



REPORT

REPORT TO: Mayor Bonnette and Members of Council

REPORT FROM: Damian Szybalski, Manager of Sustainability

DATE: April 17, 2014

REPORT NO.: PDS-2014-0021

RE: Mayor's Community Energy Plan
Draft Corporate Energy Plan & Project Status Update #4
File No.: D27-CO

RECOMMENDATION:

THAT Report No. PDS-2014-0021, dated April 17, 2014 regarding the draft Corporate Energy Plan component of the Mayor's Community Energy Plan, be received;

AND FURTHER THAT Town staff report to Council with the second component of the Mayor's Community Energy Plan, being the Local Action Plan that addresses energy use and greenhouse gas emissions Town-wide, at the earliest possible date.

PURPOSE OF REPORT:

The purpose of this report is two-fold:

1. Provide an overview of the draft Corporate Energy Plan component of the Mayor's Community Energy Plan. The second component of the Energy Plan, being the Local Action Plan which addresses energy use and greenhouse gas emissions Town-wide, will be presented to Council at a later date; and
2. Provide a project status update.

The Corporate Energy Plan and the Local Action Plan are being presented in two separate reports with the Corporate Energy Plan being advanced first because of the requirement to submit the latter to the Province by July 1, 2014, as per the *Green Energy Act*.

It is also important to note that, at this time, the Corporate Energy Plan is a draft. Any necessary minor refinements may be made as part of the Plan's finalization.

BACKGROUND:

1. Context

The Town is nearing completion of an innovative Energy Plan, referred to as the Mayor's Community Energy Plan. Town staff have provided prior updates on this project via:

- PDS-2014-0005: <http://haltonhills.ca/calendars/2014/PDS-2014-0005.pdf>
- PDS-2013-0053: <http://haltonhills.ca/calendars/2013/PDS-2013-0053.pdf>
- PDS-2013-0045: <http://haltonhills.ca/calendars/2013/PDS-2013-0045.pdf>

The Mayor's Community Energy Plan is intended to deliver practical actions that can translate into measurable financial/economic benefits, efficiencies, reduced operating costs, lower greenhouse gas emissions, community awareness and corporate leadership. Once completed, the Plan will not only meet the Town's obligations under the *Green Energy Act* in terms of reporting municipal energy use and associated greenhouse gas emissions, and the completion of a five-year Corporate Energy Conservation and Demand Management Plan (i.e. Corporate Energy Plan), but will also deliver on three key milestones of the Federation of Canadian Municipalities' (FCM) Partners for Climate Protection (PCP) program¹, of which the Town is a long-term member, specifically:

- Creation of a community-wide greenhouse gas emissions inventory;
- Setting of a greenhouse gas emissions reduction target; and
- Development of a Local Action Plan (LAP) which outlines practical actions that can be taken to achieve the greenhouse gas reduction target.

Although, the Mayor's Community Energy Plan consists of two key components, being the (i) Corporate Energy Plan (corporate focus) and the (ii) Local Action Plan (community-wide focus), the purpose of this report is to present the draft Corporate Energy Plan in order to meet the *Green Energy Act's* July 1st submission deadline.

The Local Action Plan is nearly completed and Town staff will present the latter to Council in the near future.

¹ According to FCM, the PCP program "...is a network of Canadian municipal governments that have committed to reducing greenhouse gases and acting on climate change." Currently, about 240 Canadian municipalities are members, including the Town of Halton Hills.

COMMENTS:

1. Energy Efficiency as a Valuable Opportunity

Energy use in communities is complex. It is influenced by geography, demographics, land-use patterns, transportation systems, and the local availability of energy sources. Municipalities face numerous challenges as they strive to attract economic investment, ensure sustainable energy use, maintain environmental health, and provide a high quality of life for their residents.

North American municipalities are increasingly focusing on energy as a strategic priority to reduce operating costs, prepare for rising utility costs, and to demonstrate their commitment to long-term sustainability. In Ontario, the provincial government is allocating significant resources to energy conservation and demand management (CDM) programs, providing energy consumers with significant incentives to upgrade their facilities and equipment.

