

TAY VALLEY TOWNSHIP CLIMATE ACTION PLAN

CHAPTER 5A POTENTIAL ACTIONS DETAIL

POTENTIAL MUNICIPAL (CORPORATE) ACTIONS

CORPORATION

(Your advice needed on which of these should be moved into the Chapter on How to Implement the Plan)

Enable cutting of Greenhouse Gas emissions from Municipal Operations

- Adopt the Climate Action Plan which lays out some specific (mandatory) steps to launch the process and a set of possible actions that require further research and action
- Adopt the Qualitative Climate Lens
- Adopt the Quantitative Climate Lens developed by Bob Argue
- Revise the mandate of the Green Energy and Climate Change Working Group to review, recommend, and prioritize, with the assistance of staff, climate action priorities for Council's consideration, and to identify new opportunities.
- Continuously scan for changes in energy costs and supply*
- Identify and evaluate the Municipality's change management strategy for receptivity to climate change*
- Assess Greenhouse Gas emissions from any work-related flights taken by Council or staff and assign carbon offset funds to Township Greenhouse Gas reduction projects+
- Add bookkeeping capacity to make transparent and report any carbon fees. Monitor carbon fees as a means to help determine the value of activities+
- Require all bidders to report Greenhouse Gas emissions in tenders, using the Quantitative Climate Lens or a similar lens from their industry association*
- Monitor for changes to policies governing municipal investments that allow for divestment of municipal funds from fossil fuels and avoidance of risk to taxpayers+
- Integrate the Climate Action Plan with the Building Condition Assessment Report, the Asset Management Plan, and the Conservation and Demand Management Plan+

SIDEBAR

Carbon Offsets to Air Travel

Air travel is a singularly large contributor per person to Greenhouse Gas emissions. A one-way flight from Ottawa to Toronto produces about the same amount of emissions as does the average Canadian car driven for a full a year, or 4600 Kilograms. (Check numbers) While a goal is to replace air travel with ground travel, when flight is necessary, investing in a high-quality carbon sequestration or zero emission project can offset the emissions. The Guatemala Stove Project is based in Tay Valley Township. It replaces open fires with cookstoves, saving 2-3 tonnes of carbon dioxide emissions annually, for 20-30 tonnes over the 10-year lifespan of the stove. A stove costs \$300. In

Project Drawdown, clean cookstoves ranked No. 21 of 80 top solutions to reverse global warming.

<https://guatemalastoveproject.org/gsp-solution-for-reducing-your-carbon-footprint/>

WASTE

Cut Greenhouse Gas emissions from waste+*

- Conduct a comprehensive waste audit that includes organic materials and evaluates Greenhouse Gases produced by residents travelling to the waste sites +
- Investigate and assess options for eliminating organic waste in landfill including working with Lanark County and neighbouring municipalities*
- Set goal to reduce all waste, eliminate organic materials from landfill and develop a plan modeled on circular economy and Zero Waste principles*
- Expand materials to be recycled and increase recovery rates+

The single largest source of Greenhouse Gas emissions under the control of the Municipality are those generated by the landfill. When organic or compostable material is put in the landfill, it rots, producing methane and leachate. Put into a composting process, it does not produce methane since methane-producing microbes do not live in environments with air. Eliminating organics from the waste stream would cut the methane emissions, reduce the leachate produced in the landfill and lengthen the lifetime of the landfill. Every kilogram of organics composted is a 1.5-kilogram reduction of carbon dioxide.

Ontario plans to ban all organics from landfill starting in 2022. It plans to begin upstream, by causing reductions in the production of food waste. (<https://www.ontario.ca/page/food-and-organic-waste-framework#section-4>).

