



GREEN ENERGY AND CLIMATE CHANGE WORKING GROUP AGENDA

Friday, November 12th, 2021 - 10:00 a.m.
Via GoToMeeting

GoToMeeting - <https://global.gotomeeting.com/join/609163533>

Members of the Public:

Meetings are now be held using GoToMeeting - Video Conferencing. By clicking the link above (allow extra time for downloading the program if it is the first time you have used GoToMeeting on your device), you will be able to see the agenda, see Members of Council and hear the proceedings of the meeting. Please ensure the volume on your device is **on** and **turned up** to hear the meeting. The Public is asked to ensure that their mic and camera buttons are off for the entire meeting.

Video Conference Participation Etiquette

- a meeting via video conference shall never be treated differently than a meeting in person, whereby all attendees shall abide by proper meeting procedure and etiquette;
- we ask that all public attendees mute their cameras and mics; doing so will eliminate any background noise and create a much more seamless process (for Members only - if/when you wish to speak during the meeting, you will simply unmute your mic and upon completion of your thought, please re-mute)
- the Chair will call the meeting to order at the time indicated on the agenda;
- roll call will be completed visually by the Chair;
- the Chair will then remind all attendees to place their devices on mute
- as the Chair moves through the agenda, he will call on the appropriate staff person to speak to their reports;
- we request that you retain your questions until the end of the report, at which time the Chair will ask if anyone has questions;
- just as during an in-person meeting, members will be required to raise their hand and the Chair will call on you to speak;
- when the Chair calls a vote, you will raise your hand for the vote in favour and then in opposition, if necessary.

Chair, Deputy Reeve Barrie Crampton

1. CALL TO ORDER

2. AMENDMENTS/APPROVAL OF AGENDA

3. DISCLOSURE OF PECUNIARY INTEREST AND/OR CONFLICT OF INTEREST AND GENERAL NATURE THEREOF

4. APPROVAL OF MINUTES

- i) **Minutes – September 24th, 2021 – *attached, page 5.***

Suggested Recommendation:

“THAT, the minutes of the Green Energy and Climate Change Working Group Meeting held on September 24th, 2021 be approved as circulated.”

5. DELEGATIONS & PRESENTATIONS

None.

6. BUSINESS

- i) **Budget Review Through a Climate Lens**

- Tay Valley Township Budget 2022 (extracts) – *attached, page 10*
for full budget see [Calendar - Tay Valley Township \(tayvalleytwp.ca\)](http://tayvalleytwp.ca)

- ii) **Communications**

- Lanark County Climate Change Committee Update
- Natural Gas DSM – N. Reeve, Planner – *attached, page 17*

7. NEW/OTHER BUSINESS

None.

8. NEXT MEETING DATE AND PROPOSED AGENDA ITEMS

Next Meeting: TBD

9. DEFERRED ITEMS

**The following items will be discussed at the next and/or future meeting:*

- *None at this time*

10. ADJOURNMENT

MINUTES

GREEN ENERGY AND CLIMATE CHANGE WORKING GROUP MINUTES

Friday, September 24th, 2021

10:00 a.m.

Conference Call

ATTENDANCE:

Members Present: Chair, Councillor Rob Rainer
Bob Argue
Jennifer Dickson
Douglas Barr

Members Absent: Deputy Reeve Barrie Crampton
David Poch
Peter Nelson

Staff Present: Noelle Reeve, Planner
Allison Playfair, Planning Administrative Assistant,
Recording Secretary

1. CALL TO ORDER

The meeting was called to order at 10:06 a.m.
A quorum was present.

The Chair overviewed the Teleconference Participation Etiquette that was outlined in the Agenda.

2. AMENDMENTS/APPROVAL OF AGENDA

The agenda was approved as presented.

3. DISCLOSURE OF PECUNIARY INTEREST AND/OR CONFLICT OF INTEREST AND GENERAL NATURE THEREOF

None at this time.

4. APPROVAL OF MINUTES

Minutes – August 20th, 2021

The minutes of the Green Energy and Climate Change Working Group Meeting held on August 20th, 2021, were approved as presented.

5. DELEGATIONS & PRESENTATIONS

None.

6. BUSINESS

i) **Climate Action Plan – Update**
Noelle Reeve, Planner.

- **Waste Management Audit – Survey**

The Planner advised the Working Group that the Public Works Manager requested feedback from the Green Energy Climate Change Working Group on the Township's Waste Management Master Plan project. The Planner suggested members submit any feedback directly to the Public Works Manager, Sean Ervin.

The project is a joint project with Lanark Highlands funded by the province focusing on achieving efficiencies. A report will be presented to Council with recommendations how to improve waste management and be more efficient.

The Planner also noted that the Township will also be conducting a waste audit over the next year, once in the fall, winter, spring and summer. This project is also funded through a grant and will feed into the Waste Management Master Plan.

