

COMMUNITY CLIMATE CHANGE ACTION PLAN



Project Background

The Town of Caledon, widely-respected for its progressive approach on environmental matters, has been developing a *Community Climate Change Action Plan* since November 2010. This Plan builds on prior environmental achievements and addresses the Town’s Partners for Climate Protection commitments.

What is Partners for Climate Protection?

Since 2003, the Town has been a member of Partners for Climate Protection – a network of more than 200 Canadian municipal governments committed to greenhouse gas reduction and climate change action. This group of municipalities recognize they have a role to play with climate change given that “up to half of Canada’s greenhouse gas emissions are under the direct or indirect control or influence of municipal governments”¹.

There are five milestones associated with Partners for Climate Protection: 1) creating a greenhouse gas emissions inventory and forecast; 2) setting an emissions reduction target; 3) developing a local action plan; 4) implementing the action plan or set of activities; and 5) Monitoring progress and reporting results. More information on Partners for Climate Protection or climate change science can be found online at <http://gmf.fcm.ca/partners-for-climate-protection>.

The Town has been working on these five milestones over the past few years. The *Community Climate Change Action Plan* builds on a community greenhouse gas inventory that was developed in 2008 and 2009. This chart illustrates the community contributors of greenhouse gas emissions as revealed in the inventory.

Based on these findings, the *Community Climate Change Action Plan* contains a series of proposed greenhouse gas reduction actions, categorized as follows: transportation; green development; energy; schools; agriculture; community awareness; tree planting and naturalization; waste; local food; and longer term actions.

¹ 2010, Federation of Canadian Municipalities- About Partners for Climate Protection. Retrieved from <http://gmf.fcm.ca/partners-for-climate-protection/>

Sector and Emission Source	Percentage of total emissions
Community transportation	37%
Energy Usage from residential buildings	21%
Energy usage from commercial buildings	16%
Energy usage from industrial buildings	6%
Agricultural related emissions	11%
Waste related emissions	8%

COMMUNITY CLIMATE CHANGE ACTION PLAN



Peel Climate Change Strategy

As an active partner in the development of the Peel Climate Change Strategy, the Town's *Community Climate Change Action Plan* is timely because work completed under the Action Plan will help implement several initiatives in the Peel Climate Change Strategy. This Strategy, developed in partnership with the Region of Peel, the cities of Brampton and Mississauga, the Town of Caledon, the Toronto and Region Conservation Authority and the Credit Valley Conservation was recently adopted by Regional Council and received by Town of Caledon Council. The Strategy's vision is: "a region where everyone does their part to mitigate and adapt to climate change by leading greener lifestyles, embracing a low carbon economy, enhancing and protecting our natural systems." More information on the Strategy can be found at www.peelregion.ca/climatechange.

Community Climate Change Action Plan Approach

The *Community Climate Change Action Plan* was initiated primarily to meet the Town's Partners for Climate Protection membership commitments. With an objective to effectively engage and represent all sectors within Caledon, the project included the establishment of a Community Working Group; a Key Stakeholder Workshop; a project specific website (www.caledonclimateplan.ca) and two community information sessions in partnership with the Caledon Public Library, ecoCaledon, Green T Environmental Awareness and other community partners. Town staff also attended Caledon Day and the Caledon Farmers' Market opening day to solicit input on the Plan's proposed actions via a survey.

The Community Working Group consists of representatives from the school board, developers, utilities, Region of Peel, conservation authorities (Toronto Region Conservation and Credit Valley Conservation), agriculture, transportation, waste management and small business. A representative from the Caledon Environmental Advisory Committee, the Town's Development Approval and Planning Policy Department, Town Council and a local community environmental group are also on the Working Group. Genivar Consultants were retained to assist with this work.

Have Your Say!

The Town is now seeking further community input to help refine the list of proposed greenhouse gas actions. If you have any comments on the proposed actions, please direct them to Town staff at environment@caledon.ca, or complete a short survey on some of the key actions at www.caledonclimateplan.ca.

TRANSPORTATION

The Community Transportation sector represents 37% of Caledon's Community Greenhouse Gas Emissions (based on the 2006 baseline year).

Transportation Demand Management (TDM) Activities for Residential Commute

Proposed Actions:

In partnership with the Region of Peel and appropriate agencies, the Town will work to encourage residents to reduce single occupant vehicle use. The Town will also conduct surveys in order to understand the community displacement habits and identify additional appropriate facilities, programs and services that could be offered.

- A1: Develop a transportation demand management marketing strategy and incentives for residents. Promote public transportation and demand management (TDM) websites, existing carpool parking lots and provide necessary TDM programs to residents. Promote active transportation as another sustainable mode of transportation. (Priority: Short to mid-term)
- A1-(ii): Conduct a sustainable mobility plan to better understand the community displacement habits and the most sustainable commute options for future years. (Priority: Short to mid-term)

Targets:

- A1: Increase residential carpooling and active transportation by 2-3%. Reduction of 3,303 tCO₂e/year.
- A1-(ii): Qualitative Target: Obtain a better understanding of community displacement habits.

Responsibility:

The Town may have a role in these actions by:

- 1) seeking funding to assist local developers and other applicable stakeholders to develop and execute a residential promotional campaign on carpooling and active transportation;
- 2) exploring incentives and Town policy mechanisms for the activities mentioned above. (This may include requiring developers to submit a transportation demand management plan with development applications.); and
- 3) supporting the implementation of the Town's Trails Master Plan Update and its recommendations related to active transportation.