SIDEBAR

"There is a hierarchy of things that can be done with food waste, landfill being the worst, of course," she said. "The first being feed other people [and] the second being to feed animals. And if neither of those is possible, turn it into compost." Dianne Saxe, Ontario's former environmental commissioner. (<https://www.cbc.ca/news/technology/landfill-ban-organics-ontario-1.5282881>)

The starting point for Tay Valley is to understand how much recyclables and organics and what types of compostable organic materials are coming into the landfill and the yard waste pile. A comprehensive waste audit is recommended including assessing the Greenhouse Gases emitted by residents' vehicles transporting waste, recyclables and organics to the waste sites.

Tay Valley can then set goals, including a goal of moving towards the principles of Zero Waste and a circular and sharing economy which means extending the lifespan of resources and reducing pollution by reusing, repurposing, or repairing, and specifically reducing Greenhouse

Gas emissions. Tay Valley Township has a good start with its Recycling Centre at the Waste Site.

In terms of the downstream, at the end of the pipe, or eliminating organic waste from the landfill, Tay Valley can investigate the methods that would best reduce Greenhouse Gas emissions with the use of the Climate Lens. The evaluation could investigate:

- the Greenhouse Gas emissions of residents transporting their organic waste to the waste site in comparison with a pick-up method.* (From the householder survey, about three-quarters of Tay Valley residents compost much or most of their organic waste. But detailed data from other jurisdictions shows that even with a program that diverts organic materials, such as a green bin program, as much as 30% of a bag of garbage can be organic materials. Without a diversion program it can be up to 50%.)
- the Township purchase of and operation of a central composting system or digester*
- partnering with farm biodigesters*
- partnering with the County to implement the Waste Management Master Plan+
- partnering with neighbouring municipal composting systems+
- strengthening of backyard composting supports and programs*
- creating an online system to allow Tay Valley residents to find neighbours who will receive and compost their organic waste
- continue support of local efforts to reuse materials and build the circular and sharing economies
- flaring of existing methane gas from the landfill
- developing a program to educate about burn barrels and strengthen bylaw enforcement.
- ban single use plastics in municipal operations.

SIDEBAR

Success story on TVT Reuse Centre

BUILDINGS

Minimize energy consumption and Greenhouse Gas emissions of Municipal buildings+

- Assess any new construction, renovation, or maintenance for its potential opportunity to reduce Greenhouse Gases and operating costs of the Municipal Office with the intent to reduce heating and cooling load and convert mechanical systems from natural gas to electricity+*
- Assess any new construction, renovation, or maintenance for its potential opportunity to reduce Greenhouse Gases and operating costs of all other Municipal buildings
- Continue lighting retrofit projects

*Generate revenue to offset costs through net metering**

- Assess and implement a net metering program to reduce Greenhouse Gas emissions from electricity consumption and to generate revenue to offset costs by installing solar PV with appropriate buildings

Of the energy used by the Municipality, slightly less than half is burned to heat and cool the Township's buildings.

Being rural and not on a main natural gas pipeline, there is not much natural gas delivered into Tay Valley Township. However, it does reach about 20 homes, the UCDSB Glen Tay School and the Municipal Office on Harper Road.

The Municipal Office has four roof-top heating and air conditioning units that use natural gas. Two were recently replaced with new natural gas units. The remaining two are needing replacement, providing an opportunity to both audit the building for additional conservation measures and to replace natural gas with electricity, to reduce the building's Greenhouse Gas emissions. Incorporating air or ground source electric heat pumps can save operating costs as well as reduce Greenhouse Gases.

Given the extraordinarily short time frame we now face to meet the 1.5 degree C goal, the Township can take an important step in cutting its consumption of natural gas. Evaluating the replacement of the two older units is recommended.

The Municipality has the possibility to not only reduce its Greenhouse Gas emissions from the electricity it consumes, but to generate some revenue to offset its costs by installing solar photovoltaic panels with its buildings and to take advantage of Hydro One's Net Metering program. Net metering allows any Hydro One customer who generates electricity primarily for their own use from a renewable energy source (wind, water, solar radiation or agricultural biomass) to participate in the Net Metering program and accrue credit towards electricity costs.

