

# CITY COUNCIL AGENDA

Consolidated as of July 15, 2016



Council Chambers, Guelph City Hall, 1 Carden Street

**DATE** Monday July 18, 2016 – 5:00 p.m.

Please turn off or place on non-audible all cell phones, PDAs, Blackberrys and pagers during the meeting.

## **AUTHORITY TO MOVE INTO CLOSED MEETING**

*THAT the Council of the City of Guelph now hold a meeting that is closed to the public, pursuant to The Municipal Act, to consider:*

- C-2016.52**     **Community Energy Initiative – City of Guelph Downtown and HCBP District Energy Business Case**  
Section 239 (2) (a) security of the property
- C-2016.53**     **Bargaining Update for Fire and OPSEU**  
Section 239 (2) (d) labour relations or employee negotiations
- C-2016.54**     **~~Report of the Public Services Committee –~~ Resident Appointments to the Wellbeing Grant Allocation Panel**  
Section 239 (2) (b) personal matters about identifiable individuals

## **CLOSED MEETING**

### **OPEN MEETING – 7:00 P.M.**

O Canada  
Silent Reflection  
Disclosure of Pecuniary Interest and General Nature Thereof

## **CLOSED MEETING SUMMARY**

### **PRESENTATION**

- a) Presentation of 2016 Ontario Senior of the Year Certificate to Ross Knechtel.

### **CONFIRMATION OF MINUTES** (Councillor Bell)

*“THAT the minutes of the Council Meetings held June 6, 13, 20 and 27, 2016 be confirmed as recorded and without being read.”*

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## CONSENT REPORTS/AGENDA – ITEMS TO BE EXTRACTED

*The following resolutions have been prepared to facilitate Council's consideration of the various matters and are suggested for consideration. If Council wishes to address a specific report in isolation of the Consent Reports/Agenda, please identify the item. The item will be extracted and dealt with separately. The balance of the Consent Reports/Agenda will be approved in one resolution.*

### Consent Reports/Agenda from:

Corporate Services Committee			
Item	City Presentation	Delegations	To be Extracted
CS-2016.24 Customer Service Framework			
CS-2016.26 Restating the 2016 Budget Reflecting Stormwater Service as Rate Supported for the 2017 Budget			

Adoption of balance of Corporate Services Committee Sixth Consent Report -  
Councillor Hofland, Chair

Infrastructure, Development & Enterprise Committee			
Item	City Presentation	Delegations	To be Extracted
IDE-2016.21 Waste Resource Innovation Centre (WRIC) Site Logistics, Yard Waste and Rate Structure			
IDE-2016.23 Corporate Asset Management Overview and Work Plan			
IDE-2016.24 Stormwater Funding Study – Implementation Strategy			
IDE-2016.25 Guidelines for the Development of Contaminated or Potentially Contaminated Sites			
IDE-2016.26 Process Recommendation for Identifying Potential Downtown City-owned Real Estate Partnerships		<ul style="list-style-type: none"><li>• Susan Watson</li><li>• Elizabeth Macrae</li><li>• Ann Gajerski- Cauley</li></ul>	✓

IDE-2016.27 Sign By-law Variances – 37 Quebec Street			
IDE-2016.28 Sign By-law Variances – 111- 193 Silvercreek Parkway North			

Adoption of balance of Infrastructure, Development & Enterprise Committee #  
Consent Report – Councillor Bell, Chair

<b>Council Consent Agenda</b>			
<b>Item</b>	<b>City Presentation</b>	<b>Delegations</b>	<b>To be Extracted</b>
CON-2016.42 Ward Boundary Adjustment			
CON-2016.43 Community Energy Initiative – City of Guelph Downtown and HCBP District Energy Business Case (report)	<ul style="list-style-type: none"> <li>• Scott Stewart, Deputy CAO Infrastructure, Development &amp; Enterprise</li> <li>• Pankaj Sardana, GMHI Chief Financial Officer and CEO Envida and GHESI</li> <li>• Remo Bucci and John Matovich of Deloitte</li> <li>• Derrick Thomson, CAO</li> </ul>	<ul style="list-style-type: none"> <li>• Jason Dodge</li> <li>• Glen Tolhurst</li> <li>• Pat Fung</li> <li>• Michael Finoro</li> </ul> <p>Correspondence: - Marg Harbin</p>	✓
CON-2016.44 Community Energy Initiative (CEI) Update Status Report #1 (report)	<ul style="list-style-type: none"> <li>• Rob Kerr, Manager Community Energy</li> <li>• Alex Chapman, Program Manager, Energy</li> </ul>	<ul style="list-style-type: none"> <li>• Glen Tolhurst</li> <li>• Pat Fung</li> </ul>	✓
CON-2016.45 Proposed Demolition of 129 Surrey Street East, Ward 1			
CON-2016.46 Heritage Permit Application (HP16-0005) for Partial Demolition, Alterations and New Construction at 72-74 Arthur Street North under Part IV, Sections 33 and 34 of the Ontario Heritage Act			
CON-2016.47 Council Appointments to the Committee of Management for			

the Elliott			
CON-2016.48 Councillors Request for Access to Additional Training Funding, 2016 Budget Year			
CON-2016.49 Spring 2016 to Winter 2021 U- Pass Contract Renewal			
CON-2016.38 1229 Victoria Road South Proposed Official Plan Amendment and Zoning By- law Amendment (File: OP1501 /ZC1507) as referred from July 11, 2016		Hugh Handy	✓

Adoption of balance of the Council Consent Agenda.

## ITEMS EXTRACTED FROM COMMITTEES OF COUNCIL REPORTS AND COUNCIL CONSENT AGENDA (Chairs to present the extracted items)

*Once extracted items are identified, they will be dealt with in the following order:*

- 1) delegations (may include presentations)
- 2) staff presentations only
- 3) all others.

Reports from:

- Corporate Services Committee– Councillor Hofland
- Infrastructure, Development & Enterprise Committee – Councillor Bell
- Consent – Mayor Guthrie

## SPECIAL RESOLUTIONS

### BY-LAWS

Resolution – Adoption of By-laws (Councillor Billings)

***“THAT By-law Numbers (2016)-20078 to (2016)-20079, and By-Numbers (2016)-20081 to (2016)-20088 inclusive, are hereby passed.”***

By-law Number (2016)-20078 A by-law to amend the Official Plan for the Corporation of the City of Guelph as it affects property municipally known as	To amend the Official Plan with respect to the property municipally known as 1229 Victoria Road South -Official Plan Amendment No. 64 (OPA 64).
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1229 Victoria Road South and legally described as Part of Lot 10, Concession 8, Geographic Township of Puslinch, City of Guelph (File: OP1501).	
By-law Number (2016)-20079 A by-law to amend By-law Number (1995)-14864, as amended, known as The Zoning By-law for the City of Guelph as it affects property municipally known as 1229 Victoria Road South and legally described as Part of Lot 10, Concession 8, Geographic Township of Puslinch, City of Guelph (File: ZC1507).	To amend the Zoning By-law with respect to the property municipally known as 1229 Victoria Road South.
By-law Number (2016)-20081 A by-law to authorize the execution of an agreement between The Corporation of the City of Guelph and The University of Guelph Central Student Association. (U-Pass)	To execute an agreement as per Consent Report CON-2016.49.
By-law Number (2016)-20082 A by-law to authorize the execution of an agreement between The Corporation of the City of Guelph and The University of Guelph Graduate Students' Association. (U-Pass)	To execute an agreement as per Consent Report CON-2016.49.
By-law Number (2016)-20083 A by-law to specify the clawback percentages and the capping threshold parameters for the year 2016 and to as required establish a fixed date as of which to calculate such clawbacks for all properties in the commercial, industrial property classes and to end the application of Part IX of the Municipal Act for the multi-residential property class.	A by-law to specify the capping threshold parameters for the year 2016.
By-law Number (2016)-20084 To authorize the borrowing upon instalment debentures in the aggregate principal amount of \$65,200,000.00	To authorize the issuance of debenture as approved by Council July 11, 2016.

<p>(\$22,969,391.00 principal amount of 7 year instalment debentures and \$42,230,609.00 principal amount of 10 year instalment debentures, \$26,150,000.00 of the principal amount of such 10 year debentures may be raised by the issue of new refinancing instalment debentures on or before the maturity date) for capital works.</p>	
<p>By-law Number (2016)-20085 A by-law to amend By-law Number (2002)-17017 (to remove No Parking Anytime zone on Mountford Dr., north side, McIlwraith to 9m east of Conrad; to add a No Parking Anytime zone on Mountford Dr., north side, from McIlwraith Cres. (south) to 9m east of Conrad Crt; to add a No Parking Anytime zone on Mountford Dr., south side, from 118m east of Conrad Crt. to 22 m east thereof in the No Parking Schedule XV: to remove Wyndham St. N. (Highway located within downtown area) east side, Carden St. to 72m north thereof, 2-hours, 9am-9pm Mon-Sat, once per day (5 hours, once per day, within signed disabled parking spaces) on any Highway or combination of Highways indicated in Column I as being within the downtown area; to add Wyndham St. N. (Highway located within downtown area), east side, Carden St. to Macdonell St., 2-hours, 9am-9pm Mon-Sat, once per day (5 hours, once per day, within signed disabled parking spaces) on any Highway or combination of Highways indicated in Column I as being within the downtown area in the Restricted Parking Schedule XVII: to add Watson Pkwy, both sides, from Fleming Rd. to York Rd. in the Designated Bicycle Lanes Schedule IV: to add Watson Pkwy, Ecole Guelph Lake Elementary School Zone, 40 km/h, when flashing 8am to 9am, 3pm to 4pm in the Speed Limits Schedule XII: to add Watson Pkwy, Fleming Rd. to a point 75m north thereof, One (Curb Lane), southerly: right turn only, anytime, Rb-42 in the Lane Designation Schedule VII: to add a No Stopping 8am-4:30pm Mon-Fri, Sept 1-June 30 zone on Watson Pkwy, both sides, Couling Cres. (south) to 127 m south thereof; to add a No Stopping, 8am-4:30pm Mon-Fri, Sept 1-June 30 zone on Couling Cres, both sides from Watson Pkwy to Severn Dr. in the No Stopping Schedule XVI).</p>	<p>To amend the Traffic By-law.</p>
<p>By-law Number (2016)-20086 A by-law to remove Block 32, Plan 61M194 designated as Parts 1 to 11, Reference Plan 61R20856 in the City of Guelph from Part Lot Control. (144, 146, 148, 150, 152 and 154 Summit Ridge Drive)</p>	<p>To remove land from part lot control to create separate parcels for townhouse dwelling units to be known municipally as 144, 146, 148, 150, 152 and 154 Summit Ridge Drive.</p>

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By-law Number (2016)-20087 A by-law to provide rules for governing the order and procedures of the Council of the City of Guelph, and to repeal By-law Number (2015)-19938.	A by-law to govern the proceedings of Council meetings.
By-law Number (2016)-20088 A by-law to confirm the proceedings of a meeting of Council. (July 12, 13 and 18, 2016)	To confirm the proceedings of meetings of Guelph City Council held July 12, 13 and 18, 2016.

### **MAYOR'S ANNOUNCEMENTS**

*Please provide any announcements, to the Mayor in writing, by 12 noon on the day of the Council meeting.*

### **NOTICE OF MOTION**

### **ADJOURNMENT**

## **Revised - CONSENT AGENDA**

**Monday July 18, 2016**

His Worship the Mayor  
and  
Members of Guelph City Council.

### **SUMMARY OF REPORTS:**

The following resolutions have been prepared to facilitate Council's consideration of the various matters and are suggested for consideration. If Council wishes to address a specific report in isolation of the Consent Agenda, please identify the item. The item will be extracted and dealt with immediately. The balance of the Consent Agenda will be approved in one resolution.

#### **A REPORTS FROM ADMINISTRATIVE STAFF**

<b>REPORT</b>	<b>DIRECTION</b>
<b>CON-2016.42 Ward Boundary Adjustment</b>  1. That report CS-2016-55 entitled 'Ward Boundary Adjustment', be received.  2. That staff be directed to initiate the process to adjust the current ward boundary between Wards 5 and 6 in order to correct the discrepancy noted within report CS-2016-55 and do so in accordance with all legislative and statutory requirements.	Approve
<b>CON-2016.43 Community Energy Initiative – City of Guelph Downtown and HCBP District Energy Business Case</b>  1. That Guelph City Council receive report IDE-BDE-1615 – 'Community Energy Initiative – City of Guelph Downtown and HCBP District Energy Business Case'; and  2. That Guelph City Council directs staff to support Guelph Municipal Holdings Inc., in efforts to operate the Galt Downtown and HCBP District Energy Nodes "as-is", while further efficiencies are explored with GMHI; and  3. That Guelph City Council directs staff to include in the Community Energy Initiative Update, which is to be presented for Council's consideration by no later than the end of Q1 2017, a City wide district energy business development strategy.	Approve

**CON-2016.44      Community Energy Initiative (CEI) Update  
Status Report #1**

Receive

That report IDE-BDE-1612 from Infrastructure, Development and Enterprise dated July 18, 2016 entitled "Community Energy Initiative (CEI) Update – Status Report #1 be received for information.

**CON-2016.45      Proposed Demolition of 129 Surrey Street East,  
Ward 1**

Approve

1. That Report 16-59 regarding the proposed demolition of one (1) single detached dwelling at 129 Surrey Street East, legally described as PLAN 269 PT LOT 2; City of Guelph, from Infrastructure, Development and Enterprise dated July 11<sup>th</sup>, 2016, is received.
2. That the removal of 129 Surrey Street East from the Municipal Register of Cultural Heritage Properties be approved.
3. That the proposed demolition of one (1) detached dwelling at 129 Surrey Street East be approved.
4. That the applicant be requested to contact the Plant Manager of Solid Waste Resources, within Infrastructure, Development and Enterprise regarding options for the salvage or recycling of all demolition materials.

**CON-2016.46      Heritage Permit Application (HP16-0005) for  
Partial Demolition, Alterations and New  
Construction at 72-74 Arthur Street North under  
Part IV, Sections 33 and 34 of the Ontario  
Heritage Act**

Approve

1. That report 16-56, Heritage Permit Application (HP16-0005) for partial demolition, alterations and new construction at 72-74 Arthur Street North under Part IV, Sections 33 and 34 of the Ontario Heritage Act be received.
2. That Council approve Heritage Permit Application (HP16-0005) for partial demolition, alterations and new construction at 72-74 Arthur Street North under Part IV, Sections 33 and 34 of the Ontario Heritage Act.

**CON-2016.47****Council Appointments to the Committee of Management for the Elliott**

Approve

1. That the Delegation of Authority to The Elliott By-law (2014)-19796 be amended as follows:
  - (a) Section 2(e) is deleted;
  - (b) Section 4 is deleted and the following inserted:
    4. The Committee of Management shall be composed of five members of Council appointed by Council, from time to time, for the term directed by Council at the time of appointment.
  - (c) Section 5 is deleted;
  - (d) Section 10 is deleted and the following inserted:
    10. The Chair of the Committee of Management shall be appointed by Council.
  - (e) Section 11 is deleted and the following inserted:
    11. Notice and materials for all meetings of the Committee of Management shall be communicated in the same manner as for meetings of Council Standing Committees, except that the Board of Trustees shall also be provided all notices and materials.
  - (f) Sections 26 and 27 are amended by changing "Executive Director of Community and Social Services" to "Deputy CAO – Public Services" and "Executive Director" to "Deputy CAO".
2. That Mayor Guthrie and Councillors Downer, Billings, Gordon and Van Hellemond be reappointed to the Committee of Management for the Elliott Long-Term Care Residence for a term expiring November 30, 2016 or until their successors are appointed; and
3. That Councillor Downer be appointed the Chair and Councillor Billings be appointed the Vice-Chair of the Committee of Management for the Elliott Long-Term Care Residence for the duration of the term.

**CON-2016.48****Councillors Request for Access to Additional Training Funding, 2016 Budget Year**

Approve

That Councillor Mark MacKinnon and Councillor James Gordon and Councillor June Hofland be authorized to exceed their 2016 training allocation of \$3,250.00 so as to attend conferences scheduled in summer and fall 2016.

<b>CON-2016.49</b>	<b>Spring 2016 to Winter 2021 U-Pass Contract Renewal</b>	Approve
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1. That the Public Services Committee Report #PS-16-17 "Spring 2016 to Winter 2021 U-Pass Contract Renewal" dated July 4, 2016 be received.
2. That the Mayor and City Clerk be authorized to sign this U-Pass Agreement with the Central Student Association and Graduate Students' Association at the University of Guelph.

<b>CON-2016.38</b>	<b>1229 Victoria Road South Proposed Official Plan Amendment and Zoning By-law Amendment (File: OP1501 /ZC1507) as referred from July 11, 2016</b>	Approve
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1. That the application submitted by Reid's Heritage Homes Ltd. (on behalf of Westminster Woods Ltd.) for approval of an Official Plan Amendment to change the land use designation on the western portion of the lands from "General Residential" to "Neighbourhood Commercial Centre (4650 m<sup>2</sup>)" to permit the development of a neighbourhood commercial plaza with approximately 752.7 square metres (8,102 square feet) of gross floor area in two (2) separate buildings on the property municipally known as 1229 Victoria Road South, legally described as Part of Lot 10, Concession 8, Geographic Township of Puslinch, City of Guelph be approved in accordance with the conditions and zoning regulations contained in Attachment 4 of Infrastructure, Development and Enterprise Report 16-36 dated July 11, 2016, **AS AMENDED.**
2. That the application submitted by Reid's Heritage Homes Ltd. (on behalf of Westminster Woods Ltd.) for approval of a Zoning By-law Amendment to change the zoning from the "Agricultural" (A) Zone under the former Township of Puslinch Zoning By-law No. 19/85 to the specialized "General Apartment Zone" (R.4A-51(H)) with a holding symbol on the eastern portion of the lands to permit a four (4) storey, 101-unit apartment building and to the "Neighbourhood Commercial" (NC(H)) Zone with a holding symbol on the western portion of the lands to permit a neighbourhood commercial plaza with approximately 752.7 square metres (8,102 square feet) of gross floor area in two (2) separate buildings at the property municipally known as 1229 Victoria Road South, legally described as Part of Lot 10, Concession 8, Geographic Township of Puslinch, City of Guelph be approved in accordance with the conditions and zoning regulations contained in Attachment 4 of Infrastructure, Development and Enterprise Report 16-36 dated July 11, 2016, **AS AMENDED.**

# STAFF REPORT



TO City Council

SERVICE AREA Infrastructure, Development and Enterprise

DATE July 18, 2016

**SUBJECT Community Energy Initiative – City of Guelph Downtown and HCBP District Energy Business Case**

REPORT NUMBER IDE—BDE-1615

## EXECUTIVE SUMMARY

### PURPOSE OF REPORT

Report IDE-BDE-1615 builds on information about the Downtown Galt District (Downtown) and the Hanlon Creek Business Park Phase 1 (HCBP) district energy investment Nodes, provided on May 16<sup>th</sup>, 2016 by GMHI to Guelph City Council (as shareholder of GMHI).

This report:

- Responds to the following Council directions which were passed at the May 16<sup>th</sup> Council meeting:

*"That the presentation and report on the financial history of the GMHI group of companies be referred to the June 13, 2016 Council meeting"*

*"That the closed minutes and accompanying material of November 23, 2015 with respect to District Energy Strategic Long Term Financial Plan, with the necessary redactions, be made public in conjunction with the materials for June 13, 2016 Council."*

*"That the closed minutes and accompanying material of February 29, 2016 with respect to Decision Chronology: District Energy, be made public with the necessary redactions in conjunction with the material for June 13, 2016 Council."*

The responses to these resolutions are found within Attachment # 1 of this report.

- Provides staff comments and recommendations regarding the implementation of the business case document titled '*District Energy Business Case Findings and Recommendations for the Downtown Galt District and Hanlon Creek Business Park*'. (A copy of this document is



found in Attachment #2 of this report).

## KEY FINDINGS & RECOMMENDATIONS

The business case evaluates three potential “go forward” options:

1. Exit the current investments;
2. Operate the current nodes “as-is”; and
3. Preserve opportunity for growth

The following represents a summary of the key findings and recommendations for the Downtown Galt District and Hanlon Creek Business Park district energy Nodes as agreed to by City staff, GMHI, Deloitte Canada and its sub-consultant FVB Inc.

### General Findings

- Both investments were subject to an impairment in 2015 due to poorer than expected financial performance;
- There are no immediate operating concerns with the installed infrastructure at the Nodes but some best practices are currently not met
- The Nodes together as a portfolio are considered to be largely breakeven from a financial perspective.
- The Nodes are operating at full potential, thus there is little potential for adding new customers without expansion.
- There is no “termination for convenience” in place for the thermal energy service agreements (TESA), therefore termination would trigger an event of default with current customers.

### Downtown Galt District (Downtown) Node Findings

- The Downtown Node is in good operating condition and is expected to perform well moving forward based on current growth projections.
- The heating system at the Downtown Node is commercially viable in its current operating state, while the cooling loads are insufficient.
- The current Combined Heat and Power Standard Offer Program (CHPSOP) contract power generation requirement (10 MW) is misaligned with projected loads (less than 3.0 MW).
- The current Thermal Energy Service Agreements (TESA) provides sufficient revenues to operate the Node at a marginal annual profit.
- The current TESAs do not allow for the early termination of contracts by GMHI.
- The projected cost to expand the Node to meet the CHPSOP requirements is approximately \$29m, vs. penalties of \$306k (**Note: GMHI has stated that it does not have the financial capacity to underwrite an expansion.**)
- The Node has projected annual profits of \$174K.

## **Hanlon Creek Business Park (HCBP) Node Findings**

- The HCBP Node is in fair operating condition. The current system is temporary and will require the further deployment of significant capital (\$300 – \$400k) within the next 12 years to upgrade the current plant.
- The heating system and cooling loads at the HCBP Node are not commercially viable in their current operating state.
- The revenue generated by the current TESAs result in a minor annual loss to be considered a 'break-even' situation when consolidated with the Downtown Node.
- The current TESAs do not allow for the early termination of contracts by GMHI.
- The current growth forecast for the HCBP Phase 1 indicates that the CHPSOP contract power generation requirement (10 MW) may not be achieved.
- The projected cost to expand the Node to meet the CHPSOP requirements is approximately \$31m, vs. penalties of \$300k (**Note: GMHI has stated that it does not have the financial capacity to underwrite an expansion.**)

## **Recommendations**

- Both of the Downtown and HCBP Nodes should continue to be operated "as-is".
- No further deployment of capital should be made at this time within either Node.
- Further system efficiencies should be explored.

Deloitte has also provided a number of recommendations regarding the required factors of success for building successful district energy systems. In summary the consultant has identified the following:

1. The need to develop a customer acquisition and pricing strategy;
2. The need to leverage existing resources to develop the DE market; and
3. The need to establish connection policies and incentives.

With this in mind, Staff have provided comments and recommendations regarding the creation of a district energy business development strategy, which will serve to better position current and future nodes, and to respond to unknown or unexpected district energy investment proposals.

## **FINANCIAL IMPLICATIONS**

Attachment #3 of this report provides a summary of the known or anticipated financial implications for each of the options that have been addressed in the City of Guelph Downtown and HCBP District Energy Business Case.

# STAFF REPORT

## ACTION REQUIRED

Staff is in general agreement with the consultant's findings and recommendations and have provided the following resolutions to implement the business case.

## RECOMMENDATIONS

"THAT Guelph City Council receive report IDE—BDE-1615 – '*Community Energy Initiative – City of Guelph Downtown and HCBP District Energy Business Case*'; and

"THAT Guelph City Council directs staff to support Guelph Municipal Holdings Inc., in efforts to operate the Galt Downtown and HCBP District Energy Nodes "as-is", while further efficiencies are explored with GMHI"; and

"THAT Guelph City Council directs staff to include in the Community Energy Initiative Update, which is to be presented for Council's consideration by no later than the end of Q1 2017, a City wide district energy business development strategy".

## BACKGROUND

At its meeting of May 16<sup>th</sup>, 2016, Guelph Municipal Holdings Inc. (GMHI) presented to Guelph City Council report number GMHI-2016.1 – '*Financial History of the GMHI Group of Companies and Current Issues*', which in part provided financial information concerning the performance of the Downtown Galt District (Downtown) and Hanlon Creek Business Park Phase 1 (HCBP) district energy investments made to date by GMHI.

With respect to the performance of the current district energy investments GMHI stated: '*Following a close examination of the thermal potential in HCBP and downtown Guelph by Ontario district energy experts, a general lack of thermal loads in the two nodes implies that CHP plants will likely not be built. This leads to Envida being required to take asset write-offs and write-downs.*'

GMHI went on to state that the '*District energy assets in HCBP and Downtown Guelph will not generate sufficient cash flows over their useful lives to fully recover the costs of installing these assets. The required asset write-down / write-off amount to:*

- *Hanlon Creek Business Park District Energy System \$5.1 million*
- *Downtown Guelph District Energy System \$3.6 million.*'

Building on this information, Business Development and Enterprise Services and GMHI developed a scope of work to create a business case which would further

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evaluate the GMHI investments within the Downtown and HCBP district energy Nodes, and to assess the implementation of three potential options:

1. Exit Option: Exit the DE Business and, specifically shut down the operations at both Nodes;
2. Operate As-is: “Stabilize” the current investments in both systems and continue operations under current contractual agreements without investing significant capital or infrastructure expansion or spending on business development activities;
3. Preserve Opportunity for Growth: Continue to operate the current investments within both Nodes and actively assess and position for future investment opportunities.

The business case finding and recommendations are based on the following:

- Background on the current investments and options;
- Strategic objectives of the City;
- Benchmark factors of success for DE Systems;
- Gap Analysis;
- Decision criteria methodology for analysis of options;
- Detailed analysis of the Operate as-is option;
- Detailed analysis of Preserve Opportunity for Growth options; and
- Final recommendations and risks.

This assignment was contracted to the consulting team Deloitte Canada and FVB Energy Inc., both of which have background and expertise within the commercial implementation district energy systems in Canada.

## REPORT

Staff are generally in agreement with Deloitte’s findings, and support the recommendations that the two Nodes should continue to be operated “as-is”, while efficiencies be explored with GMHI to further stabilize these Nodes. Because GMHI has entered into contracts with others, it is assumed that GMHI will lead these activities, and that Business Development and Enterprise Services will provide support to GMHI were it is required.

Staff also agrees that no further deployment of capital should be expended on the current or future potential systems in the absence of a robust corporate wide business development strategy, which will serve as the basis for improved project business cases, implementation plans and investment decisions.

With this in mind, the consultants have provided some observations and recommendations regarding the creation of a business development strategy, which will allow for improved risk assessment, business planning and the realization of sustainable future district energy systems. The strategy will also serve to allow the

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City to better respond to future unexpected investment proposals. In summary the consulting team identifies the need for the following:

- The need for improved business development activities to acquire anchor contracts that will provide the necessary heat loads to support a district energy system;
- Consideration of programs which will incentivize customer hook up to district energy programs;
- Business case development and review; and
- Establishing expertise and resources.

BDE agrees with the need to create such a strategy which serves to better analyze potential future nodes, such as the Guelph Innovation District, HCBP Phase 3, the downtown, and possibly the University of Guelph. It will also serve to better prepare the City to respond to unexpected district energy investment needs, such as what occurred in the Town of Markham in securing IBM.

BDE is currently working on two initiatives which in part will address these suggestions. The initiatives include: 1) the updating of the Community Energy Initiative (CEI), which is scheduled to be presented to Council in Q1 2017 and 2) a Municipal Comparator Study which will provide an assessment of Guelph's cost to do business versus other Ontario communities and assess the role that incentive play in attracting new investment.

Staff intend to include in the CEI update scope the following district energy matters:

- An assessment of current and emerging policy and programs at the Federal and Provincial government levels;
- An assessment of local policies and programs that may act as an incentive to connect to district energy;
- A preliminary assessment of potential future district energy opportunities, including but not limited to the downtown, current local businesses (in-front or behind the meter), current and future employment lands, as well as local institutions and public facilities;
- A customer acquisition program which will target desired new customer anchor customers;
- Confirmation and costing of resources and expertise that will be required to implement the strategy; and
- The establishment and confirmation of investment goals and objectives (both financial and non-financial)

With respect to the Municipal Comparator Study, the scope of work will be expanded to include the role that funding and policy programs may play to incentivize new district energy customers.

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With the above in mind, staff is proposing the following resolutions for Council's consideration:

- *"THAT Guelph City Council receive report IDE—BDE-1615 – 'Community Energy Initiative – City of Guelph Downtown and HCBP District Energy Business Case'"; and*
- *"THAT Guelph City Council directs staff to support Guelph Municipal Holdings Inc., in efforts to operate the Galt Downtown and HCBP District Energy Nodes "as-is", while further efficiencies are explored with GMHI"; and*
- *"THAT Guelph City Council directs staff to include in the Community Energy Initiative Update, which is to be presented for Council's consideration by no later than the end of Q1 2017, a City wide district energy business development strategy."*

## **CORPORATE STRATEGIC PLAN:**

- **Organizational Excellence**
  - Building robust systems, structures and frameworks aligned to strategy
- **Innovation in Local Government**
  - Build an adaptive environment for government innovation to ensure fiscal and service sustainability
  - Ensure accountability, transparency and engagement
- **City Building**
  - Be economically viable, resilient, diverse and attractive for Business

## **FINANCIAL IMPLICATIONS:**

Attachment 3 of this report provides a summary of the known or anticipated financial implications for each of the options that have been addressed in the Business Case.

## **CONSULTATION:**

- Legal Services
- Guelph Municipal Holdings Inc.
- Clerks Office
- Executive Team

## **COMMUNICATIONS:**

It is the intent of BDE to work with Corporate Communications to provide on-going communications to the public and the business community. At this time it is envisaged that it will include web and social media along with personal outreach to stakeholders and district energy customers.

# STAFF REPORT

## ATTACHMENTS

- Attachment # 1- June 13, 2016 – District Energy Materials from Previous Council Meetings – Report Number CAO-LR-1612
- Attachment # 2 – June 2016 – City of Guelph Downtown and HCBP District Energy Business Case - Deloitte
- Attachment #3 – Financial Implications of the Options

### Report Author

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General Manager, Business Development & Enterprise Services



### Approved By

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# STAFF REPORT



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## Attachment # 1

**June 13, 2016 – District Energy Materials from Previous Council Meetings –  
Report Number CAO-LR-1612**



# STAFF REPORT



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TO City Council

SERVICE AREA Office of the Chief Administrative Officer  
Legal, Realty and Risk Services

DATE June 13, 2016

**SUBJECT District Energy Materials from Previous Council Meetings**

REPORT NUMBER CAO-LR-1612

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## RECOMMENDATION

1. That the report, "District Energy Materials from Previous Council Meetings", CAO-LR-1612, dated June 13, 2016 be received.