Transportation Demand Management Activities for Employment Commute through ongoing work with Smart Commute Brampton-Caledon

Proposed Actions:

Smart Commute Brampton-Caledon is ongoing and currently offers a number of services to employers to make their employees' commuting easier in the Greater Toronto and Hamilton Area. Carpool Zone (ride-sharing software program) and Emergency Ride Home (a guaranteed ride home program for those who carpool) are the two most common services. Smart Commute can also customize programs depending on the employer or property manager's specific needs and challenges.

TRANSPORTATION

Provision of Public Transit Services

Proposed Actions:

Through Metrolinx's recent Bolton Commuter Rail Service Feasibility Study, plans for a Bolton GO train station have been raised and could possibly allow development of Public Transit in the Town of Caledon.

- A5: Integration of Carpool Lots at Mayfield Road and Highway 50 with GO Transit, York Transit and Brampton Transit. (Priority: Mid to long-term)
- A6: Provision of GO Rail Services to Bolton. (Priority: Long-term)

Targets:

- A5 and A6: Provisional target of 1% increasing within 10 years. Potential reduction of 1,101 tCO₂e.

Responsibility:

- A5: Town's Development Approvals and Planning Policy Department in collaboration with the Region of Peel, to pursue discussions with appropriate transit authorities such as GO Transit, York Transit and Brampton Transit to make this carpool lot (at Mayfield Road and Highway 50) a transit hub.
- A6: The Town to request Metrolinx to expedite the implementation of GO commuter rail service to Bolton and accordingly initiate the property protection process, environmental assessment study and detailed design process and to amend its capital budget to include construction within a 10 year priority time frame to facilitate early implementation for the GO rail service to Bolton.

Alternative Fuel Types

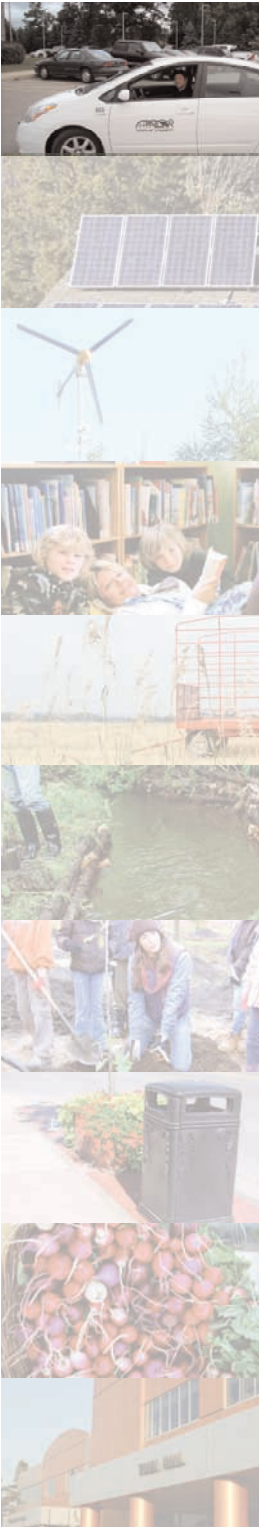
Proposed Actions:

The use of alternative fuels (such as biodiesel and electricity) may be an option for greenhouse gas reduction due to their reliance on non-fossil fuels. (Priority: Mid to long-term)

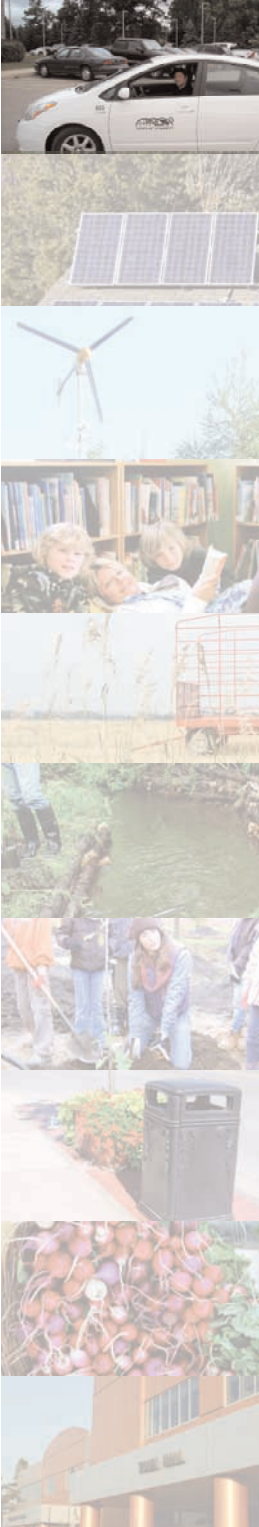
- A7: Encourage and support use of biodiesel for large fleet and trucks and hybrid power units for auxiliary power requirements for large fleet and heavy trucks.
- A8: Encourage and support use of electric vehicles, i.e. hybrid gas-electric vehicles in short-term, plug-in hybrid electric vehicles in mid-term and fully electric vehicles in long-term.
- A9: Encourage, support and lead the development of an electric vehicle charging infrastructure that is symbiotic with the Ontario Smart Grid.

Targets:

- A7: Using a BD20 biodiesel (20% biofuel, 80% diesel oil) allows a GHG reduction by 20% (BD 20s GHG emission = 2.2 kg CO₂e/L of fuel consumed and Diesel's GHG emission = 2.732 kg CO₂e/L of diesel consumed). (Ref. Environment Canada, 2010).