Investing in energy management and implementing the actions identified in the Corporate Energy Plan will provide valuable opportunities for the Town of Halton Hills. Not only is the Plan expected to result in energy intensity and greenhouse gas savings, but it can also provide opportunities for staff and community engagement, lower risk exposure, and demonstrate Town leadership.

2. Mayor’s Community Energy Plan

The Mayor’s Community Energy Plan consists of two distinct, but closely related parts. The first is the Corporate Energy Plan (CEP). The second is the Local Action Plan (LAP). Key aspects of both parts are highlighted below in Figure 1.

When the final Mayor’s Community Energy Plan is brought forward for Council’s approval, the two parts (i.e. Corporate Energy Plan and Local Action Plan) will be consolidated into one seamless Plan – the Mayor’s Community Energy Plan.

Figure 1: Scope of the Corporate Action Plan versus Local Action Plan

Characteristic	Corporate Energy Plan (CEP)	Local Action Plan (LAP)
Timeframe	2019	2031
Focus	Town’s corporate operations	Community-wide
Targets	<ul style="list-style-type: none"> • Energy use reductions • Greenhouse gas emissions reductions 	Greenhouse gas emissions reductions
Driver	<i>Green Energy Act</i>	Federation of Canadian Municipalities Partners for Climate Protection program

The Mayor's Community Energy Plan builds on the Town's existing practice of identifying and implementing a broad range of energy conservation measures. It will include practical actions that are anticipated to increase energy efficiency, reduce operating costs, reduce greenhouse gas (GHG) emissions, and translate into measurable financial/economic and environmental benefits.

The overall Mayor's Community Energy Plan's key objectives are:

- To fulfill the reporting and planning requirements of Regulation 397/11 under the *Green Energy and Green Economy Act*;
- To complete Milestones 1, 2 and 3 of the Partners for Climate Protection Program;
- To take advantage of all available incentives for energy efficiency;
- To improve the Town's environmental and financial sustainability, through initiatives that are Practical, Affordable, Reasonable, Educational and Enforceable;
- To identify and implement actions that reduce greenhouse emissions from corporate operations and from community activities;
- To increase community awareness and demonstrate the Town's leadership in energy and greenhouse gas emissions reduction; and
- To build on the Town's long-standing commitment to energy conservation, Halton Hills Hydro's energy efficiency programs, and the Community Sustainability Strategy.

It is an opportune time to prepare the Mayor's Community Energy Plan, given the financial incentives currently available for energy efficiency measures, as well as the strong alignment and synergies between this Plan and other Town initiatives/objectives.

3. Overview of the Corporate Energy Plan (CEP) – corporate focus

As one of two key components of the Mayor's Community Energy Plan, the Corporate Energy Plan has three key objectives:

- The Town is a national leader in energy management.
- Efficient energy management is part of the Town's day-to-day operations.
- The Town's financial and environmental sustainability is improved through energy management initiatives that are practical, affordable, reasonable, educational and enforceable (i.e. PAREE Principle).

Recognizing the above, the Corporate Energy Plan (CEP) is focused on the Town's corporate operations. Starting in 2014, the CEP outlines a 5-year roadmap for successful energy management, focusing on electricity, natural gas and fleet fuel use. It addresses building operations, technology, vehicle fleet, people behaviour, processes, organizational measures and information sharing. The CEP meets the Town's obligations under the *Green Energy Act*. Overall, it aims to ensure that new and existing

Town facilities are built and operated as efficiently and sustainably as possible. It builds on the Town's existing commitment to energy conservation.

In 2011, the Town's annual electricity and natural gas costs are estimated to have approached \$900,000, excluding electricity costs associated with streetlights and fuel for the Town's vehicle fleet. This consumption generated over 1.7 million kilograms of greenhouse gas emissions. Through the CEP, the Town has a significant opportunity to reduce its energy intensity and greenhouse gas emissions.

It is important to emphasize that the costs of the Town's 2011 energy consumption are an estimate. This estimate is based on the actual amount of energy used (commodity costs only) at those Town facilities that are part of *Green Energy Act* reporting. The estimate was derived by multiplying the energy amount by an estimated average price, rather than including the actual cost. These estimates may be adjusted based on actual costs as part of the final Mayor's Community Energy Plan.