## REPORT

At the May 16, 2016 Council meeting, Council passed three resolutions requesting materials from that meeting and previous closed Council meetings be brought to an open Council meeting on June 13, 2016. This report provides some context for these materials and attaches the relevant documents.

### **1. District Energy - Update on Current, Planned and Strategic Activities**

On November 23, 2015, Council received, in Closed Session, a presentation from staff – "District Energy; Update of Current, Planned and Strategic Activities". This report (see Attachment 1) provided some basic information on the function of District Energy as well as an update on District Energy activities as follows:

- The Role of Envida Community Energy
- District Energy Activities to Date
- Current Project Status
  - District Energy – Downtown
  - District Energy – Hanlon Creek Business Park (HCBP)
  - Combined Heat and Power Projects – Downtown and HCBP
- Current Situation – Informing Next Steps
- Forward Options

# STAFF REPORT

- Option 1 – Cease activity. Abandon all investments to date and return existing customers to traditional heating and cooling equipment.
- Option 2 – Pause and Operate. Pause all further investments and operate small DE nodes in downtown and HCBP
- Option 3 – Pursue Future DE Developments. Develop a business plan that defines the future conditions for success.
- Next Steps

The presentation articulated Next Steps as follows:

- Develop management plan – staff, resource requirements
- Develop business case, with appropriate timing, for downtown and HCBP and other “nodes” in the city that show potential
- Develop:
  - pro-forma for return on equity
  - financing options
  - expert partnerships and in-house resources
  - city role – business development, engineering, planning
- Engage higher levels of government, and other potential financial partners.

Subsequent to the presentation, staff engaged the consultants, Deloitte, to develop a study “District Energy Business Case Downtown and Hanlon Creek Business Park – Phase 1 and 2”. A scope of work (Attachment 2) has been developed to forward with a business case for two specific areas, or nodes, of the City – Downtown and Hanlon Creek Business Park (I and II) where initial investments in District Energy have already been made and to fully consider the three potential options as described above.

The final results of this study are expected to be delivered to Council by Deloitte at the Council meeting on June 27, 2016.

Attachments:

1. District Energy Presentation to Council on November 23, 2015 (Public Version)
2. Scope of work for Deloitte
3. Minutes of Guelph City Council November 23, 2015

## **2. Decision Chronology: District Energy**



# STAFF REPORT



On February 29, 2016, Council received a report which responded to requests for information from a Councillor and provided additional information regarding the GMHI group of companies the timing of decisions made by Council and the GMHI group of companies regarding District Energy.

A spreadsheet was included with this report which catalogued the most important decisions made regarding District Energy from 2010 to 2015. The spreadsheet is only intended to provide the timing of the decision and a brief description of what the decision was. This work was not intended to be an audit of the decision making process nor of the validity of the decisions nor the accuracy of the information supporting the decisions. Staff recognize that there may be missing information in the spreadsheet due to the inability to find historical documents.

Following receipt of the report, Council passed a motion directing staff to undertaking an audit of how decisions regarding District Energy were made. The scope of this audit has not yet been determined by Council.

#### Attachments:

4. Decision Chronology Report to Council, February 29, 2016 (Public Version)
5. Decision Chronology Spreadsheet (Public Version)
6. Minutes of Guelph City Council February 29, 2016

### **3. Financial History of the GMHI Group of Companies**

On May 16, 2015, Council, meeting as the Shareholder of GMHI, received a report and presentation regarding the Financial History of the GMHI Group of Companies. After receipt of the report, Council directed that the materials be brought to the June 13, 2016 Council meeting. Following the meeting, the amount of the write down was finalized at \$8.76M.

#### Attachments:

7. Report to Shareholder from Ann Pappert and Pankaj Sardana May 16, 2016
8. Financial History of the GMHI Group of Companies Report May 16, 2016
9. Presentation regarding the Financial History of the GMHI Group of Companies May 16, 2016
10. Minutes of Guelph City Council May 16, 2016

## **CORPORATE STRATEGIC PLAN**

### Innovation in Local Government

#### 2.3 Ensure accountability, transparency and engagement

## **DEPARTMENTAL CONSULTATION**

Business Development and Enterprise  
Office of the CAO

## **COMMUNICATIONS**

N/A

## **ATTACHMENTS**

1. District Energy Presentation to Council November 23, 2015 (Public Version)
2. Scope of work for Deloitte
3. Minutes of Guelph City Council November 23, 2015
4. Decision Chronology Report to Council February 29, 2016 (Public Version)
5. Decision Chronology Spreadsheet (Public Version)
6. Minutes of Guelph City Council February 29, 2016
7. Report to Shareholder from Ann Pappert and Pankaj Sardana May 16, 2016
8. Financial History of the GMHI Group of Companies Report May 16, 2016
9. Presentation regarding the Financial History of the GMHI Group of Companies May 16, 2016
10. Minutes of Guelph City Council May 16, 2016



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### **Authored and Submitted by**

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**June 13, 2016 – District Energy Materials from Previous Council Meetings –  
Report Number CAO-LR-1612**

Attachment #1: District Energy Presentation to Council on November 23, 2015  
(Public Version)

## **District Energy**

### **Update on Current, Planned and Strategic Activities**

Presentation to Guelph City Council – November 23, 2015

1

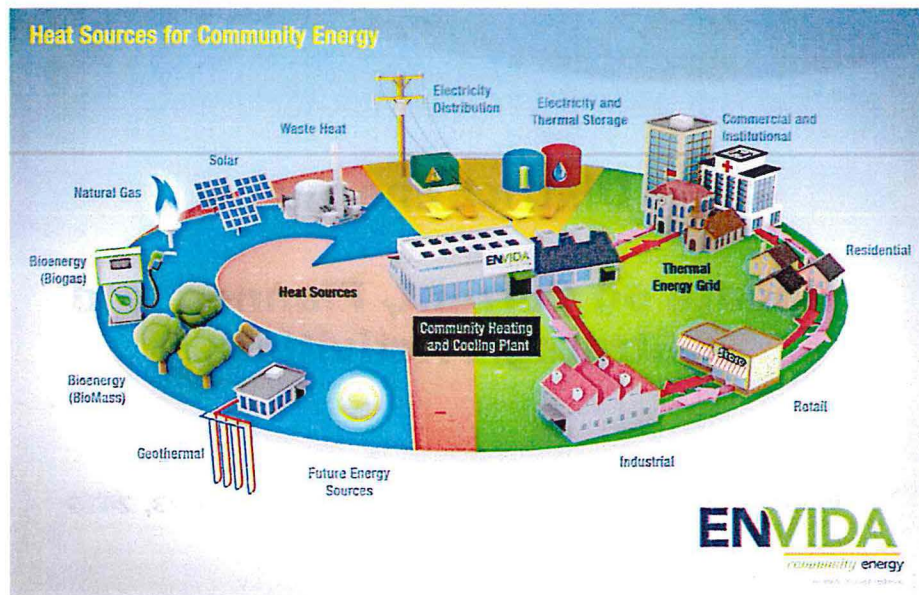
## **Summary**

### To Provide and Update of District Energy

- **District Energy Activities to Date**
- **Current Project Status**
  - District Energy – Downtown
  - District Energy – Hanlon Creek Business Park (HCBP)
  - Combined Heat and Power Projects – Downtown and HCBP
- **Financial Status**
- **Current Situation**
- **Forward Options – Where To From Here?**
  - Option 1
  - Option 2
  - Option 3
- **Next Steps**

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## Envida Community Energy

### Their Role in Implementing Energy Projects

- Unregulated arm of Guelph Hydro Electric Systems Inc. (GHESI) under Guelph Municipal Holdings Inc. (GMHI).
- Have developed a number of energy projects to date:
  - Eastview Landfill Biogas Plant and Rooftop Solar on GHESI Headquarters and City-owned Facilities
  - **District Energy – Downtown (Galt District Energy System)**
  - **District Energy – Hanlon Creek Business Park (HCBP)**
  - **Combined Heat and Power Standard Offer Program (CHPSOP) contracts from the Independent Electrical System Operator (IESO) for both Downtown and HCBP**

All decisions related to these projects have been made by Envida and Guelph Hydro Inc. prior to amalgamation with GMHI in September, 2014

## Galt District Energy System

### Downtown District Energy

- Natural gas fueled thermal energy plant equipped with a chiller and boilers installed in the Sleeman Centre
- Serving through underground insulated piping connection:
  - Sleeman Centre
  - River Mill Condominiums (Tricar)



## Hanlon Creek Business Park

### Serving Initial Tenants of the HCBP

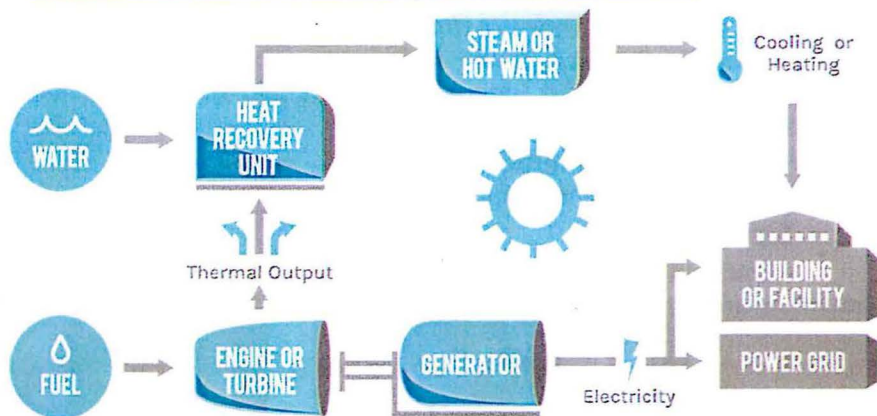
- Natural gas fueled district energy plant located in HCBP
- Two customers:
  - Wurth Canada
  - MF Property Management
- Fusion Homes Head Office
  - Standalone heating/cooling enabled for future connection





## Combined Heat and Power

### Basics



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## Combined Heat and Power cont.

### Standard Offer Program of the IESO

- Envida awarded two separate contracts for Combined Heat and Power (CHP) projects by the Independent Electrical System Operator (IESO).
- IESO is looking for electricity generating projects that provide thermal output to two target sectors: Agricultural and District Energy.
- Contracts are for approximately 10 MW each for Downtown and HCBP.
- Approximately \$300K each in non-refundable security deposits.
- Require a minimum use of thermal energy output that exceeds current potential customers within IESO contract timeframe.

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## Current Situation

### Informing Next Steps

- Envida has reached its current resource capacity
- Envida acted in key role of first-in start-up investor
- Realization that Combined Heat and Power Contracts from IESO are oversized and require commitment to connect to a volume of heat customers that have not yet been engaged.
- Conditions for success not yet defined and established to support ongoing development.

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## Where to From Here?

### Cease Activities or Pause and Plan for Continued Development

#### **Three options established for consideration:**

- **Option 1** – *Cease activity.* Abandon all investments to date and return existing customers to traditional heating and cooling equipment.
- **Option 2** – *Pause and Operate.* Pause all further investments and operate small DE nodes in downtown and HCBP
- **Option 3** – *Pursue Future DE Developments.* Develop a business plan that defines the future conditions for success.

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## Option 1

### Cease All Activity

#### **Hanlon Creek Business Park:**

##### ***Estimated Costs to Cease:***

Convert existing customers to conventional:	TBD
IESO security deposit:	\$310,000
Incentives:	\$185,000
Land:	\$815,000
Write down of existing assets to salvage value:	\$TBD
Removal of existing piping	\$TBD

##### ***Capital Costs Incurred:***

Investment to Date:	\$5,128,591
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**TOTAL MINIMUM ESTIMATED: \$7,039,000<sup>11</sup>**

## Option 1 cont.

### Cease All Activity

#### **Downtown District Energy:**

##### ***Estimated Costs to Cease:***

Convert Tricar to conventional (estimate):	TBD
IESO security deposit:	\$310,000
Removal of existing piping	\$TBD

##### ***Capital Costs Incurred:***

Investment to Date:	\$6,781,499
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**TOTAL MINIMUM ESTIMATED: \$8,091,499**

## Option 2

### Pause and Operate

#### **Analytical Assumptions:**

- 2016 to 2020 Revenues and expenses are based on the 2016 budgeted operations of the respective DE projects.
- Contracts with IESO are forfeited incurring \$620K costs

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## Option 2 cont.

### Pause and Operate

#### **Benefits:**

- Envida is able to financially manage the on-going operations of the two sites on a go-forward basis with no further capital investment.

#### **Risks:**

- Envida will likely have to recognize an impairment on the capital investment made to date for these projects as the net present value of the cash flows does not support the carrying cost of the investment
- Will impact City balance sheet upon consolidation

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## Option 2 cont.

### Pause and operate

#### ***Impairment of Asset – Impact on City Financial Statements***

The City carries an "Investment in GMHI" of \$68.6M on our balance sheet. An impairment to GMHI assets would flow through as a direct reduction of this investment and an expense on our income statement.

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## Option 3

### Pursue Future DE Development

#### **Why do communities develop & invest in District Energy?**

- Financial Performance
- Economic Development
- Environmental
- Community Resiliency

#### **How Do Cities Successfully Pursue District Energy Development? What Are The Conditions for Success?**

1. Platform/Strategy
2. Business Development, Management and Operational
3. Early Growth

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## Option 3 cont.

### Pursue Future DE Development

#### **Improving value and financial performance of existing investments as described in Option 2**

##### **Building a Viable District Energy Platform and Strategy:**

1. What is the desired return on equity?
2. Construct a competitive rate structure.
3. Develop a long-term pro-forma (capital, revenue, earnings)
4. Look at heat inputs (CHP, biomass, solar thermal) - do these projects enhance or deteriorate the pro-forma?
5. The Big Picture - Is there a long term vision?
6. Secure Capital Commitments; equity and source of debt.
7. Every project investment must support the pro-forma and the long term vision.

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## Option 3 cont.

### Pursue Future DE Development

#### **Key Business Development, Management, Operational Factors for District Energy Success:**

- Generate positive cash flow from the beginning
- Demonstrate operational excellence
- Develop in-house expertise
- District energy/CHP is a non-regulated entrepreneurial business; hire or partner with professionals with appropriate background
- Manage capital efficiency; the business competes with the customer's lifecycle cost of conventional heating & cooling systems.

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## Option 3 cont.

### Pursue Future DE Development

#### **Specific Keys to Early Growth Success:**

- Anchor loads: Pursue major anchor energy load or clustered loads
- Minimum density: Ideally launch with 2 to 3 million sq. ft. of commercial/residential within a 5-7 year period or equivalent industrial customer
- Distance: Total distance from the energy plant less than 3 kilometers.
- Customer Load Mix: Connecting new buildings is optimum. A mix of residential, commercial, institutional and industrial optimizes the utilization of district energy assets.

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## Next Steps

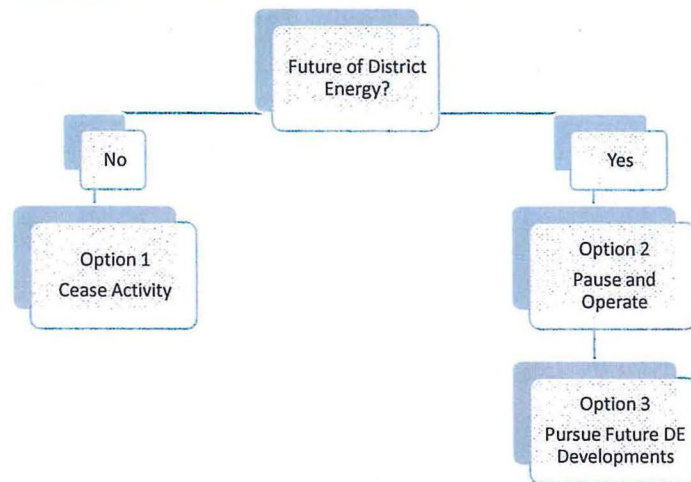
### January through June 2016

- Develop management plan – staff, resource requirements
- Develop business case, with appropriate timing, for downtown and HCBP and other “nodes” in the city that show potential
- Develop:
  - pro-forma for return on equity
  - financing options
  - expert partnerships and in-house resources
  - city role – business development, engineering, planning
- Engage higher levels of government, and other potential financial partners.

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## Future Decisions

### Going Forward



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## Thank You

[guelph.ca/energy](http://guelph.ca/energy)  
<http://ow.ly/UKNFd>

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**June 13, 2016 – District Energy Materials from Previous Council Meetings –  
Report Number CAO-LR-1612**

Attachment #2: Scope of Work for Deloitte

## **District Energy Business Case Downtown and Hanlon Creek Business Park – Phase 1 and 2**

### ***Scope of Work***

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#### **Introduction**

In August of 2015, Deloitte delivered a report to the City of Guelph entitled: “Guelph District Energy Strategic Plan - Review Report “. The report summarized: “In general the recommendations in the DESP appear reasonable mainly because it does not commit the City to a specific funding budget. The recommendations should be considered as agreement on strategic direction with understanding that significant work still needs to be complete to turn this high-level plan into an operating plan.”

The proposed work described herein will move forward with a business case for two specific areas, or nodes, of the City – Downtown and Hanlon Creek Business Park (I and II) where initial investments in District Energy have already been made and fully consider three potential options.

It is envisioned that the work will require the support of a technical sub-contractor with experience in designing and implementing district energy systems.

#### **Proposed Scope of Work:**

##### **A. Purpose:**

The business case will focus on three potential options:

- a. Abandoning current investments within the Hanlon Creek Business Park Phase 1 and the Downtown Galt District DE nodes;
- b. Stabilizing and not expanding the current investments within the Hanlon Creek Business Park Phase 1 and the Downtown Galt District DE nodes; and
- c. Stabilizing the current investments within the Hanlon Creek Business Park Phase 1 and the Downtown Galt District DE nodes, and assessing future investment opportunities for these nodes.

At this time the business case will not consider longer term DE node opportunities, such as the Hanlon Creek Business Park Phase 3, the Guelph Innovation District or the University of Guelph (although it is our understanding that GMHI may be considering this opportunity). Given the long term nature of these potential projects, thorough business cases for future DE development can be done at a later date. In short the intent of this business case is to provide an analysis and recommendations regarding costs, benefits, risks and to provide recommendations regarding each of the options noted above. The business plan will also include a balanced scorecard or a list of critical success factors (a mix of financial and non-financial metrics).

It should be noted that a ‘business case is different than a ‘business plan’. A business plan would address the operationalization requirement for each option. This is not recommended at this time. Upon Council’s review of the ‘business case’ and their direction, ‘business plan(s)’ may then be developed for the preferred option(s).

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Developing business plans at this time would not be materially effective, and would result in additional cost and time.

#### **B. Scope of Work**

- a. **Background (Gap Analysis)** – In this section, the consultants will conduct a review of the business investments done to date and provide their observations on what has contributed to the current situation. This information is required to understand the drivers of the current state, identify possible gaps (either economic and/or technical) which have contributed to the current state, and will serve to provide the basis for providing recommendations regarding the implementation of each options, and recommendations concerning a preferred option.

**NOTE: A review will be conducted at the completion of the Gap Analysis described above and may inform adjustments to the continuing scope described below.**

- b. **Strategic Alignment** – This section will assess how each option aligns with overall Corporate directions, such as provided by Council by way of resolutions, corporate strategic plans, and other relevant municipal documents. This information will serve to help establish the non-financial metrics and assess them against each option.
- c. **Environmental Analysis** – The consultant will be asked to conduct a SWOT analysis on the current situation versus industry performance standards and other related metrics. This would include such matters as establishing typical financial metrics, such as targeted return on investment, acceptable break even periods, typical equity/debt ratios, etc. The environmental analysis will also consider market conditions relating to potential investors and/or customers. It will also consider the DE measures of success as provided by GMHI in its assessment of the two current DE development nodes.
- d. **Stakeholder Identification** - Identify who has a vested interest in each option, and how they may be affected by, or can have an effect on each option. Anyone whose interests may be positively or negatively impacted by each option or anyone that may exert influence over the project or its results should be considered a project stakeholder. This is required to establish legal and reputational risks associated with each option.
- e. **Option Analysis (Qualitative & Quantitative)** - Option Analysis will be conducted on all of the noted options. Included will be a 'Risk Analysis', 'Social Benefit Analysis' and 'Financial & Economic Impact Analysis'. The 'Risk Analysis' will include but not be limited to potential legal, reputational and economic risks. The 'Social Benefit Analysis' will include but not be limited to the alignment with community or corporate priorities. The Financial & Economic Impact Analysis will include high level financial pro-forma and economic impact projections. The consultants will also be asked to provide input and analysis into the viability of multiple revenue streams

coming resulting from the sale of energy, or the leveraging of current contracts. The consultant will also be asked to identify potential risk mitigation actions or strategies.

- f. **Recommendations** – From the above analysis the consulting team will provide recommendations with respect to implementing each option, including any mitigation strategy, as well as to providing recommendations with respect to a preferred option. The recommendations will consider the implications and requirements of the municipality (in its capacity as shareholder), and/or the potential involvement of the private sector (as a DE subscriber or node investor).

**Proposed Project Teams –**

**City Team**

Project Sponsor: Scott Stewart; DCAO, Infrastructure, Development and Enterprise  
Project Manager: Peter Cartwright, GM, Business Development and Enterprise  
Project Team: Rob Kerr, Manager, Community Energy  
Ian Panabaker, Manager, Downtown Renewal  
Donna Jaques, General Manager, Legal (or designate)  
Janice Sheehy, General Manager, Finance Treasurer (or designate)

**Main Consultant**

**Deloitte**, Infrastructure Advisory & Project Finance

**Sub-Consultants**

To be sub-contracted through Deloitte after a review of potential candidates who demonstrate capabilities to support the work described herein.

**C. Timing**

- Confirmation of Scope of Work by City – End of week of February 1<sup>st</sup>.
- Contract with Deloitte – End of week of February 8<sup>th</sup>
- “Check-in after item B.a, above, completed
- Draft Business Case – April 30
- Target date to complete business case and present to ET and Council – By no later than the end of Q2 2016.

**NOTE: Consultant to schedule no less than bi-weekly update meetings with the City through the course of the engagement.**

**June 13, 2016 – District Energy Materials from Previous Council Meetings –  
Report Number CAO-LR-1612**

Attachment #3: Minutes of Guelph City Council November 23, 2015



**Extract from Guelph City Council Closed Minutes - November 23, 2015**

**C-2105.50 District Energy – Strategic/Long Term Financial Plan**  
*(Section 239(2) (a) respect to security of the property of the municipality)*

Ann Pappert, CAO, Peter Cartwright, General Manager Business Development & Enterprise and Rob Kerr, Corporate Manager Community Energy Initiative summarized what district energy is and provided an update on the status of the 2 district energy projects: Galt District Energy System (Downtown district energy) and Hanlon Creek Business Park. They outlined the current situation and highlighted three options that could be considered and their implications.

Moved by Councillor Downer  
Seconded by Councillor Salisbury

That the presentation on District Energy – update on current, planned and strategic activities, be received.

CARRIED

**June 13, 2016 – District Energy Materials from Previous Council Meetings –  
Report Number CAO-LR-1612**

Attachment #4: Decision Chronology Report to Council, February 29, 2016 (Public Version)

# STAFF REPORT



TO City Council (Closed)

SERVICE AREA Office of the Chief Administrative Officer  
Legal, Realty & Risk Services

DATE February 29, 2016

**SUBJECT Decision Chronology: District Energy**

REPORT NUMBER CAO-LR-1605 (Public Version)

## EXECUTIVE SUMMARY

### PURPOSE OF REPORT

To provide a response to Council to the questions relating to GMHI raised by Councillor Gibson at the Council meeting held February 8, 2016 and to provide context for decisions made related to District Energy systems beginning with a Memorandum of Intention dated 2010 to the present

### KEY FINDINGS

During that meeting, and in an email following the meeting, a number of requests and questions were raised by Councillor Gibson.

City staff reviewed the relevant documents and created a spreadsheet which tracks decisions made about district energy over the period 2010 to 2015.

The responses to more specific questions are also included in the report.

### FINANCIAL IMPLICATIONS

N/A

### ACTION REQUIRED

Council to receive the report.

## RECOMMENDATION

That Report CAO-LR-1605 titled "Decision Chronology", dated February 29, 2016 be received.

## BACKGROUND

During that meeting, and in an email following the meeting, the following requests and questions were raised by Councillor Gibson:



# STAFF REPORT

1. Provide council with the evaluation process developed by the GMHI Board in the fall of 2012 which would "ensure excellence in decision making and transparency" for potential projects.
2. The governance structure clearly states GMHI will maintain full oversight and control of GHI and its subsidiaries. Therefore, please explain how/why ENVIDA/GHESI/GHI were able to move forward with the DE investments without the knowledge and/or unanimous support of the GMHI Board? Even with the Memorandum of Intent in place, ENVIDA/GHESI/GHI did not appear to have this type of authority (Solar voltaic yes, thermal energy no). To provide evidence to this I'll point to page 10 of the 2012 Annual Report, where (for the thermal energy file), staff were required to develop a long term thermal energy strategy for GMHI Board consideration.
3. Was this energy strategy completed (Yes or No)?
4. Was this energy strategy shared with the GMHI board (Yes or No)?
5. If the energy strategy was not shared with the GMHI board how did these projects proceed?
6. Did the GMHI Board approve these projects without the energy strategy?
7. Was a GMHI Board decision on District Energy bypassed?

## REPORT

To allow staff to respond to the requests and questions, particularly with regard to how decisions were made on DE projects, City staff have reviewed over 800 documents provided by the Corporate Secretary at GHESI and Envida and formerly GHI and GMHI. The majority of these documents were provide to the CAO, City Solicitor, Mayor Guthrie and a select few others in December, 2015. In addition, City staff have reviewed the GMHI corporate documents created during the period GMHI was supported by City staff. The documents included Board and Committee meeting minutes, emails, decision support documents and other Board materials.

The result of this review is the attached spreadsheet (Attachment 1) which shows most of the decisions of the relevant entities on the district energy projects, decisions and comments on district energy generally, governance decisions and requests for information made by the City and GMHI to the New GMHI and GHI. There may be gaps in the decision flow due to an inability to locate the relevant documents, however none of the gaps is indicative of a lack of decision making on the part of the relevant Boards.

# STAFF REPORT

The decisions were made in the context of the Memorandum of Intention entered into by the City and Guelph Hydro Inc. in 2010, which is attached as Attachment 2.

The spreadsheet is only intended to provide the timing of the decision and a brief description of what the decision was. This is not intended to be an audit of the decision making process nor of the validity of the decisions nor the accuracy of the information supporting the decisions.

The Council decisions made during the period 2010 to 2015 that are relevant to the decision making and provide some context are also included in the spreadsheet. All of the Council resolutions made in open meetings regarding GMHI during this period are attached as Attachment 3.

## **Decision Making Process**

The decision making process at GHI and its Subsidiaries from 2010 until January 2015 was made in the context of the following structure:

- Guelph Hydro Inc (the "parent" company) had five Board members.
- The Board of Envida Community Energy Inc. was identical to the GHI Board.
- The GHESI Board was composed of all the members of the GHI Board plus three independents.
- The GHI and Envida Boards shared one Finance and Audit Committee ("FAC").

A chart showing the membership of the Boards from 2010 to the end of 2015 is attached as Attachment 4.

In general, recommendations regarding DE projects were made initially to the FAC and then to the Envida/GHI Board, with the GHI Board making the ultimate decision.

## **Information Flow**

There were a number of requests for information made by the City and GMHI to GHI from 2012 to present. These are also shown on the spreadsheet.

The spreadsheet and the above narrative should address most of the requests and questions raised.

## **Specific Questions**

On the following specific questions:



# STAFF REPORT

1. Evaluation Process – The 2012 GMHI Annual Report was intended as a branding tool for GMHI and contained aspirational statements reflecting GMHI's goals and objective. Attachment 5 is the graphic description of the evaluation process being proposed for projects being transferred by the City to GMHI. This was not intended to apply to projects being developed by GHI or its Subsidiaries.
2. Authority of GHI/Envida to make Decisions - In the creation of GMHI, and even prior with the relationship between the City and GHI, there was no reservation of decision making power for specific projects of GHI or its Subsidiaries to the City or GMHI. The GHI Board had the authority to make decisions regarding the district energy projects without consulting with or obtaining the approval of the City or GMHI. Specific decisions regarding disposition of a certain portion of the GHI corporation or any percentage of GHESI were reserved to the City.
3. Thermal Energy Strategy – The Thermal Energy Strategic Plan is formally entitled the Guelph District Energy Strategic Plan prepared by Garforth International Inc: Energy Productivity Solutions (Toledo, Ohio, USA.). It was commissioned and prepared for Envida Community Energy and was conducted by a joint team with members from the City of Guelph, Envida Community Energy Inc. and Garforth International Inc. The report is a proposed District Energy Strategy covering the period of 2013-2041. Further detailed technical reports support this strategy. The strategy was provided to the Board of GMHI on November 14, 2013. The GHI and Envida Boards made decisions regarding District Energy prior to the Plan being completed
4. GMHI Decisions on district energy – As the spreadsheet shows, the GMHI Board did endorse in principle the creation of a thermal utility and sought to work collaboratively with members of GHI on a Task Force to determine its viability, however the actual development plan for this utility was not completed. GMHI did not take an active role in decision making regarding district energy until after the amalgamation of the Old GMHI with GHI in September, 2014, when it replaced GHI as the parent company of Envida.

## **CORPORATE STRATEGIC PLAN**

2.3 Ensure accountability, transparency and engagement.

## **DEPARTMENTAL CONSULTATION**

Enterprise, CAO, GMHI, Envida

## **COMMUNICATIONS**

## **FINANCIAL IMPLICATIONS**

N/A

## **ATTACHMENTS**

Attachment 1 - Decision Spreadsheet

# STAFF REPORT



Attachment 2 – Memorandum of Intention  
Attachment 3 – Open Meeting Council Decisions regarding GMHI  
Attachment 4 – Board Membership 2010 to 2015  
Attachment 5 – Evaluation Process

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Original signed

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City of Guelph  
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# STAFF REPORT

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## Attachment 1

### Decision Spreadsheet

SEE SEPARATE DOCUMENT



## Attachment 2



**Memorandum of Intentions ("MOI")**  
between  
**The Corporation of the City of Guelph (the "City") and**  
**Guelph Hydro Inc. ("GHI")**

GHI as a wholly owned entity of the City, shares the goals of the City's Council approved Community Energy Initiative ("CEI") and supports the economic development objectives in the environmental technology sector of Prosperity 2020.