TRANSPORTATION



- A8: According to *Getting to Carbon Neutral: A Guide for Canadian Municipalities*, the percentage reduction of carbon emissions relative to conventional gasoline is:
 - 52% for a hybrid gas electric vehicle 30 (30 mile electric-only range);
 - 75% for a plug in hybrid electric vehicle 20 (20 mile electric-only range); and
 - 83% for a plug in hybrid electric vehicle 30 (30 mile electric only range).

According to Transport Canada, the percentage reduction of carbon emissions relative to conventional gasoline is:

- 50 % for an electric vehicle (about 3 tCO₂e/car.year-1, based on a 20,000 km/year mileage).
- A9: Qualitative target: Having enough charging infrastructure to answer the demand.

Responsibilities:

- A7/A8: Town to demonstrate alternative fuel leadership through continued use and expansion of biodiesel and hybrid gas-electric vehicles. The Town should build on this leadership through the pilot use of plug in electric and full electric vehicle options in Town fleet.
- Town to explore other policy mechanisms for encouraging and supporting the commercialization of alternative fuels (and low emission vehicles) through taxi fleet regulations, parking incentives and providing electric vehicle charging infrastructure.
- A9: Complete needs assessment for electric vehicle infrastructure in partnership with the private owners of the community's larger fleets.

GREEN DEVELOPMENT

The residential sector represents 22% of Caledon's Community Greenhouse Gas Emissions. These come from energy use (based on 2006 baseline year).

Green New Residential Development

- A16: Effective January 1, 2012, the Ontario Building Code will require all new houses to meet or exceed the EnerGuide 80 standards through conforming to one of the new prescriptive construction option packages (upgraded insulation, higher efficiency mechanical equipment, high rated windows, etc.) or have the home tested by a qualified energy consultant to certify the home as constructed meets the requirements of EnerGuide 80. The Town to immediately require EnerGuide 80 as minimum standard for all new (and applicable) residential development to promote green residential development and to decrease residential energy demand. (Priority: Short-term)

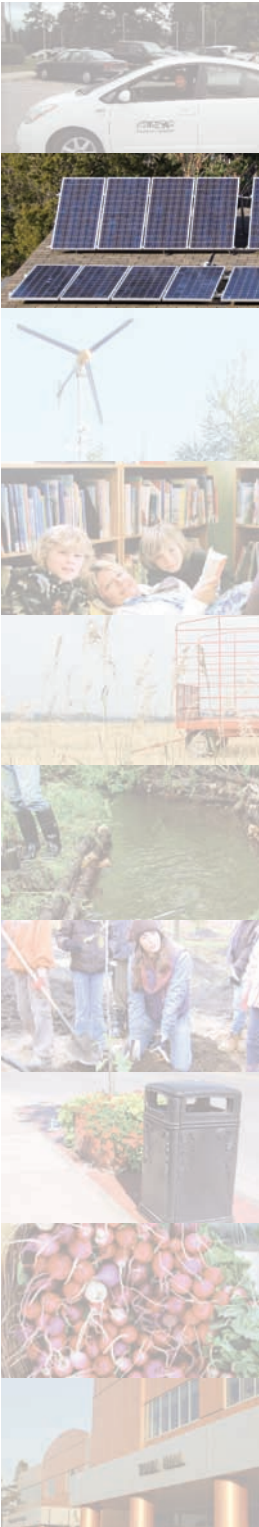
Town to explore other policy mechanisms for encouraging new green residential development in Caledon such as requiring homes to exceed Energy Star through Greenhouse Certified Construction, LEED Canada for Homes or requiring Energy Star certification a condition of draft site plan approval. Town to explore options to adopt a voluntary energy performance labelling program for homes. Town to also consider value of a green home or green subdivision demonstration project that could educate residents and prospective buyers on the benefits of green features and low impact development. Town to explore or consider a similar Green Development Program that provides financial incentives for greening new residential development. (Priority: Short-term)

- A17: As per Official Plan Amendment 226, Town should require proponents of redevelopment to submit a Sustainability Design Brief as part of a complete application which addresses sustainability objectives. (Priority: Short to mid-term)

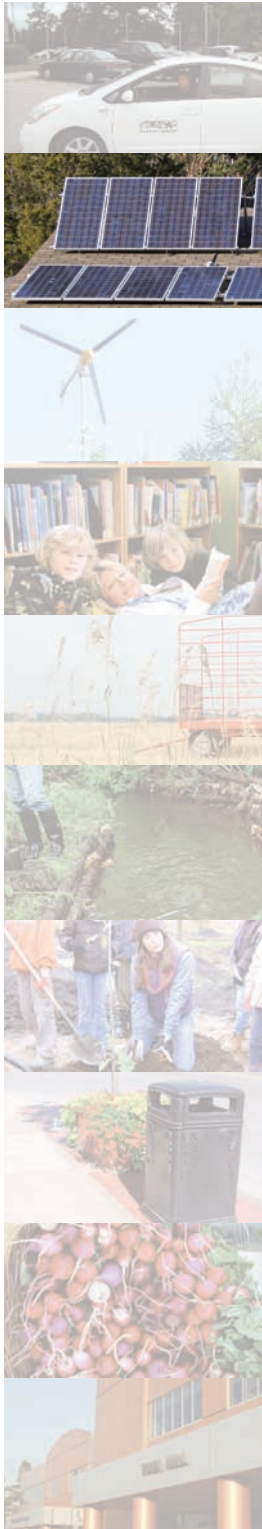
- A18: As per Official Plan Amendment 226, the Town should require a Sustainability Checklist (which is currently in draft form) to be used when reviewing planning applications including plans of subdivision, Official Plan and Zoning By-law amendments and site plan control to determine how each development proposal will assist in achieving the sustainability objects and policies of the Official Plan's new sustainability policies. (Priority: Short to mid-term)