SIDEBAR

What's the issue with natural gas?

Natural gas is a particular concern as the climate crisis worsens. Where natural gas was seen to be a good transition fuel between the most polluting of the fossil fuels – coal and oil – to the renewable sources of energy, in recent years it has become clear that it is a particular contributor to climate change. Natural gas is primarily methane, and methane has a global heating effect that is more than 80 times that of carbon dioxide in the first 20 years after it is released. Recent discoveries have shown extreme methane leakage from the production, gathering, processing, transmission and storage of natural gas as well as from natural systems such as the tundra.

(Note: <https://www.pbs.org/newshour/science/the-u-s-natural-gas-industry-is-leaking-way-more-methane-than-previously-thought>)

SIDEBAR

Tay Valley Municipal Lighting Retrofit
Story on Streetlight and Garage lighting retrofits

FLEET & ROADS

*Cut Greenhouse Gas emissions from the fleet**

- Assess current fleet and any new potential purchases by type of use/size for lowest costs and Greenhouse Gas emissions.

*Cut Greenhouse Gases emitted as a consequence of road materials**

- Evaluate roadbed materials for Greenhouse Gas emissions*

Of the energy used by the Municipality, slightly more than half is diesel fuel consumed in the Township's fleet. While there are few Greenhouse Gas reduction developments on the heavy vehicles, electric vehicle half-ton pick-ups are expected on the market in 2020 and Tay Valley is monitoring opportunities to replace its gasoline pick-ups with electric.

MUNICIPAL WORKPLACE

Enable and educate Council and staff to act on cutting Greenhouse Gas emissions

- Educate Council and staff to facilitate carpooling, employee switching to electric vehicles and removing organics and plastics from waste stream*+
- Install EV charger(s)*
- Install bike racks*

Engaging Council members and staff in personal actions in the workplace can better enable them to implement Greenhouse Gas reduction actions throughout their work and make them knowledgeable leaders in the community.

PUBLIC COMMUNICATIONS

Enable public action to cut Greenhouse Gas emissions

- Secure partners to deliver and fund an ongoing Communications Strategy that motivates community climate actions by residents, businesses, community organizations and individuals*+
- Develop and deliver public communications on many items related to climate change and greenhouse Gas emissions reductions, but specifically on these items recommended by the community*:
 - The identification of EV chargers and hydrogen refuelling stations in the area, in partnership with Lanark County, Smiths Falls and other neighbouring municipalities.
 - The purchase of EV vehicles including bikes, scooters and motorbikes, and hydrogen vehicles.
 - Home energy conservation programs and funding
 - The installation of EV chargers and hydrogen refuelling stations.
 - Farm programs of Rideau Valley Conservation Authority and Mississippi Valley Conservation that support climate actions
 - Reduction in meat consumption with the Leeds, Grenville and Lanark Health Unit and their Climate staff person.
 - Local organizations that support local food security with the GECC, Lanark Local Flavour, Perth Farmers Market, Two Rivers Food Hub, The Table

- Backyard composting including education about backyard composting at the Waste sites
- The natural re-establishment of natural areas and systems including specific information on forest management and wetlands management
- The Conservation Land Tax Incentive Program and the Managed Forest Tax Incentive Program
- Water conservation programs and actions
- Local community organizations and businesses that are taking climate action and providing low- or no-carbon products and services.

POTENTIAL COMMUNITY ACTIONS

TRANSPORTATION

*Cut Greenhouse Gas emissions from transportation within the community**

- Support the national transition to electric and hydrogen vehicles*
- Assess and develop a plan to create systems that support public and shared transit opportunities. Assess for development:
 - an online ride sharing system
 - park & ride
 - the existing Lanark Transportation bus system
 - a microtransit system
 - measures from the Rural Transportation Issues and Options for Lanark County Report

Transportation is the single largest contributor of Greenhouse Gas emissions from the Tay Valley community. Tay Valley's Greenhouse Gas reduction target will benefit from the rapid transition to electric vehicles (EVs) that is underway. The federal government has a target for zero emission vehicles (ZEVs) of 10% of new passenger vehicle sales by 2025, 30% by 2030, and 100% by 2040. Its incentives to support this transition have been taken up quickly. As well, the network of charging stations is growing quickly.