The City and GHI agree that GHI can contribute to these shared goals by:

1. Acting as the primary developer and having overall responsibility for the development and implementation of energy related projects in the City with respect of City initiatives and consistent with the Shareholder Agreement:
  - a) marketing opportunities to partners as appropriate;
  - b) identifying and taking the lead in developing energy-related opportunities within city-owned assets;
  - c) undertaking the procurement process of products and services consistent with acceptable standards and practices and the approved procedures of GHI;
  - d) conferring and providing regular updates to the designated City representative(s) on matters relating to the development of initiatives in which GHI is involved relative to the CEI or Prosperity 2020;
  - e) assessing, evaluating and reporting to Council on the success of energy projects undertaken;
  - f) sharing non-commercially sensitive data and information with the City for the purposes of the CEI; and
  - g) serving as a foundation member of the Mayor's Task Force on Community Energy and provide resources for its operation as appropriate at its cost.

Both GHI and the City will:

2. Assign staff resources to the administration of the cooperative efforts required for implementation of the CEI.
3. Share information that may impact the goals of the CEI with each other and Council as the Shareholder, consistent with the requirements and expectations set out in the Shareholder Agreement and customary commercial practices.
4. Review the Terms of the MOI on no less than an annual basis should modifications be required as all parts of this document are open to modification and negotiation.
5. Settle any disputes through an independent agreed upon third party with costs being shared equally by both partners.
6. Under terms and conditions acceptable to the City and GHI acting reasonably, provide long term leased or similar access to those lands, buildings and rooftops owned by the City necessary for the implementation of a energy efficiency and renewable energy generation programs in the City of Guelph.
7. While this MOI expresses the intentions and goals of the City and GHI with respect to the CEI, is not considered a legally binding contract and shall be replaced over time with specific legally binding agreements that give effect to the Parties intentions.

  
Karen Rashbridge, Mayor, City of Guelph

  
Hans J. Lewig, CAO, City of Guelph

  
Jasmine Urisk, Board Chair, Guelph Hydro Inc.

  
Barry Chuddy, CEO, Guelph Hydro Inc.

Date: JULY - 28 - 2010

## Attachment 3

### **Council Resolutions - Guelph Municipal Holdings Inc. 2010 to 2015**

Dec. 14, 2015	That Councillor Downer be appointed as a member of the Guelph Municipal Holdings Inc. Board, effective December 14, 2015.
Oct. 14, 2015	That the Information Report entitled Consolidation of Local Distribution Companies (LDC) Guelph Hydro Electrical Systems Inc. (GHESI) dated October 14, 2015, be received.
May 25, 2015	<p>That the Shareholder Declaration relating to Guelph Municipal Holdings Inc. dated August 13, 2014 be amended as follows:</p> <p>a) Article 4.03 <i>Composition of the GMHI Board</i> be amended to add the following subsection:</p> <p>(a.1) The Chief Administrative Officer (CAO) of the City or such other person designated by him or her shall be a non-voting member of the Board, entitled to receive notice of and to attend and participate in all open and closed GMHI Board and Committee meetings.</p> <p>(b) Article 6 <i>Decisions of the City</i> be amended by adding the following section:</p> <p>6.03 The Chief Administrative Officer (CAO) of the City shall advise the GMHI Board of the City staff who will be representing the City as members of the GMHI Management Team. The Board shall ensure such City staff receive notice of and are able to attend and participate in all GMHI Management Team meetings and discussions. Such City staff shall be entitled to attend GMHI Board and Committee meetings at the invitation of the CAO and his or her designate, unless otherwise agreed between the CAO and the Board Chair.</p> <p>(c) A new Article 6.1 <i>CEO Recruitment and Compensation</i> be added as follows:</p> <p>6.1.01 The Chief Administrative Officer (CAO) or his or her designate shall participate in the recruitment and selection of the Chief Executive Officer, or similar position, of GMHI (the "CEO"). The Chief Administrative Officer shall be entitled to participate in the GMHI Committee and</p>



# STAFF REPORT

	<p>Board discussions regarding appointment of the CEO and provide his or her opinion regarding candidates however the decision regarding selection shall be made by the GMHI Board.</p> <p>6.1.02 The Chief Administrative Officer (CAO) shall be consulted on the compensation and benefit packages to be offered to senior management of GMHI. The CAO and the Board shall agree on a compensation package for the CEO.</p>
April 22, 2015	<p>Ms. Donna Jaques, City Solicitor/General Manager, Legal and Realty Services and Mr. Rob Kerr provided information on the history of Guelph Municipal Holdings Incorporated as well as its mandate, role and organizational structure.</p> <p>That the presentation on Guelph Municipal Holdings Inc. be received for information.</p>
Dec. 15, 2014	<ol style="list-style-type: none"> <li>1. That Mayor Guthrie and Councillor Karl Wettstein be appointed as municipal members of the Board of Directors of GMHI for a term commencing December 15, 2014 and terminating at the end of the current municipal term, in accordance with the provisions of the Shareholder Declaration; and</li> <li>2. That the following individuals be appointed as independent members of the Board of Directors of GMHI for the term commencing December 15, 2014 and ending at the 2016 AGM: <ul style="list-style-type: none"> <li>Ted Sehl</li> <li>William Koornstra</li> <li>Curt Hammond</li> <li>Mary Ellen Richardson</li> <li>Roderick Smith</li> </ul> </li> </ol> <ol style="list-style-type: none"> <li>1. That the Business Case Study regarding the amendment of the articles of amalgamation of GMHI be approved; and</li> <li>2. That the articles of amalgamation of GMHI be amended by deleting the restrictions in section 10 of the articles.</li> </ol>
Aug. 25, 2014	<p><b>CAFE-2104.36 Municipal Development Corporation Business Case Study Update</b></p> <ol style="list-style-type: none"> <li>1. That Council receive report # FIN-ED-14-09 titled</li> </ol>



# STAFF REPORT

	<p>'Municipal Development Corporation Business Case Study Update'; and</p> <ol style="list-style-type: none"> <li>2. That Council approve the business case study attached to Report FIN-ED-14-09; and</li> <li>3. That Council directs staff to incorporate a municipal development corporation, as described in report # FIN-ED-14-09, with the first director of the corporation to be Barry Chuddy, CEO of GMHI.</li> </ol>
Aug. 13, 2014	<p>The Business Case Study dated July 22, 2014 is approved and adopted by the City as required pursuant to subsection 6(d) of <i>O.Reg. 599/06</i> under the <i>Municipal Act, 2001</i>.</p> <p>WHEREAS:          Guelph Hydro Inc. (the "Subsidiary") is wholly-owned subsidiary of Guelph Municipal Holdings Inc. (the "Corporation").          AND WHEREAS          The Corporation has agreed to amalgamate with its Subsidiary pursuant to subsection 177(1) of the Business Corporations Act (Ontario) the "Act").          THEREFORE, it is resolved that:</p> <ol style="list-style-type: none"> <li>1. The amalgamation of the Corporation with its Subsidiary pursuant to subsection 177(a) of the Act is approved.</li> <li>2. Any officer or director of the corporation is authorized and directed to sign the articles of Amalgamation for and on behalf of the Corporation and to file them with the Director appointed under the Business Corporations Act (Ontario).</li> <li>3. The Board of Directors of the Corporation is hereby authorized to revoke this special resolution without further approval of the sole shareholder of the Corporation at any time prior to the endorsement by the Director under the Business Corporations Act (Ontario), of a certificate of amalgamation of articles in respect of the amalgamation referred to above.</li> </ol> <p>The Shareholder Declaration dated August 13, 2014 between the City and the amalgamated corporation is approved and shall be effective on the date the Articles of Amalgamation are filed with the Director appointed under the Business Corporations Act (Ontario).          The Shareholder Declaration dated August 13, 2014 between the City and the amalgamated corporation is approved and shall be effective on the date the Articles of Amalgamation are filed with the Director appointed under</p>

# STAFF REPORT

	<p>the Business Corporations Act (Ontario).</p> <ol style="list-style-type: none"> <li>1. That subject to the consent of the following individuals to serve as directors, the following persons shall be the first directors of the amalgamated corporation:  <u>Municipal Members:</u>  Karen Farbridge, June Hofland, Karl Wettstein, Todd Dennis and Lise Burcher  <u>Independent Members:</u>  Ted Sehl and Bill Koonstra (to be confirmed)</li> <li>2. The term of the appointment of the directors shall commence on the date the Articles of Amalgamation are certified and continue, until December 31, 2014.</li> </ol>
June 16, 2014	<p>That the Compensation Report from the Board of Directors of GMHI regarding the activities of GMHI in 2013, be received.</p> <p>That the Compliance Report from the Board of Directors of GMHI dated May 29, 2014 regarding the activities of GMHI in 2013, be received.</p> <p>That in lieu of an audit of the consolidated 2013 financial statements of GMHI as required by IFRS 10, the 2013 unconsolidated audited financial statements shall be presented to the Shareholder with an accompanying special report on the audit of the GMHI financial statements by Deloitte.</p> <p>That the 2013 audited, unconsolidated GMHI Financial Statements and auditor's report, be received.</p> <ol style="list-style-type: none"> <li>1. That the recommendation of the GMHI Board of Directors regarding the appointment of auditors for GHI and its Subsidiaries and GMHI be received; and</li> <li>2. That KPMG LLP be appointed as auditors for Guelph Hydro Inc. and its Subsidiaries for its 2014 fiscal year; and</li> <li>3. That KPMG LLP be appointed as auditors for Guelph Municipal Holdings Inc. for its 2014 fiscal year.</li> </ol> <p>That the recommendations related to the amalgamation of GHI and GMHI, in principle, be approved.</p>
March 31, 2014	<p>That City Staff be directed to complete the Municipal Act requirements for incorporation of a company, including public consultation and development of a business case study that will be used by GMHI for the development of City assets and report back to Council with recommendations.</p>



Jan. 27, 2014

## **GMHI-2014.1 Shareholder Declaration Amendment and CAO By-law Amendment**

1. That the Shareholder Declaration dated August 16, 2011, as amended, be amended as follows:
  - (a) Section 5.6 of the Declaration shall be deleted and the following inserted:  
 Officers of GMHI – The officers of GMHI shall be the Persons selected by the Board of GMHI, or its delegate, from time to time. Pending selection by the Board of GMHI, the CEO of GMHI shall be the Chief Administrative Officer of the City, the Chief Financial Officer of GMHI shall be the Chief Financial Officer of the City and the General Counsel and Secretary of GMHI shall be the City Solicitor of the City. The selection of Officers of GMHI does not require the approval of the City.
  - (b) Section 5.10 of the Declaration shall be deleted and the following inserted:  
 Officers – Any officer of GMHI who is also a Municipal Member or an employee of, or consultant to, the City of any agency, board, commission or corporation of the City, shall receive compensation for serving in such capacity in addition to such officer's compensation, if any, as an employee of or consultant to the City, in an amount determined by the Board of GMHI.
  - (c) Section 15 of the Declaration shall be deleted and the following inserted:  
 GMHI and the City shall enter into a services agreement for the provision of services by City employees or the use of other resources of the City by GMHI. GMHI may have its own employees perform these services in lieu of City employees and may purchase its own resources as required.
2. That By-law Number (2011)-19310, being the by-law appointing Ann Pappert as the CAO of the City, be amended as follows:  
 Section 1(1) of Schedule A to By-law Number (2011)-19310 shall be deleted and the following inserted:
  - (i) To serve as the Chief Executive Officer of Guelph Municipal Holdings Inc. providing leadership and direction as non-voting member of the Board of Directors unless and

# STAFF REPORT

	<p>until the Board of Guelph Municipal Holdings Inc. selects a Chief Executive Officer other than the CAO of the City. Reasonable expenses for travel and/or training in respect of this role may be incurred in accordance with policies established by the Board and approved by Council.</p> <p>(ii) To act as the City's "Shareholder Representative" for the purpose of communicating Council decisions to the Board of Guelph Municipal Holdings Inc.</p>
October 7, 2013	<ol style="list-style-type: none"> <li>1. That Council approve the revisions to the reporting requirements of GHI and GMHI in the Shareholder Declaration as set out in the report of Legal and Realty Services dated October 7, 2013, and such other minor amendments as required by the City Solicitor, in a final form and content to the satisfaction of the City Solicitor.</li> <li>2. That Council authorize the Mayor and Clerk to execute the revised GHI and GMHI Shareholder Declaration.</li> </ol>
June 24, 2013	<ol style="list-style-type: none"> <li>1. That Council approve an exemption for GMHI from compliance in 2013 with the requirements of section 10.3 of the GMHI Shareholder Declaration to hold the Annual General Meeting of GMHI by June 30 of each year.</li> <li>2. That Council receive the 2012 GMHI Financial Statements (unaudited) and refer them to the Annual General Meeting of the Shareholder to be held July 10, 2013.</li> </ol>
Dec. 17, 2012	<p>Ms. A. Pappert, CEO of Guelph Municipal Holdings Inc., provided a brief history of GMHI and highlighted their mandate, values and vision. She outlined the three areas of strategic focus being capacity building; accountability and transparency; and governance.</p> <p>Mr. A. Horsman, outlined the three cornerstones for the GMHI Business Development Plan readiness; capability; and identify. He reviewed the 2013-2014 budget.</p> <p>THAT Guelph Municipal Holdings Inc. 2013-2016 Strategic Framework and 2013-2014 Business Development Plan and 2013 Budget be received.</p> <p>THAT Council approve a commitment of up to \$777,000 representing \$388,500 in each of 2013 and 2014</p>



# STAFF REPORT

	<p>respectively, from the Strategic Initiatives Reserve (#179) to be provided to GMHI through a share purchase structure, to implement its 2013-2014 GMHI Business Development Plan. In the proposed structure, the City's Investment in GMHI as reported on the City's financial statements will increase by \$777,000.</p>
June 25, 2012	<p>Mayor Farbridge gave introductory remarks and highlighted the mandate of Guelph Municipal Holdings Inc. Ms. Ann Pappert, CEO, Guelph Municipal Holdings Inc., addressed the Guelph Municipal Holdings Inc. 1<sup>st</sup> Annual Report contained in the meeting agenda. THAT the Guelph Municipal Holdings Inc. 2011 Annual Report be received.</p> <p>THAT Karen Farbridge, Chair, Jasmine Urisk, Lise Burcher, Todd Dennis, June Hofland and Karl Wettstein are hereby appointed Directors of Guelph Municipal Holdings Inc. for the balance of the municipal term of Council.</p> <p>THAT the audit requirement for the financial statements of Guelph Municipal Holdings Inc. prescribed in section 12(c) of the Shareholder Declaration be waived commencing for the fiscal year 2012 and continuing until the total annual revenues and/or total annual expenditures exceed 10% of the materiality figure as determined by the external auditors for the City of Guelph consolidated financial statement audit.</p>
May 28, 2012	<p>The appointment by the Board of Guelph Municipal Holdings Inc. of Brian Cowan and Rick Thompson as members of the Board of Directors of Guelph Hydro Inc. until the 2015 Annual General Meeting of Guelph Hydro Inc., is approved;</p> <p>The appointment by the Board of Guelph Municipal Holdings Inc. of KPMG LLP as the auditors for Guelph Hydro Inc. is approved.</p> <p>Despite the provisions of section 12(a) of the Shareholder Declaration which requires Guelph Municipal Holdings Inc. to provide audited financial statements to the City annually, the City waives the requirement for Guelph Municipal Holdings Inc. to provide the City audited financial statements for the financial year ending December 31, 2011.</p>
Dec. 19, 2011	Ann Pappert, Chief Executive Officer, Guelph Municipal

# STAFF REPORT

	<p>Holdings Inc. highlighted the 2012 Business Plan strategic focus which will include capacity building, accountability and transparency and governance. She requested that Council support the request for purchasing the Directors and Officers insurance and general liability insurance.</p> <p>Ian Miles, Chief Financial Officer of Guelph Hydro Inc., highlighted the 2012 business plan for the company and the 2011 activities undertaken.</p> <p>THAT the report from the Chair of the Guelph Municipal Holdings Inc. Board dated December 2, 2011, which includes the business plan of the Corporation for 2012, be received; AND THAT the Chief Executive Officer is authorized to purchase directors and officers insurance and general liability insurance for the Corporation from Frank Cowan Company Limited.</p>
Dec. 7, 2011	<p>THAT the report dated December 7, 2011 which has been prepared by the Office of the CAO regarding Potential Sale of Streetlight Assets to Guelph Hydro Inc. be received as information; AND THAT development oversight and assessment of a business case for the potential transfer of streetlight assets from the City to Guelph Hydro Inc. and its regulated subsidiary, Guelph Hydro Energy Systems Inc be directed to Guelph Municipal Holdings Inc. (GMHI); AND THAT GMHI report back to Council with a subsequent recommendation regarding this matter; AND THAT the \$290,000 in savings identified in the Draft Operational Budget, as presented to Council on November 2, 2011 be removed and the resulting shortfall be addressed through a corporate variance strategy to be presented to Council at its meeting December 7, 2011.</p>
Sept. 6, 2011	<p>THAT the Mayor and Clerk be authorized to sign and seal the following documents in a form satisfactory to the Chief Administrative Officer (CAO):</p> <ul style="list-style-type: none"> <li>a) the forms related to the transfer of shares in Guelph Hydro Inc. from the City to GMHI;</li> <li>b) the Council-approved Shareholder Declaration with GMHI, Guelph Hydro Inc., Guelph Hydro Electric Systems Inc. and Ecotricity Guelph Inc; and</li> <li>c) the Support Services Agreement with GMHI;</li> </ul> <p>AND THAT Council approve the Acknowledgement, Consent and Agreement Regarding Legal Services,</p>



# STAFF REPORT

	<p>provided by the City Solicitor.</p> <p>THAT Robert Aumell be appointed to the Board of Directors of the Guelph Municipal Holding Company (GMHC) as the independent member for a term ending November 30, 2014.</p>
July 25, 2011	<p>THAT Councillors Dennis, Hofland and Wettstein and Mayor Farbridge be appointed to the Board of Directors of the Guelph Municipal Holding Company for a term ending November 30, 2014.</p> <p>THAT Councillor Burcher be appointed to the Board of Directors of the Guelph Municipal Holding Company for an interim term ending November 30, 2014.</p>
May 30, 2011	<p>THAT Jane Armstrong be reappointed as a Director of Guelph Hydro Inc. for a three year term expiring at the Annual General Meeting of the Shareholder in 2014; AND THAT William Koornstra be reappointed as a Director of Guelph Hydro Inc. for a three year term expiring at the Annual General Meeting of the Shareholder in 2014; AND THAT Judy Fountain be appointed as a Director of Guelph Hydro Inc. for a three year term expiring at the Annual General Meeting of the Shareholder in 2014; AND THAT Dr. Jan Carr be appointed as a Director of Guelph Hydro Inc. for a three year term expiring at the Annual General Meeting of the Shareholder in 2014 with the appointment commencing at the time that Mayor Farbridge steps down from the Guelph Hydro Inc. Board to assume role of Chair of the Guelph Municipal Holding Company.</p>
April 26, 2011	<p><b>Guelph Municipal Holding Company (GMHC) Implementation Strategy</b></p> <p>THAT the Guelph Municipal Holding Company Implementation Strategy be received and approved; AND THAT the attached revised Shareholder Declaration in support of the new governance structure which is designed to provide oversight and direction to Guelph Hydro Inc. (GHI) and GHI subsidiaries, be approved; AND THAT the Asset Transfers to Corporations Policy be approved; AND THAT staff continue to work with representatives of Guelph Junction Railway to develop a revised Shareholder Declaration specific to their organization; AND THAT Council appoint the Mayor of Guelph and 3 Councillors to serve as GMHC Board members; AND THAT staff be directed to initiate a citizen selection</p>



# STAFF REPORT

	process for an independent Board member consistent with the Council approved GMHC Board structure.
June 28, 2010	<p><b>City of Guelph Holding Company Design; Memorandum of Intentions (MOI) for Implementation of Community Energy Plan (CEP) Projects; and Guelph Hydro Inc. (GHI) Leasing Framework</b></p> <p>THAT the proposed design of a Holding Company for current and future owned city assets, including Guelph Hydro Incorporated (GHI) and Guelph Junction Railway (GJR), as outlined in the attached Business Case Study, be approved; AND THAT staff be directed to prepare an Implementation Strategy for the proposed Holding Company to be approved by Council that includes financial and resource requirements planned for through the 2011 budget process.</p> <p>THAT the attached Memorandum of Intentions (MOI) between Guelph Hydro and the City of Guelph to enable implementation of projects related to the Community Energy Initiative (CEI) be approved; AND THAT the tender process as set out in the City's Purchasing Policy be waived for energy efficiency and renewable energy generation projects that require access to City-owned lands, buildings and rooftops, and that the projects be managed through Guelph Hydro Inc. as outlined in the MOI; AND THAT staff be directed to develop a leasing framework for Lease Agreements with Guelph Hydro Inc. to provide long term leased or similar access to those lands, buildings and rooftops owned by the City necessary for the implementation of energy efficiency and renewable energy generation projects.</p>

# STAFF REPORT

## Attachment 4

<b>Guelph Hydro Inc.</b>	
<b>Board Members 2010 – 2011</b> Jane Armstrong – first appointed to Board 2009 Robert Aumell – first appointed to Board 2002 Brian Cowan – first appointed to Board 2001 Karen Farbridge – first appointed to Board 2000 William Koonstra – first appointed to Board 2009 Rick Thompson – first appointed to Board 2001 Jasmine Urisk – first appointed to Board 2000	<b>Board Members 2011 – 2012 (*new member)</b> Jane Armstrong Jan Carr* Brian Cowan Judy Fountain* William Koonstra Rick Thompson Jasmine Urisk
<b>Board Members 2012 – 2013 (*new member)</b> Jane Armstrong Jan Carr Brian Cowan Judy Fountain William Koonstra Rick Thompson Jasmine Urisk	<b>Board Members 2013 – 2014 (*new member)</b> Jane Armstrong Jan Carr Brian Cowan Judy Fountain William Koonstra Rick Thompson Jasmine Urisk

<b>Guelph Hydro Electric Systems Inc.</b>	
<b>Board Members 2010 – 2011</b> Jane Armstrong – first appointed to Board 2006 Robert Aumell – first appointed to Board 2002 Brian Cowan – first appointed to Board 2001 Karen Farbridge – first appointed to Board 2000 Rob Fennell – first appointed to Board 2006 Judy Fountain – first appointed to Board 2009 William Koonstra – first appointed to Board 2009 Barbara Leslie – first appointed to Board 2006 Rick Thompson – first appointed to Board 2001 Jasmine Urisk – first appointed to Board 2000	<b>Board Members 2011 – 2012 (*new member)</b> Jane Armstrong Brian Cowan Rob Fennell Judy Fountain Bob Huggard* Margaret Kelch* Barbara Leslie Rick Thompson Jasmine Urisk
<b>Board Members 2012 – 2013 (*new member)</b> Jane Armstrong Brian Cowan Rob Fennell Judy Fountain Bob Huggard Margaret Kelch Barbara Leslie Rick Thompson Jasmine Urisk	<b>Board Members 2013 – 2014 (*new member)</b> Jane Armstrong Brian Cowan Rob Fennell Judy Fountain Bob Huggard Barbara Leslie Rick Thompson Jasmine Urisk
<b>Board Members 2014 – 2015 (*new member)</b> Jane Armstrong Brian Cowan Rob Fennell – resigned May 14, 2015 Judy Fountain Ted Sehl* Rick Thompson Jasmine Urisk	

# STAFF REPORT

<b>Envida Community Energy Inc. (formerly Ecotricity Guelph Inc.)</b>	
<b>Board Members 2010 – 2011</b> Robert Aumell – first appointed to Board 2002 Brian Cowan - first appointed to Board 2001 Karen Farbridge - first appointed to Board 2000 Rick Thompson - first appointed to Board 2001 Jasmine Urisk - first appointed to Board 2000	<b>Board Members 2011 – 2012 (*new member)</b> Brian Cowan Judy Fountain* Rick Thompson Jasmine Urisk
<b>Board Members 2012 – 2013 (*new member)</b> Jane Armstrong * Jan Carr* Brian Cowan Judy Fountain William Koonstra* Rick Thompson Jasmine Urisk	<b>Board Members 2013 – 2014 (*new member)</b> Jane Armstrong Jan Carr Brian Cowan Judy Fountain William Koonstra Rick Thompson Jasmine Urisk
<b>Board Members 2014 – 2015 (*new member)</b> William Koonstra - resigned August 25, 2015 Pankaj Sardana* Karl Wettstein*	

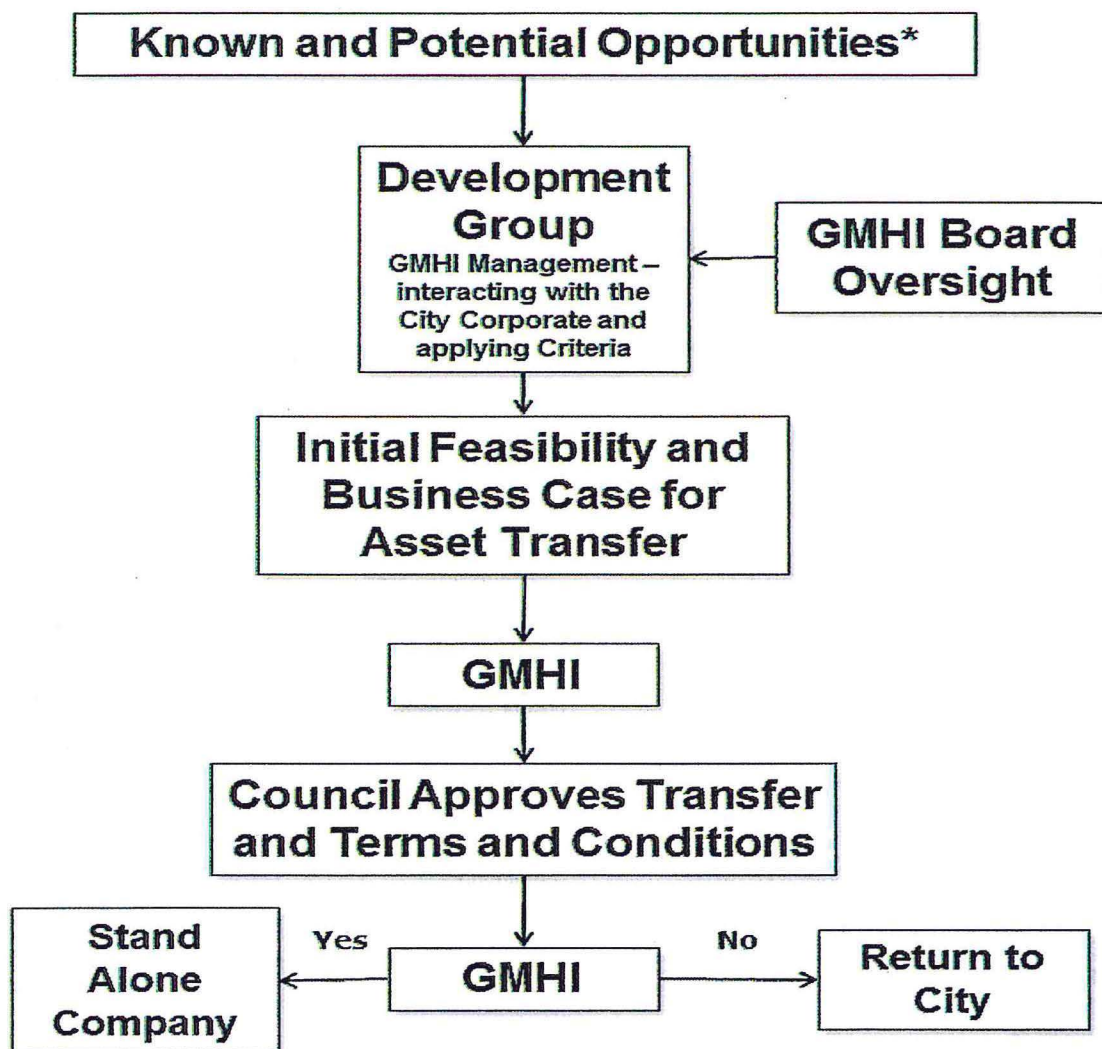
<b>Guelph Municipal Holdings Inc.</b>	
<b>Board Members 2011 – 2012</b> Bob Aumell Lise Burcher Todd Dennis Karen Farbridge June Hofland Jasmine Urisk Karl Wettstein	<b>Board Members 2012 – 2013 (*new member)</b> Lise Burcher Todd Dennis Karen Farbridge Mark Goldberg* June Hofland Ted Sehl* Jasmine Urisk Karl Wettstein
<b>Board Members 2012 – 2013 (*new member)</b> Lise Burcher Todd Dennis Karen Farbridge June Hofland Ted Sehl Jasmine Urisk Karl Wettstein	<b>Board Members 2013 – 2014 (*new member)</b> Lise Burcher Todd Dennis Karen Farbridge June Hofland Ted Sehl Jasmine Urisk Karl Wettstein
<b>Board Members 2014-2015 (*new member)</b> Cam Guthrie* Curt Hammond* William Koonstra* - resigned August 25, 2015 Ann Pappert* Mary Ellen Richardson* Ted Sehl R.L. Bud Smith* Karl Wettstein	



## Attachment 5

Appendix 4

## GMHI Process Map



\* - Opportunities identified in the following categories:

- |                        |                                       |
|------------------------|---------------------------------------|
| 1. Energy and Utility  | 4. Asset Management                   |
| 2. Transportation      | 5. Alternative Procurement Strategies |
| 3. Municipal Expertise | 6. Development Corporations           |

**Extract from Guelph City Council Closed Minutes – February 29, 2016**

**C-2016.15     Decision Chronology: District Energy**  
Section 239 (2) (a) security of the property

The CAO, City Solicitor and Mr. Sardana provided information regarding the Decision Chronology: District Energy.

Moved by Councillor Downer  
Seconded by Councillor Gibson

That staff be directed to report back to Council with terms of reference to define and scope a third party audit that would look at how decisions were made for District Energy.

Councillor Wettstein declared a potential pecuniary interest at this time because he was a member of the boards in this past period.

Councillor Wettstein left the room and did not vote or discuss the matter.

A recorded vote was requested.