Targets:

- All new (and applicable) residential development.
- Effective January 1, 2012, the Ontario Building Code will require all new houses to meet or exceed the National Research Councils EnerGuide standard in one of two ways: 1) Conform to one of the new prescriptive construction option packages effective January 1, 2012 or 2) have the home tested by a qualified energy consultant to certify that the home as constructed meets the requirements of EnerGuide 80.
- Number of homes with an energy performance label.



GREEN DEVELOPMENT



Responsibility:

Town, developers, builders and other appropriate agencies (Conservation Authorities, utilities)

Town to address potential verification issues with EnerGuide 80 requirements if builders choose to meet EnerGuide 80 through conforming to a prescriptive construction option rather than having the home tested to certify that it meets the EnerGuide 80 requirements; lead by example through adoption of green building standard (which is in development) for all new corporate facilities and major facility renovations; consider process and cost required for developing a green home or subdivision demonstration project; and evaluate municipal best practices (such as the Town of East Gwillimbury) for greening new development.

ENERGY

The Industrial, Commercial and Institutional sector represents 21% of Caledon's Community Greenhouse Gas Emissions. Commercial and Institutional energy usage accounts for 16% and Industrial energy usage accounts for 6%.

Energy Efficiency

Proposed Actions:

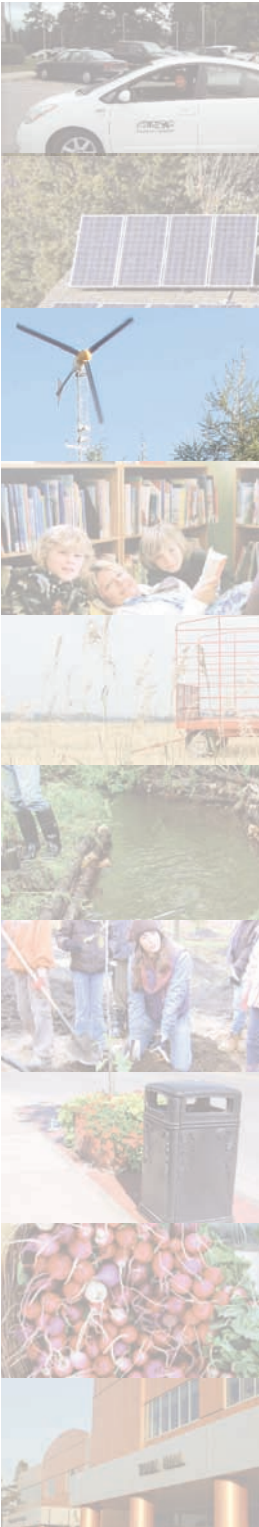
- A10: (short term) Develop an eco business policy framework that supports and accelerates Eco Industrial Parks and eco business activity. The Town of Caledon has been working with the Toronto Regional Conservation Authority (TRCA) on the development of a Greenfield eco-industrial park. The inherent characteristics of industrial parks lend itself to symbiotic relationships and culture change.
- A11: (short term) Encourage building audits and retrofits through the promotion of utility and other government incentives through existing Economic Development promotional vehicles. Equipment includes lighting system, water heating, heating system, air conditioning and ventilation system. This action leverages existing programs:
 - Enbridge Business Solutions - Multiple program/audit services, incentives and rebates for the ICI sectors;
 - PowerWISE Business Incentive Programs that initiate energy conservation and load management projects through rebates and incentives; and,
 - Bolton Community Improvement Plan's energy retrofit grants.
- A12: (short term) Leadership in Energy and Environmental Design (LEED) certification for new industrial and commercial buildings. Expand Town's current Green Development Program incentives and continue to create supportive environment for LEED buildings.
- A13: (mid to long term) All new ICI buildings and major renovations are recommended to have energy performance labelling. Energy performance labels will indicate the energy efficiency rating of the building.
- A14: (mid to long term) Energy efficiency in commercial heating system: increase efficiency of existing heating systems via boiler/furnace replacements.

Targets:

- A10: Estimated reduction of 5,000 tCO₂e.
- A11: Estimated reduction of 1,135 tCO₂e.
- A12: 20% of new commercial development as LEED (or equivalent) certified buildings. Reduction of 2,452 tCO₂e.
- A13: To be determined.
- A14: 15.6% reduction in energy consumption. Reduction of 4,158 tCO₂e.

Responsibility:

- A10: Town to continually advance eco business policy framework so these types of uses are supported and promoted in Caledon
- A11 and A12: Town of Caledon to help promote existing utility and upper level government incentives through existing



ENERGY

- Economic Development promotional vehicles. Hydro-One and/or Enbridge Gas to implement conservation and demand management programs.
- A12 and A13: Town to promote green building standards for new construction such as LEED, BOMA and Energy Star Certification. Caledon to continually lobby the Region of Peel to provide matching development charge discounts for LEED commercial and industrial buildings through Town's Green Development Program. Town to expand promotional efforts for Green Development Program and additional industrial discounts which are seeking Council approval in July 2011.
- A14: Town to assist with facilitation of energy performance labelling, where appropriate.