- **Light Spark project update**

The Planner updated the Working Group on the Light Spark project that is funded by the Federation of Canadian Municipalities to reduce energy usage from heating and cooling homes. Clear Air Partnership of Ontario has requested information on how residents heat their homes in the Township and then will create an interactive visual model of the Township's residences to help residents understand the costs and GHG emissions associated with their current heating and cooling systems are and what other heating and cooling options there are for their home and what the costs would be to improve their homes.

With this information, the Township would provide residents who apply, with a low interest loan to purchase new equipment to improve energy efficiency, and reduce costs and GHG emissions. The Township has already provided information from Hydro and Enbridge and will provide information from the Municipal Property Assessment Corporation on the size and age of homes in the area.

The Planner noted that Light Spark is hoping to launch the visual module mid-winter or early spring.

The Planner advised the Working Group that the Township has begun budget discussions and the Climate Lens that was included in the Climate Action Plan will be used. She also noted that the Township is looking at replacing the Chief Building Official's vehicle with a hybrid in 2022 and asked the Working Group for their opinion on the benefits of a hybrid versus a fully electric vehicle. The Working Group responded that waiting an extra year to purchase a fully electric vehicle in 2023 would be more beneficial than purchasing a hybrid at this time. They also asked if the Township was considering a Level 2 electric charger for its parking lot.

Jennifer Dickson left at 10:33 a.m. due to technical difficulties.

The Planner explained that quorum had been lost. As per the Procedural By-Law, the Green Energy Climate Change Working Group is recessed and will wait for 15 minutes to see if quorum is regained.

Jennifer Dickson arrived at 10:37 a.m.

Chair, Councillor Rob Rainer noted quorum had been regained and resumed the meeting.

ii) **Communications**

- Lanark County Climate Change Committee Update – Climate Network Lanark Survey

B. Argue, the appointed member of the Lanark County Climate Change Committee, provided an update to the Committee and noted a meeting was held on Monday, September 20th and commented on the agenda items. He noted Lanark County Council removed Part 1 and 2 of the Working Plan that concerned all survey and public consultation. The committee wants to implement actions not undertake consultation on attitudes.

He also noted the Lanark County Climate Change Committee has requested that the members submit a list of action ideas before its next meeting. B. Argue asked the Working Group members to provide him with any items they would like suggested.

The Working Group asked how to help support B. Argue's submissions. The Planner noted that the Lanark County Climate Change survey was attached to the agenda to be sure the members are aware of the survey. The Working Group requested a separate email be sent to them with the survey link information.

The Working Group expressed concern that education on Climate Change awareness is important and suggested council members in all municipalities should have talks with the younger generation to promote a positive mindset for youth in the future.

B. Argue informed the Working Group that Lanark County Council passed the phase out of Natural Gas motion that the Township Council voted against.

Councilor Rob Rainer mentioned to the Working Group that the Official Plan is being reviewed and that the Provincial Policy Statement now requires Climate Change to be incorporated in the update. He suggested that the Official Plan consultant, Forbes Symon from JP2G, be invited to the next meeting to discuss the Official Plan and give the Working Group an opportunity to have any questions answered and suggestions proposed.

7. NEW/OTHER BUSINESS

i) Teleconference versus Video Conference Meetings

The Working Group will continue using GoToMeeting video conference but has requested a second option to call into the meeting if connections are lost so as not to not lose quorum.

8. NEXT MEETING DATE AND PROPOSED AGENDA ITEMS

Next Meeting: October 22, 2021

- Invite Official Plan Consultant, Forbes Symon to speak at the next meeting.

9. DEFERRED ITEMS

**The following items will be discussed at the next and/or future meeting:*

None at this time.

10. ADJOURNMENT

The Working Group adjourned at 11:10 a.m.

BUSINESS



2022 DRAFT OPERATING AND CAPITAL BUDGET

Overview

*The Township's Strategic Plan's vision for the future includes "Financial Sustainability".
The goal is to have stable tax rates and debt ratios, and be able to fund our desired programs and infrastructure.*

The 2022 Draft Budget proposes that the Township provide an increase in the level of services and operations with the addition of two new positions (Community Service Coordinator and Deputy Fire Chief). Some new initiatives have been itemized on a separate list (and are not included in the Draft Budget) for Council's consideration, this can be found on the "Considerations" tab.

Impact to the Taxpayer

The impact of this year's draft budget upon taxpayers proposes a 3.17% tax levy increase. The Township tax rate change will be determined when we receive our assessment role in December.

As shown on the "Summary" page the levy increase of 3.17% is comprised of:

- 0.09% (\$5,600) from an adjustment to the debt financing for the Bolingbrooke Bridge project,
- 0.38% (\$23,169) increase in contributions to reserves, and
- 2.69% (\$162,265) operational increase.