*VOTING IN FAVOUR: Mayor Guthrie, Councillors Allt, Bell, Billings, Downer, Gibson, Gordon, MacKinnon, Piper and Van Hellemond (10)*  
*VOTING AGAINST: Councillors Hofland and Salisbury (2)*

CARRIED



**June 13, 2016 – District Energy Materials from Previous Council Meetings –  
Report Number CAO-LR-1612**

Attachment #5: Decision Chronology Spreadsheet (Public Version)

CONFIDENTIAL

DE @ HCBP  
CHPSOP @ HCBP  
DE @ Downtown  
CHPSOP @ Downtown  
DE (General)  
City / GMHI RFI's  
Governance



GM = GMHI



GH = GHI

En = Envida



C = City

F = FAC/GHI

2010	Q1						
	Q2			F-1		C-1	F-1 May 25 Initiation of partnership selection process for potential CHPSOP projects; directing staff to issue a Request for Expressions of Interest for potential partners
							C-1 June 28 - MOI between GHI & City approved for implementation of projects related to CEP - Tender process in City's Purchasing Policy waived for energy efficiency & renewable energy generation projects that require access to City-owned lands & buildings, and projects be managed through GHI - Staff to develop a leasing framework for Lease Agreements with GHI to provide long term leased or similar access to City-owned lands & buildings and rooftops necessary for implementation of energy efficiency and renewable energy generation projects.
	Q3			F-2		GH-1	GH-1 July 19 -Board approves MOI between City and GHI for implementation of projects related to CEP
							F-2 Jul 23 - Committee reviewed six responses to RFI. - Projects being considered (DE/CHP only): HCBP, UofG, GGH and Cargill
Q4			GH-2				GH-2 Nov 2 - Board approves Term sheet summarizing the essential terms of a proposed partnership between Dalkia and GHI to carry out various projects involving CHP, renewable power generation, DE or energy efficiency
			GH-3				GH-3 Nov 5 Board authorizes entering into the Partnership Term Sheet with Dalkia
	Q1						
	Q2		GH-5		GH-4		GH-4 April 19 - Board authorizes filing of applications with OPA under the CHPSOP program for the design, engineering and construction of CHP projects for UofG and GGH
			GH-6		GH-5		GH-5 May 10 - Boards of GHI & EGI (now Envida) authorizes filing applications with the OPA under the CHPSOP program for the design, engineering and construction of CHP projects for UofG, GGH and the new HCBP

CONFIDENTIAL

CONFIDENTIAL

CONFIDENTIAL

CONFIDENTIAL

CONFIDENTIAL

CONFIDENTIAL

CONFIDENTIAL

		DE @ HCBP	CHPSOP @ HCBP	DE @ Downtown	CHPSOP @ Downtown	DE (General)	City / GMHI RFI's	Governance	
2011	Q3		GH-7		GH-6				GH-6 May 16 In order to file CHPSOP applications with the OPA, the Authority requires applicant to post security in amount of \$20,000 per MW of annual average contract capacity. Board approves
					GH-7				GH-7 May 27 First applications for 4 CHPSOP projects submitted
					GH-9	F-3			F-3 Jul 5 Committee advised that partnership with Dalkia was ended.
						GH-8		GM-1	GH-8 Jul 31 Board advised new potential partner was reviewing CHP projects.
	Q4								GM-1 Aug 16 GMHI incorporated
									GH-9 Aug 31 GHI Board authorizes filing of CHPSOP application for Arthur Street District Energy Project. Supply agreement signed August 22, 2011.
								C-2	C-2 Sept 6 - City Council Meeting GHESI and Envida are moved into the structure of GMHI through a motion of Council.
									GM-2 Oct 4 - GMHI Board Meeting Inaugural Board Meeting of GMHI
	Q1				GH-10		GM-3	GM-2	GH-10 Nov 11 Board advised potential partner no longer interested in a partnership. Proposal on how to look for new partner presented to Board.
									GM-3 Dec 1 GMHI advised by GHI 4 CHPSOP applications currently underway (UofG, HCBP, GGH and Arthur Street)
	Q2							C-3	C-3 Dec 19 GHI Business Plan highlights presented to Council. Council advised of CHPSOP applications
	Q1			C-4					C-4 Jan 2012 City receives draft thermal energy supply agreements for Sleeman & RRC
	Q2								

GM = GMHI

GH = GHI

C = City

CONFIDENTIAL

CONFIDENTIAL

CONFIDENTIAL



CONFIDENTIAL

CONFIDENTIAL										
		DE @ HCBP CHPSOP @ HCBP DE @ Downtown CHPSOP @ Downtown DE (General) City / GMHI RFI's Governance								
				GM = GMHI		GH = GHI		C = City		
2012	Q3					GM-4		GM-4	Sept 19 - GMHI Board Discussion with GHI regarding thermal energy services at HCBP and Downtown. GMHI requests GHI to engage GMHI in the business case development for DE to ensure alignment with GMHI interests.	
	Q4		GH-11		GM-5	En-1	En-1	Decision made to proceed with district energy without CHP.		
								GH-11	Dec 6 - Downtown DE Project Board authorizes Envida to procure, install, construct, own and operate a thermal energy plant (max cost \$4M) subject to conditions.	
								GM-5	Dec 7 - GMHI Board Meeting GMHI requests joint GHI/GMHI meeting. GMHI requests GHI provide a portfolio of current projects including thermal energy master plan.	
2013	Q1									
	Q2				GM-6	GM-7	GM-6	Apr 2 - Joint GHI/GMHI Board Meeting GMHI Board requests GHI provide a business case for a thermal utility including longer term 2031/2041		
	Q3	F-5							GM-7	Apr 25- GMHI Board Meeting GMHI Board endorses in principle the long term goal of development of a thermal energy utility
		GH-12							F-4	Aug 8 - FAC Recommend to the Boards of GHI & Envida approval for Envida to enter into a lease agreement, including option to purchase, with the City, for land in the HCBP, subject to satisfactory completion of Phase I environmental assessment.
									GH-12	Aug 22 - GHI / Envida meeting Approve recommendation of FAC (F-5)
		F-6	GH-14		GM-9	GM-8	GM-8	GM-8	Nov 14 - GMHI Board Meeting - Board approves establishment of Thermal Utility Task Force -Board receives District Energy Strategic Plan - GMHI CEO requests GHI to provide information on status and funding commitments regarding Envida projects underway or in development that are in support of the CEI	
								GH-13	Nov 22 - GHI Board Meeting Approval of Board's participation in Thermal Utility Task Force	
								F-5	Nov 26 FAC	
CONFIDENTIAL										
CONFIDENTIAL										

CONFIDENTIAL

		DE @ HCBP	CHPSOP @ HCBP	DE @ Downtown	CHPSOP @ Downtown	DE (General)	City / GMHI RFI's	Governance	
Q4									
	En-3								
Q1									
	En-3								

GM = GMHI      GH = GHI      C = City

Recommends to the Boards of GHI & Envida approval of a temporary thermal energy facility at HCBP to service a customer.

**GM-9** Dec 2 - GMHI Board Meeting

- District Energy Strategic Plan referred to the Thermal Utility Task Force for consideration. Task force to report back to the Board in 90 days.
- Concern brought to Board re GHI being able to act on the CEI MOU or the Thermal Energy Utility.
- GMHI to provide notice to GHI, GHESI and Envida that financial consultant retained by the CEO will be inspecting books and records and consultant shall advise GMHI and inform the work of Task Force re most advantageous method to position resources/assets required for CEI.

**En-2** Dec 9 - Envida Board Meeting

**Approval of Portable Energy Plant**

- Undertake procurement, installation, construction and operation of a portable DE Plant for heating & cooling of Wurth, subject to conditions.

Dec 12 - GHI Board Meeting

Through Envida, enter into a CHP Standard Offer Program Contract with OPA authorizing the design, engineering & construction of a combined heat & power facility at the HCBP

**GH-14**

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**F-7** Jan 10 - FAC

Recommend to the Board of Envida:

- Undertake a preliminary engineering & feasibility study to assess viability of connecting additional buildings to the Galt District Energy System.
- Max cost of study \$350,000 subject to conditions.

**En-3** Jan 20 - Envida Board Meeting

Study costs approved (F-3)

**GH-15** Jan 21 - Thermal Utility Task Force Meeting (GMHI & GHI)

**GM-10** Staff to prepare material in support of the 'function' of a thermal utility

**GM-11** Feb 10 - Thermal Utility Task Force Meeting (GMHI & GHI)

**GH-16** Develop position on the regulation of thermal utilities and determine the start-up and ideal state of a thermal utility in relation to the key functions.

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DE @ HCBP  
CHPSOP @ HCBP  
DE @ Downtown  
CHPSOP @ Downtown  
DE (General)  
City / GMHI RFI's  
Governance



GM = GMHI



GH = GHI



C = City

2014	Q2								
	Q3						GM-12	GM-12	July 29 - GMHI Board Meeting Business case to support amalgamation presented to the Board
							GH-17	GH-17	Aug 7 - GHI Meeting Approval of amalgamation of GMHI and GHI
							C-5	C-5	Aug 13 - Council as Shareholder Meeting Amalgamation approved by City Council
							GM-13	GM-13	Sept 11 - Inaugural meeting of new GMHI Board
								En-4	Nov 20 - Envida Board Meeting Tricar-2 Project Authorize Envida to procure, install, construct, own & operate district energy as required to service Tricar-2 subject to: - Receiving relevant permits & approvals required to construct and operate facility - Obtaining/structuring financing for the project to the satisfaction of the Board  Authorize CEO & VP to execute 2 Thermal Energy Sales Agreements to enable DE service to be provided to the Tricar-2 by the October 1, 2015 in-service date.  City Capital Contribution Board directs CEO & CFO to convene a meeting with City CAO & City CFO to resolve issues relating to the fair contribution of capital by the City for DE assets servicing City-owned properties and report back to the Board by December

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CONFIDENTIAL								
		DE @ HCBP	CHPSOP @ HCBP	DE @ Downtown	CHPSOP @ Downtown	DE (General)	City / GMHIRFI's	Governance



CONFIDENTIAL

CONFIDENTIAL

		DE @ HCBP	CHPSOP @ HCBP	DE @ Downtown	CHPSOP @ Downtown	DE (General)	City / GMHI RFI's	Governance		

**June 13, 2016 – District Energy Materials from Previous Council Meetings –  
Report Number CAO-LR-1612**

Attachment #6: Minutes of Guelph City Council February 29, 2016



**Extract from Guelph City Council Closed Minutes – February 29, 2016**

**C-2016.15      Decision Chronology: District Energy**  
Section 239 (2) (a) security of the property

The CAO, City Solicitor and Mr. Sardana provided information regarding the Decision Chronology: District Energy.

Moved by Councillor Downer  
Seconded by Councillor Gibson

That staff be directed to report back to Council with terms of reference to define and scope a third party audit that would look at how decisions were made for District Energy.

Councillor Wettstein declared a potential pecuniary interest at this time because he was a member of the boards in this past period.

Councillor Wettstein left the room and did not vote or discuss the matter.

A recorded vote was requested.

*VOTING IN FAVOUR: Mayor Guthrie, Councillors Allt, Bell, Billings, Downer, Gibson, Gordon, MacKinnon, Piper and Van Hellemond (10)*

*VOTING AGAINST: Councillors Hofland and Salisbury (2)*

**CARRIED**

**June 13, 2016 – District Energy Materials from Previous Council Meetings –  
Report Number CAO-LR-1612**

Attachment #7: Report to Shareholder from Ann Pappert and Pankaj Sardana May 16, 2016

## Shareholders Meeting

Date: May 16, 2016

Report from: Ann Pappert, CAO, City of Guelph  
Pankaj Sardana, CFO, GMHI / CEO, Guelph Hydro Electric Systems Inc.  
and Envida Community Energy Inc.

### RE: Financial History of the GMHI Group of Companies

The financial history provides clarity and establishes a shared understanding of the transition of funds and assets among the GMHI group of companies starting with provincial government's Energy Competition Act in 1998 through to present day. A better understanding of GMHI's financial history is also an important step towards improved asset management and organizational transparency.

**Meeting context:** This shareholder meeting is part of a series of meetings related to GMHI, its subsidiaries and the City's energy projects where the following information is provided:

- April 4 and 25 – CEI Report
- May 3 and 24 – GEERS Project Proposal
- **May 16 – Financial history and GMHI's restated 2016 budget**
- June 7 – City's Audit Statements
- June 20 – GMHI Annual General Meeting
- June 27 – District energy long-term financial plan
- July TBD – CEI Update

**Asset management:** Presenting the chronological financial history of the GMHI group of companies is an important component of the City's participation in the Community Energy Initiative update. Excellence in asset management practices – one of the core objectives in creating GMHI – requires a full, accurate accounting of the company's position and assets, which is what this report provides.

**Revaluing district energy assets:** Based on the auditor's current assessment of the long-term value projections of GMHI's district energy assets, GMHI is revaluing/writing down the balance sheet value of the Galt District Energy System and Hanlon Creek Business Park district energy assets.

Since the assets are already paid for, the revaluation doesn't have an immediate impact on the organization's actual cash balance. And should the long-term value projection of the asset change, the write-down can be reversed in the future.

Providing this full accounting of the financial history of the GMHI group of companies provides clarity and transparency to the Shareholder and the community.



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Ann Pappert



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Pankaj Sardana

**June 13, 2016 – District Energy Materials from Previous Council Meetings –  
Report Number CAO-LR-1612**

Attachment #8: Financial History of the GMHI Group of Companies Report may 16,  
2016



## Shareholders Meeting

Date: May 16, 2016

Report from: Pankaj Sardana, CEO  
Guelph Hydro Electric Systems Inc. and Envida Community Energy Inc.

Tara Baker, Acting City Treasurer  
City of Guelph

RE: Financial History of the GMHI Group of Companies

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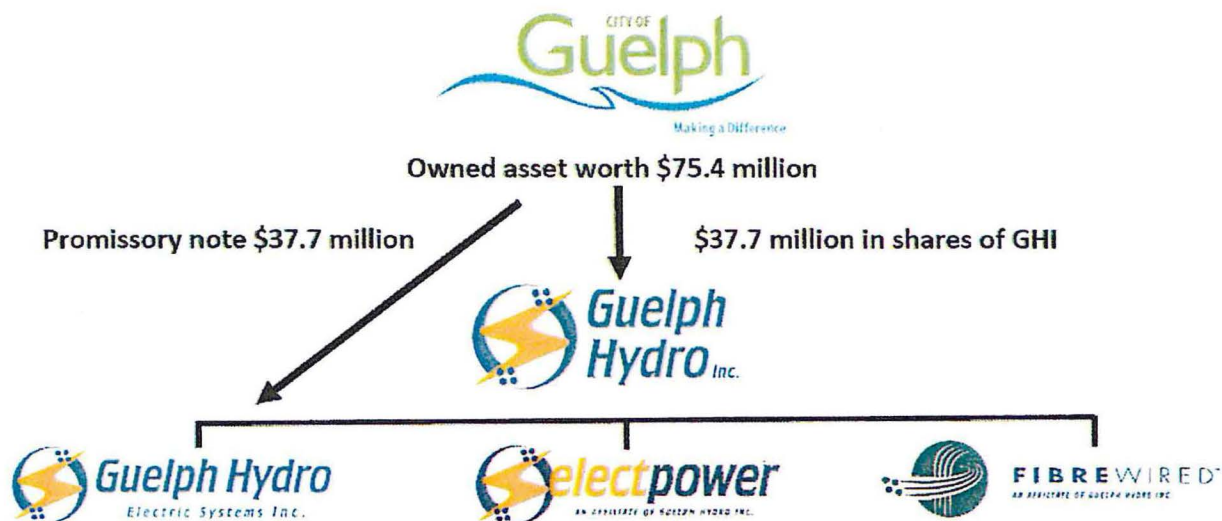


Diagram 1

## 1998-2000

1. In 1998, the Ontario government passed the *Energy Competition Act*, 1998 ending Ontario Hydro's monopoly in the province and outlining the procedures for restructuring to occur at all levels of the electricity industry. This is referred to as the "deregulation" of the electricity market.
2. Municipalities who were owners of hydro distribution assets had two years to establish a business corporation with all shares held by the municipality.
3. In 2000, Guelph Hydro was divided into four separate companies:
  - Guelph Hydro Inc. (GHI), the parent company which held the following three subsidiaries:

- Guelph Hydro Electric Systems Inc.(GHESI), a local distribution company (LDC), servicing distribution needs in the community;
  - Selectpower Inc., a retail energy and energy services company; and
  - Fibrewired, a fibre-optics company.
4. The Ontario Energy Board set a 50% / 50% debt/equity structure for LDCs. This debt-to-equity split meant that GHESI's balance sheet was initially capitalized with \$37.7 million in debt (which *de facto* was new debt created from the "downloading" of the municipal utilities to the municipalities) and \$37.7 million in equity which was the value of the shares held by its shareholder, GHI.
5. The City's assets were comprised of the shares of GHI valued at \$37.7 million (cash) and a promissory note from GHESI for \$37.7 million for a total capitalization value of \$75.4 million.

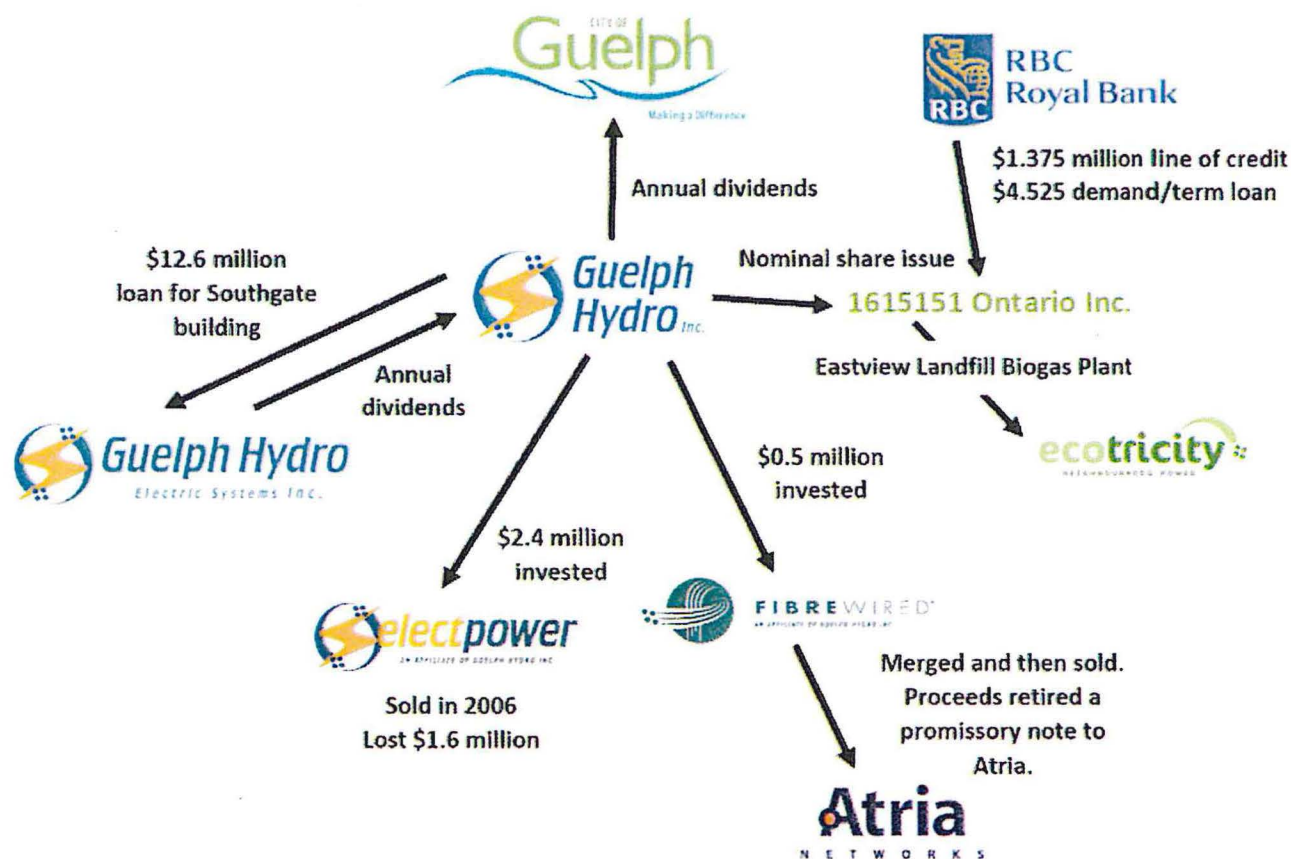


Diagram 2

## 2000 - 2005

6. Over time, funded by dividend payments from GHESI, the following investments were made by GHI:
  - \$2.4 million in SelectPower (which it sold in 2006 at a loss of \$1.5 million)
  - \$0.5 million in Fibrewired (which was merged and became Atria Networks Inc. and subsequently sold, with the proceeds from the sale used to retire a promissory note with Atria Networks Inc.)
  - \$12.6 million loaned back to GHESI to cover the cost of expanding the Southgate office building to house all GHESI (and GHI) employees.
7. In April, 2004, GHI incorporated another company, 1615151 Ontario Inc., with a nominal share issue (i.e. one share for \$1,000 owned by GHI at that time). The company's business purpose was to own and operate generation assets starting with the Eastview Landfill Biogas Plant. Monies to build the Eastview Landfill Biogas Plant were borrowed from the Royal Bank. The credit facilities offered by the Royal bank consisted of a non-revolving line of credit for \$1.375 million and a demand loan for \$4.525 million.

8. In June, 2005, 161551 Ontario Inc. was renamed Ecotricity Guelph Inc. (Ecotricity) so that it would have a more recognizable corporate name.
9. In 2005, the City's Eastview Landfill Biogas Plant went into commercial operation. This plant generates electricity from methane gas captured from the landfill site, The facility was granted a 20-year contract to supply 2.775 MW (years 1-7) and 1.85 MW (years 8-20) of electricity to the Ontario grid as the first participant project under the Province of Ontario's Renewable Energy Supply (RES) contract.



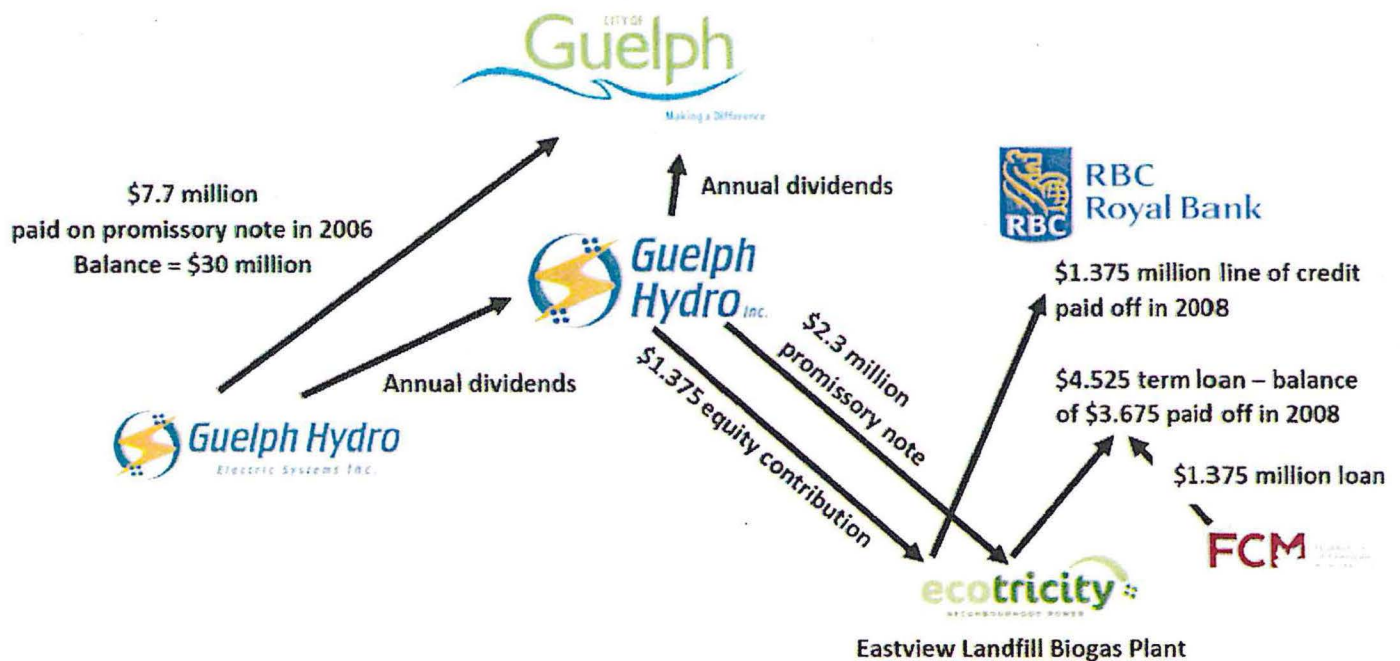


Diagram 3

## 2006 – 2009

10. In 2006, GHESI paid the City a lump-sum payment of \$7.7 million against the \$37.7 million loan provided by the City leaving a promissory note balance of \$30 million. The City applied these funds towards the construction of the Guelph Civic Administration Centre Complex (including POA Courthouse renovations).
11. In March 2006, Ecotricity entered into a loan agreement and subsequent interest rate swap agreement with the Royal Bank. This resulted in the conversion of the existing demand loan into a fixed rate loan for \$4.525 million.
12. In April 2007, Guelph City Council unanimously endorsed the vision, goals and general directions of a 25-year Community Energy Initiative. This plan was developed with the assistance of a Consortium that included the City of Guelph, Union Gas, Guelph Hydro, business and industry representatives, the University of Guelph, school boards, and the Guelph Chamber of Commerce. The goals of the Community Energy Initiative to be achieved by 2031 were:
  - Use 50 per cent less energy per capita
  - Produce 60 per cent less greenhouse gas emissions per capita
  - Encourage and facilitate community-based renewable and alternative energy systems.

Achievement of the Community Energy Initiative goals would position Guelph among the top energy performers in the world and make it one of the most competitive and attractive communities in which to invest.

13. In March 2008, the Ecotricity non-revolving line of credit facility was repaid in full via proceeds of an equity contribution from GHI.
14. In addition, during 2008, the balance of \$3.675 million on Ecotricity's term loan with the Royal Bank was repaid and the swap agreement was unwound. A portion of this debt repayment (\$1.375 million) was funded via proceeds from a low interest loan from the Federation of Canadian Municipalities (FCM). The remainder of this debt repayment was made via proceeds from a promissory note for \$2.3 million payable to GHI.
15. The Operating Results for Ecotricity from 2005 to 2009 were as follows:

**Ecotricity Guelph Inc.**  
**Operating Results**  
**2005-2009**

	2009	2008	2007	2006	2005
Revenues	1,073	1,152	1,252	1,490	820
Landfill Gas	58	55	68	85	48
OM&A	1,541	680	655	612	427
Impairment of Fixed Assets	2,984	0	0	0	0
Depreciation	306	327	327	324	150
Interest	125	414	276	342	144
Tax	4	-11	-13	25	24
Net Income	-3,945	-313	-61	102	27

16. In 2009, due to the landfill gas supply declining faster than anticipated, one of three generators at the Envida Eastview Landfill Gas site was decommissioned reducing the contract capacity to 1.7 MW from 2.775 MW three years ahead of schedule and reducing revenues. An impairment of \$2.984 million was taken in 2009.

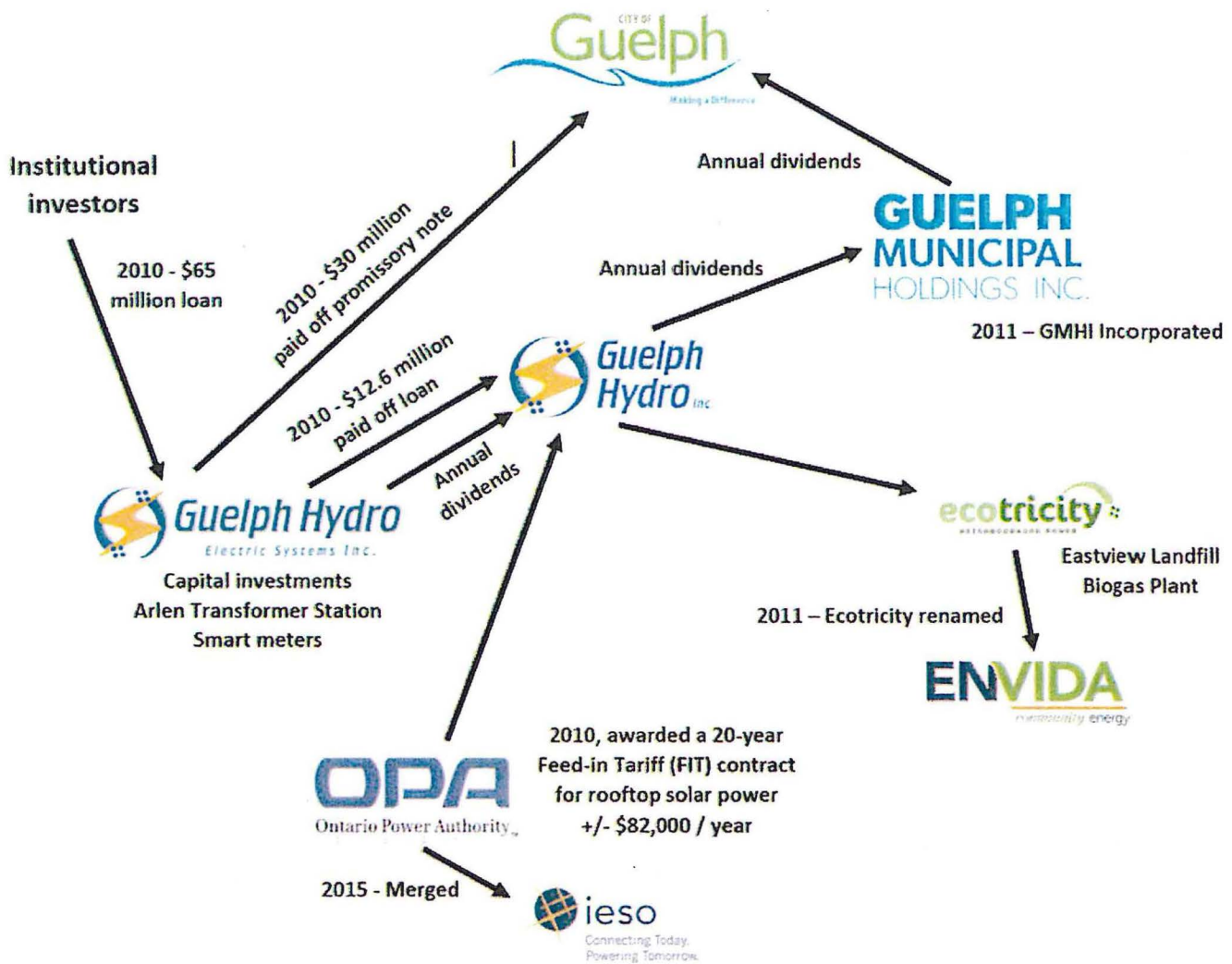


Diagram 4

## 2010-2011

17. In 2010, the City and GHI entered into a Memorandum of Intention in which GHI was designated as the prime implementer and key developer of high-efficiency, low-carbon, sustainable energy projects to assist the City of Guelph in achieving targets set out in the Guelph Community Energy Initiative and foster economic development.
18. In 2010, GHI was awarded a 20-year Feed-in Tariff (FIT) contract for electricity generated from a 100-kilowatt rooftop solar facility installed at a cost of just under \$1 million that same year on the Guelph Hydro Southgate building. This facility went into commercial operation in 2011 with annual income estimated at \$82,000.