Energy Supply

The Town encourages the Industrial, Commercial and Institutional sectors to generate and/or use renewable energy where possible.

- A15: Conversion from fossil fuel to biomass or other renewable energy in industrial, commercial and institutional heating system. (short to mid term)

Targets:

- A15: 10% participation - reduction of 854 tCO₂e.

Responsibility:

- Primarily the responsibility of local utilities (Hydro One, Enbridge Gas, etc.) the Town will help promote existing utility and upper level government incentives through existing Economic Development promotional vehicles.
- Promoted through the Green Development program.

Energy Efficiency

The Town to encourage residential sector to implement better energy consumption practices and use less inefficient equipment by the following mid to medium-term actions:

- A19: Installation of Certified Energy Star Lighting; switching from traditional light to more efficient lighting source.
- A20: Installation of Certified Energy Star Equipment – Electrical appliances: switching from traditional equipment to energy star equipment: refrigerator, freezer, dishwasher and washing machine.
- A21: Installation of programmable (thermostat) to control and stabilize/decrease room temperature.
- A22: Insulation upgrade: good participation rates are expected from residents since this action can provide financial savings.
- A23: Installation of home energy management system which will allow home owners to monitor energy consumption in real-time and make educated decisions about energy use.
- A24: As an environmental leader Caledon will offer its community as a provincial prototype for adjusted regulatory and business models to guide Ontario in meeting its energy and climate change challenges of the future.

ENERGY

- A24-(ii): Develop web space to support implementation and monitoring of residential energy retrofits.

Targets:

- A19: 100% participation given provincial ban on sale of inefficient bulbs by 2012. Anticipate a reduction of 1,268 tCO₂e.
- A20: 75% participation. Reduction of 1,566 tCO₂e.
- A21: 90% participation. Reduction of 3238 tCO₂e.
- A22: 25% participation. Reduction of 899 tCO₂e.
- A23: qualitative target.
- A24 and A24 (ii): qualitative target .

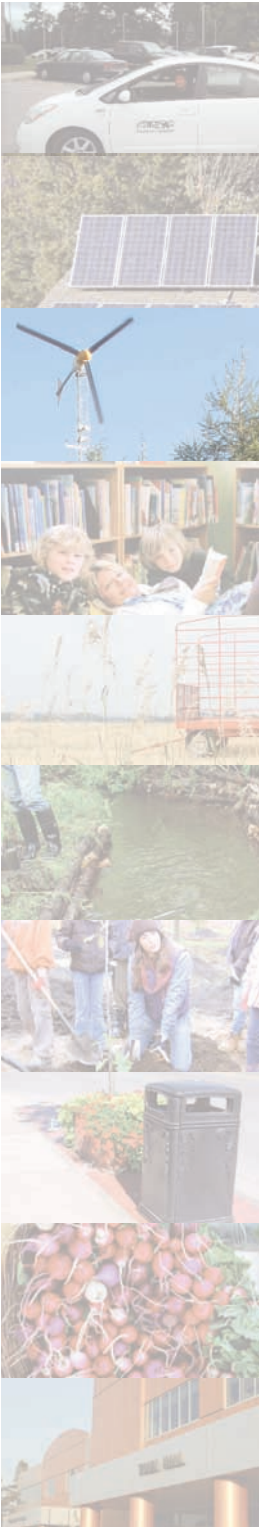
Responsibility:

- Town to work with utilities (such as Hydro-One, Enbridge Gas) to better promote existing residential incentive programs. Town to seek partnership with utilities to develop a residential energy reduction promotional website to provide information and track participation in the various programs offered to the community. The website would provide on-line resources and links to facilitate individual action and provide a centralized location for all residential-related reduction opportunities.
- Town to explore feasibility of residential rebate programs for energy efficiency measures or incentive programs for homeowners that choose to renovate “green” (such as waived or reduced building permit fees).
- Explore opportunities to arrange bulk purchase of energy efficient products on the behalf of residents.
- Work with Region of Peel’s Waste Management Division on the promotion of proper and safe disposal methods for CFLs.

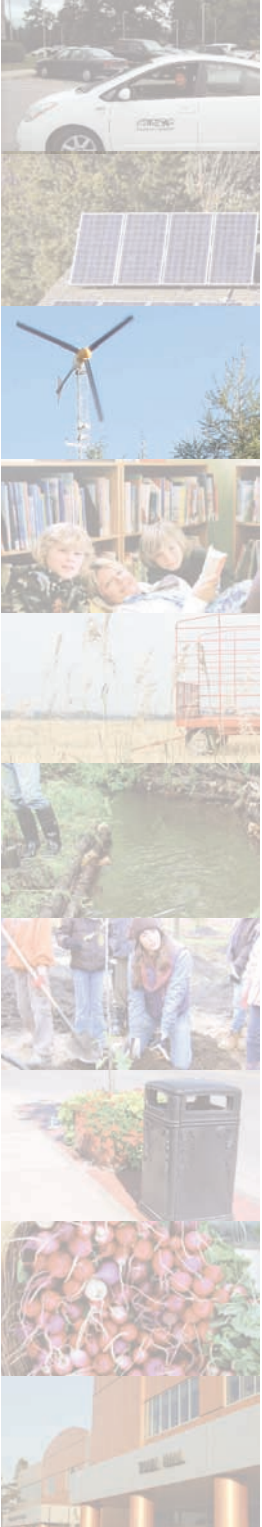
Energy Supply

The Town to encourage the residential sector to consider and use renewable energy where possible or other fossil fuel alternatives.