The operational increase can be summarized as follows:

- Community Service Coordinator position	\$ 66,000
- Fire Board – Deputy Chief (our share 46%)	47,000
- Fire Board – Wage & Benefit increase (3.3%) (our share 46%)	3,000
- Fire Board – Other budget increases (our share)	8,000
- Wage & Benefit increase (all departments) (1.5%)	31,000
- Lost revenues (Tax Penalty & Investment Income)	55,000
- Increase in transfers to reserves (2%)	23,000
- Reduction in contribution to Hospital	(33,000)
- Net of all other changes	(9,000)
TOTAL	<u>\$ 191,000</u>

The assessment rate has been frozen again the second year in a row (same amounts as in 2020 and 2021 unless property improvements have occurred). This is due to the government's decision to again postpone phase-in due to COVID-19, resulting in a loss in anticipated revenue for the Township. We do anticipate some increases from new builds and from property improvements. We also anticipate a large reduction in assessment resulting from the appeal that was settled early in 2021. That reduction amounts to an assessment drop of \$26,846,119 which would reduce our tax revenue by \$55,714 based on 2021 tax rates.

The Acting Treasurers estimate (based on prior year assessment growth) would be that the net change to assessment would be a decrease in tax revenue of \$40,000 and a .66% effect on the tax rate. The combined levy increase and assessment decrease could result in the Township tax rate increase being 3.83%

The 3.83% results in an increase of approximately \$52 for a home with an assessed value of \$300,000.

The total 2022 tax requirement of \$6,214,082 is \$191,034 more than was required in 2021. It is important to note that a 1% raise in levy equates to approximately \$60,230 in additional revenues for Tay Valley.

Reading the Budget

For ease of reference, a summary of the increases and decreases has been provided and can be found on the "2022 Budget - Impacts on Levy" which shows the increases and decreases by function (i.e. salary, contracted services, etc.) and on the "2022 Budget – Impacts by Department" which shows the increases and decreases summarized by department and sub-department (i.e. Council then by elections, etc.).

The "Expenses" and "Revenues" details (i.e. line by line) have also been highlighted to reflect the increases, decreases from the prior year's budget.

Capital

The Township's Strategic Plan's vision for the future included "Infrastructure". The goal is to have roads, bridges, trails, buildings, landfills and communications systems that are efficient and well-maintained.

The impact of the current Capital Replacements, as identified in the 10 Year Capital Plan is reflected in the estimated year-end balances of the Township reserves. In order to be sustainable, the Township is required to increase the annual contribution to these reserves or find alternative revenue sources. A listing of all proposed 2022 Capital Projects is found on the "Capital" tab and offers a description of each project.

The 2022 Draft Capital Budget includes \$3,179,373 for infrastructure and asset replacements. The capital and special programs are funded primarily by reserves and grants. All projects should be funded from reserves and grants as long as the contributions to reserves continue as proposed in the 10 Year Capital Plan.

Following the completion of the 2022 Budget process, staff will further review the Replacement Schedules and Asset Management Plan and continue developing the Long Term Financial Plan. This will include reviewing existing policies and identifying any required changes that may be necessary in order to attain sound financial management and to ensure the Township's Asset Management Plan remains compliant. This review will also take into consideration re-assessment, growth, tax rates and analysis of existing tax rates in relation to household income to verify affordability for the taxpayers. The 10 Year Capital Plan will also be reviewed and updated annually. This information will assist the Township in future budget processes.