Between 2014 and 2019, implementation of the CEP's recommended technical actions is projected to translate into:

- 13% to 17% improvement in energy intensity²; and
- 16% to 20% reduction in greenhouse gas emissions.

The above targets are intended to guide the Town's energy management efforts. They are in line with targets established by other municipalities. While the results of the energy audits completed on Town facilities suggest that the above targets are achievable, due to uncertainty about whether the recommendations identified in the audited Town facilities will be transferable to unaudited buildings³, a target range from 80% to 100% of the estimated reductions has been recommended. Therefore, the energy intensity reduction target is 13% to 17% and the greenhouse gas emissions reduction target is 16% to 20%.

Beyond the above targets, it is estimated that converting all Town streetlights to LED technology can achieve an additional 30% electricity reduction.

3.2 Corporate Energy Plan (CEP) Preparation

The CEP was prepared through six key steps, as shown in Figure 2:

² Energy intensity is measured in terms of the amount of electricity used per square foot of Town facility. The measurement is described as the number of kilowatt-hours per square foot of Town facility space (ekWh/sq.ft.) In 2012, based on Town facilities subject to the requirements of the *Green Energy Act*, the average energy intensity of Town facilities was 34.5 ekWh/sq.ft.

³ The audits were completed on seven Town facilities of a variety of types so that measures from these seven facilities could be extrapolated across all Town buildings.

Figure 2: Overview of the CEP Planning Process



- Define Preferred State: Determined where the Town would prefer to be with respect to energy management. Defining the preferred state guided the Plan's objectives, targets and recommended actions. Statements of the Town's preferred state of energy management include:
 - Town's energy management activities are guided by ambitious yet achievable targets.
 - Town is progressive in energy management and strives for excellence.
 - Energy management is recognized as a strategic opportunity and priority in all policy and planning activities.
 - Dedicated staff are available to implement the Energy Plan.
 - Town has a centralized facility management role to ensure a consistent approach to energy management across all buildings.
 - Town has a clear and dedicated process to fund energy efficiency projects, and money obtained from energy savings is reinvested into energy projects.
 - Town strategically implements all cost effective energy projects in existing buildings.
 - Projects are prioritized in a consistent way, using clear criteria and appropriate metrics, and the Town implements retrofit projects that are cost-effective over longer time periods.
 - Town uses key performance indicators (KPIs) to track progress towards targets.
 - Town has real-time building level data for all utilities at an appropriate level of detail.

- All fleet vehicles are operated in the most energy efficient manner while meeting the needs of their intended use.
 - Town is pursuing net-zero energy use.
 - Project-specific communication and education helps building occupants appreciate energy efficiency retrofits.
 - Town relays a common and consistent message about energy, greening and sustainability, and this message is communicated succinctly and directly to all staff.
 - Staff are aware of energy conservation and the actions they can take to save energy within Town facilities.
- Identify Present State: Assessment of the Town's current state of energy management, including through facility energy audits, policy review and past energy conservation initiatives.
 - Develop Actions: Technical and organizational actions were identified.
 - Set Priorities: Timeframes for implementing each action were determined.
 - Prepare the CEP: The draft CEP was prepared. The final CEP will be presented to Council in the near future.

The CEP consists of 16 sections:

- Executive Summary
- Introduction
- Objectives and Targets
- Year 1 Priority Actions
- Years 2-3 Priority Actions
- Years 4-5 Priority Actions
- Capital costs and net present values
- Renewables and alternative energy
- Implementation of the plan
- Energy management systems
- Communication and engagement
- Conclusion
- Appendix A – Present State
- Appendix B – Criteria for prioritizing actions
- Appendix B – Utility incentive programs
- Appendix D – List of acronyms

The CEP is based on several key inputs, including:

- Input from the project's Steering and Technical Advisory Committees.