19. In 2010, GHESI and Union Gas published a report by MCW Consultants Limited entitled *"Developing a Downtown District Energy System for the City of Guelph Using a CHP Facility."*
20. In 2010, GHESI borrowed \$65 million via a private placement of debt to a group of institutional lenders (long-term debt issue) and used the money as follows:
  - a) \$30 million - used to pay off the remaining \$30 million owed on the promissory note to the City arising from the establishment of GHESI in 2000. The City used these monies to fund the City's share of the Federal and Provincial Infrastructure Stimulus Funding and RINC programs with the remaining funds directed to a new reserve fund for "long-term capital forecast update" (later renamed as the Capital Asset Renewal Reserve Fund).
  - b) \$12.6 million – used to pay off the loan from GHI to cover the cost of expanding the Southgate office building to house all GHESI (and GHI) employees.
  - c) Remaining proceeds – spent on capital projects i.e., Arlen Transformer Station and the provincially-mandated installation of smart meters for all residential and small commercial customers.
21. By 2011, GHI had 7 corporate employees. A portion of their salaries and benefits were charged to subsidiary companies via intercompany charges for work provided but some ongoing costs were incurred at the GHI level.
22. Guelph Municipal Holdings Inc. (GMHI) was incorporated in 2011 to hold Guelph Hydro Inc. and its two subsidiaries – Guelph Hydro Electric Systems Inc. and Ecotricity Guelph Inc. – and was expected to take on other city-owned assets at some point in the future. The City's shares in GHI were transferred to GMHI on Dec. 31, 2011. A Board of Directors was formed but no employees worked for GMHI.
23. In December 2011, to avoid possible copyright infringements, Ecotricity changed its name to Envida Community Energy Inc. (Envida), effective January 1, 2012.



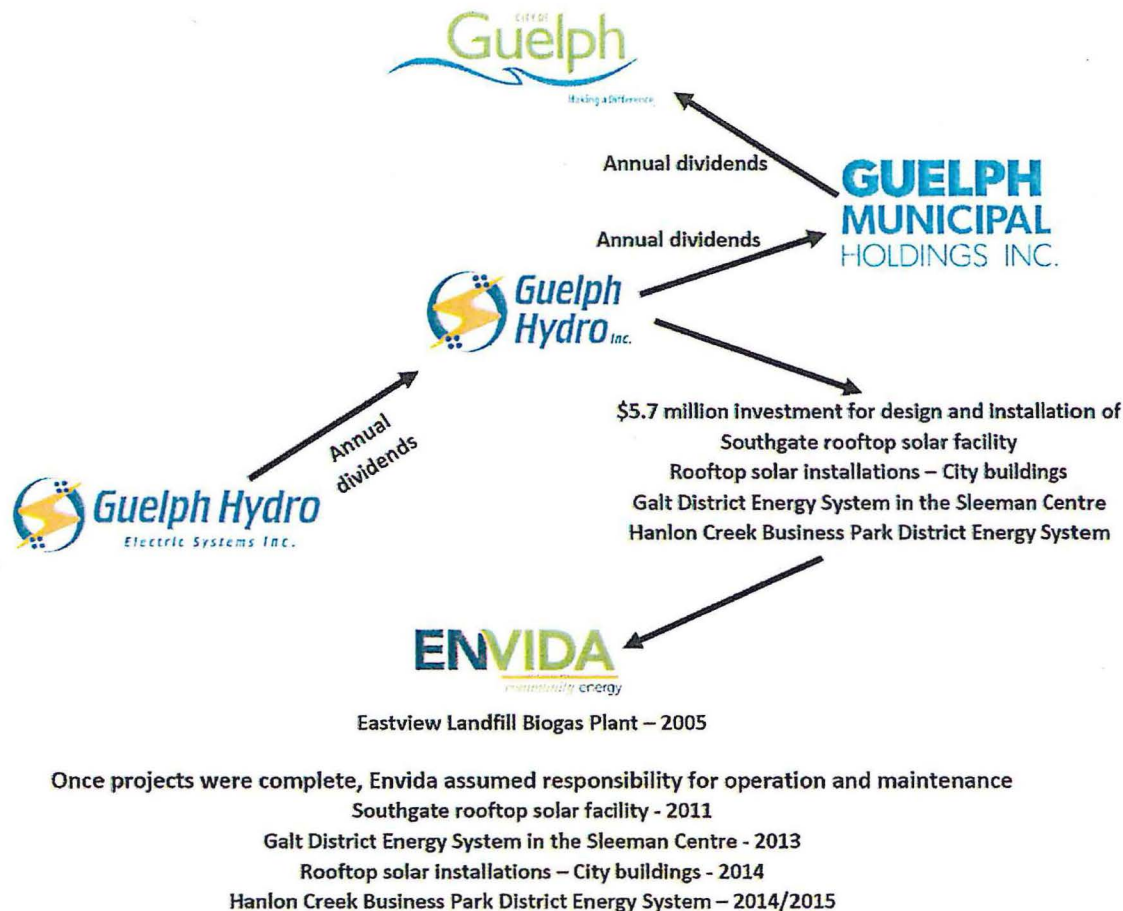
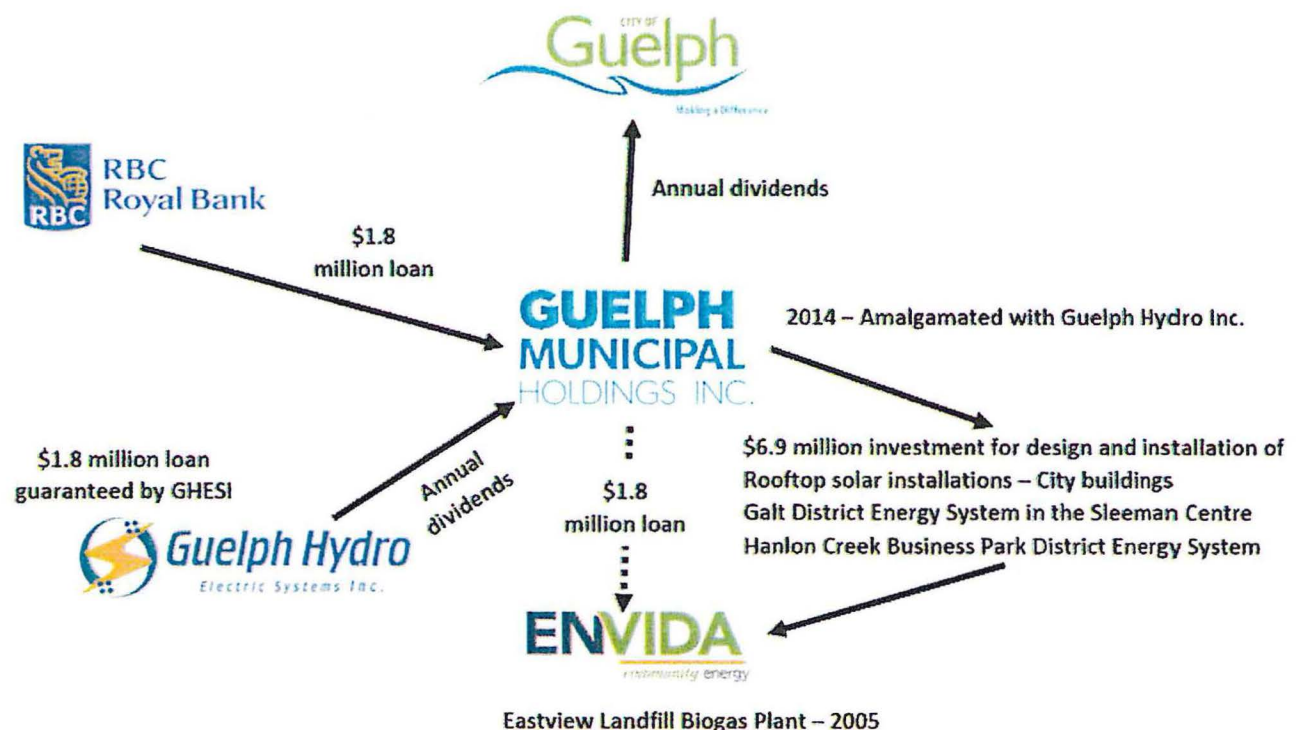


Diagram 5

## 2012 to September 2014

24. In 2013, Envida and the City of Guelph jointly prepared a District Energy Strategic Plan that provided background information on district energy systems, benefits for individuals and communities, and examples of successful district energy networks in other cities.
25. In May 2013, Envida elected to retire its loan payable to the Federation of Canadian Municipalities. Payment was made via proceeds of a promissory note from GHI.
26. Between 2010 and September 2014, using the \$12 million received from GHESI in 2010 as well as the net proceeds from annual dividends, GHI invested \$5.7 million in sustainable energy projects through a combination of equity investments and loans. Funds were used to design and install district energy infrastructure in the Sleeman Centre in downtown Guelph and the Hanlon Creek Business Park, as well as rooftop solar installations on the roof of Guelph Hydro's Southgate building and on seven buildings owned by the City of Guelph. Once projects were complete, Envida assumed responsibility for operation and maintenance.

27. In December 2013, the thermal energy centre in the Sleeman Centre in Downtown Guelph went into commercial operation
28. In April 2014, Envida was awarded a 20-year contract to supply electricity to the Ontario grid from a 10.2 megawatt natural gas-fired combined heat and power (CHP) plant to be located in the Hanlon Creek Business Park. If built, the CHP plant would serve as a heat source for a district energy system in the Hanlon Creek Business Park.
29. In August 2014, The Tricar Group – River Mill Condominium project signed a contract with Envida for district heating and cooling to be provided from the thermal energy plant in the Sleeman Centre in downtown Guelph.



Once projects were complete, Envida assumed responsibility for operation and maintenance

- Southgate rooftop solar facility - 2011
- Galt District Energy System in the Sleeman Centre - 2013
- Rooftop solar installations – City buildings - 2014
- Hanlon Creek Business Park District Energy System – 2014/2015

Diagram 6

## September 2014 to Present

30. In 2014, Guelph Hydro Inc. and Guelph Municipal Holdings Inc. were amalgamated under Guelph Municipal Holdings Inc. (GMHI). GMHI acquired 8 employees from GHI. A portion of the salaries and benefits was charged back to subsidiaries for work provided via intercompany charges but there were ongoing costs at the GMHI level.
31. Since amalgamation, GMHI has invested \$6.9 million in sustainable energy projects through a combination of equity investments and loans. Funds were used to design and install district energy infrastructure for the Galt District Energy System in downtown Guelph and the Hanlon Creek Business Park, as well as rooftop solar installations on buildings owned by the City of Guelph. Once projects were complete, Envida assumed responsibility for operation and maintenance.



32. In July, 2015, Envida was awarded a 20-year contract to supply electricity to the Ontario grid from a 10 megawatt natural gas-fired combined heat and power (CHP) plant to be located in downtown Guelph. If built, the CHP plant would serve as a heat source for a district energy system in downtown Guelph.
33. By June 2015, GMHI had completely exhausted the \$12 million that GHI had received from GHESI in 2010 but was still faced with expenses relating to connections to the existing district energy infrastructure for M.F. Property Management Ltd. in the Hanlon Creek Business Park and The Tricar Group's River Mill Condominiums in downtown Guelph. To meet its obligations, GMHI borrowed \$1.8 million on its short-term credit facility from the Royal Bank. This loan is guaranteed by GHESI and will need to be fully repaid at the beginning of 2017 or a new loan taken out if repayment is not possible.
34. In 2016, City Council streamlined its oversight of GMHI:
- a) The Board was restructured to consist of three members of City Council (Mayor Guthrie, Councillor Wettstein and Councillor Downer).
  - b) The City's CAO was assigned the role of Interim CEO of GMHI to provide the necessary authority and oversight to implement the directions of Council.
  - c) In addition, a new CEO was appointed on an interim basis for GHESI and Envida.
35. After in-depth consultation with district energy experts and KPMG, GMHI determined that without the addition of a significant thermal load in the Hanlon Creek Business Park, the project will lose money every year it is in operation and the capital costs to build the plant will be unrecoverable. Although the revenue generated from the Galt District Energy System in the Sleeman Centre will cover its operating and maintenance costs, there will be little or no revenue to repay the initial capital investment in the project.
- Capital costs incurred in building the company's two district energy projects which include engineering costs and costs for piping, boilers, chillers, pumps, energy transfer station, backup generators, air conditioning units, cooling tower, air handling units, heat exchangers, etc. totalled:
- Hanlon Creek Business Park \$5.1 million
  - Galt District Energy System in the Sleeman Centre in downtown Guelph \$6.1 million



## **Write-Offs / Write-Downs**

36. Envida prepares its financial statements in accordance with accounting standards which require that assets be carried on the balance sheet at no more than their recoverable amount. The recoverable amount of an asset is the higher of its fair value less costs of disposal and its value in use. Value in use is the present value of the future cash flows expected to be derived from an asset. For each reporting period the entity is required to determine whether there is any indication that the asset is being carried at greater than its recoverable amount. If it is determined that the recoverable amount of an asset is less than its carrying value, then the asset is deemed to be impaired and the value must be written down to the recoverable amount. District energy assets in the Hanlon Creek Business Park and downtown Guelph will not generate sufficient cash flows over their useful lives to fully recover the costs of installing these assets. The required asset write-down / write-off amounted to:

- Hanlon Creek Business Park \$5.1 million
- Galt District Energy System in the Sleeman Centre in downtown Guelph \$3.6 million

## **Intercompany Loans**

37. As of the end of 2015, Envida owes GMHI \$11.8 million related to funds invested in the Eastview Landfill Biogas Plant, district energy assets, as well as other corporate service and operating needs over the past five years.
38. Given the current state of operations, it is unlikely that Envida will be able to repay this loan and consideration to forgiving this loan is being explored.

## Tax Considerations

39. GMHI's income is derived primarily from dividends paid by GHESI, as well as interest on any monies loaned to its subsidiaries. GMHI's dividends are not treated as taxable income and as a result, the company is typically in a "taxable loss" position as its other sources of income are insufficient to meet its ongoing operating expenses.
40. Since 2006, a total of \$10,595,931 in tax losses have been accumulated. These tax losses may be applied against future income earnings but are subject to an expiry date.
41. Envida also generates tax losses since its taxable income from operations (solar installations, district energy projects, Eastview Landfill Gas Plant) does not offset the company's expenses (fuel costs, water charges, land lease payments, maintenance of equipment by contractors, Board of Director costs, etc.). (Note: Envida has no employees so there are no salary and benefit costs.)
42. Since 2008, a total of \$7,341,313 in tax losses have been accumulated. These losses may be applied against future income earnings but are subject to an expiry date.

### GMHI Non-Capital Loss Continuity Worksheet

Year of Origin	Non-Capital Loss	Expiry Date
2015	\$ 3,003,425 <sup>1</sup>	December 31, 2035
2014	388,429	December 31, 2034
2013	1,032,064	December 31, 2033
2012	2,218,324	December 31, 2032
2011	1,746,480	December 31, 2031
2010	562,622	December 31, 2030
2009	-	
2008	3,880	December 31, 2028
2007	143,911	December 31, 2027
2006	1,496,796	December 31, 2026
	<u>\$ 10,595,931</u>	

<sup>1</sup> Estimate subject to review by KPMG

### Envida Non-Capital Loss Continuity Worksheet

Year of Origin	Non-Capital Loss	Expiry Date
2015	\$ 761,290 <sup>1</sup>	December 31, 2035
2014	2,230,110	December 31, 2034
2013	81,592	December 31, 2033
2012	1,455,957	December 31, 2032
2011	758,000	December 31, 2031
2010	845,488	December 31, 2030
2009	939,360	December 31, 2029
2008	269,516	December 31, 2028
	<u>\$ 7,341,313</u>	

<sup>1</sup> Estimate subject to review by KPMG

Report submitted by:

Pankaj Sardana  
Chief Executive Officer  
Guelph Hydro Electric Systems Inc. and Envida Community Energy Inc.  
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Tel: 519-837-4707

Tara Baker  
Acting City Treasurer  
City of Guelph  
Email: [tara.baker@guelph.ca](mailto:tara.baker@guelph.ca)  
Tel: 519-822-1260

**June 13, 2016 – District Energy Materials from Previous Council Meetings –  
Report Number CAO-LR-1612**

Attachment #9: Presentation regarding the Financial History of the GMHI Group of Companies May 16, 2016



**GUELPH**  
**MUNICIPAL**  
HOLDINGS INC.



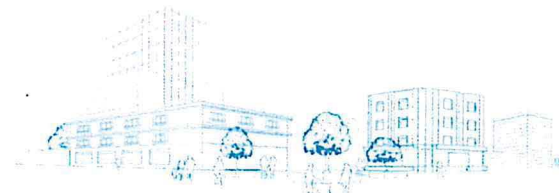
## **GMHI Shareholder Meeting**

### **May 16, 2016**

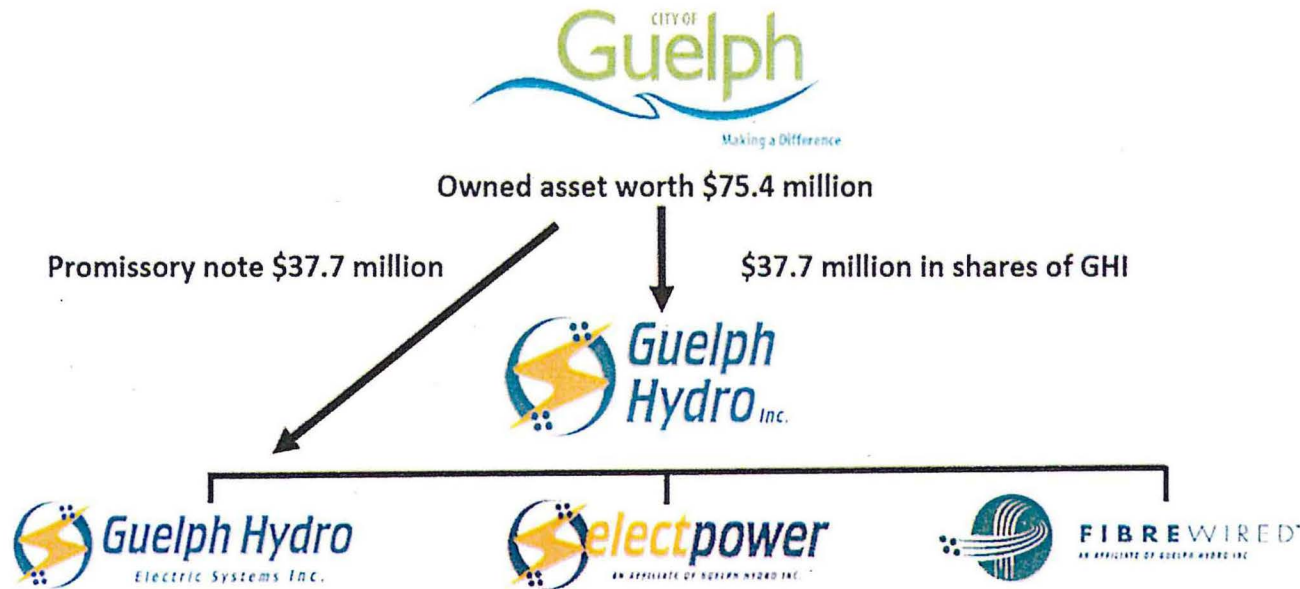


# AGENDA

- Historical Overview – 1998 to Present
- Amalgamation: Financial Transfers, HR Transfers
- Asset Write Downs
- Tax Losses
- Inter-Company Loans
- Asset Sales to GHESI (Eastview and Southgate Solar)
- Q & A



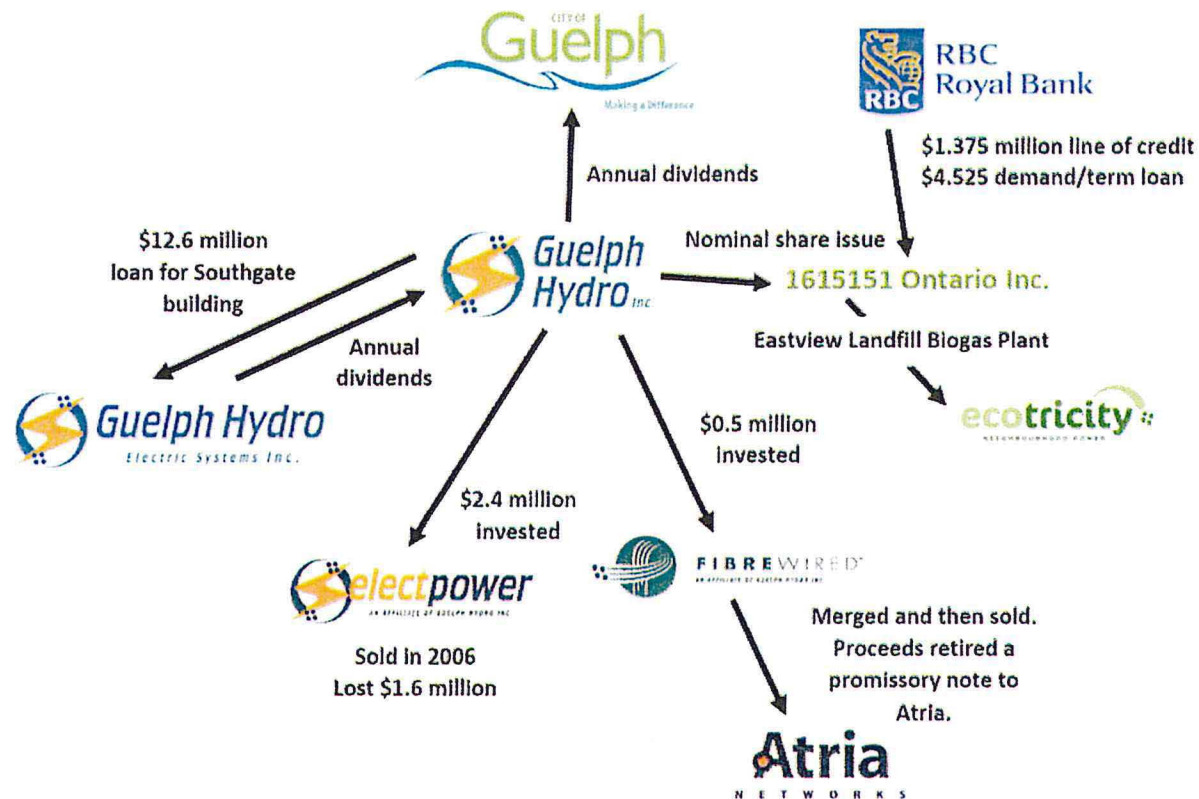
# HISTORICAL OVERVIEW -- 1998 TO 2000



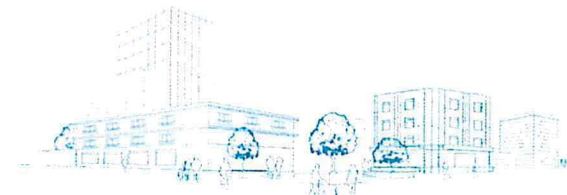
- Province passes *Energy Competition Act, 1998*, which “re-regulated” electricity sector
- Local Distribution Utilities were “given” to Municipalities who had two years to establish LDCs as business corporations, with the municipalities as 100% shareholders
- In 2000 City of Guelph divided Guelph Hydro into the four businesses shown above
- For Guelph Hydro Electric Systems Inc., the OEB initially split the company’s \$75.4 million balance sheet into 50% debt and 50% equity, with all shares held by the City of Guelph



# HISTORICAL OVERVIEW -- 2000 TO 2005

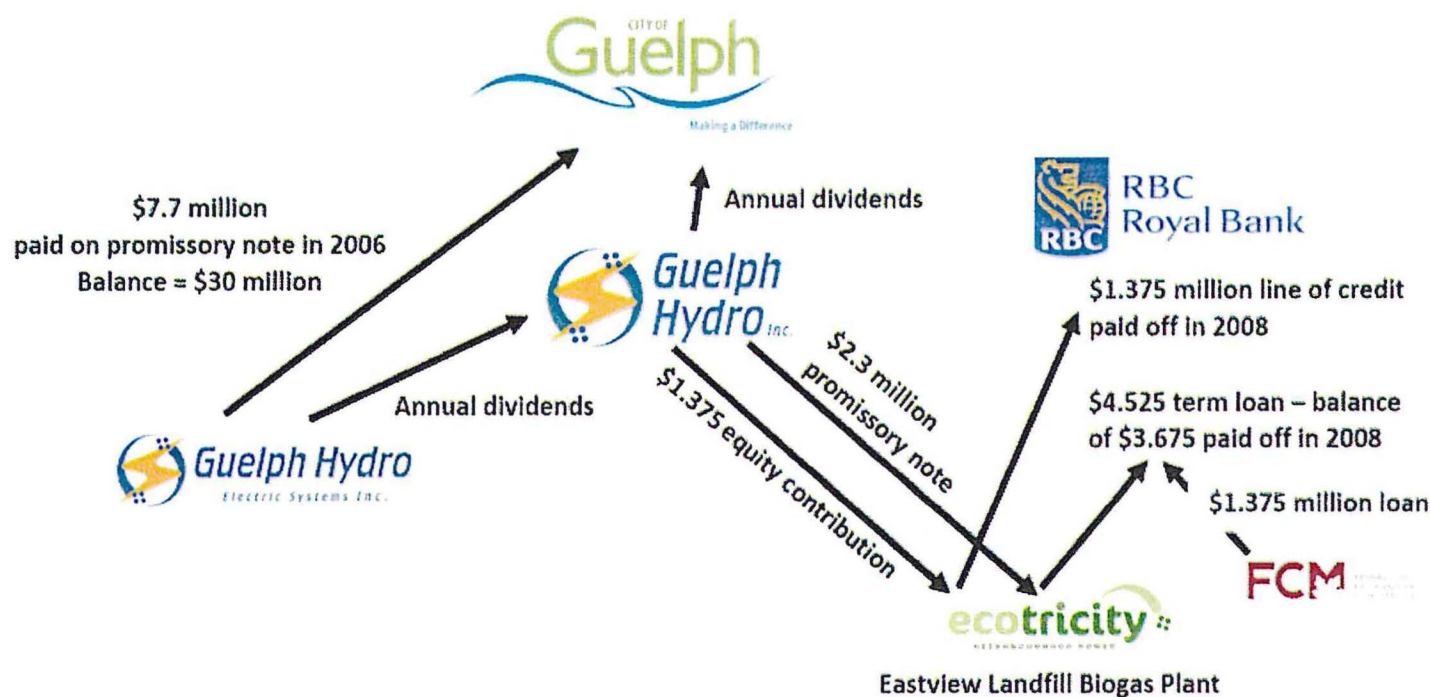


- With a view to increasing shareholder value, dividend payments from GHEI to GHI permitted the investments into various unregulated businesses, and also provided funding to allow GHI to lend money back to GHEI to expand the 395 Southgate Drive building
- In 2005, the City's Eastview Landfill Biogas plant went into commercial operation

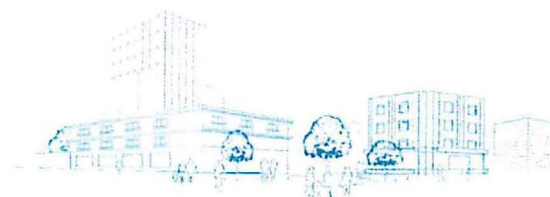




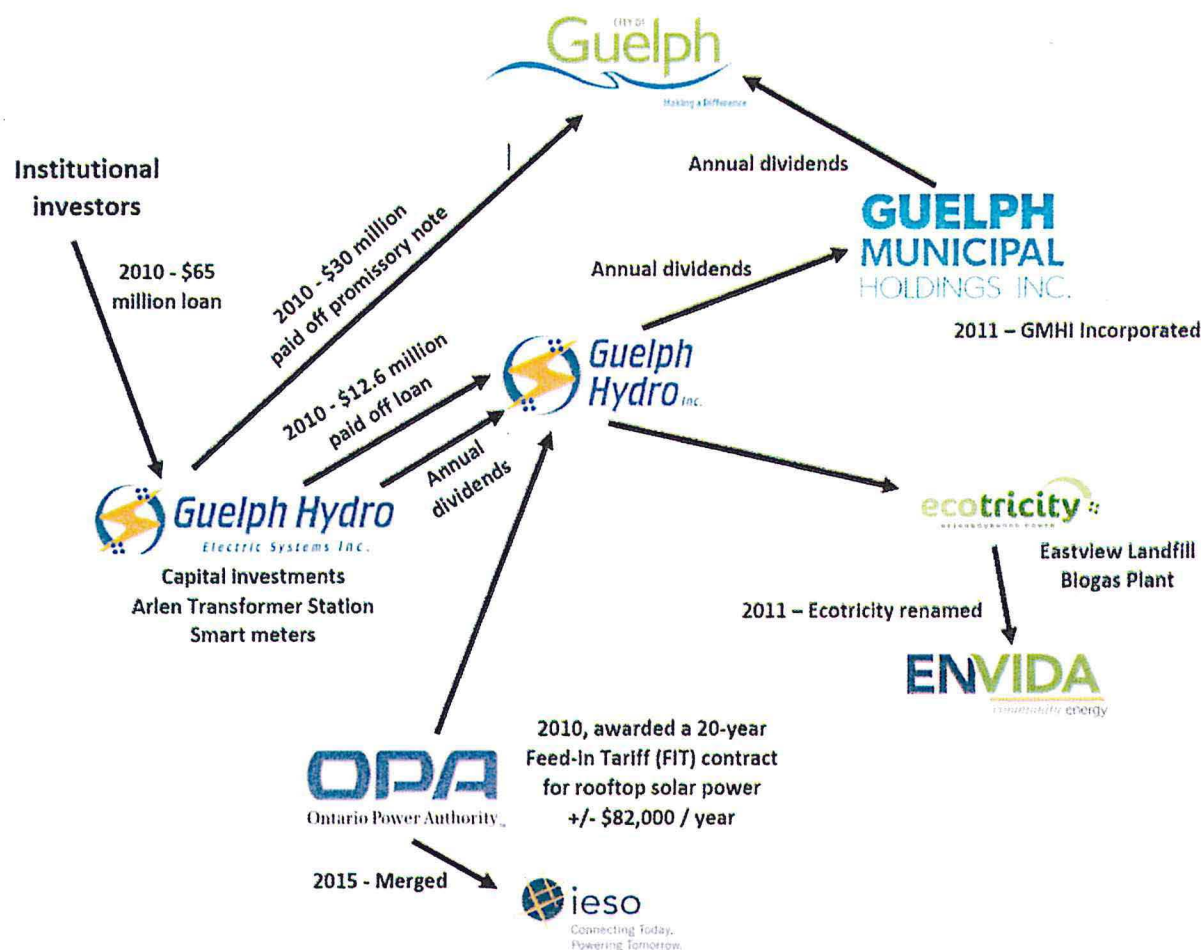
# HISTORICAL OVERVIEW -- 2006 TO 2009



- In 2006, using cash-on-hand, GHESI paid off \$7.7 million of the initial \$37.7 million debt held by the City, leaving an unpaid long-term debt balance of \$30 million
- In April, 2007, Guelph City Council unanimously endorsed the vision, goals, and general directions of a 25-year Community Energy Initiative