2022 CAPITAL BUDGET		BUDGET Total Gross Cost of Project	Development Charges Reserve	Cash In Lieu of Parkland Reserve	Official Plan Reserve	Modernization Funds	Contingency Reserve	Special Contingency Reserve	Recreation Capital Reserve	Recreation Fundraising Reserve	Waste Sites Reserve	Road Equipment Reserve	Road Construction Reserve	Bridge Construction Reserve	Federal Gas Tax	OCIF Formula Based Funding	COVID Funds	Other Grants	TOTAL
Description of Project																			
MANDATED AND COMMITTED PROJECTS																			
Official Plan	30,000	50%	7,500		22,500														
Inclusive Community Project	30,000		carried over from 2021		2,980													27,020	
Pay Equity	40,800						40,800												
Harrasment Policy Update	10,000						10,000												
Total Mandated and Committed Projects	110,800		7,500	-	22,500	2,980	-	50,800	-	-	-	-	-	-	-	-	-	27,020	110,800
HEALTH - SAFETY - ENVIRONMENTAL PROJECTS																			
Waste Audit	7,500	25%	carried over from 2021			7,500													
Waste Master Plan	22,500	25%	2,250 carried over from 2021															20,250	
Waste Site new wells *provisional - as needed basis	10,000		carried over from 2021								10,000								
Waste Site Glen Tay trees *possible replace/moving	5,000		carried over from 2021								5,000								
Weigh Scales & Software	60,000					60,000													
Establishing E. Limit of WE and placement of Final Cover along Harper Road	40,000							10,000			30,000								
Total Health-Safety-Environmental Projects	145,000		2,250	-	-	67,500	-	10,000	-	-	45,000	-	-	-	-	-	-	20,250	145,000
ROADS																			
Road Deficiencies Program	30,000												30,000						
Road Conditon Assessment	16,830												16,830						
Anglican Church Road	143,820												143,820						
Cameron Side Road	759,900		75,990										333,910		300,000	50,000			
Zealand Road (Culvert)	47,000												47,000						
Glen Tay Road (CR5 to CR10)	174,420												174,420						
Harper Road (Shouldering)	35,000												35,000						
Gravel to Surface Treatment	244,800		72,534										172,266						
Total Roads	1,451,770		148,524	-	-		-	-	-	-	-	-	953,246	-	300,000	50,000	-	-	1,451,770
BRIDGES & CULVERTS																			
Second Line Road	266,000													266,000					
Glen Tay Rd Open Footing Culvert - Engineering	10,200													10,200					
5th Concession Culvert Replacement	71,400													71,400					
Total Bridges	347,600		-	-	-		-	-	-	-	-	-	-	347,600	-	-	-	-	347,600
VEHICLES																			
Water Tank	39,500	100%	carried over from 2021									39,500							
Grader (replace 2007 Volvo)	402,900											402,900							
CBO Vehicle - Hybrid/Electric	45,700							35,700										10,000	
Emergency Trailer (Closed In)	12,750											12,750							
Fire Pumper Truck (Joint)	54,000		54,000																
Deputy Chief Vehicle	27,000		27,000																
Pumper Truck (South Sherbrooke)	50,000		50,000																
Total Vehicles	631,850		131,000	-	-		-	35,700	-	-	-	455,150	-	-	-	-	-	10,000	631,850
BUILDINGS																			
Building Condition Assessment			should be completed in 2021																
Waste Site Accesibility ramps (2 GT, 1 SV, 1 Mab))	91,728		full grant															91,728	
Council Chambers ramp accessibility fix	4,550		full grant															4,550	
Automatic Transfer Switch for Generator	11,600					11,600													
Total Buildings	107,878		-	-	-	11,600	-	-	-	-	-	-	-	-	-	-	-	96,278	107,878
RECREATION																			
Forest Trail	195,000		42,120						9,880	3,000									
Glen Tay Swimming Hole	11,475	75%	carried over from 2021						11,475								45,000	95,000	
Maberly Outdoor Sports Facility * (if grant rec'd)	106,000		6,137	7,500					12,863									79,500	
Total Recreation	312,475		48,257	7,500	-		-	-	34,218	3,000	-	-	-	-	-	-	45,000	174,500	312,475
MINOR CAPITAL																			
Councillor Technology	7,500					7,500													
Modernization Projects - Property Tax Software Upgrade	29,500					29,500													
Modernization Projects - AMP Software	35,000					35,000													
Total Minor Capital	72,000		-	-	-	72,000	-	-	-	-	-	-	-	-	-	-	-	-	72,000
TOTAL CAPITAL PROGRAM	3,179,373		337,531	7,500	22,500	154,080	-	96,500	34,218	3,000	45,000	455,150	953,246	347,600	300,000	50,000	45,000	328,048	3,179,373

2022 CAPITAL BUDGET		
Project		Description of Project:
MANDATED AND COMMITTED PROJECTS		
Official Plan	30,000	The Zoning/Official Plan Reserve is used to hire consultants to assist the Planner in preparing an Official Plan update every five years followed by a Zoning By-Law update within three years of the adoption of the revised Official Plan.
Inclusive Community Project	30,000	Funded by a grant.
Pay Equity	40,800	The Township is not compliant. A pay equity review was last undertaken in 2008/2009. A consultant will be retained to conduct a pay equity assessment both internally and externally.
Harassment & Violence in the Workplace Policy Update	10,000	The Township is currently not compliant. The policy needs to be updated, including conducting a workplace risk assessment, and then staff and Council trained on that new policy, as well as processes and templates established, then an annual review must occur. Staff will work with legal counsel on this project.
Total Mandated and Committed Projects	110,800	
HEALTH - SAFETY - ENVIRONMENTAL PROJECTS		
Waste Audit	7,500	Commenced in 2021 and will continue into 2022. Most of this project is funded by CIF, however the Township is responsible for the additional sorting of organics and textiles, as well as overhead costs including bin rentals and providing a heated area where the sorts can be completed (Maberly garage). Funded by a grant.
Waste Management Master Plan	22,500	Commenced in 2021 and will be completed in first quarter of 2022. Funded by a grant.
Waste Site new wells <i>*provisional - as needed basis</i>	10,000	Included in the budget if additional wells are required as per recommendations from the Annual Reports. If no additional wells are required, the funds remain in the reserve
Waste Site Glen Tay trees <i>*possible replacement/moving</i>	5,000	The final contour plans for the Glen Tay Waste Site was completed in 2018. Many of the small trees along Harper Road are located within the allowable waste area and will be buried by waste as the on-site contractor moves towards building out the waste site. The new trees will be installed on the berm, outside the buffer area for the waste site.
Weigh Scales & Software	60,000	Project to be determined upon the completion of the Waste Management Master Plan.
Establishing E. Limit and placement of Final Cover along Harper Ro	40,000	This project is to confirm the eastern limit of the waste site along Harper Road and the placement of final cover along Harper Road. Detailed drawings, survey and construction costs are included in this budgeted amount.
Total Health-Safety-Environmental Projects	145,000	
ROADS		
Road Deficiencies Program	30,000	Annual program that is typically focused on a gravel road in the Township. In 2022, the proposed work includes ditching and rock removal along Christie Lake North Shore Road. Proper ditching will prevent washouts and prevent potholes from developing on the road.
Road Condition Assessment	16,830	This was last completed in 2018 by StreetScan. It is proposed that StreetScan is retained again in 2022 to complete the Pavement Condition Index (PCI) for all of the paved roads in TVT. The PCI information will be used in updating the 10-year Capital Plan as well as the Townships Asset Management Plan.
Anglican Church Road	143,820	Anglican Church Road is 3.3km in length and off Highway 7. The Average Daily Traffic (ADT) is 200 and the road was last resurfaced in 2008. The road is still in "fair" condition and there are signs of water penetration and minor potholes. Microsurfacing is the preferred preservation method as it will re-seal the road and eliminate the minor defects of the road. Microsurfacing should extend the life of the road by 8-10 years. The Township will join Lanark County's tender to take advantage of economies of scale.