Ride Sharing, Park & Ride, Car Share, Lanark Transportation

While adopting zero emission personal transportation, including EV bikes, scooters and motorbikes, is important, creating shared or public transit systems promises greater Greenhouse Gas reductions. Options for use and expansion in the region include an online Ride Share program, Park & Ride locales, Car Share programs and Lanark Transportation which not only provides rides for medical appointments but runs a bus service between Lanark Village and Perth.

The Rural Transportation Issues and Options for Lanark County Report has many applicable recommendations that could be evaluated through a Climate Lens for implementation.

http://www.lanarkcounty.ca/AboutLanark/Public_Transportation.htm

Microtransit

Tay Valley could work with Lanark County and neighbouring municipalities and examine some new models for microtransit that have been developed in communities such as Innisfil, Belleville, and Okotoks.

Microtransit can be privately or publicly operated and typically uses small, multi-passenger/pooled shuttles or vans. By using technology for scheduling, it can provide on-demand or fixed-schedule services with either dynamic or fixed routing.

SIDEBAR

Innisfil, Ontario microtransit system

Innisfil is a growing community south of Barrie that had no existing public transit system. Its population of about 40,000 is of a low density. Innisfil developed a microtransit system that uses Uber. The municipality provides subsidies of \$3-5 per ride that enables residents to arrange pick-up on-demand for both dynamic and fixed routes. <https://www.citylab.com/transportation/2019/04/innisfil-transit-ride-hailing-bus-public-transportation-uber/588154/>

SIDEBAR

ZEV Incentives

Federal incentives are available for new and leased battery-electric, plug-in hybrid electric and hydrogen fuel cell vehicles. Incentives range from \$2,500-5,000 <https://www.tc.gc.ca/en/services/road/innovative-technologies/zero-emission-vehicles.html>

Incentives of \$1,000 are available on used EVs <https://www.plugndrive.ca/used-electric-vehicles/>

Charging stations

<https://energyhub.org/ev-map-canada/>

Ride Share

Community Ride Share Connection Lanark County

<https://www.facebook.com/groups/668214839939550/>

Lanark Transportation

<https://lanarktransportation.com/>

RENEWABLE ENERGY SUPPLY (DISCUSSION)

Cut Greenhouse Gas emissions by increasing the supply of renewable energy

- Support the adoption of renewable energy such as solar, wind and water generation by Tay Valley residents, businesses and organizations
- Smart grid? What would the Green Energy and Climate Change Working Group like to do about this?

*Cut Greenhouse Gas emissions from the local electricity supply, create local electricity grids and improve the resilience of the local electricity grid**

- Promote, advocate and support efforts to create microgrids for the Lanark County area.
- Advocate for federal and provincial regulations to allow residents to sell or trade clean power to the grid individually or through co-ops and microgrids.

Microgrids are small electricity grids that may or may not be connected with the larger grid. The supply of power to them generally comes from renewable sources and can include power produced by individual property owners. The power to them can go into the main grid, or it can be stored. Storage of the power can be in small units, including the batteries of electric vehicles. Communities can draw on the power in the microgrid when the main grid goes down, or at peak times, offsetting the power produced by natural gas plants in Ontario.

Microgrids increase the reliability and efficiency of electricity supply to customers, reduce the amount of energy wasted in moving electricity over long distances, and can possibly reduce costs.

Working with neighbouring municipalities and Lanark County, Tay Valley Township has the opportunity to create a microgrid, make its electricity supply more robust and reliable and increase the renewable energy proportion.