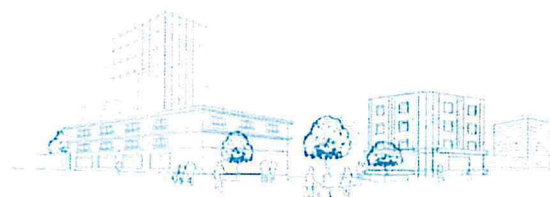


# HISTORICAL OVERVIEW -- 2010 TO 2011



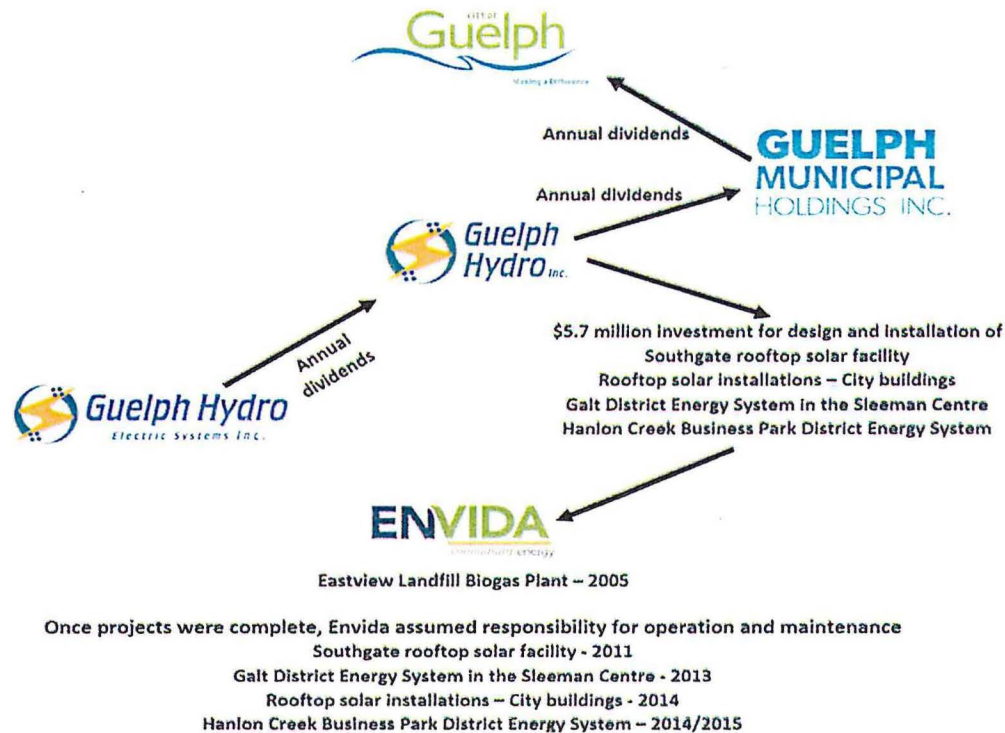
## In 2010:

- City and GHI enter into an MOI to assist City with achieving CEI targets; GHI designated as prime implementer and key developer of high-efficiency, low carbon, sustainable energy projects
- GHI awarded 20-year contract for Southgate rooftop solar PV project
- GHESI borrowed \$65 million in long-term debt; \$30 million used to retire City-held long-term debt of \$30 million; \$12.6 million used to retire debt held by GHI, and balance used to fund smart meter installation and construction of Arlen Transformer Station



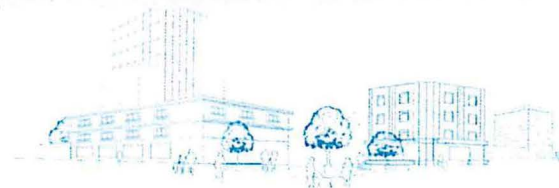


# HISTORICAL OVERVIEW -- 2012 TO 2014

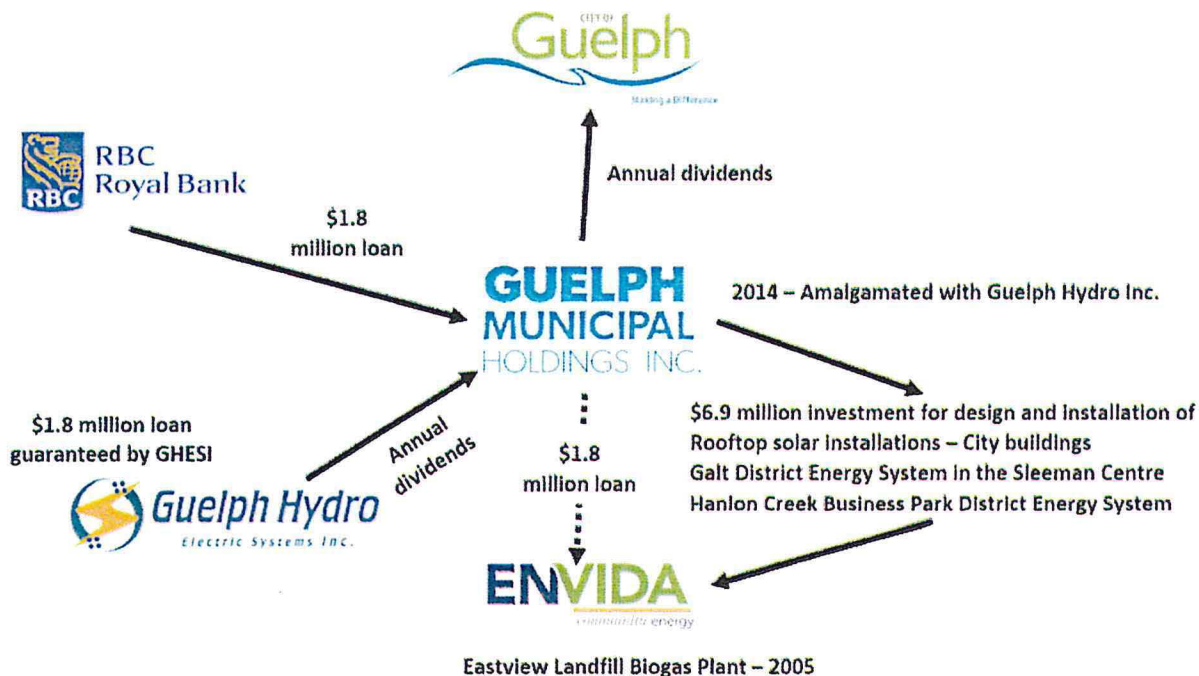


## Between 2012 and September 2014, using the \$12.6 million received from GHESI in 2010:

- GHI invested \$5.7 million in sustainable energy projects in downtown Guelph, the Hanlon Creek Business Park (HCBP), and for rooftop solar installations on City-owned buildings
- Once the projects were completed, Envida assumed responsibility for operation and maintenance
- In April, 2014, Envida was awarded a 20-year contract to supply electricity to the Ontario grid from a 10 MW natural gas-fired CHP; if built, CHP would serve as heat source for a DE system in HCBP



# HISTORICAL OVERVIEW -- 2014 TO PRESENT

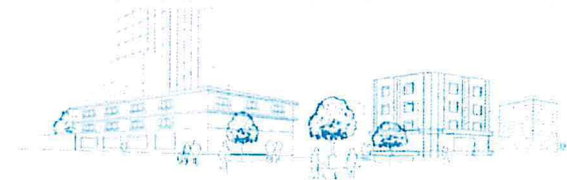


Once projects were complete, Envida assumed responsibility for operation and maintenance

- Southgate rooftop solar facility - 2011
- Galt District Energy System in the Sleeman Centre - 2013
- Rooftop solar installations – City buildings - 2014
- Hanlon Creek Business Park District Energy System – 2014/2015

## In September 2014:

- GMHI and GHI were amalgamated under GMHI
- GMHI acquired 8 employees from GHI
- Since amalgamation, GMHI has invested \$6.9 million in district energy projects in downtown Guelph and the HCBP
- In July, 2015, Envida was awarded a 20-year contract to supply electricity to the Ontario grid from a 10 MW natural gas-fired CHP; if built, CHP would serve as heat source for the DE system in downtown Guelph
- Following a close examination of the thermal potential in HCBP and downtown Guelph by Ontario district energy experts, a general lack of thermal loads in the two nodes implies that CHP plants will likely not be built. This leads to Envida being required to take asset write-offs and write-downs





## ASSET WRITE DOWNS

- District energy assets in HCBP and downtown Guelph will not generate sufficient cash flows over their useful lives to fully recover the costs of installing these assets.
- The required asset write-down / write-off amounts to:

Hanlon Creek Business Park District Energy System	\$5.1 million
Downtown Guelph District Energy System	\$3.6 million



## TAX LOSSES -- GMHI

- GMHI's income is derived primarily from dividends paid by GHESI, and from interest on monies loaned to its subsidiaries. Because these intercompany dividends are not treated as taxable income, the company is typically in a "taxable loss" position as its other sources of income are insufficient to meet its ongoing operating expenses



# TAX LOSSES -- GMHI

## GMHI

### Non-Capital Loss Continuity Worksheet

Year of Origin	Non-Capital Loss	Expiry Date
2015	\$ 3,003,425 <sup>1</sup>	December 31, 2035
2014	388,429	December 31, 2034
2013	1,032,064	December 31, 2033
2012	2,218,324	December 31, 2032
2011	1,746,480	December 31, 2031
2010	562,622	December 31, 2030
2009	-	
2008	3,880	December 31, 2028
2007	143,911	December 31, 2027
2006	1,496,796	December 31, 2026
	<u>\$ 10,595,931</u>	

<sup>1</sup> Estimate subject to review by KPMG

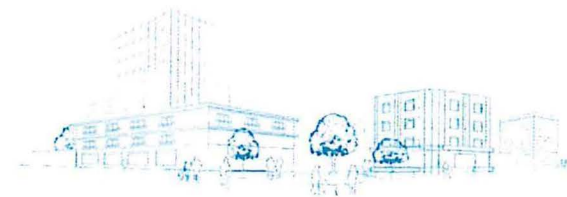
- Since 2006, a total of \$10,595,931 in tax losses have accumulated. These tax losses may be applied against future income earnings but are subject to an expiry date





## TAX LOSSES -- ENVIDA

- Envida also generates tax losses since its taxable income from operations (solar installations, district energy projects, Eastview Landfill Gas Plant) does not offset its expenses (fuel costs, water charges, land lease payments, maintenance of equipment by contractors, Board of Director costs, etc.)
- Note: Envida has no employees so there are no salary and benefit costs.





# TAX LOSSES

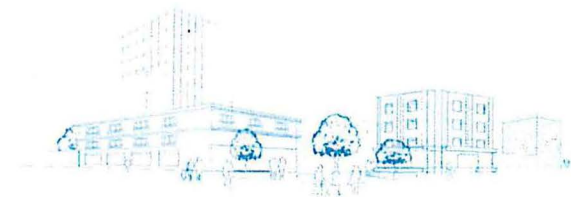
Envida

## Non-Capital Loss Continuity Worksheet

Year of Origin	Non-Capital Loss	Expiry Date
2015	\$ 761,290 <sup>1</sup>	December 31, 2035
2014	2,230,110	December 31, 2034
2013	81,592	December 31, 2033
2012	1,455,957	December 31, 2032
2011	758,000	December 31, 2031
2010	845,488	December 31, 2030
2009	939,360	December 31, 2029
2008	269,516	December 31, 2028
	<u>\$ 7,341,313</u>	

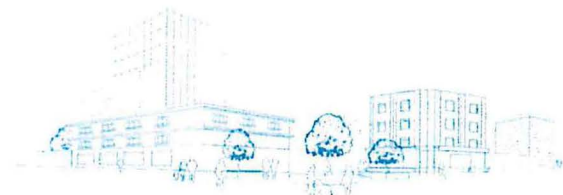
<sup>1</sup> Estimate subject to review by KPMG

- Since 2008, a total of \$7,341,313 in tax losses have accumulated.
- These losses may be applied against future income earnings but are subject to an expiry date



## INTER-COMPANY LOANS

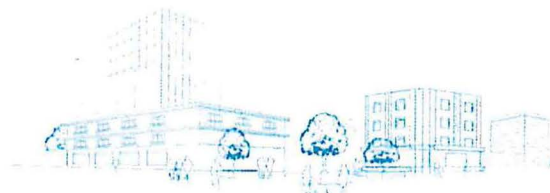
- As of the end of 2015, Envida owes GMHI \$11.8 million related to funds invested in the Eastview Landfill Biogas Plant, district energy assets, and related to costs for corporate services and operating needs over the past five years
- Given the current state of operations, it is unlikely that Envida will be able to repay this loan and forgiving this loan may need to be considered





## ASSET SALES TO GHESI EASTVIEW AND SOUTHGATE SOLAR

- GHESI is allowed to invest in certain generation assets up to 10 MW as part of permitted distribution activities
- To alleviate some of the financial pressures in Envida, GHESI and Envida have begun exploring the sale of the Southgate solar assets and the Eastview Landfill Biogas plant to GHESI
- Should the sale be economically viable, the acquisitions will require approval by the OEB



# Q & A

## Questions





**June 13, 2016 – District Energy Materials from Previous Council Meetings –  
Report Number CAO-LR-1612**

Attachment #10: Minutes of Guelph City Council May 16, 2016

**Extract from Guelph City Council Minutes – May 16, 2016**

**GMHI-2016.1 Financial History of the GMHI Group of Companies**

7. Moved by Councillor Hofland  
Seconded by Councillor MacKinnon

That the report titled 'Financial History of the GMHI Group of Companies', be received.

*VOTING IN FAVOUR: Mayor Guthrie, Councillors Allt, Bell, Billings, Downer, Gibson, Gordon, Hofland, MacKinnon, Piper, Van Hellemond and Wettstein (12)*

*VOTING AGAINST: (0)*

CARRIED

8. Moved by Councillor Gibson  
Seconded by Councillor Billings

That the presentation and report on the financial history of the GMHI group of companies be referred to the June 13, 2016 Council meeting.

*VOTING IN FAVOUR: Mayor Guthrie, Councillors Allt, Bell, Billings, Downer, Gibson, Gordon, Hofland, MacKinnon, Van Hellemond and Wettstein (11)*

*VOTING AGAINST: Councillor Piper (1)*

CARRIED

9. Moved by Councillor Downer  
Seconded by Councillor Allt

That the closed minutes and accompanying material of November 23, 2015 with respect to District Energy Strategic Long Term Financial Plan, with the necessary redactions, be made public in conjunction with the materials for June 13, 2016 Council.

*VOTING IN FAVOUR: Mayor Guthrie, Councillors Allt, Bell, Billings, Downer, Gibson, Gordon, Hofland, MacKinnon, Piper, Van Hellemond and Wettstein (11)*

*VOTING AGAINST: Councillor MacKinnon (1)*

CARRIED

10. Moved by Councillor Downer  
Seconded by Councillor Allt

That the closed minutes and accompanying material of February 29, 2016 with respect to Decision Chronology: District Energy, be made public with the necessary redactions in conjunction with the material for June 13, 2016 Council.

*VOTING IN FAVOUR: Mayor Guthrie, Councillors Allt, Bell, Billings, Downer, Gordon, Hofland, Piper and Wettstein (9)*

*VOTING AGAINST: Councillors Gibson, MacKinnon and Van Hellemond (3)*

CARRIED



# STAFF REPORT

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**Attachment # 2  
City of Guelph Downtown  
And  
HCBP District Energy Business Case  
July 2016**

# City of Guelph Downtown and HCBP District Energy Business Case

July 18, 2016



# Table of Contents

- Introduction
- Overview
- Gap Analysis
- Options Analysis: Methodology
- Options Analysis: Operate As-Is
- Options Analysis: Preserve Opportunity for Growth Option
- Scoring of Options
- Summary Recommendations



# Introduction

# Purpose of this Report

## Background

Deloitte together with technical consultant FVB Energy Inc., has been engaged by the City of Guelph (the “**City**”) to produce a business case to evaluate GMHI’s investments in the Downtown Galt District (“**Downtown**”) and Hanlon Creek Business Park I (“**HCBP**”) District Energy (“**DE**”) Nodes (together the “**Nodes**”), and consider three potential Options (the “**Options**”):

1. **Exit Option:** Exit the DE business and, specifically, shut down the operations at both Nodes;
2. **Operate As-Is:** “Stabilize” the current investment in both systems and continue operations under the current contractual agreements, without investing significant capital on infrastructure expansion or spending on business development activities.
3. **Preserve Opportunity for Growth Option:** Continue to operate the current investments within both Nodes and actively assess and position for future investment opportunities in these Nodes.

This report intends to communicate the findings and recommendations of Deloitte and FVB Energy Inc., based on the following outline (the “**Report**”):

### BUSINESS CASE

- Background on the current investments and Options to be analysed;
- Strategic objectives of the City;
- Benchmarking factors of success for DE systems;
- Findings from Gap Analysis discussions with the City and Envida, and review of information provided;
- A decision criteria methodology for analysis of the Options;
- A detailed analysis of the Operate As-Is Option;
- A detailed analysis of the Preserve Opportunity for Growth Option, including preconditions required for potential growth; and
- Final recommendations & risks.

# Methodology and Approach

As illustrated below, the engagement followed a two-step approach, consisting of a preliminary gap analysis in which information was gathered with a specific focus on reviewing and concluding on the Exit Option with respect to the City's objectives. The second step involved an Options Analysis for the remaining 2 Options (the As-Is and the Preserve Opportunity for Growth Option).

## Gap Analysis (Current condition and Exit Option review)

- Held kickoff meeting to establish project requirements and information requirements for review.
- Conducted review of documentation provided by the City.
- Held meetings with the project team (City and Envida) to discuss the basis for the current DE investments.
- Identified high level opportunities and constraints for the City.
- Conducted a site visit and a technical performance review of the Nodes.
- Reviewed both Thermal and CHPSOP contracts for each Node.
- Presented results of the Gap Analysis to the Executive Team.
- Concluded on the viability of the Exit Option.

## Options Analysis (As-Is and Preserve Opportunity for Growth Option)

- Identified strategic considerations for the Options analysis.
- Developed Options analysis methodology in conjunction with the City.
- Established benchmark metrics for the Options analysis.
- Assessed growth outlook for the City and specifically for the two Nodes.
- Incorporated feedback from technical review.
- Performed Options analysis using the methodology developed for the City.
- Developed ranking of Options.



# Limitations

Our work was performed in the period March 2016 - July 2016. The scope of Deloitte's review for this Report is subject to limitations set out below.

Deloitte has relied on the documents, which were assumed to be valid and accurate, provided by the City and Envida and on clarifications sought during conversations with the City and Envida.

It is understood and agreed that the Report may include advice and recommendations, but all decisions in connection with the implementation of such advice and recommendations shall be the responsibility of, and made by, the City.

Deloitte retained FVB Energy Inc. as a sub-consultant to conduct a technical review of the Nodes. All technical conclusions on operations and performance are based on the findings of FVB Energy Inc.

This Report is focused solely on commercial considerations related to the financial components of the Nodes, and does not constitute legal advice. Deloitte has assumed that the City will retain a legal advisor to review any legal considerations. This Report is not intended to be:

- An examination of DE in the City at other Nodes or locations;
- A long-term projection of financial performance including revenues, expenses and returns;
- A retrospective review of prior investments;
- A “scorecard” of historical performance; or
- An analysis of DE systems in North American cities.

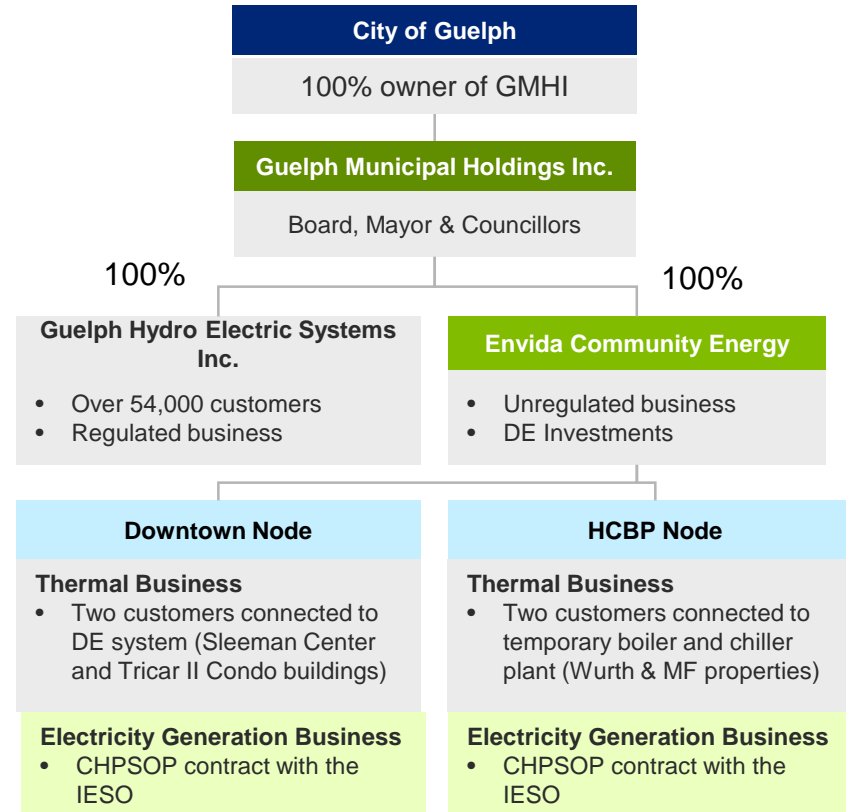
This Report is intended solely for the information and confidential internal use of the City and is not intended to be, and should not be, used by any other person or entity. No other person or entity is entitled to rely, in any manner, or for any purpose, on this Report.

# Overview

# Background

ENVIDA Community Energy, a subsidiary of Guelph Municipal Holdings Inc., has made investments in the Downtown Galt DE and Hanlon Creek Business Park DE Systems.

Each Node consists of a system connected to revenue paying customers each under Thermal Energy Service Agreements (“**TESAs**”). Each Node has a Combined Heat and Power Standard Offer Program (“**CHPSOP**”) contract with the Independent Electricity System Operator (the “**IESO**”).





# Strategic objectives of the City

## Community Energy Initiative (“CEI”)

The CEI, approved by the City in 2007, outlines a comprehensive roadmap to 2031 aiming to provide clean, reliable and competitive energy to a population expected to grow by 50%. The objectives set forth under this initiative were as follows:

- The City will become a location of choice for investment;
- A variety of reliable, competitive energy, water, and transport services will be available to all;
- Energy use per capita and resulting Greenhouse Gas (“**GHG**”) emissions will be less than the current global average;
- Energy and water use per capita will be less than comparable Canadian cities;
- All publicly funded investments will visibly contribute to meeting CEI goals; and
- By 2031, the City will use 50% less energy and reduce its GHG emissions by 60% per resident.

The CEI and its objectives are assumed to still apply. This acted as the basis for the development of the Option analysis framework in the Report.

## District Energy Objectives

The following objectives were set forth for DE in general by the City as part of the CEI and its 2031 implementation horizon:

1. Cover at least 50% of City heat demand;
2. Grow into new developments and areas;
3. Operate profitably; and
4. Result in customer satisfaction equal to or better than typical alternatives of heating through oil or natural gas.

Objectives 3 and 4 were assumed by Deloitte to still be relevant from an Options analysis perspective. Objectives 1 and 2 were not deemed to be mandatory objectives which must be met in the Options analysis.

# Benchmarking factors for success

DE systems follow different development cycles than typical infrastructure development in that systems are sized for known demand rather than for growth. The key factors driving a successful DE business are summarized below:

## Drivers of District Energy Success

- 1. Connection Incentivizing Policies:** Most successful DE systems, especially in a North American context, require the catalyst of municipal policies to encourage connections to a DE system:
  - The “build-it and they will come” approach does not work with DE systems as, unlike typical municipal infrastructure, these systems need to respond to market demand and cannot be oversized as there are limited costs that can be passed through to developers as scale is achieved (as can be done for roads, water infrastructure, etc.);
  - Examples of municipal policies include: mandatory connection laws (e.g. BC), densification bonuses (e.g. City of Calgary), development fee rebates (e.g. City of Toronto), or fast-track permitting (e.g. City of Markham).
- 2. Thermal Energy Service Agreements:** TESAs are the primary source of generating revenues for the DE system and; therefore, need to be structured to achieve returns on all costs (capital and operating). In addition, the contracts should ideally be structured to allow for stable recovery of a majority of invested capital through a ‘capacity charge<sup>1</sup>’ vs. energy sales alone which could fluctuate based on usage;
- 3. “Anchor” loads:** Anchor customers (i.e. customers with large year round thermal energy needs) at each Node should be identified and connected to the DE system. Anchor loads are critical to the success of the DE Systems especially for district cooling;
- 4. Experienced Team:** An experienced DE Management/Marketing team is required to operate in a niche market. Marketing teams, in particular, are critical to overall financial performance of DE businesses;
- 5. Scale:** An operational scale of 2-3 million ft<sup>2</sup> for the entire system within the first 5-7 years of operations is suggested to achieve typical market returns; and
- 6. Density:** Due to the cost of piping and installation, buildings should be situated within 3km of the central plant.

*(1): Capacity charges are charges paid for recovery of fixed costs associated with the delivery of energy.*

# Background

The analysis considers three Options identified by the City and described below:

1

## **Shutdown / Exit Option**

Shutdown of the operations at both the HCBP and Downtown Nodes and exit the investments.

2

## **Operate As-Is**

Stabilize the current investment in both systems, and continue operations under the current contractual agreements, without investing capital in expansion or incurring costs on business development activities.

3

## **Preserve Opportunity for Growth Option**

Continue to operate the current investments within both Nodes and actively assess and position for future investment opportunities in these Nodes through business development activities such as marketing, development of policy and a pricing strategy. This option does not require expansion or capital investment.

# Gap Analysis



# Gap Analysis

## Overview

An overall review was performed to establish an understanding of the commercial, financial, and technical state of the Nodes. The review looked at:

- Key timelines and approvals upon which the current investment is predicated;
- The commercial parameters involved in the original investment decision;
- The historical financial performance of the Nodes.

### KEY QUESTIONS

**A** Are the investments performing well on both a financial and technical basis?

**B** What are the drivers underlying the financial performance, if any? Do these apply to both Nodes?

**C** What are the key features of the existing contracts?

**D** What is the cost of exiting the current investments?

**COMMERCIAL,  
TECHNICAL, AND  
FINANCIAL STATE OF  
CURRENT NODES**

# A Financial Performance

- Both investments were subject to an impairment in 2015 due to poorer than expected financial performance.

## Forecasted financial performance of the Nodes:

Downtown	Average	Cumulative	NPV <sup>(1)</sup>
Operating Revenue	\$377,550	\$7,551,002	\$5,925,086
Operating Costs	\$203,126	\$4,062,521	\$2,686,912
<b>Operating Cash Flow</b>	<b>\$174,424</b>	<b>\$3,488,480</b>	<b>\$2,238,174</b>
Capex	\$0	\$0	\$0
<b>Net Cash Flow</b>	<b>\$174,424</b>	<b>\$3,488,480</b>	<b>\$2,238,174</b>
<b>Downtown IRR</b>	<b>4.2%</b>		

HCBP	Average	Cumulative	NPV <sup>(1)</sup>
Operating Revenue	\$57,627	\$1,152,542	\$713,511
Operating Costs	\$91,321	\$1,826,410	\$1,211,707
<b>Operating Cash Flow</b>	<b>(\$33,693)</b>	<b>(\$673,868)</b>	<b>(\$498,196)</b>
Capex	(\$17,500)	(\$350,000)	(\$225,581)
<b>Net Cash Flow</b>	<b>(\$51,193)</b>	<b>(\$1,023,868)</b>	<b>(\$723,777)</b>
<b>HCBP IRR</b>	<b>-6.1%</b>		
<b>Total Net Cash Flow</b>	<b>\$123,230</b>	<b>\$2,464,611</b>	<b>\$1,514,396</b>
<b>Total IRR</b>	<b>-1.9%</b>		

*Source: Envida estimates and projections. Capex for HCBP is presented at the lower end of the expected range of \$300,000-\$400,000, per FVB estimate.*

*(1) NPV discounted at a Weighted Average Cost of Capital ("WACC") of 4.07% over assumed 20 year asset life, per Envida model*

*(2) The Internal Rate of Return ("IRR") has been calculated using the values of the investments after the impairment.*

# A Technical Performance

As part of the detailed technical review and operational assessment, FVB Inc. concluded that:

- There are no immediate operating concerns with the installed infrastructure at the Nodes but some best practices are currently not met.

# B Drivers of Financial Performance

Based on discussions and information provided by the City and Envida, key findings are presented below:

## Financial Performance

1

### Financial Performance

1. Annual Operating losses of approximately \$50K projected by HCBP Node for the duration of the remaining operating term. The Downtown Node runs an annual operating cash flow of approximately \$174.4K by comparison.

**Finding: Current load offtake and revenues from the two customers is not sufficient to make the HCBP Node profitable. Comparatively, the Downtown Node is expected to continue to generate positive cashflows over the term.**

2

### Growth

1. No incentive strategy in place to sign new customers as part of a growth plan Downtown or at HCBP, and marketing activities for both Nodes have been stopped.

**Finding: Based on recent growth forecasts, a customer acquisition strategy needs to be developed which focuses on incentivizing new developments to connect to the DE system as well as identifying and confirming key customers to pursue.**

3

### Sizing

1. Current Downtown and HCBP capacity is fully committed to the existing customers for the current infrastructure. Current size does not allow for additional capacity to be connected.
2. Scaling operations as additional customers are acquired has not been explored as an Option to date.