2022 CAPITAL BUDGET		
Project		Description of Project:
Cameron Side Road	759,900	Cameron Side Road is 3.6km and located between Highway 7 and Christie Lake Road with an ADT of 355. It is unknown when the road was last reconstructed and is in very poor condition. The scope of work includes localized reconstruction of the roadbed, pulverizing the existing road surface, ditching, culvert replacement and the application of a double surface treatment with fog seal.
Zealand Road (Culvert)	47,000	Replacement of one road culvert on Zealand Road, just east of Wesley Camp Lane. The existing culvert is showing signs of failure and the scope of work will include dewatering, excavation of the existing culvert, installation of new culvert, backfill with new materials and paving.
Glen Tay Road (CR5 to CR10)	174,420	This section of Glen Tay Road is 3km long between the Scotch Line and Christie Lake Road. The ADT is 2300 and the road was last reconstructed in 2007. The road is in "good" condition however is showing signs of water penetration and wheel rutting. Microsurfacing is the preferred preservation method as it will re-seal the road and eliminate the minor defects of the road. Microsurfacing should extend the life of the road by 8-10 years. The Township will join Lanark County's tender to take advantage of economies of scale. Alternatively, an asphalt overlay could be completed on this road, which would allow for the north bound shoulder, between Scotch Line and Ernest Way to be paved. The additional thickness of asphalt would further extend the life of the roadway. The estimated cost to complete an overlay is estimated to be \$556,000.
Harper Road (Shouldering)	35,000	This section of road is between Highway 7 and Bathurst 6 th Concession and includes the placement of new gravel on the shoulder of the road. There is minimal gravel remaining on the shoulder of the road, which causes a drop off between the edge of pavement and the shoulder and is a safety hazard. The Township will join Lanark County's tender to take advantage of economies of scale
Gravel to Surface Treatment	244,800	This project needs to be discussed further during deliberations (i.e. the selection of the road to be converted).
Total Roads	1,451,770	
<u>BRIDGES & CULVERTS</u>		
Second Line Road	266,000	DM Wills is currently completing the design for this project with an anticipated construction start in 2022. The bridge underwent a minor rehabilitation in 2015 and the anticipated scope of work for 2022 includes recoating the existing steel girders, bearing replacement, and performing isolated concrete repairs to the abutment walls and wingwalls.
Glen Tay Rd Open Footing Culvert - Engineering	10,200	Identified in the 2020 OSIM by-annual inspections. This project includes the detailed design to be completed in 2022, with construction to follow in 2023.
5th Concession Culvert Replacement	71,400	Replacement of one road culvert on the Bathurst 5 th Concession, between Highway 7 and Cameron Side Road. The existing culvert is showing signs of failure and the scope of work will include dewatering, excavation of the existing culvert, installation of new culvert, backfill with new materials. This project will be included in the Cameron Side Road Project to take advantage of economies of scale.
Total Bridges	347,600	

