps to reduce overall electricity consumption in your facility. Activity sensors can be easily purchased at hardware stores.

## Weather Stripping and Air Curtain Installation

Proper weather stripping helps to maintain consistent indoor comfort and temperature. The air sealing of doors at your facility can improve overall air quality and energy efficiency.

Air curtains use a wall of forced air to create a barrier that allows people and vehicles to still pass through. This helps to prevent outdoor elements from coming in and indoor air escaping. The types of facilities that can benefit from an air curtain include: warehouses, industrial facilities, retail stores, and office buildings. There is a fixed incentive program being offered by Enbridge Gas to assist with further costs to installing an air curtain.

Resources:

- [How to: Weather Strip your Windows and Doors](#)
- [Weather Stripping - Home Depot](#)

## High Efficiency Window Replacement

Upgrade your windows to triple pane windows. Triple pane windows have the potential to reduce up to 20% of energy usage and costs. When looking for windows to purchase, ensure that they are ENERGY STAR certified. As well, wood and fiberglass are the most efficient window frames.

Resources:

- [Clera Windows and Doors in London](#)

## LED Lighting Retrofit

Switching to LED lights from fluorescent lights for indoor and outdoor lighting systems is a great way to reduce GHG emissions. LEDs use less than 75% energy and last up to 25 times longer than traditional incandescent lighting. The production cost is low and the efficiency allows for longer use of the same amount of light at a lower wattage. Additionally, adding signage to rooms to remind people to turn off lights when they leave a room that is occasionally occupied throughout the day can help.

Resources:

- [Save ON Energy Retrofit Program](#)
- [What You Need to Know About LED Retrofitting](#)

## Renewable Energy Project - Solar Panel/Geothermal Installation

Generating your own renewable energy cuts your GHG emissions and bills over the long-term. Adding a solar PV array can reduce and offset electricity consumption at facilities. Solar panels can be installed on a rooftop, or on ground racking or a tracker. It is best to have the PV panels facing south to maximize energy production. A contractor can help you determine the optimal position of the panels and assist with installation.

Resources:

- [Solar Power Ontario](#)
- [Solar Project at Heeman's](#)



## Condensing Electric Tankless Water Heater Installation

Conventional water heaters store heated water continually, even when the heated water is not needed. Tankless water heaters heat water only as it is demanded. When heated water is required, cold water enters the heater, causing the burner to ignite. The water then travels through the heat exchanger until it is the designated temperature and is passed through the pipes to the tap. Once the tap is shut off, the unit shuts down, eliminating the need to continually maintain hot water in a hot water tank. The energy required to heat water is greatly reduced as a result of not having to continually maintain the heat in a tank of water. Consultation with a contractor will help identify an appropriate water heater for your facility. A soft water system will also help prolong the life of your water heater by eliminating mineral build-up.

Tankless water heaters can eliminate 30% of the energy typically used to heat water. Installing a tankless water heater translates into cost savings of approximately \$160 or more annually on your utility bill (assuming 155 liters per day) and a reduction in emitted GHGs from reduced heating energy needs.

Resources:

- [Sizing Tankless Water Heaters](#)

## Air-Source Heat Pump

Eliminate natural gas bills with an air-source heat pump. Electric heat pumps are the most effective HVAC installation in bringing down natural gas usage for heating. An air-source heat pump is an electrical device that uses heat energy from outdoor air and brings it inside to heat your facility.

Resources:

- [Air-Source Heat Pumps](#)
- [Smart Renewables and Electrification Program](#)
- [Most Efficient Air Conditioners and Air-Source Heat Pumps](#)



# Green Economy London programming made possible by:



**London**  
CANADA



THE  
**READY**  
COMMITMENT

**Canada** 



**HSBC** Bank