- A25: installation of solar water heating. (short to mid term)
- A26: Light oil Heating system conversion to natural gas (mid term)
- A27: Conversion from propane to geothermal in residential heating system through the renewable energy incentives program from the Ontario’s Ministry of Energy. (mid term)
- A27 ii: Promote green energy purchase options (such as Bullfrog Power) or others (renewable green gas from local gas utility) as source of greener energy.
- A28: Encourage community renewable energy through administering and promotion of a community renewable energy cooperative. (Timeframe to be determined)
- A29- Development of a Community Energy Map with the intent to allow for the evaluation of the community’s energy profile and prepare a practical, cost-effective energy efficiency response that integrates the transportation systems, the built environment, and the energy supply mix of a community at one time. (Timeframe to be determined)



ENERGY



Targets:

- A25: 1% participation. Reduction of 22 tCO₂e.
- A26: 30% participation. Reduction of 462 tCO₂e.
- A27: Action already implemented. Participation of 130 households in 2009. 1% additional participation is planned. Reduction of 662 tCO₂e.
- A27 (ii): reduction of 4 tCO₂e. Per household (participation rate 3%) 840 households @ 4 tons each totals a reduction of 3360 ton CO₂ eq.
- A28 and A29: qualitative target

Responsibility:

- A25 and A26: Town to work with utilities (such as Hydro-One and/or Enbridge Gas) to better promote existing residential incentive programs. Town to seek partnership with utilities so a residential energy reduction promotional website is developed to provide information and so residents can register upgrades on a central site.
- A27 to A29: to be determined

SCHOOLS

While schools' emissions are included in the institutional sector and were not broken out in the 2006 Community Inventory, it is important to include this as a separate sector given their ongoing environmental initiatives.

Ontario EcoSchools Promotion

Proposed Actions:

The Peel District School Board (PDSB) is currently looking at developing and implementing operating procedures to accompany School Board's environmental policy and guiding principles. Many Caledon schools are also participating in the Ontario EcoSchools program.

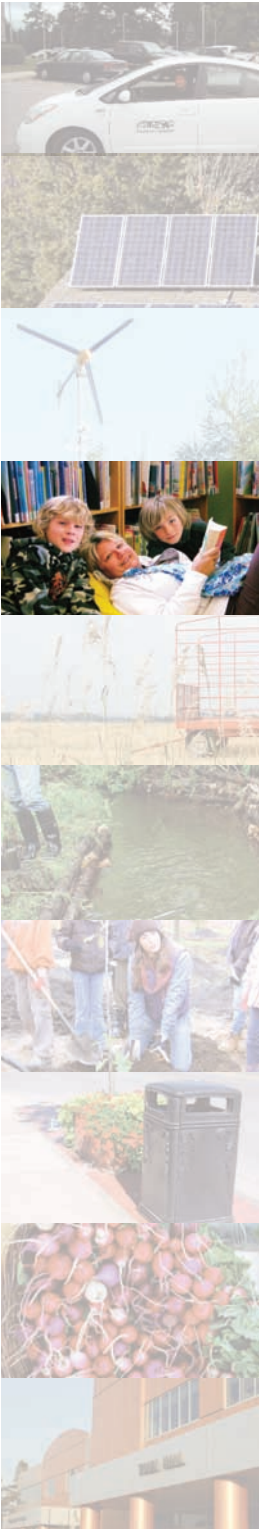
- A30: Developing and implementing procedures to accompany Peel District School Board's environmental policy and guiding principles that address water, waste and energy. (Priority: Short to mid-term)
- A31: Increasing Eco-school certification at Caledon schools via EcoSchools Program: Ontario EcoSchools program incorporates environmental sustainability and stewardship into students learning's and school operations through four key pillars: ecological literacy, energy conservation, waste minimization and school ground greening. Annual certificates of recognition are provided based on clearly defined point system. (Priority: Short to mid-term)

Targets:

- A30: to be determined.
- A31: Peel District School Board (PDSB) goal: 8 certified schools in 2011 and all schools to be certified by 2013. Dufferin Peel Catholic District School Board: mandating all schools to be certified by 2013.
- GHG Reduction from Caledon schools in PDSB = 1,843 tCO₂e. Anticipated GHG Reduction from the six Dufferin Peel Catholic District School Board's school (using a mean area) = 790 tCO₂e.

Responsibility:

- A30: The Town will have a limited role if any. School board's responsibility.
- A31: Town to provide local curriculum materials, staff for in-school presentations and funding mechanism (i.e. via a new Community Green Fund for schools) for environmental school projects.