2022 CAPITAL BUDGET		
Project		Description of Project:
VEHICLES		
Water Tank	39,500	Ordered in 2021 but has not been delivered (parts shortage)
Grader (replace 2007 Volvo)	402,900	The 2007 Volvo will be 15 years old in 2022 and is showing signs of age. This grader has had significant repairs in the past and is a very important piece of equipment for the Township. The new grader will be equipped with a wing to ensure year-round usage (used to cut ice off the gravel roads in the winter and push-back snowbanks). There are no electric options yet, however the new grader will meet the latest emission standards (Tier 4).
CBO Vehicle - Hybrid/Electric	45,700	To replace the 2013 Mitsubishi RVR. This will be the Township's first electric vehicle.
Emergency Trailer (Closed In)	12,750	This is a new addition and will allow for a quicker and more organized response to road emergencies. The trailer will store the proper signage for a complete road closure and will be kept at the Bathurst Garage. The current trailer that is used is too small and is stored in the Maberly garage.
Fire Pumper Truck (Joint)	54,000	Approved in principle by Fire Board (from Development Charges)
Deputy Chief Vehicle	27,000	Approved in principle by Fire Board (from Development Charges)
Pumper Truck (South Sherbrooke)	50,000	Approved in principle by Fire Board (from Development Charges)
Total Vehicles	631,850	
BUILDINGS		
Building Condition Assessment		Commenced in 2021 and is grant funded. Scheduled to be completed in early 2022 with an update to the Building 10-year plan to follow. A requirement for the Asset Management Plan.
Waste Site Accesibility ramps (2 GT, 1 SV, 1 Mab))	91,728	Grant Funded, includes the replacement of the ramps at each of the waste site, pending outcome of the Waste Management master Plan (further discussion to follow).
Council Chambers ramp accessibility fix	4,550	Grant funded.
Automatic Transfer Switch for Generator	11,600	The automatic transfer switch will automatically turn the Generator on once the Township Office loses power. This is currently a manual process, and the power must be transferred at the pole behind the garage.
Total Buildings	107,878	
RECREATION		
Forest Trail	195,000	Council approved Phase 1 of the project. Partially grant funded.
Glen Tay Swimming Hole	11,475	Project commenced in 2021 but was put on hold due to staff workload. Project includes the transferring of lands to the Township to allow for proper access to the site, as well as fencing and possibly a small retaining wall. Further discussion to follow.
Maberly Outdoor Sports Facility * (if grant rec'd)	106,000	Includes the replacement of the Tennis Court and possibly some improvements to the Maberly Rink.
Total Recreation	312,475	
MINOR CAPITAL		
Councillor Technology	7,500	New iPads for the new Council.
Modernization Projects - Property Tax Software Upgrade	29,500	The ability for tax payers to look-up their property tax account information on-line. A municipal modernization project.
Modernization Projects - AMP Software	35,000	Asset management software that is composed of and intelligent asset inventory with decision support, an operations management system, and capital planning tools. This would be fully integrated with the Townships GIS system and is designed to advance the critical decison-making capacity. This software would also allow staff to identify levels of service which is the next requirements under the Ontario Regulation 588/17.
Total Minor Capital	72,000	
TOTAL CAPITAL PROGRAM	3,179,373	



October 22, 2021

Ms. Christine Long
Ontario Energy Board (OEB) Registrar
Ontario Energy Board
P.O. Box 2319, 27th Floor
2300 Yonge Street
Toronto, ON M4P 1E4
Email: Registrar@oeb.ca

Dear Ms. Long:

RE: OEB Case Number EB-2021-0002

The City of Ottawa is Canada's fourth largest municipality comprised of extensive rural and urban areas. With a population of 1,000,000 it consumes roughly 46,000TJ of natural (fossil) gas annually. The City declared a climate emergency on April 26, 2019. On October 28, 2020, Energy Evolution, the City's community energy transition plan, was passed unanimously by Ottawa City Council.

Energy Evolution includes the need for incremental energy conservation to reduce consumer natural gas use in a cost-effective manner, thereby helping the Ottawa achieve corporate City targets in 2040 and community-wide targets by 2050.

The City of Ottawa has a direct interest in the Enbridge Gas Distribution's (EGD) Demand Side Management (DSM) Plan and related DSM Framework. We see the availability of a significant and incrementally expanding natural gas DSM plan as being essential to helping Ottawa meet its City (corporate) and community-wide objectives.

On April 1st, 2021 the City of Ottawa held a meeting of stakeholders to discuss what might be included in the development of the next Enbridge DSM plan which would align with the goals of Energy Evolution. This stakeholder meeting included many people with longstanding experience in building retrofitting. There were many recommendations, and key ones were as follows:

- EGD has a history of delivering DSM programs which are supported by engaged and responsive staff or delivery agents. EGD uses a broad approach for delivery of DSM programs which leave significant opportunity for increase programs and results if EGD were to more effectively align program development and delivery with the needs of Ontario municipalities (i.e., City of Ottawa consumes roughly 46,000 terajoules of natural gas annually). The City of Ottawa requests that the OEB increase both the funding and program portfolio in alignment with consumer and community needs.
- There has never been a more opportune time to increase DSM resources and results given that they are complimentary to emissions reductions objectives. Use of natural gas is the highest source of building emissions in the City of Ottawa and for municipalities across Ontario. It should be noted, that since our stakeholder meetings

have taken place, government programs such as the Green and Inclusive Community Buildings program have been introduced. These programs will have the effect of reducing natural gas demand and this, along with the emergency declarations should be taken into account in the setting of targets for the next DSM program.