SIDEBAR

Hydro Ottawa's Microgrid

Hydro Ottawa's MiGen Transactive Grid sees homes, businesses or defined communities install self-contained energy grids to generate their own power. The system uses solar panels to generate the energy, which can be used immediately, stored in lithium batteries to protect against outages, shared with neighbours or sent back into the wider National Capital Region energy grid. Ottawa Community Housing Corp. has installed the MiGen system at the Viewmount and Sand Cherry complexes.

HOUSES & BUILDINGS

Cut emissions from homes and small business buildings in the community+*

- Develop a Home and Small Business Energy program with financing capacity and the possibility of making bulk purchases of equipment to increase efficiency, convert fossil fuel heating to electric, and add solar PV, solar hot water and net metering.
- Adopt LEED and Green Development Standards when they become available.
- Encourage the development of training for local businesses and personnel in the delivery, installation and maintenance of low- and no-carbon systems such as heat pumps and PV systems.

Buildings are the second largest contributor of Greenhouse Gas emissions from the community of Tay Valley. Actions to reduce those Greenhouse Gas emissions are to make those buildings better able to conserve energy, to replace fossil fuel heating systems with low- or no-carbon electric systems and to add renewable energy.

Financing retrofits, replacements and renewable energy

Tay Valley Township can work with federal and provincial partners, Lanark County and neighbouring municipalities to develop a financing program that would allow home and small business property owners to borrow against the township to increase efficiency, convert fossil fuel heating to electric, add solar PV and solar hot water, and implement net metering. The property owner would be able to borrow funds, then pay them back on their tax bill. The Township has expressed interest and is following a pilot project.

As well, Tay Valley could facilitate the bulk purchase of equipment such as heat pumps and PV systems for its residents and small businesses.

The Tay Valley community has access to some services and businesses that can help residents and business owners do all of this. However, there is a pressing need in the local community for more trained personnel to install and maintain such systems as heat pumps and solar PV systems. This is a business opportunity for expansion and opportunities for local job creation.

Adopt LEED, Passive House, Green Development and other leading standards

Working with municipal colleagues through the Partners for Climate Protection, Tay Valley will have the opportunity to adopt such leading-edge building standards as LEED (Leadership in Energy and Environmental Design), Passive House and the Green Development standards (in development in Toronto and Hamilton) when they become more widely deliverable to municipalities. As well, the Township can adopt methods that evaluate embodied Greenhouse Gases in construction materials. To encourage the take up of these standards, Tay Valley could follow the Toronto model and provide financial incentives through a Development Charge refund program. For e.g. Toronto reduces development cost charges for developers who include climate change mitigation such as enough insulation to hold a house at 18.3 degrees C for two weeks without power.

SIDEBAR

Home Energy Audits

Two local services, a non-profit and a local business, provide home energy audits. Audits provide the home or small building owner with information specific to that house or building, detailed insight into how to cut energy consumption, costs and Greenhouse Gas emissions, and recommendations that solve comfort, indoor air quality, efficiency and durability issues.

<https://www.reaction.ca/energy/home-energy-assessment/>

<https://homesolbuildingsolutions.com/>

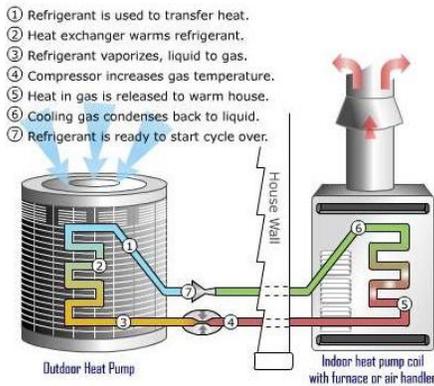
SIDEBAR (Revise to be both air and ground source heat pumps)