- Interviews with Town staff.
- Comprehensive analysis of the Town's energy data.
- Review of the Town's existing policies, plans and past energy conservation projects.
- Energy audits of seven Town facilities.⁴
- Benchmarking of Town facilities.
- Two strategic planning sessions with stakeholders.
- Survey of Town staff.
- Review of energy management best practices.

3.3 Classification of Recommendations

About 90 priority actions are recommended for implementation between 2014 and 2019⁵, including four recommendations specific to the Plan's implementation. Recommended actions are divided into high-priority organizational and technical actions. Organizational actions directly impact the Town's energy performance, enable the technical measures, and relate to behaviour change and the resources needed for successful ongoing management of the Town's energy use. The technical actions take into account the facility energy audit results, project costs, available incentives, reduced utility costs, rates of return and ease of implementation. Technical actions are prioritized based on their internal rate of return (IRR).⁶ They include plumbing upgrades; heating, ventilation and air conditioning optimization; installing lighting controls; building envelope upgrades; and lighting retrofits.

Priority actions are organized into seven categories or themes:

- *Organizational commitment*: Measures related to policies, targets, and resources required to enable energy management and the other actions;
- *Existing buildings and equipment*: Measures, both technical and policy based, that impact existing buildings and equipment;
- *New buildings and equipment*: Measures, both technical and policy based, that impact new buildings and equipment;
- *Monitoring and tracking*: Measures related to evaluating, monitoring, and verifying energy data;

⁴ The audits were completed on seven Town facilities of a variety of types so that measures from these seven facilities could be extrapolated across all Town buildings.

⁵ The numbering of the actions is not an indication of importance. All actions have the same priority and their implementation is equally important.

⁶ The Internal Rate of Return (IRR) is the percentage return realized over the lifetime of a project. The higher the IRR the better.

- *Communication and engagement*: Measures related to encouraging behavioural modifications to save energy;
- *Fleets*: Measures related to Town fleet vehicles that reduce energy consumption; and
- *Procurement and renewables*: Measures related to the procurement of energy and renewable technologies.

3.4 Recommended Actions

In Year 1 (see Tables 3 and 4 of the CEP), the focus should be on implementing organizational actions as these directly impact the Town's energy performance and tend to be prerequisites for actions in subsequent years. Numerous technical actions are also recommended. Examples of short-term organizational and technical actions in Year 1 include:

- Organizational Actions:
 - Adopt 5-year corporate energy intensity and greenhouse gas emission targets.
 - Continue to foster an excellent relationship with Halton Hills Hydro and Union Gas.
 - Develop a process for updating the CEP.
 - Assign a dedicated staff person to implement the CEP and track energy initiatives.
 - Develop a centralized energy facilities management role.
 - Implement all retrofit measures identified as priority actions.
 - Formalize criteria and metrics for prioritizing energy efficiency projects.
 - Develop consistent guidelines and policies for energy management.
 - Formalize key performance indicators and tracking mechanisms to monitor and report on progress.
 - Investigate options for an energy management system to be used to track and analyze energy use.
 - Make energy management related information available to the public and Town staff.
 - Develop a single brand for communicating about energy, greening and sustainability.
- Technical Actions:
 - Based on the recommendations of the facility energy audits implement specified technical measures (see Table 4 of the CEP), including plumbing optimization, HVAC optimization, CO² sensors, electric baseboard heater controls, HVAC system controls and air sealing.

- In Year 1, the projected cost of all recommended technical actions is \$49,808. Importantly, this investment is projected to result in a net present value of \$616,270.⁷

In Years 2-3 (see Tables 5 and 6 of the CEP), the focus is on ensuring that Year 1 actions have been completed and are being maintained. Additional medium-term organizational and technical actions are recommended. Examples include:

- Organizational Actions:

- Re-affirm commitment to targets.
- Include energy management as an important objective for the Town.
- Develop a process for continually monitoring available incentives, and for applying for the latter.
- Expand the scope of the Staff Sustainability Team to help champion the CEP's implementation and behaviour change programs, and to provide resources and assistance.
- Develop a mechanism (e.g. a revolving fund) through which savings from energy projects are re-invested in new energy projects.
- Implement applicable retrofit measures.
- Ensure that each building is appropriately metered.
- Allocate sufficient and appropriate staff resources to collect and manage energy data.
- Publish regular reports on key performance indicators.
- Develop standardized education and communication tools.
- Develop an employee engagement process.
- Implement general training on energy and energy efficiency.
- Develop and implement a corporate Town-wide energy, greening and sustainability behaviour change program.
- Implement a driver-training program.