- Programs to improve building envelopes were seen as important as this was seen as been relevant to the condition of our buildings. A focus on longer payback measures in building envelopes was cited as these have yet to be addressed in our building stock.
- Enbridge incentives should be stackable with other incentive programs. This will be particularly important for enabling deep building retrofits as they can be quite costly and need often need generous financial assistance available to make them feasible.
- The next DSM program must incent fuel substitution to energy solutions that have both lower GHG emissions and higher than gas point of use efficiency. An example would be the use of electric heat pumps or electric boilers either solely as a replacement to natural gas heating or as a hybrid heating gas/electric solution. Such solutions constitute conservation measures as they will often greatly reduce primary energy demand. It should be noted that Enbridge recently suggested hybrid heating solutions in their recent submission the Independent Electricity System Operator relative to their Gas Phase-Out Impact Assessment. Also, the City of Ottawa did outline how they are employing hybrid heating to an Enbridge official in May of this year to the official's apparent enthusiasm.

Prior to the issuance of this letter, several of these points were re-iterated by City of Ottawa staff during a discussion an Enbridge organized workshop on June 10th, 2021, entitled "Your Feedback Matters – Municipal Focus Group with Enbridge Gas". At the time of writing this correspondence, a first draft of the meeting notes (promised by Enbridge) has yet to be circulated. It would be much simpler if EGD had included the feedback from City of Ottawa and other municipalities into its 2022-2027 DSM Plan, but since the application is now in the hands of the OEB we understand that it will be up to the OEB to include these incremental requirements.

Of these discussion points above, the issue of fuel substitution has the ability to be the most transformative, and a transformative approach is called for at this time. It is notable that the OEB's DSM letter notes that: "...the level of gas savings achieved through DSM programs for each dollar spent has been decreasing. ..."1. With the effectiveness of DSM spending decreasing, it's time to consider a new approach. If implemented correctly, fuel switching to electricity/renewables has the ability meet the primary objective of the OEB's DSM Letter2 and two of the secondary objectives (help to lower overall annual natural gas usage and play a role in meeting Ontario's greenhouse gas reduction goals)3.

There is significant low hanging DSM fruit still available in the City of Ottawa through existing and incremental programs. A specific dual fuel idea of employing air source heat pumps has been considered and studied by the City of Ottawa and deserves to be discussed in more detail here to showcase the prospective value of fuel switching to electricity. We are aware that Pollution Probe has proposed to coordinate consolidated best practice information related to these opportunities for the OEB and we intend to participate in that activity if endorsed by the OEB. A typical architype for an Ottawa residence has a utility set up with a

¹ EB-2019-0003, OEB Letter Post-2020 Natural Gas Demand Management Framework (December 1, 2020), p.4.

² EB-2019-0003, OEB Letter Post-2020 Natural Gas Demand Management Framework (December 1, 2020), p.2.

³ EB-2019-0003, OEB Letter Post-2020 Natural Gas Demand Management Framework (December 1, 2020), p.3.

natural gas furnace for heating and an air-cooled air conditioner for cooling. We believe that a switch over of the air conditioner to an air source heat pump deserves consideration.

The switch to an air source heat pump from an air-cooled air conditioner, particularly if done at end of life or with a new install at an existing residence, would result in benefits that far exceed the modest incremental costs. The cost adder for changing an air-cooled air conditioner into an air source heat pump was discussed during phase One of Energy Evolution and was felt to be in the order of \$1200. With this information, City of Ottawa staff built a spreadsheet to compare net heat pump costs to gas furnace costs in Ottawa Climate Conditions (please see Appendix 1). We have just updated this spreadsheet with updated time of use electricity prices and Enbridge gas prices as effective on July 1st, 2021. The analysis indicates that an air source heat pump would provide cost savings during periods of off-peak electricity rates down to roughly -10°C and during the mid-peak rate down to roughly 0 period down to 0°C. During times when the natural gas furnace is more economical (colder periods as influenced by the time of use electricity rate), the natural gas furnace could still be employed.

The operations strategy would meet the primary objective of making energy bills more manageable by giving customers a cheaper source of thermal for well over half the heating season. As for the secondary objectives, the reduction in natural gas usage and GHG emissions is quite evident from the use of an electrically driven heating device which we estimate would have an efficiency ranging between 250% and 550% when employed.