Electric Air Source Heat Pumps

A heat pump is an electrical device that extracts heat from one place and transfers it to another. Refrigerators and air conditioners are both common examples. Heat pump heating systems simply reverse the process. Generally, they use about 1/3 of the electricity of electric baseboards or furnaces, making them as economic as most other

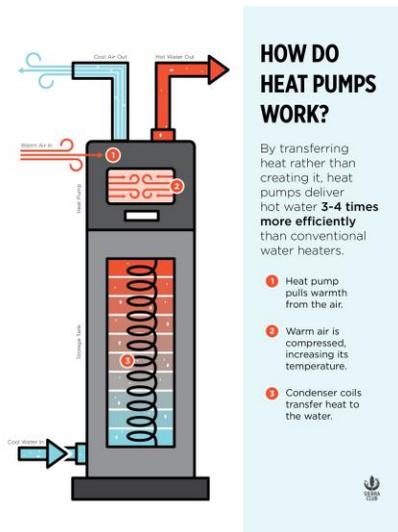
heating systems. As well, they provide cooling and dehumidifying. (<https://www.nrcan.gc.ca/energy/publications/efficiency/heating-heat-pump/6827>) There are two types of air source heat pumps, air to air, and air to water, for hydronic heating systems. Air to air heat pumps can either use an internal ductwork system or can be installed as ductless systems. Standard air source heat pumps work down to below 0 degrees C, but new cold climate ones capture heat from air as cold as the -20s.

How a heat pump works.



Heat pumps integrated with water heating

More advanced designs of air-source heat pumps are being developed that can provide domestic water heating also. Such systems integrate heating of domestic water with a house space-conditioning system. Water heating can be provided with high efficiency in this way with the promise of water heating bills reduced by 25 to 50 percent.



SIDEBAR SOLAR PV AND NET METERING

Net metering allows any Hydro One customer who generates electricity primarily for their own use from a renewable energy source (wind, water, solar radiation or agricultural biomass) to participate in the Net Metering program and accrue credit towards electricity costs. As well, net-metered customers can pair energy storage with renewable energy systems, opening the door to using Electric Vehicles for energy storage and to provide power to microgrids.

<https://www.hydroone.com/business-services/generators/net-metering>



The cost of solar photovoltaic for the production of electricity from your own home or building has dropped dramatically making net metering a net cost saving. Tay Valley Township is served by a number of suppliers.

SIDEBAR

Subsidies, full to partial and other forms of assistance to cut your Greenhouse Gas emissions

Low-income

Lanark County Social Services Insulate Lanark – new

<http://www.lanarkcounty.ca/Home.htm>

Low Income Energy Assistance Program

Bill subsidy

<http://www.lanarkcounty.ca/Page1929.aspx>

Ontario Electricity Save On Energy Home Assistance Program

If you use electricity and qualify, replacement appliances, insulation and air sealing

<https://saveonenergy.ca/For-Your-Home/Home-Assistance-Program>

Enbridge Home Winterproofing –

If you use natural gas and qualify, insulation and air sealing

<https://energy-savings-programs.ca/winterproofing-program/>

Enbridge Natural Gas Home Efficiency Program –
If you use natural gas, and retrofit, up to \$5,000 in rebates
<https://enbridgesmartsavings.com/home-efficiency-rebate>

AGRICULTURE & FOOD SECURITY

*Cut Greenhouse Gas emissions from agriculture and increase soil sequestration of carbon dioxide by farms**

- Support and promote farm organizations that engage their members in Greenhouse Gas reductions and sequestering of carbon dioxide*+
- Assess support for and advocate for reversal of the expansion of natural gas pipeline and services in Eastern Ontario.
- Investigate methane collection, capture and use on farms and supply streams incl. residential compostables*
- Promote less waste of food
- Encourage local farms to produce more food for local consumption

Beef cattle and dairy cows are considered to be some of the greatest contributors of Greenhouse Gas emissions from the agricultural sector. In 2016, Tay Valley Township had 1094 cows, primarily as beef cattle. Farmers are investigating means to reduce the Greenhouse Gas emissions produced on their farms, and the means to improve sequestration of carbon dioxide in the soil, including investigating crops that may be net reducers of carbon dioxide such as hemp.