SCHOOLS

Reduction of School Buses Idling

Proposed Actions:

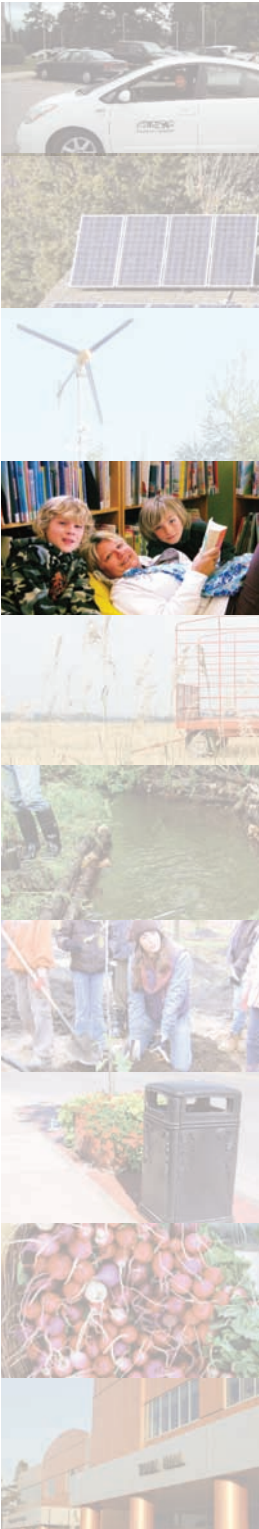
- A32: Conduct a school anti-idling campaign which could include student engagement; parent education; education sessions with bus companies and operators via a week long anti-idling blitz. (Short to mid-term)
- A32 (ii): Reduce idling time from Caledon's school buses fleet through the development of bus anti-idling policies. (Short to mid-term)

Targets:

- A32: To be determined.
- A32 (ii): 10 minutes idling reduction. GHG Reduction of 53.6 tCO₂e/176 buses' fleet.

Responsibility:

- Primary responsibility is schools and school boards. The Town and other community groups can assist with development and implementation of a school anti-idling campaign and bus policies as appropriate.



AGRICULTURE

Agriculture's GHG emissions represent 11% of the total Community GHG Emissions (based on the 2006 baseline year) and come from fertilizer (nitrogen) use and manure management.

Nitrogen Use Reduction and Management; No Till Farming; Biomass and Reforestation

An Environmental Farm Plan is one way that farms can achieve greenhouse gas reductions and possible financial savings. Many Caledon farms already have these plans.

- A33: Conduct a feasibility study on manure management and biogas recovery opportunities for Caledon's farming community. (Priority: Mid to long-term)
- A34: Agricultural biomass usage as an alternative fuel to fossil fuel. (Priority: To be determined)

Other agricultural actions will be implemented such as better nitrogen use, no till farming and reforestation. However these actions are outside the GHG inventory boundaries and are not counted as a reduction within the Partners for Climate Protection program.

Targets:

- A33: To be determined following the feasibility study conclusions.
- A34: To be determined. 2.732 kgCO₂e reduced/L of bunker (oil #6) replaced, 2.377 kgCO₂e reduced/L of light oil (oil #2) replaced.

Responsibility:

Other partners: farming community, Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), Agriculture Canada, Ontario Soil and Crop Improvement Association, University of Guelph, Peel Federation of Agriculture. Credit Valley Conservation, Toronto and Region Conservation may also be potential partners given the Peel Rural Water Quality Program that is delivered by both conservation authorities. Credit Valley Conservation also offers outreach and education to the equestrian sector on nutrient and manure management.

- A33: Town to assist through necessary zoning changes and other policy and planning mechanisms.
- A34: To be determined.



COMMUNITY AWARENESS

Community Awareness and Engagement

Increasing community awareness and the level of engagement about climate change and its necessary “call to action” is a critical success factor in implementing the Plan’s actions. A strong education, awareness and engagement program is required which includes messages on the reality of climate change and its local impacts; ways to reduce greenhouse gas emissions; the need for informed decision making and action; and the opportunities for local actions in all sectors to make a difference. A successful program can be informed through market research which can identify the community residents and sectors motivations and barriers to desired sustainable behaviours. Information will need to be customized to reflect various target audiences and should build on existing educational campaigns such as the Life is Better in Peel campaign.

Possible actions which will assist in community awareness and engagement include the following:

- Conducting market research to identify barriers and motivations for desired sustainable behaviours; creating a shared vision through the branding of Caledon’s Community Climate Change Action Plan and conducting a coordinated campaign to build awareness for the Plan and to highlight successes and action in the community;
- Identify, map, engage and support existing programs in the community that support actions within the Community Climate Change Action Plan and determine tools that could be provided to assist them in their efforts;
- Liaise with corporate leaders and business associations to establish support for and participation in the Community Climate Change Action Plan’s implementation;
- Develop and launch a central website that provides residents with one stop information, tools resources and support for community actions to reduce greenhouse gas emissions; and,
- Continually support and explore expansion of Community Green Fund to provide resources to community champions, non governmental or voluntary groups for projects that are consistent with the Community Climate Change Action Plan.