It is notable that this is an example of a holistic solution to issues in Ontario's energy markets. By targeting electricity use outside periods of extreme cold, the employment of air source heat pumps as we described has the ability to make proactive use of the widely reported electricity surplus (please see "Managing Surplus Baseload Generation" in this [link](#)). The issue of surplus generation was commented on last year by the then president of the Independent Electricity System Operator – please see [this link](#). This heat pump strategy avoids using electricity during periods of winter peak demand and mirrors a strategy being employed by Énergir and Hydro-Québec to electrify heating while avoiding winter peaks (please see [this link](#)). It is this type of holistic approach which will allow Enbridge to support the province's climate targets.

With our recommendations noted and one of them detailed, the City of Ottawa would be remiss to not also discuss the ambition of the DSM program as it is related to budget. Enbridge called for program spending increases of 2.95 percent in 2022 over 2021 and increases of 3% above inflation for the 2023-2027 period.⁴ This low level of funding will not do anything to meet the need for incremental DSM programs and enhanced activity.

Given that:

- i. With the recommendation for dual fuel discussed herein, a whole new dimension to conservation has opened up that will need to be funded and
- ii. That the province has support programs to support people on low incomes
- iii. With the August 9th, 2021 release of the latest intergovernmental Panel on Climate Change report, United Nations Secretary Guterres stated that: "Today's IPCC ... report is a code red for humanity. The alarm bells are deafening, and the evidence is irrefutable: Greenhouse gas emissions from fossil fuel burning and deforestation are choking our planet and putting billions of people at immediate risk. Global heating is affecting every region on Earth, with many of the changes becoming irreversible."

⁴ EB-2021-0002, EGI_APPL_20210503, May 5, 2021, Exhibit B, Tab 1, Schedule 1, Page 5 of 16

The internationally agreed threshold of 1.5C is perilously close. The only way to prevent exceeding this threshold is by urgently stepping up our efforts, and pursuing the most ambitious path" ([link here](#))

The City of Ottawa recommends that annual increases to the conservation program 20% above the rate of inflation should be implemented for the entire period from 2023-2027, or no less than a doubling of funding over the five-year term.

In terms of measures our recommendation to develop a dual fuel gas / air source heat pump program is a novel and transformational measure. It will greatly reduce primary energy demand and therefore we feel its imperative that Enbridge work with the City of Ottawa and all relevant stakeholders to develop such a measure as part of its conservation program. This measure should be available to Ontario municipalities and all EDG customers no later than January 1, 2023

I look forward to the OEB's efforts in this matter and in seeing their sound judgement and impartiality being brought to bear. I'm at the board's disposal to discuss this further either directly or in concert with our subject lead on this matter, Mike Fletcher.

Sincerely,

A handwritten signature in black ink, appearing to read 'Don Herweyer', with a long horizontal flourish extending to the right.

Don Herweyer
Director, Economic Development & Long-Range Planning (EDLRP)
Planning, Infrastructure and Economic Development (PIED)
City of Ottawa

Cc: Mike Fletcher

Note: An appendix follows on the next page.

Appendix 1:

<u>Air Source Heat Pump vs. Natural Gas Furnace Cost Equivalency Curve</u>			
City of Ottawa. February 2018			
Pricing updated: Aug 12, 2021		<u>Entered Values</u>	
<u>Energy Marginal Costs (Hydro Ottawa, Enbridge Gas)</u>			
Variable Electricity Delivery Charges	0	Cents / kWh	
Electricity Off Peak Rate	8.2	Cents / kWh	
Electricity Mid Peak Rate	11.3	Cents / kWh	
Electricity On Peak Rate	17	Cents / kWh	
Volumetric Gas Price	0.3268	\$ / m ³	
<u>Efficiency and Operating Values</u>			
Furnace Efficiency	98	Percent	
Heat Pump Warm Temperature COP	5.5	Factor	
Min ASHP Operating Temperature	-20	°C	

Results Table

Operation Pts	Cost and Efficiency Values				
Bin Data	Heat Pump	Furance	Heat Pump		
Temperatures			Off Peak	Mid Peak	On Peak
°C	COP	\$/MMBTU	\$ / MMBTU	\$ / MMBTU	\$ / MMBTU
16.9	5.50	9.53	4.37	6.02	9.06
14.2	5.20	9.53	4.62	6.37	9.58
11.4	4.90	9.53	4.90	6.76	10.17
8.6	4.60	9.53	5.22	7.20	10.83
5.8	4.30	9.53	5.59	7.70	11.59
3.1	4.00	9.53	6.01	8.28	12.46
0.3	3.70	9.53	6.50	8.95	13.47
-2.5	3.40	9.53	7.07	9.74	14.65
-5.3	3.10	9.53	7.75	10.68	16.07
-8.1	2.80	9.53	8.58	11.83	17.79
-10.8	2.50	9.53	9.61	13.25	19.93
-13.6	2.20	9.53	10.92	15.05	22.65
-16.4	1.90	9.53	12.65	17.43	26.22
-19.2	1.60	9.53	15.02	20.70	31.14
-21.9	1.30	9.53	18.49	25.48	38.33
-24.7	1.00	9.53	24.03	33.12	49.82