- Technical Actions:

- Based on the recommendations of the facility energy audits implement specified technical measures (see Table 6 of the CEP), including those pertaining to plumbing, water heaters, occupancy sensors, lighting controls and review of utility use/costs.
- In Years 2-3, the projected cost of all recommended technical actions is \$99,587. Importantly, this investment is projected to result in a net present value of \$498,795.

⁷ Net Present Value (NPV) is the cash value of a project over (compared to) putting the money into an account at 5%. A positive NPV is favourable.

In Years 4-5 (see Tables 7 and 8 of the CEP), the focus is on ensuring that all prior actions have been completed and are being maintained. Additional long-term organizational and technical actions are recommended, including:

- Organizational Actions:
 - Prepare a Plan update.
 - Track and assess progress on targets from Years 2-3.
 - Implement all retrofit measures.
 - Conduct an assessment to ensure that energy data needs are being met, and staff resources are adequate to manage and collect data.
 - Identify an appropriate benchmarking system to monitor the energy performance of Town facilities.
 - Examine the feasibility of installing renewables or other alternative generation opportunities.
 - Produce guidelines for selecting the most energy efficient travel option for work related travel.

- Technical Actions:
 - Based on the recommendations of the facility energy audits implement specified technical measures (see Table 8 of the CEP) related to lighting.
 - In Years 4-5, the projected cost of all recommended technical actions is \$101,244. This investment is projected to result in a net present value of \$41,480.

Figure 3, below, summarizes the recommended five-year action plan.

Figure 3: Summary of Corporate Energy Plan Priority Actions

Timeframe	Year 1 (short-term)	Years 2-3 (medium-term)	Years 4-5 (long-term)
Energy intensity reduction target (ekWh/sq.ft)	8.3%	6.9%	1.5%
Greenhouse gas emission reduction target (kg)	11% ⁸	8%	1.4%
Projected Investment (Net capital cost)	\$49,808	\$99,587	\$101,244
Net present value (all measures)	\$616,270	\$498,795	\$41,480

⁸ The energy intensity and greenhouse gas emission reduction targets are based on the implementation of all of the recommended technical actions over a five year period.

Appendix A of the CEP provides an overview of the Town's present state of energy use, including the 2012 energy data and associated greenhouse gas emissions for Town facilities. Appendix A also highlights relevant Town policies and plans, and the results of a successful survey of Town staff regarding energy management. Staff responses were useful and provided a sense of how energy management is perceived by staff as well as suggestions for moving forward. Staff suggestions for preferred energy conservation measures included:

- Improve temperature control
- Formalize work-at-home arrangements
- Install motion activated light switches
- Increase budget to implement energy saving measures
- Install energy and water efficient fixtures
- Install rooftop solar panels and solar lights
- Reduce solar heating by installing white roof materials
- Purchase more fuel efficient vehicles
- Enforce turning of computers at the end of the day
- Install better window glazing on windows
- Reduce the amount of printing

Appendix B outlines criteria which the Town can use to help evaluate and prioritize energy management actions. Appendix C highlights a variety of available incentives that can support CEP implementation. Potential sources include Halton Hills Hydro, Union Gas and the Ontario Power Authority. Appendix D is a glossary of key acronyms.

3.5 Capital Investments and Savings

Implementation of the CEP will require a capital investment by the Town. However, this investment is anticipated to yield significant returns.

Full implementation of the technical measures in all applicable Town facilities will require a total investment of about \$250,639 or about \$50,100 in annual net capital costs in each of the five years.⁹ This investment translates into about \$1,156,545 in net present value.