Tay Valley Township can support and promote efforts underway in the area by its farmers to do this:

- Local farmers are participating in an EFAO and NFU sponsored Soil Benchmark Study to determine what measures may improve CO2 sequestration, including managed grazing and use of green cover crops. <https://www.nfu.ca/wp-content/uploads/2019/12/Tackling-the-Farm-Crisis-and-the-Climate-Crisis-Final-with-covers.pdf>
- The Climate Action Network of Lanark County, Smiths Falls and Region is working with local farmers to bring the Alternative Land Use Services group to Lanark, which would pay farmers to maintain and restore land to its natural systems and to practice regenerative agriculture.

To eliminate organic materials going to the Tay Valley landfill means starting at the upstream. Tay Valley can work with local food organizations to promote less waste of food. Canadian households waste 140 kilos of edible food each year. Every tonne of household food waste that is avoided is the equivalent of taking one car off the road each year.

<https://lovefoodhatewaste.ca/about/food-waste/>

Tay Valley can work with local farm and food organizations to investigate and advocate for regulatory changes to allow slops (fresh food waste) to go to consumption by farm animals.

Tay Valley can work with local farm and food organizations to assess how much food is imported and exported from the foodshed, how far it travels to reach consumers in Tay Valley, and to encourage increased production of local food for local consumption.

SIDEBAR

Farm Biodigesters

Shane Mowat's Jockvalley Farms is a family farm comprised primarily of dairy and cash crops in Ashton, Ontario. Adding a 1500m³ anaerobic digester was a decision made for economic reasons as well as for sustainable agriculture. The methane biogas fuels a 500kW MWM generator, with the electricity produced supplying the grid and the recovered heat supporting the biogas plant and farm. Jockvalley accepts large quantities of a variety of organic materials for the digester.

(https://biogasassociation.ca/about_biogas/ontario_map_popup#)

NATURAL SYSTEMS

*Increase the sequestration of carbon dioxide in local natural systems**

- Facilitate planting of 10,000 trees/year, incentivize personal commitment to plant 10 trees/person/year
- Institute an incentive program to encourage home food production, conversion of lawns to natural spaces and/or food gardens*
- Develop a Natural Heritage System Plan for Tay Valley Township which implements Dr. Paul Keddy's Lanark County Green Gems project

Trees take up CO₂. Tay Valley can work with its partners to encourage the renaturalization, or rewilding, of lands in the township, the planting of trees, and the protection of existing mature forests.

SIDEBAR

Lanark County partners with RVCA tree planting program

Lanark County is partnering with the Rideau Valley Conservation Authority's tree planting program to extend its reach and cut Greenhouse Gas emissions. To participate in the program, which provides planted seedlings at a subsidized rate, a property owner must have a minimum 0.4 Ha (one acre) of suitable land, order a minimum of 1,000 trees and agree to reasonably protect the trees from damage. Lanark County has a goal to plant at least 1 million trees in Lanark County in the next 10 years. In light of the spread of the invasive emerald ash borer, suitable diversified species would be planted. The county's budget for trees and advertising is \$2,500. Tree sales are planned for May 2 from 9 a.m. to noon at the County Administration Building, and May 9 from 9 a.m. to noon at Beckwith Park.

<https://www.rvca.ca/stewardship-grants/tree-planting>

SIDEBAR

Minnesota Bee Friendly Lawns

Minnesota has instituted a short-term program to provide incentives to its residents to convert their lawns to natural oases for bees. Such an incentive program is a model for encouraging other positive behaviour on lands.

<https://www.smithsonianmag.com/smart-news/minnesota-will-pay-residents-grow-bee-friendly-lawns-180972430/>