**Finding: Detailed plan for scaling operations needs to be developed which ties in growth based on customer acquisition.**

4

### Funding

1. Funding was provided as related party financing through GMHI as a combination of equity (\$6.8M), construction. financing (\$1.8M) and an inter-company note from Envida to GMHI (\$9.2M).
2. There is no remaining unallocated capital remaining for capital expansion.

**Finding: Further capital should not be deployed on either Node without first securing customer service agreements.**



# Key Features of Existing Contracts

The contracts were reviewed but due to the confidential nature of these contracts, details are not provided except for an overall summary:

## **CHPSOP Contracts**

- In order meet contractual obligations, both Nodes would need to be expanded. The cost of this expansion is estimated at approximately \$59.7 million vs. liquidated damages of \$612,000 (i.e. a call by the IESO on the two performance security letters of credit estimated as \$306,000 per Node).
- It is unlikely that the Useful Heat Output (UHO) obligations outlined in the CHPSOP contracts would be met.

## **TESA Contracts**

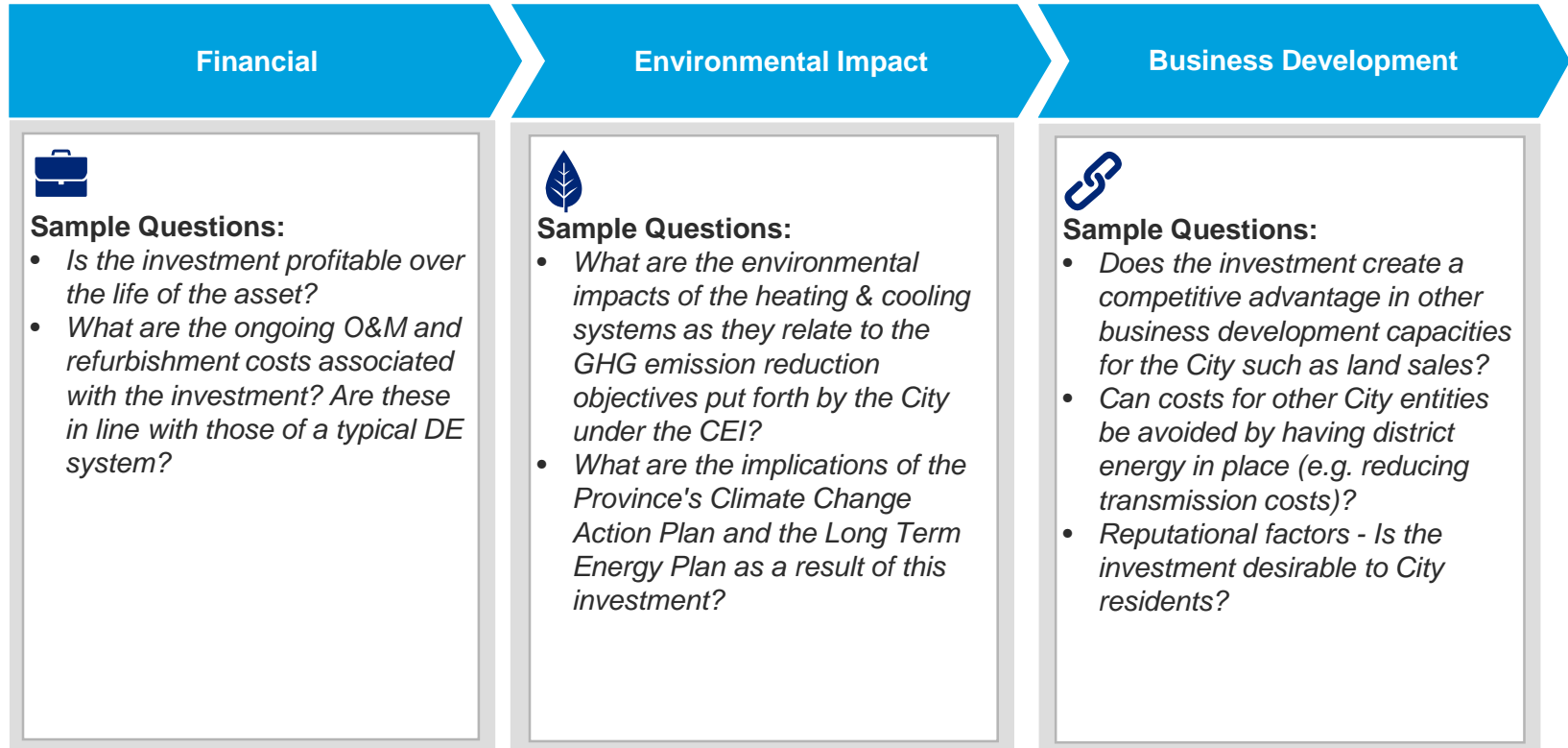
- There is no “Termination for Convenience” clause in place for the TESAs.
- The current investments could not be abandoned without significant risk. The Exit Option is not recommended for the TESAs for both the Downtown and HCBP Nodes.

# Options Analysis

## Methodology

# Decision Criteria

The Options Analysis considered the following three criteria and associated questions:






# Options Analysis

## Operate As-Is



## 2 Operate As-Is

# Risk and Benefit Analysis

Financial	Environmental Impact	Business Development
 <p>The HCBP Node is projected by Envida to operate at an annual loss of \$50K for the duration of the operating life and will require refurbishment costs of \$300,000 to \$400,000 in Year 10-12.</p> <p>The Downtown Node has projected annual profits of approximately \$174,424.</p>	 <p>There is no environmental benefit achieved by the Nodes due to the operational inefficiency of the temporary chillers, per FVBs review. Environmental benefits can only be realized once full scale and permanent system are put in place at the respective Nodes. Benefits in GHG reductions would vary with the scale or technology of the facility.</p>	 <p>Business development in this Option is not required as the Nodes both operate at full capacity. The City and Envida have ceased all marketing and development activities and therefore no further benefits would be realized.</p>

## 2 Operate As-Is

# Conclusions

### Downtown Node

- The Node is in good condition and is expected to perform in line with current results and be profitable based on current projections provided by Envida.
- The heating system at the Node is commercially viable at its current operating state, while the cooling loads are insufficient to operate a sustainable DE cooling business.

### Hanlon Creek Business Park Node

- Financial performance of this Node is poor due to insufficient load offtake and low pricing. The Node is projected to run an operating loss of ~\$47,000 annually throughout the life of the asset and will likely require a refurbishment within Year 10-12 of the TESA.
- The cooling and heating loads are insufficient to meet contracted requirements. The operating performance and life expectancy of the asset are being impacted as a result of the equipment currently in use.

### Findings

**The Nodes together as a portfolio are considered to be largely breakeven from a financial perspective. The Nodes is already operating at full capacity thus there is limited potential for adding new customers without an expansion. This would imply a cessation of marketing and business activities in this Option. As a result, running the Nodes as-is represents a low risk Option for the City, as the financial impairment has already been recognized. The City and Envida would then not be in place to take advantage of any future market changes or potential growth opportunities.**

# Options Analysis

## Preserve Opportunity for Growth Option

### 3 Growth in the City

## Backdrop of strong growth expected

### Background and Opportunity for the City

The City is located within the western Greater Golden Horseshoe (GGH), which is one of the fastest growing and most productive economic regions in North America. Currently, the region is home to nine million people which represents more than 25% of Canada's population and generates roughly 25% of Canadian GDP. The GGH is expected to see a significant increase in population levels over the next 25 years so that by 2041, an estimated 13.5 million people will call the region home with employment expected to rise by 2 million jobs. This growth will lead to demand for significant new business investment, building space and economic development opportunities

If these projections are achieved, the GGH will see its population increase by almost 50%. By 2041, the economic region will be roughly the current size of the Chicago Metropolitan Area. With strong and growing clusters in financial services, information technology, agri-food and food processing, life sciences, aerospace and other advanced industry, the GGH has the potential to emerge as an economic 'super cluster' within the Province, Canada and the North American and global marketplace. A network of international and regional airports, rail lines, ports and intermodal yards is already in place, as well as a well-developed 'innovation infrastructure' in the form of secondary education, technical colleges and research institutions, particularly in the City of Toronto, Kitchener-Waterloo and City.

### Positioning Guelph for Investment Attraction

The City has the potential to play an important role in the future growth of the broader economic region. The current population and employment forecast of 130,670 and 66,730 (*Late 2013 estimate, Guelph DC Background study, Mar 21, 2014*) respectively, is expected to grow to 175,000 residents and 92,000 jobs by 2031 and 191,000 residents and 101,000 jobs by 2041. The combination of a location outside the greenbelt between the Greater Toronto Area (GTA) and Kitchener-Waterloo, good highway transportation access and proximity to air and rail infrastructure, bus and potential GO transit access, educational institutions and relatively affordable housing positions the City well to compete for new business investment.

### Key Challenges

As the City looks forward to a period of significant growth and economic opportunity, and with the rapidly evolving global competitive environment, it is clear that the municipality needs to refocus and accelerate its efforts to capture new business investment. To this end, the City has undertaken a number of initiatives including the preparation of strategic directions for economic development and tourism (Prosperity 2020), Guelph's Agri-Food value proposition and a Foreign Direct Investment (FDI) strategy and implementation plan. The City also intends to have a Municipal Comparator Study undertaken to provide the necessary benchmarking and comparative assessment to understand key factors influencing site selection and business investment decisions.

*Source: Guelph - Guelph DC Background study, Mar 21, 2014*



### 3 Growth in the City

## General growth trends do not result in DE growth

### Constrained potential for District Energy Uses

Despite a generally growing region and City, the type of growth anticipated and seen to date raises challenges to DE demand and growth. Based on a review of growth forecasts for the City in terms of population, employment and non-residential space, it seems **development prospects and municipal land sale projections to support DE may be constrained** based on the following trends :

- **Lack of demand for High energy institutional and commercial uses:** The current forecast projects a lower share of institutional or high density commercial uses that are more suited to DE. Uses such as institutional facilities like hospitals, university areas offering a mix of academic and student accommodation uses as well as high density office towers provide a consistent energy load and are better candidates to benefit from DE uses. In the current forecast to buildout, of the 23 million sf forecasted, only 3.4 million sf is institutional space. While 5.9 million sf is the forecast commercial space, the general market trend is resulting in a mix of small scale office and population growth related commercial uses.
- **Challenges for the current employment structure to move to advanced industry:** Due to heavy concentrations in the struggling manufacturing sector in the Province in general, the current employment structure and labour force present challenges for the economy to transition to advanced industry uses. Industrial growth is also anticipated in late 2023 onwards making reliance from an investment in DE perspective uncertain.

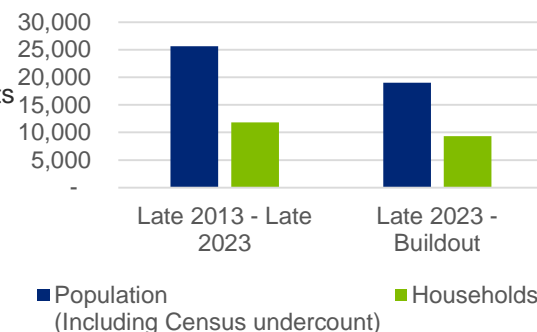
### Understanding the employment space forecasts

Considering the **employment structure** in Guelph and **space distribution based on historic employment absorption (1984 to 2006)**, it is clear that manufacturing has been a dominant sector in the City.

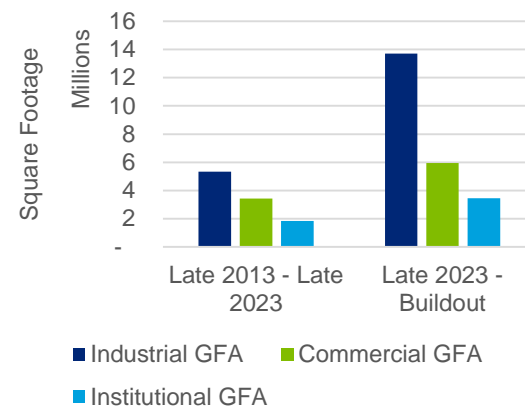
However, given recent economic and market changes, especially post-2008, there has been a greater market demand for warehousing / distribution, office and retail sectors, which are not ideal candidates for District Energy uses.

**Given the uncertainty around the end use of employment lands, there is a lower investment incentive to build infrastructure and capacity. The suitability of future developments for DE must be considered.**

Population and Household Forecast



Non-residential Space Forecast



Source: Guelph - Development Charge Study, Aug 2013

### 3 Expansion of Existing Nodes

## Growth Forecasts for the Nodes

Following a review of general growth trends expected in the City, the growth prospects within the municipal capital planning horizon (0-5 years) were examined specifically to develop immediate forecasts for growth in the Nodes. The analysis takes into account assumptions around publicly and privately controlled facilities and applying a discount factor typical for DE uptake.

Future development plans of the Downtown core identified several buildings that are expected to be occupied within the next five years. Following are summary observations from this analysis:




- There is adequate heating load Downtown for a district heating system to be viable. On the other hand, the cooling load is insufficient for a district cooling system.
- A significant difference between HCBP and Downtown is that the land use is weighted more towards industrial and warehouse use. District energy is almost never used in warehousing buildings, as there is typically insufficient thermal load to justify the connection to the system. In general, HCBP does not represent a good fit for district energy as the projected building types (industrial/warehousing) typically have very low heating and cooling loads.

	Downtown DE System	HCBP DE System
Projected Heating Load (Current load in brackets)	3.8 MW (1.6 MW)	1.3 MW (0.2 MW)
Projected Cooling Load (Current load in brackets)	2.4 MW (1 MW)	0.9 MW (0.2 MW)
DE System Recommendation	<ul style="list-style-type: none"> <li>• <b>Heating only system is viable, continue investments into the DE system based on potential to connect to developments Downtown.</b></li> <li>• Not enough load for district cooling; discontinue future investments</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Not enough load for heating or cooling</b></li> <li>• Building density is too low</li> <li>• Building usage is not appropriate for DE</li> </ul>

Source: FVB Energy Inc. Guelph Review of Loads and CHPSOP Contract Memo 2016-05-11

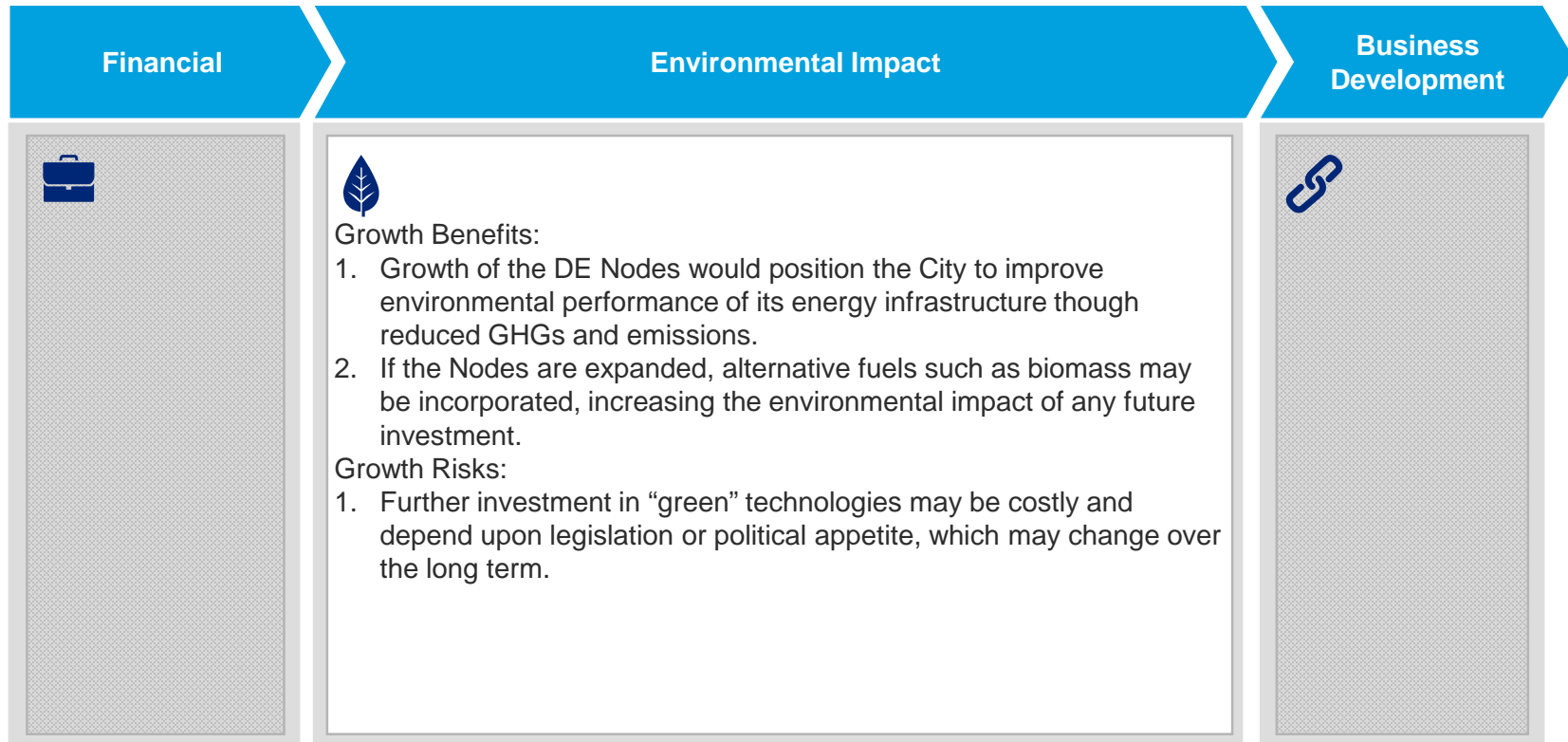
### 3 Preserve Opportunity for Growth Option

## Risk and Benefit Analysis

Financial	Environmental Impact	Business Development
 <p>Growth Benefits:</p> <ol style="list-style-type: none"><li>1. Forecasts for DE expansion show limited but possible growth in the Downtown Node. If growth is undertaken strategically with tactical negotiations of contracts, the City would be positioned to expect to generate a Return on Investment of 8%-10%. Profitability would depend on pricing strategy.</li></ol> <p>Growth Risks:</p> <ol style="list-style-type: none"><li>1. Larger scale growth will depend on type of growth that is achieved in the City over the next five to seven years which cannot be predicted.</li><li>2. Commercial financing for full scale DE systems would likely require a secured anchor tenant.</li><li>3. Only a small proportion of the buildings that can be connected are controlled by the City leading to limited growth potential.</li><li>4. There is no connectivity incentive program aimed at connecting potential customers to the network which makes connectivity rates more uncertain.</li></ol>		

### 3 Preserve Opportunity for Growth Option

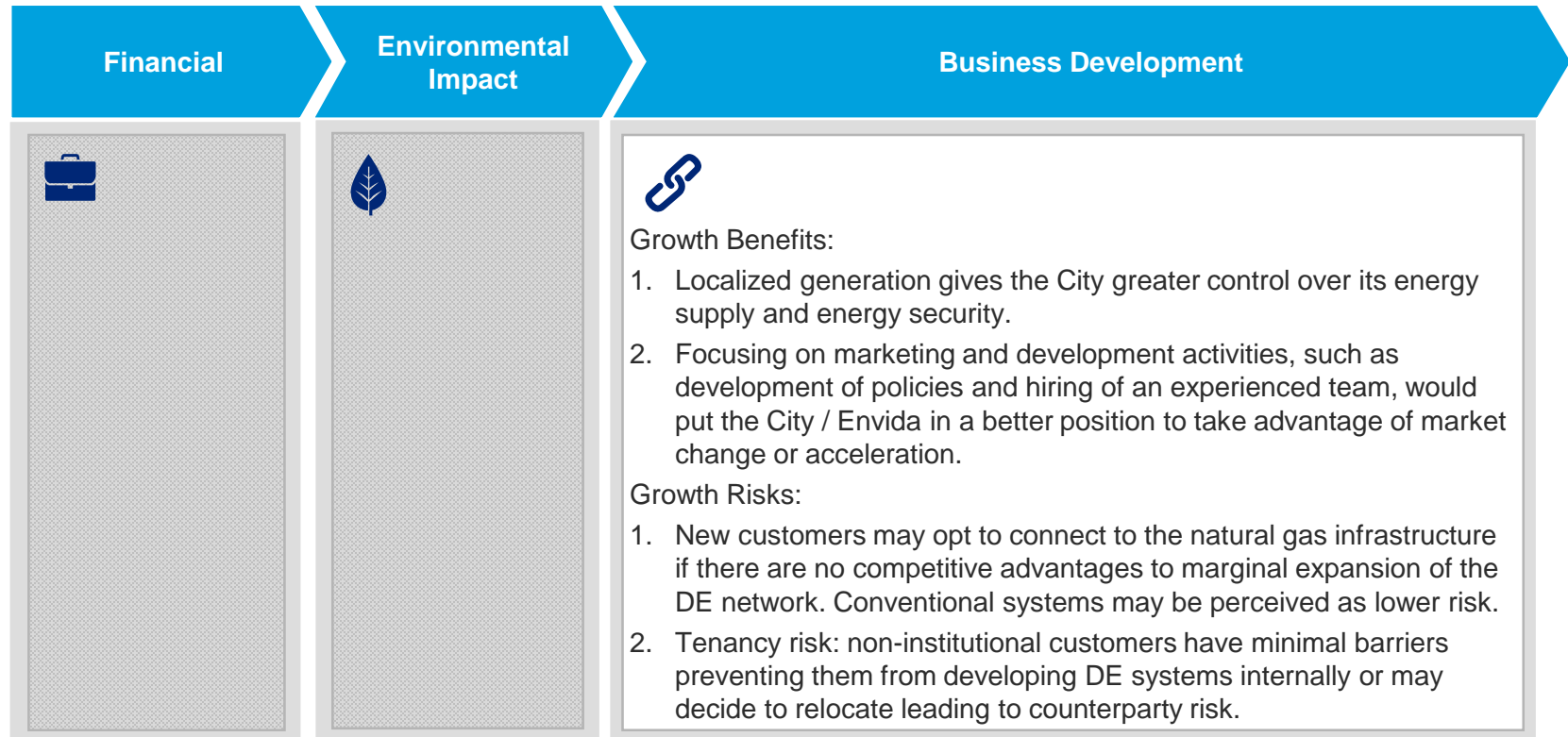
## Risk and Benefit Analysis





### 3 Preserve Opportunity for Growth Option

## Risk and Benefit Analysis



# 3 Preserve Opportunity for Growth Option

## Conclusions

### Downtown Node

- Given the load potential in the Downtown area, a heating system would be viable and should remain the City's focus for any growth Options in the Nodes.
- If the CHPSOP contract can be renegotiated at the Downtown Node there is a potential upside on financial returns without incurring penalties on default.
- Further capital for growth should only be deployed once customers are identified and sufficient revenues are guaranteed in order to offset development costs.

### HCBP Node

- Heating and cooling loads are too low to justify an expansion to the DE system. Furthermore, the building type and distribution do not represent desirable DE customers as loads for industrial & warehousing customers are typically low.

### Findings

**Beyond any specific growth in the Downtown Node, the Preserve Opportunity for Growth Option can be more properly characterized as an investment in future market development opportunities. Based on the City's own outlook, and broader outlook in the region, growth and intensification is expected in the long-term. While it is difficult to predict the level and type of demand, by focusing on the development on incentive and connection policies, and market development activities, the City can put itself in a better position to take advantage of changes in the market. This is a low cost Option for the City as it does not require any future capital investment until specific customers are identified and key terms are negotiated upfront.**

# Scoring of Options

# Evaluation Framework

## Scoring of Options



Options 2 and 3 are ranked below. The Exit Option was summarized at the conclusion of the Gap Analysis:

District Energy Evaluation Criteria	Option 2: Operate As-Is	Option 3: Growth	Details / Summary
Criteria 1: Financial			<ul style="list-style-type: none"> <li>Both Nodes together generate a net positive return (on an NPV basis) and there are no immediate technical concerns with the operating performance. As a result, Option 2 is considered as a low financial risk for the City in general and ranked higher than Option 3.</li> <li>Potential expansion in the Downtown Node is possible and if done tactically, could generate positive returns. Combined with right-sizing of the CHSOP contract, Option 3 could improve financial results over the medium term. However, given uncertainty and risk associated with the Option, it is not ranked higher than Option 2.</li> </ul>
Criteria 2: Environmental Impact			<ul style="list-style-type: none"> <li>Option 2 does not yield any Greenhouse Gas reduction benefits as the operations are not at sufficient scale</li> <li>While Option 3 would be reliant on having the right scale, density, and load type to realize environmental benefits, the potential of efficient scaling to improve GHG emissions makes this Option higher ranked than the As-Is Option, which shows no environmental benefits.</li> </ul>
Criteria 3: Business Development			<ul style="list-style-type: none"> <li>Option 2 assumes that the City and Envida cease all market development activities and as a result is ranked as 'weak'.</li> <li>With Option 3, the focus of effort will be on business development activities in the immediate term. The main rationale for this Option is to better position the City to take advantage of changes in the market.</li> <li>This is a low cost Option for the City as it does not require any future capital investment until specific customers are identified and key terms are negotiated upfront. Major municipal build out is likely 10+ years away so capital deployment is not imminent</li> <li>Further development could stem from businesses realizing the opportunity to avoid investing in heating and cooling plants, accelerating development, and differentiating from competition. (FVB, International District Energy Association 2016)</li> </ul>
Results			<b>While we weight the Financial criteria more strongly than the others, the low cost nature of pursuing Option 3 combined with the qualitative benefits, result in this Option being slightly better than Option 2.</b>



# Summary Recommendations

# Summary of Recommendations

The final recommendations based on review of all three Options are summarized below:

## Recommendation 1: Operate Nodes “As-Is”

Both of the Downtown and HCBP Nodes should continue to be operated “as-is” at the existing scale with no further deployment of capital at this time.

**Envida should continue to pursue system efficiencies for current operations.**

## Recommendation 2: Develop customer acquisition and pricing strategy

New systems are very capital intensive, thus agreements must be in place sufficiently early in the development cycle of new buildings. Potential customers should be identified and prioritized based on current heating and cooling systems, remaining asset life of their existing systems, location, size, and type of load profile.

**Envida should identify the customers most likely to connect, and those with the best revenue potential (i.e. large, regular, stable anchor loads). It should develop a pricing strategy based on its cost structure. Based on currently available information on upcoming growth, Envida should start developing the strategy for the Downtown Node, however it should not restrict its potential expansion plans to the two current Nodes. Envida should concurrently look at other regions and customers that are strong candidates for DE based on the aforementioned preconditions for DE success.**

## Recommendation 3: Leverage existing resources to develop the DE market

The support of the City in the form of a clear policy platform is critical in incenting customer connections based and future success of the DE system. Meanwhile, developing market intelligence on the potential customer buildings is strategically important and should be a high priority for a professional business development specialist on the team.

**An experienced and effectively incentivized marketing/management team with decision making authority on connecting new customers should be established, allowing any expansion to be streamlined due to tight development timelines of the customers. The team must consist of both senior representation from the City, as needed, and Envida and have the support of experienced DE experts (technical & financial expertise) as and when needed.**

# Summary of Recommendations

## Recommendation 4: Establish connection policies

Typical DE Systems offer incentive strategies to new tenants as a marketing mechanism to attract potential customers. This can be done in a variety of ways. The City currently has yet to implement such policies to incentivize connecting to a DE system. Incentives can come in several forms depending on the strategic direction of the City. Some common incentive policies include:

- Reductions in development cost charges or community amenity contributions;
- Tax revitalization exemptions;
- Streamlined approval processes; or
- Development permit area guidelines encouraging or incentivizing hydronic heating or cooling infrastructure within buildings.

It is recommended that senior representatives from the City work with the marketing team to align proper incentives for customer acquisition.

Section 11.1.6.2.3 stipulates that “**Official Plan Amendment No 43: downtown Guelph Secondary Amendment Plan**” *“Where a district energy system has been established or is planned, new City-owned buildings shall use the system and private development will be encouraged to connect to it.”*

Understanding of customer drivers, such as competitive service cost, aversion to investing in a heating and cooling plant, streamlining development, and differentiation from competition is important in assessing customer incentive strategy.

**The City is recommended to enforce this stipulation among public buildings and create proper incentives for new private developments.**

# Summary of Recommendations

## Risks to Consider

- 1. Growth Forecast Risk:** The City of Guelph is expecting to experience significant population growth (50% by 2041), however the suitability of the growth to DE development is key. Ideal customers include stable institutions and industrial users with significant heating and cooling demands.
- 2. Suitability of Future Customers:** In order for DE Systems to operate at optimal efficiency and environmental effectiveness, the proper combination of load size, load type, and density is required. There is a risk that the City will be unable to acquire the right type of tenants to ensure the Systems operate optimally. Tenancy risk among private sector commercial and certain industrial tenants must also be considered in evaluating potential customers.
- 3. Ineffective Connection Incentives:** Incentives tied to realizing environmental objectives are unlikely to be a selling point for the City, as the owner is more likely to realize the benefits of the DE network. If the City can offer attractive incentives in the form of lower rates, reduced land or development costs, or tax credits, it can be in a competitive position to attract the aforementioned anchor customers through its market building strategy.
- 4. Limited revenue from initial anchor customers:** Owners of existing buildings in the Downtown must have switchover costs that justify the connection costs being offset by the savings from a financial perspective. This is specifically important for the first anchor load that is connected, for which Envida may have to pay the difference in cost between the initial capital spend and the rate passed on to the first customer(s), i.e. a rate mimicking the costs that the building owner would incur if they purchased boilers and chillers, whilst the subsequent customers are being connected to the system. This could result in the anchor tenants being break-even customers from a revenue perspective and extend the payback period on any expansion.