3.6 CEP Implementation

Successful implementation of the CEP will require several inter-related measures to be put in place, including:

⁹ The capital costs only include the costs associated with the technical measures. Additional costs will be required to implement some of the organizational measures which may include retaining third-party contractors, auditing additional facilities, training costs and purchasing an Energy Management System. Other costs associated with organizational actions will be mainly in the form of staff time.

- Dedicated staff to implement the CEP: This resource would lead the implementation of the CEP by managing energy use and greenhouse gas emissions. Responsibilities would include:
 - Ensure that actions are implemented.
 - Track and report on progress.
 - Implement communication and engagement tools.
 - Develop and deliver training and behaviour change programs.
 - Assist the central facilities management staff person and the Staff Sustainability Team in fulfilling their roles (see below).
 - Assist with monitoring *Green Energy Act* compliance.

Subject to further review, this role may potentially be assumed by the Planning, Development and Sustainability Department via the Office of Sustainability.

- Central facilities management role: This resource would oversee energy management within all facilities. Responsibilities would include:
 - Oversee energy management at all Town facilities.
 - Lead the implementation of technical actions.
 - Act as a resource for all Operations and Maintenance staff.
 - Manage the Town's Energy Management System.
 - Assistance with training and staff engagement programs.
 - Monitor ongoing *Green Energy Act* compliance.

Currently, there is no consistent centralized energy management of facilities across all Town departments and facilities. It is recommended that an assessment be completed to determine if an existing staff person can take on the central facilities management role or if additional resources would be more appropriate. Although funding is available to hire an embedded energy manager via the Ontario Power Authority, it is only available until the end of 2015. Ultimately, it would be most effective to have a permanent Town staff dedicated to the role of energy management.

Many municipalities have a dedicated staff person responsible for energy management, including the Town of Caledon, Town of Oakville, City of Burlington, City of Pickering, City of Hamilton and the City of Brantford.

- Operations and Maintenance: Operations and Maintenance staff would play a critical role by identifying and implementing energy saving opportunities, and participating in training programs.
- Staff Sustainability Team: The Staff Sustainability Team would provide assistance with staff behaviour change programs and would act as a resource, as appropriate.
- Energy Management System: The current practice of utility data collection at the Town is very resource intensive, and involves requesting and verifying data from multiple sources, both internally and externally. To provide quality, timely and

readily accessible data in a useful format, the Town should investigate options for an Energy Management System. Various options for such systems are available and very depending on their capabilities and the amount of effort required by Town staff versus external resources. Incentives may be available towards the purchase of an Energy Management System.

Municipalities that have effectively managed their energy data, and achieved energy and cost savings have purchased and are using an Energy Management System.

- Communication and Engagement: Ongoing and consistent communication and staff engagement are important to effective implementation. Possible tools include:
 - A system for staff to submit ideas.
 - A system for recognizing staff contributions.
 - Communication tools (e.g. posters, e-newsletters, meetings).
 - Facility staff training.
 - Fleet driver training.
 - New staff training.
- Review: The CEP will be reviewed annually and comprehensively updated at the end of its five-year term. Among other things, the annual review will serve to:
 - Track implemented activities.
 - Track results.
 - Update the CEP based on new data, such as new energy audits and lessons learned.
 - Identify priority actions for the next year.
 - Provide a status report.
 - Meet requirements of the *Green Energy Act*.

4 Next Steps

Key next steps include:

- Update of the Corporate Energy Plan, as appropriate.
- Submit the Corporate Energy Plan to the Province as per the *Green Energy Act* by July 1, 2014
- Present the draft Local Action Plan to Council.
- Update the draft Local Action Plan, as appropriate.
- Consolidate the Corporate Energy Plan and the Local Action Plan into one seamless Plan – the Mayor’s Community Energy Plan.
- Once the final Plan is approved, a brief summary of the Plan will be prepared as an easy reference for the general public.

RELATIONSHIP TO STRATEGIC PLAN:

Sustainability is one of ten Council priorities identified in the Town's Strategic Action Plan, and repeatedly referenced throughout the Strategic Plan's Strategic Objectives and Strategic Actions. Therefore, the completion of the Mayor's Community Energy Plan will better enable the Town to fulfill its many sustainability objectives, including those directly related to energy. In particular, Strategic Action B.5.(h) which reads: "Develop a Community Energy Plan, in cooperation with Halton Hills Community Energy Corporation."