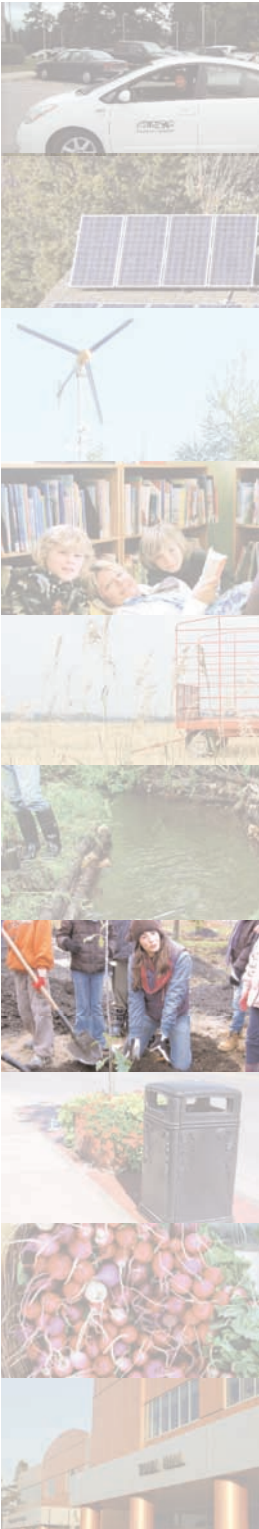
TREE PLANTING

Tree Planting and Naturalization Programs

Preserving and expanding tree planting and related naturalization programs can play a large role in countering the effects of greenhouse gas emissions through carbon sequestration. It also contributes to energy conservation because shading a building reduces cooling load, and, sheltering homes from winter winds cuts down on heating costs. Tree Planting may also reduce snow clearing needs if roads are lined with trees to reduce snow coverage.

According to Peel Region's draft Urban Forest Strategy, the carbon stored and sequestered by Caledon's urban forest within Bolton and Caledon East account for 1.1 tonnes/hectare/year. Through the Town's seeding program which has led to 118,000 native seedlings for planting by local residents across 120 acres of land, an additional 4600 tonnes of CO₂ has been sequestered.

Further actions to build on these efforts and to maximize Caledon's carbon sequestration may include: continued tree planting programs for both rural and urban properties; naturalization of urban parks; partnerships with landowners to create carbon sequestration opportunities such as incentives, compensation and outreach; determining ways of valuing carbon sequestration to meet regional targets; and supporting Peel Region's Urban Forest Strategy. Many of these actions relate to residential programs since 45% of Peel Region's urban canopy cover is located on residential property. Since Credit Valley Conservation (CVC), Toronto Region Conservation (TRCA) and Region of Peel currently offer tree planting (naturalization and reforestation) programs for Caledon landowners, there is an opportunity to build on these programs.



WASTE

Solid Waste's GHG emissions represent 8% of the total Community GHG Emissions (based on the 2006 baseline year) and mainly come anaerobic waste biodegradation in landfill.

Master Composting Plan

Proposed Actions:

Initiative consists of diverting organics degradable waste to landfilling through various measures.

- A35: Diversion of solid waste through blue box (recyclable material) program;
- A35-(ii): Master Composting Program implementation: diversion of compostable organics and yards waste from landfill disposal. Acquire and distribute household composting units to households in collaboration with Region of Peel. This program would complement existing Region of Peel's green cart program.

Targets:

- A35: Diversion of 91,800 tonnes of solid waste. Reduction estimated to 7,200 tCO₂e (without biogas collection system).
- A35-(ii): Diversion of 89,000 tonnes of solid waste. Reduction estimated to 6,981 tCO₂e (without biogas collection system).
- Additional 5% of total residential waste diverted from disposition to composting. Additional reduction of 500 tCO₂e.

Responsibility:

- Town of Caledon to work in collaboration with Region of Peel on implementation of any waste related programs.

Lobby for better packaging

Proposed Actions:

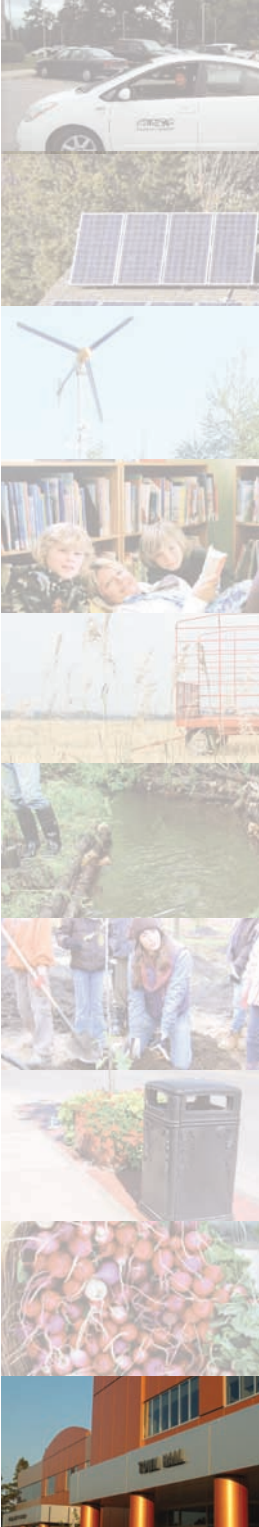
Town of Caledon will encourage Commercial Sector to offer goods that are less over packaged.

- A36: Develop a lobbying plan for better packaging. Option for implementation include municipal ban on plastic shopping bags; lobby upper levels of government for more sustainable packaging; promote bottled water ban through community. (Priority: Mid-term)

Target: ICI waste generation reduction by 5%.

Responsibility: Town of Caledon and Peel Region to work together lobby for better packaging.

LONG TERM ACTIONS



Longer Term Actions for Consideration

- Promote District Energy use within the Town’s Official Plan or other land use planning mechanisms and centralized geothermal energy production.
- Provide public transit options that could help with the Town’s community transportation emissions.

Responsibility:

As Caledon’s densities increase, the Town will work with developers and utilities to consider district energy for new development. The Town will continually be in support of – and advocate for – Caledon public transit options.