FINANCIAL IMPACT:

The Mayor's Community Energy Plan makes a strong business case for continued investments in energy conservation. Financial benefits include:

- Through the Federation of Canadian Municipalities' Green Municipal Fund approximately half of the cost of preparing the Plan will be offset.
- In undertaking the Mayor's Community Energy Plan, the Town anticipates receiving about \$17,500 in energy conservation incentives.
- Implementation of the Corporate Energy Plan is anticipated to generate \$1,156,545 in net present value.
- A wide range of incentives are available to the Town to assist with the Plan's implementation.

In terms of how the Corporate Energy Plan and the overall Mayor's Community Energy Plan will be implemented, Town staff will provide recommendations as part of the final Mayor's Community Energy Plan. However, at this point, one practical option may be to consider the recommended actions as part of the annual capital and operating budgeting process, pending their detailed review, prioritization, appropriate phasing of the recommended actions, identification of available incentives, review of existing staff resources, consultation with appropriate Town departments, and consultation with possible community partners. As part of the operating budget, consideration would be required of potential additional staff resources needed for the Plan's successful implementation.

COMMUNICATIONS IMPACT:

The Corporate Energy Plan contains a large amount of technical information. This is partly due to the need to meet prescribed requirements of the *Green Energy Act* and the underlying technical data.

Recognizing the need to make the CEP accessible and relevant to Town staff and the wider community, Town staff will:

- Develop a practical Communication Plan;
- Prepare a short executive summary; and
- Prepare outreach materials.

SUSTAINABILITY IMPLICATIONS:

By focusing on energy conservation, efficiencies, and greenhouse gas emission reductions, the Corporate Energy Plan supports three areas of community sustainability:

- Resilient Economy;
- Healthy and Diverse Environment; and
- Responsive and Effective Government.

There is alignment between the Corporate Energy Plan and the Community Sustainability Strategy, specifically the focus areas of:

- Diversified and Resilient Economy
- Energy
- Air Quality and Greenhouse Gas Emissions
- Green Economy
- Infrastructure
- Land Use
- Transportation

The Corporate Energy Plan and the overall Mayor's Community Energy Plan also relate to numerous Green Plan recommendations, including #25, 26, 31, 39, 43, 44, 48, 60, 66 and 67 which relate to energy and water efficiency, new development practices, energy management, LEED® building design, renewable energy and greenhouse gas emission reductions. There are also synergies with the Town's Strategic Plan, Official Plan, Green Development Evaluation Checklist, Green Development Standards, and the climate change report prepared by the Town Environmental Advisory Committee.

The Plan's recommendations are anticipated to benefit future generations through a focus on efficiency, conservation, renewable energy and greenhouse gas emission reductions. Successful implementation is anticipated to translate into financial benefits through improved energy efficiency in municipal operations.

CONSULTATION:

The project's Steering and Technical committees were engaged throughout the project.

In addition, various modes of community engagement were used for the Corporate Energy Plan and the overall Mayor's Community Energy Plan, including workshops, staff interviews, staff survey, engagement at community events, newspaper ads, Social Media, Media Releases, Mayor's announcements, website postings, presentations to community stakeholders, and youth presentations at Town summer camps.

CONCLUSION:

This report highlighted one of the two key components that will make up the Mayor's Community Energy Plan – the Corporate Energy Plan.

Building on the Town's past successes and many existing efforts, the Corporate Energy Plan is anticipated to materialize in improved efficiencies, utility cost savings, improved energy management, future cost avoidance, lower greenhouse gas emissions and continued municipal leadership. The Plan also positions the Town in compliance with the *Green Energy Act*.

Through the Corporate Energy Plan, it is recommended that by 2019, the Town achieve:

- 13% to 17% improvement in energy intensity; and
- 16% to 20% reduction in greenhouse gas emissions.

Sustained and comprehensive effort is anticipated to yield significant positive results.

Respectfully submitted,

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