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## Attachment # 3 Financial Implications (DE Options)

Financial Implications	Downtown	HCBP
<b>a) Maintain Current TESA Obligations</b>		
Impact on New Capital	No Further Plant Refurbishment is Required <b>\$0k</b>	Further Plant Refurbishing is Required <b>(\$300-\$400k)</b>
Impact on Operating Revenue	No Further Impact Projected - Net annual Operating Revenue Profit of <b>\$171k</b>	No Further Impact Projected - Net annual Operating Revenue Loss of <b>(\$50k)</b>
<b>Projected TESA Financial Implications</b>	<b>\$171k</b>	<b>(\$984k)</b>
<b>b) Exit Current TESA Obligations</b>		
Impact on New Capital - TESA Contracts	Not applicable - TriCar II building cannot be retrofitted and made "whole"	Anticipated capital costs to make clients "whole" = <b>(\$1.24m +)</b>
Impact on Other Incentives - TESA Contracts	Given the modest return on investment, incentives may be required to sell the system to another party. The cost of these incentives is unknown at this time.	In addition to the noted capital costs, there may also be a requirement to provide additional incentives to make clients "whole"
<b>Projected Financial Implication</b>	<b>N/A</b>	<b>Minimum (\$1.24m+)</b>
<b>c) Maintain Current CHPSOP Obligations</b>		
Impact on New Capital	System upgrade required to provide required output of 9.7MW = <b>(\$29.1m)</b>	System upgrade required to provide required output of 10.2MW = <b>(\$30.6m)</b>
Impact on Operating Revenue	Projected output not achievable to generate required revenues	Projected output not achievable to generate required revenues
Impact on IESO Contracts (Penalties)	306k	306k
<b>Projected CHSOP Financial Implications</b>	<b>(\$291k to \$29.1m++)</b>	<b>(\$984k to \$30.9m++)</b>

June 8/2016

## **DISTRICT ENERGY AND GEERS**

“Guelph’s award-winning District Energy Initiative” is internationally recognized for changing the way cities think about energy”. This statement was taken from a post on the City of Guelph website January 23/2014.

I attended the May 16<sup>th</sup> council meeting to hear Mr. Sardana’s report on GMHI, and was shocked at what I learned. Millions of dollars of public money has been lost on a project that was orchestrated outside of public scrutiny, and pushed ahead in spite of expert advice against it. Guelph’s energy saving efforts have been set back considerably by this failure as there is no environmental benefit from the project .

I believe DE is a wonderful concept, so, I’m upset that it wasn’t done properly. No doubt former Mayor Farbridge and her supporters believed they were doing something good for this city. Their passion for the environment is admirable, but, I feel they failed the city through their arrogance at thinking they knew best. It seems they were in such a hurry to be the first in North America, they wouldn’t even listen to people who know the systems and what is involved in setting them up to be successful.

Equally shocking was the reaction to the report of a few of the councillors. Their questions and comments appeared to be an attempt to downplay the mistakes or defend the decision that had been made. More than once we heard that this isn’t about blame and “lets’ pack up and move on”. The sentiment is nice, but, it’s not fair to the citizens, many of whom are still likely in the dark about all of this. I believe it is necessary for everyone to know what happened and how. It’s not ethical to brush it under the carpet to save face. I feel that was the style of the former council. Mayor Guthrie has demonstrated his ability to admit mistakes and apologize. It would be refreshing to see his lead followed on this issue. I believe the public can accept honesty and apologies better than secrets.

And now we’re moving on to GEERS. It’s a much smaller and less risky initiative, but, I was surprised to hear some councillors push to speed up the process because “climate change won’t wait”, for four months! If this isn’t done properly, we will lose again, so why not take the time to do it right. Do your constituents not deserve that?

I respect those who are passionate about climate change and support some of their ideas. However, I dislike how much of the city resources they want to dedicate to the issue. Passion is great, but, knowledge planning, and balance are equally important. I’m aware that, in the end, everyone voted to move ahead, but, I doubt that was the choice of some. To my knowledge, there is only one councillor who actually has formal education and training on these issues, and that’s Councillor Gibson. He was initially in favour of waiting to do it right. The impression I got was that the urgency was more about the split on council and politics, than a concern about the effect of a four month delay on climate change. I’m sure I’m not alone when I say I’m tired of the constant effort by a few councillors to discredit the Mayor .It serves no one. My hope is to witness a more respectful and collaborative approach in future.

Best Regards,  
Marg Harbin

# Community Energy Initiative (CEI) Update Status Report #1

IDE-BDE-1612  
July 18, 2016

1

## Reporting on CEI Activities To Date

### Several Reports

The CEI is an overarching, multi-faceted program. District Energy and the Corporate Energy Management Program are elements of the CEI.

1. **Community Based CEI Activities** – A progress report was provided to Governance Committee April 5, 2016 in Staff Report IDE-BDE-1604 and is not re-presented here.
2. **District Energy** - Further reporting on District Energy is provided in Staff Report IDE-BDE-1615.
3. **Corporate Energy Management Plan (CEMP)**- Reported in IDE-BDE-1612 (this evening)

2



## CEI Update Activities

### Analytical Tools

1. Scope of Work developed
2. Market scan underway
3. RFP by July 30, 2016

For:

- Inventory of available tools for Community Energy Planning;
- Updated baseline (2014 or 2015 depending on data availability);
- Development of energy maps;
- Market, legislative and regulatory scan;
- Revised target recommendation(s) for efficiency, energy distribution and local generation;
- Implementation strategy recommendations.

3

## CEI Update Activities

### Community Engagement

- Draft Terms of Reference for the Advisory Committee :
  - Purpose
  - Mandate
  - Membership
  - Role of the Chair
  - Advisory Meetings
  - Decision-Making
  - Administration
  - Roles and Responsibilities
  - Reporting Relationship
- Criteria for participation in the Community Advisory Committee is included in the Draft Terms of Reference.
  - Private-Sector Market Participants
  - Large Energy Consumers
  - Community Groups
  - Faith-based Groups
  - Business Groups
  - Interest Groups
  - Experienced individuals
  - Academia
  - Transportation Experience
  - Experience with Energy and Economy

4

## CEI Update Activities

### Workplan

Next report on the CEI Update process is targeted for the November 7 Committee of the Whole Meeting to report on:

#### Update Development Activities

- Results of the consultant selection process;
- Membership of the Community Advisory Committee;
- Stakeholder map Community Engagement Plan;
- Engagement activities through Q3 and Q4 2016 and Q1 2017;
- Results of outputs to date from the Analysis activities; and
- Update on project funding.

#### CEI Update Outputs

- Recommended reporting protocols.
- High level indicators for reporting.
- Reporting responsibility.
- Cost-Benefit and Economic Impact Analysis

5

## CEI Update Activities

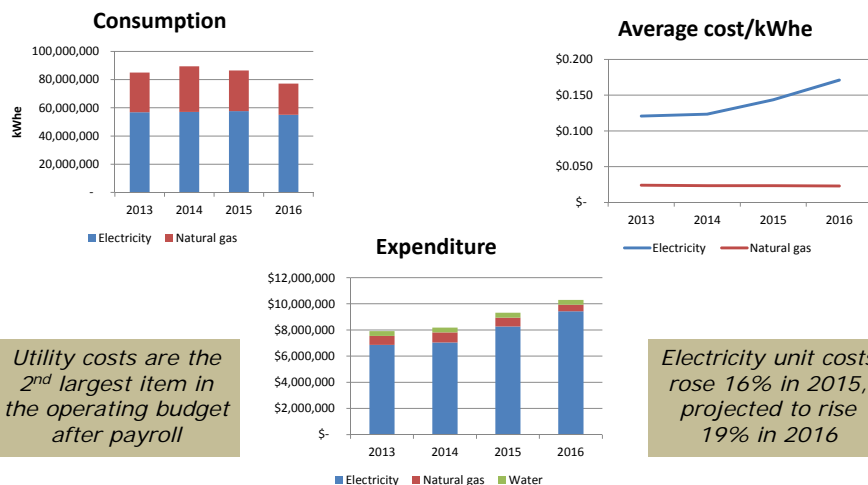
### Funding

- Budget for CEI Update remains at \$150,000
- Funding relationships are strong
- Applications to Ontario Ministry of Energy and Federation of Canadian Municipalities Green Municipal Funds underway. Confident of successful support \$\$\$\$
- Other potential funders emerging

6

## CEMP – Corporate Energy Use

### Consumption vs Costs



## CEMP - Energy Management Measures

### Driving down energy consumption, reducing costs

Completed <sup>1</sup>			Planned and in-progress <sup>2</sup>		
Facility	Investment	Avoided cost/yr	Facility	Investment	Avoided cost/yr
Transit	\$224,200	\$27,334	WECC	\$685,478	\$71,588
45/50 Municipal	\$167,200	\$6,812 <sup>3</sup>	Evergreen Centre	\$159,109	\$16,242
Sleeman	\$507,607	\$53,684	River Run	\$312,958	\$53,018

<sup>1</sup> See page 10 of IDE-BDE-1612

<sup>2</sup> See page 11 of IDE-BDE-1612

<sup>3</sup> Low due to issues with HRV installation - Being addressed by staff

#### New opportunities

LED street lighting

Eastview-WWTP generator relocation

Rooftop solar Power Purchase Agreements

# STAFF REPORT

TO City Council

SERVICE AREA Infrastructure, Development and Enterprise

DATE July 18, 2016

**SUBJECT Community Energy Initiative (CEI) Update  
Status Report #1**

REPORT NUMBER IDE-BDE-1612

## EXECUTIVE SUMMARY

### PURPOSE OF REPORT

At its meeting of April 25<sup>th</sup>, 2016, Guelph City Council provided direction to staff to update of the Community Energy Initiative (CEI).

Based on that direction this Staff Report addresses the following:

1. A progress report on the activities, outcomes and next steps related to the Corporate Energy Management Program (CEMP)
2. Status of activities to date related to the update of the CEI as described in the April 7, 2016 Staff Report to Governance Committee (IDE-BDE-1604). Specifically:
  - a) A Scope of Work developed to engage consultants to provide qualitative and quantitative analysis in support of the CEI Update process
  - b) Development of a Community Engagement Plan including:
    - Terms of reference of the Community Advisory Committee
    - Criteria for participation
    - Communications.
3. The status of funding applications to the Ontario Ministry of Energy's Municipal Energy Plan Program, and the Federation of Canadian Municipalities' Green Municipal Fund and other potential funders in support of the CEI Update.

### KEY FINDINGS

The development and execution of the CEI Update is proceeding well according to the process described in IDE-BDE-1605. Since the CEI Update was approved activities have focused on the development of Community Engagement activities



# STAFF REPORT

and determination of technical and analytical needs. Currently, there are no concerns as to adhering to the overall completion goal of the end of Q1 2017.

The CEMP and activities related to District Energy are both sub-components of the CEI. This is an important distinction when reporting on the CEI. The following summarizes current and recent CEI reporting:

1. A gap analysis of the CEI was provided in the Staff Report to Governance Committee April 7, 2016 (IDE-BDE-1604)
2. The assessment of the District Energy investments made to date and recommendations going forward do not form part of this report. They are provided in Staff Report IDE-BDE-1615 to be presented to council July 18, 2016
3. A report on activities and outcomes related to the CEMP is found in Attachment #1 of this Staff Report.

Activities related to the CEMP (Attachment #1) are showing:

- Positive results in mitigating the inflationary pressures on a \$9.6M annual electricity and natural gas budget for corporate operations.
- Recently completed retrofits at three City facilities are showing a combined simple payback of 9.7 years based on a capital investment of \$852,773 (after utility incentives) and annual avoided costs of \$87,830
- Retrofits are anticipated or currently underway at three City facilities with similar, or better, simple paybacks.
- Future activities in the planning or early business development stages are: LED streetlight conversion, behind-the-meter solar projects and on-site generation at the Waste Water Treatment Plant.

Funding applications in support of the CEI Update are in development and expected to be submitted to both the Ontario Ministry of Energy and the Federation of Canadian Municipalities (FCM). The City of Guelph's historical relationship, through the CEI, with both of these entities supports staffs confidence that funding for at least 50% of the CEI update budget of \$150,000 will be achieved.

## **FINANCIAL IMPLICATIONS**

The full cost of the CEI Update as presented in April 7<sup>th</sup>, 2016 Staff Report of Governance Committee, remains estimated at \$150,000. Approved budgets for 2016 will cover 50% of these costs with remaining expected from third party funders (as described above).

# STAFF REPORT

Building retrofit activity to date under the CEMP, as detailed in Attachment #1, shows recently completed retrofits at three city facilities are showing a combined simple payback of 9.7 years based on a capital investment of \$852,773 (after utility incentives) and annual avoided costs of \$87,830.

## **ACTION REQUIRED**

That Council receive the report for information.

## **RECOMMENDATIONS**

1. THAT report IDE-BDE-1612 from Infrastructure, Development and Enterprise dated July 18, 2016 entitled "Community Energy Initiative (CEI) Update – Status Report #1" be received for information.

## **BACKGROUND**

On April 7, 2016 Governance Committee received a Staff Report "Community Energy Initiative Update - Proposed Scope" (IDE-BDE-1604).

In the "Timing" section of that Report, staff made a commitment to return to Council in July, 2016 with an update on the following:

1. A CEI activity, status and gap analysis report
2. A status summary of activities related to the CEI Update:
  - a) Existing analytical tools and scope of needed study and analysis in support of CEI Update Process.
  - b) Community Engagement Plan, terms of reference, communication protocol, and criteria for participation in a Community-based Advisory.
  - c) Work plan for subsequent two month period.
  - d) Update of funding activities from 3<sup>rd</sup> parties in support of the CEI Update

## **REPORT**

### **1. - A CEI Activity, Status and Gap Analysis Report**

The CEI is overarching, multi-faceted program. District Energy and the Corporate Energy Management Program are elements of the CEI. They are not the entirety of the CEI. The following itemizes how staff is reporting on the overall program in conjunction with certain elements of the program.

- a) **Community Based CEI Activities** – A progress report was provided to Council in Staff Report IDE-BDE-1604 and is not re-presented here.

# STAFF REPORT

- b) **District Energy** - The assessment of the District Energy investments made to date and recommendations going forward do not form part of this report. Previous reports which provide the current status and performance of district energy have been provided to Council. Further reporting on District Energy is provided in Staff Report IDE-BDE-1615. Staff have been tasked to present to Council with a business case that will address the current status and options on a go forward basis.
- c) **Corporate Energy Management Plan (CEMP)**- Attachment #1 provides a report on the Corporate Energy Management Plan including financial analysis (including Net Present Value) of the corporate energy investments in the period of 2007 to 2016. and anticipated in the near future.

## 2. Status Summary of Activities Related to the CEI Update:

### a) **Existing Analytical Tools and Scope of Needed Study and Analysis in Support of CEI Update Process:**

A Scope of Work has been developed for the "analysis" portion of the Update as described in the April 7, 2016 Staff Report. Included in the Scope is:

- Inventory of available tools for Community Energy Planning;
- Updated baseline (2014 or 2015 depending on data availability);
- Development of energy maps;
- Market, legislative and regulatory scan;
- Revised target recommendation(s) for efficiency, energy distribution and local generation;
- Implementation strategy recommendations.

Currently staff is scanning the market for qualified and experienced consultants who may be proponents to an Request for Proposal (RFP). An RFP is targeted to be issued by the end of July for a competitive public bidding process for qualified technical consultants. A consultant is targeted to be in place by mid-August and is expected to provide input and analytical support to the Community Engagement process as described above.

### b) **Community Engagement Plan, Terms of Reference, Communications, and Criteria for Participation in a Community-based Advisory (Attachment #2):**

Staff is working closely with the Community Engagement Team to develop a full Community Engagement Plan. The Community Engagement Plan will be consistent with the policies, principles and practices that define the City's Community Engagement framework.

The Community Advisory Committee will play a key role in providing community oversight to the CEI Update process. Three elements of the Plan included in this report are:

1. Draft Terms of Reference for the Advisory along with a high-level overview map of the entire engagement process.

2. A criterion for participation in the Community Advisory Committee is included in the draft Terms of Reference.
3. Communications processes and strategies are described in the "Communications" section of this report (below).

c) **Work Plan for Subsequent Four Month Period:**

Staff Report IDE-BDE-1604 indicated the next Status Report would come to Council in late September 2016. Due the rescheduling of meeting to Committee of the Whole (CoW) framework, the next report on the CEI Update process is targeted for the November 7, 2016 CoW meeting. Activities planned for the subsequent four month period from the date of this report will be reported at that time as CEI Update Status Report #2 and will include the following:

**Update Development Activities**

- Results of the consultant selection process as described above;
- Membership of the Community Advisory Committee;
- Stakeholder map of all targeted stakeholders to be engaged in the Community Engagement Plan for the CEI Update;
- A preliminary schedule of engagement activities through Q3 and Q4 2016 and Q1 2017;
- Results of any outputs to date from the Analysis activities described above; and
- Update on funding applications as described below.

**CEI Update Outputs**

- Recommended reporting protocols.
- High level indicators for reporting.
- Reporting responsibility.
- Cost-Benefit and Economic Impact Analysis.

d) **Funding**

Funding applications are in development and expected to be submitted to both the Ontario Ministry of Energy and the Federation of Canadian Municipalities (FCM). The City of Guelph's historical relationship, through the CEI, with both of these entities supports staffs confidence that funding for at least 50% of the CEI update budget of \$150,000 will be achieved.

## **CORPORATE STRATEGIC PLAN**

### **Organizational Excellence**

- Build robust systems, structures and frameworks aligned to strategy.

### **Innovation in Local Government**

- Ensure accountability, transparency and engagement.



# STAFF REPORT



## City Building

- Ensure a well-designed, safe, inclusive, appealing and sustainable.
- Be economically viable, resilient, diverse and attractive for business.
- Strengthen citizen and stakeholder engagement and communications.

## FINANCIAL IMPLICATIONS:

The full cost of the CEI Update as presented in April 25th, 2016 remains estimated at \$150,000. Approved budgets for 2016 will cover 50% of these costs. Applications are currently underway for funding support from the Ontario Ministry of Energy and the Federation of Canadian Municipalities.

Building retrofit activity to date under the CEMP, as detailed in Attachment #1, shows Recently completed retrofits at three city facilities are showing a combined simple payback of 9.7 years based on a capital investment of \$852,773 (after utility incentives) and annual avoided costs of \$87,830.

## DEPARTMENTAL CONSULTATION

CAO's Office  
Communications  
Business Development and Enterprise  
Facilities Management  
Finance

## COMMUNICATIONS

The community will continue to be informed of the CEI Update's status and project-related activities on [guelph.ca](http://guelph.ca) as well as through the City's social media channels and earned media coverage. Local media outlets will be informed via media relations activities that include media advisories, releases and staff interviews. Further strategic communications will be planned to promote opportunities for the community to participate in the CEI Update, once the engagement activities are confirmed.

## ATTACHMENTS

- ATT-1 Report on the Progress of the Corporate Energy Management Program (CEMP)  
ATT-2 Community Engagement Plan

# STAFF REPORT

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## Attachment #1

### Report on the Progress of the Corporate Energy Management Program (CEMP)

#### Introduction:

The following report will address the Corporate Energy Management Plan (CEMP).

Since being tabled and approved by Council in September 2012 the Corporate Energy Management Plan (CEMP) has acknowledged that it has key links to the Community Energy Initiative and has a role in facilitating the community towards the broader goals of the CEI, including (but not limited to):

- The original Community Energy Plan indicates the leadership role of the City, as a corporation, in best practice energy management is key to the success of the CEI.
- The City is among the top ten in energy users in Guelph – almost \$10M in 2016 dollars.
- The City has corporate assets that may leverage participation of third parties – i.e. leasing corporate rooftops to solar interests.
- The City, as a corporation, houses key enablers to Community Energy activity:
  - Planning plays a role in developing land use policies that can have a direct link to energy use in the community. The CEI is reflected in our current Official Plan and Secondary Plans (Downtown and the Guelph Innovation District).
  - Economic Development develops its activities around Prosperity 20/20 which identifies the CleanTech sector as a priority and therefore targets its marketing and outreach efforts to attracting energy-related investments to the City.
  - Facilities Management oversees the program of energy efficiency retrofits on Corporate facilities as envisioned in the CEMP. This is fully integrated with other Facilities Management undertakings, maximizing opportunities to combine disparate projects and thereby minimize overhead costs and disruption to facility operations.
  - Communications plays a key role in communicating activities and general awareness around City-based activities that enable the community toward the goals of the CEI.

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## Background

Corporate Energy is a part of the Facilities Management department in the Infrastructure, Development and Enterprise service area and consists of the Energy Program Manager, the Energy Project Specialist, and the Building Performance Specialist. The group has an operating budget of \$267,700 and manages Corporation-wide utilities expenditures budgeted at \$9,651,000 for the 2016 fiscal year.

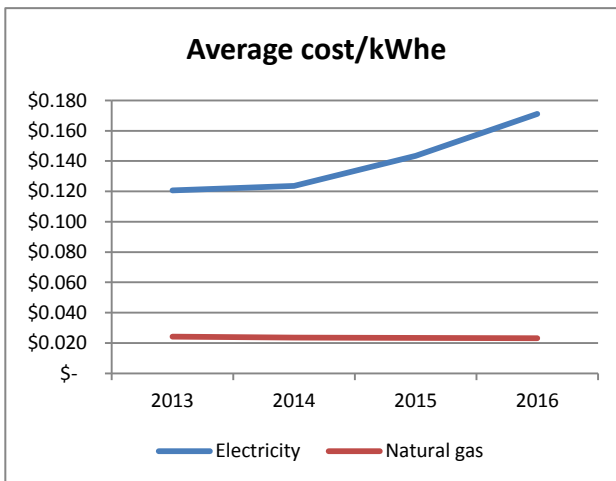


Figure 1 - Electricity and Natural Gas Rate History

Utility expenses are the largest line item in the 2016 Corporate operating budget after payroll costs. Electricity accounts for 90% of these expenses, and electricity rates are rising faster than other measures of inflation (see *Figure 1 - Electricity and Natural Gas Rate History*). This makes it a growing burden on the City's ability to continue delivering services and programming on which the public depends. The task of Corporate Energy is to reduce energy consumption and other factors driving energy costs in the Corporation.

## Report

**Corporate Energy Management Plan.** The CEI states that the Corporation should lead by example, improving its own energy efficiency, developing opportunities for on-site energy generation, and maximizing the value obtained from various energy-related activities. To achieve this goal, the CEMP was developed in 2012 and accepted by Council in October of that year. The CEMP described:

1. The business case for effective energy management
2. Organizational and technical measures to improve energy management processes and practices
3. A program of capital projects to improve energy efficiency of the facilities that are the most significant energy users.

The CEMP has become the policy foundation for all Corporate Energy undertakings.

Next steps:

1. Convene a formal Energy Management Improvement Team to provide oversight and governance of Corporate Energy.



# STAFF REPORT

2. Update the CEMP to reflect changes in the energy landscape since 2012, so that it will continue to provide an effective policy framework for Corporate Energy.
3. Integrate the CEMP update with the CEI update to ensure both programs continue to support and reinforce each other.

**Facility Energy Efficiency Retrofit Program.** Energy efficiency is a specific focus area of the CEMP. In 2012, audits of 13 City facilities identified technical measures to reduce energy consumption. These measures were compiled into a facility-by-facility retrofit program, which began execution in late 2013. Some “quick hit” measures were implemented in that year, with the result that 2014 utility expenses came in on budget despite the winter of 2014 being the worst in recorded history (26% more heating degree days than the 25-year average).

More extensive retrofit measures were implemented as capital projects. *Figure 2 - Retrofit projects: Actual results* shows actual avoided cost, i.e. the expense that would have been incurred if the project had not been implemented, based on before and after measurements of energy consumption corrected for weather effects.

**Figure 2 - Retrofit projects: Actual results**

Site	Description	Capital cost	Utility incentives	Annual avoided cost	NPV
Transit Garage	Lighting, unit heaters, de-stratification fans, occupancy sensors	\$224,200	\$1,735	\$27,334	Positive
45 and 50 Municipal	Lighting, occupancy sensors, HRV	\$167,200	\$295	\$6,812	Negative
Sleeman Centre	Lighting (incl. ice pad); ice plant compressors	\$507,607	\$45,107	\$53,684*	Positive

\* Projected, based on actuals from October through March

The 45/50 Municipal project was combined with other Facilities Management life cycle replacement work, reducing project overhead costs that would have resulted from two independent projects. Efficiencies for this project have not met expectations due to deficiencies with the Heat Recovery Ventilator, which constituted one third of the project cost. Corporate Energy staff is working to resolve this issue and get the consumption reductions back on track.

Results from the Transit Garage are tracking positively, with actual consumption reductions projecting a payback of 8.1 years and positive NPV. The Sleeman Centre

# STAFF REPORT

results are 3% better than originally estimated, and utility incentives are expected to be 64% higher than estimated, reducing the payback and increasing the already positive NPV.

Additional projects are in progress and planned, with details as shown in *Figure 3 - Retrofit projects: Planned and in progress*.

**Figure 3 - Retrofit projects: Planned and in progress**

Site	Description	Capital cost	Utility incentives	Avoided cost (est.)	NPV
West End Community Centre	Lighting, HVAC measures	\$685,478	\$72,052	\$71,588	Positive
Evergreen Centre	Lighting, destratification fans	\$159,109	\$13,945	\$16,242	Positive
River Run Centre	Lighting, HVAC measures	\$312,958	\$43,601	\$35,018	Positive

Until this year, retrofits had been financed by the Capital Asset Renewal Reserve (CARR). Investments from this revolving fund are being repaid from the resulting savings or revenues, with a maximum payback period of ten years. With this fund being fully committed, Corporate Energy is seeking other potential sources of funding to continue the facility retrofit program.

An additional facility retrofit opportunity has arisen that was not technologically or economically feasible when the CEMP was written. Conversion of our street lighting fleet to LED technology offers attractive avoided costs, given that it is the Corporation's second largest energy consuming facility (with a 2016 electricity budget of \$1.66M). Such a project would offer additional so-called "smart city" opportunities. The potential savings are such that, by extending the capital repayment schedule, they could make the Corporate Energy group self-funding.

## **Next steps:**

1. Continue existing slate of planned facility retrofits.
2. Present business case for LED street lighting retrofit in September 2016, including proposal for a self-funded business model for Corporate Energy.

**Other Opportunities.** Corporate Energy has pursued other opportunities to implement energy management best practices, including an Energy Management Information System (EMIS), commodity hedging, and revenue generation from rooftop solar photovoltaic (PV) arrays.

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Beginning in Q1 2015, an EMIS was implemented for all electricity, water, wastewater, and natural gas accounts at lower cost than originally envisioned (\$24,410 vs. \$32,328). The system has provided visibility into energy consumption and expenditure trends, making it far easier to analyze anomalies, to report on utility budget variances, to identify underperforming facilities, and to prepare reports to the Ministry of Energy under O.Reg.397/11. This investment has also yielded dollar savings by identifying billing credits that had not been applied appropriately (e.g. a one-time savings of \$13,620 and ongoing average monthly credit of \$470 for a missing transformer allowance credit).

Hedging is an established strategy to reduce risk associated with volatile commodities. The Corporation continues to purchase natural gas through a contract with Local Authority Services (LAS) along with many other member municipalities in Ontario. This has yielded greater certainty regarding natural gas prices and reduced exposure to short-term fluctuations as occurred during the so-called “polar vortex” extreme cold weather event during the winter of 2014-15.

The CEMP calls for “promotion and project management of renewable energy generation projects on City property”. Eight rooftop solar photovoltaic (PV) arrays have been implemented under the MicroFIT program of the Independent Electricity System Operator (IESO), producing electricity sufficient for eight average Guelph households. Seven applications to the IESO for larger rooftop arrays under the Small FIT 4.0 program were not successful. Corporate Energy is now examining opportunities to deploy rooftop solar “behind the meter”, as solar PV costs have declined to a level where these projects have a positive NPV.

Since it went online in 2005, the Eastview Landfill Gas Energy Plant has experienced gradually declining gas production volumes (as is typical with such installations). Corporate Energy is working with Guelph Hydro Electric Systems Inc. and Envida Community Energy on the opportunity to deliver electricity and heat to the Wastewater Treatment Plant by redeploying one or both of the under-utilized generators. Producing electricity in this way offers substantial savings compared to electricity purchased from the grid. This is the Corporation’s top energy consumer, with a 2016 electricity budget of \$1.74M, making it an ideal location to exploit this opportunity.

Near future projects:

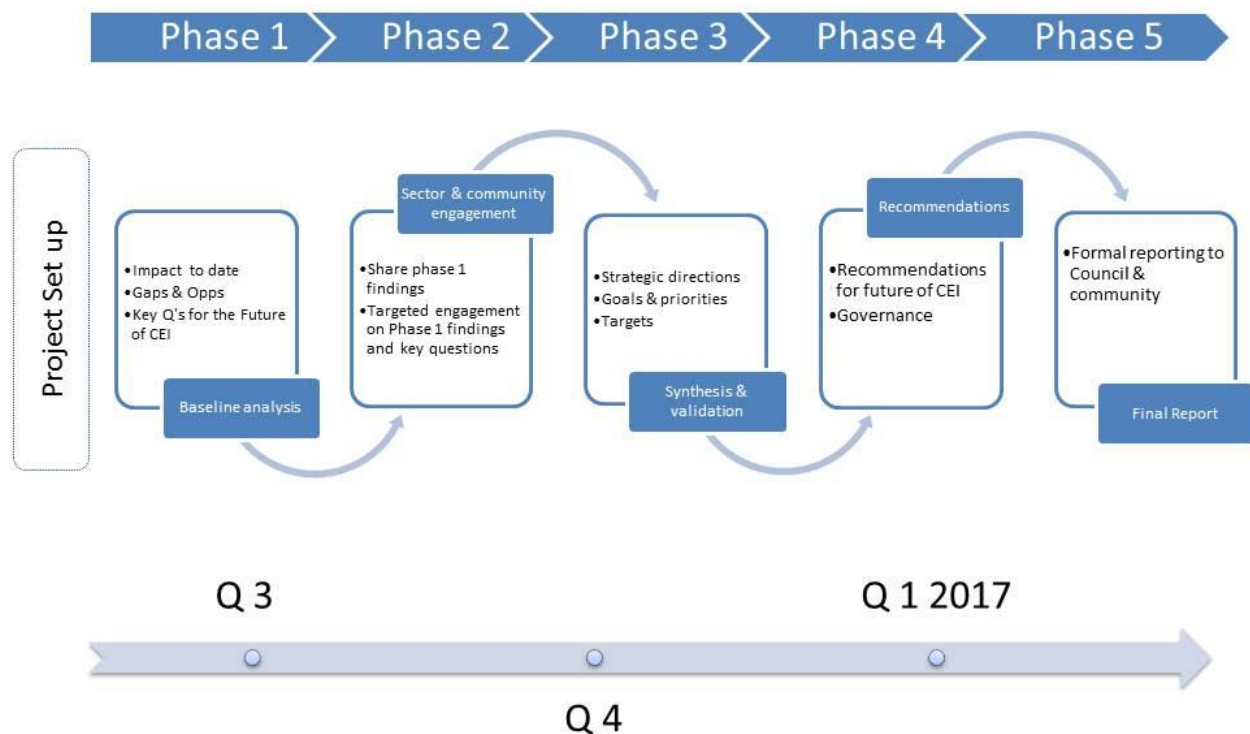
1. Develop business cases for behind-the-meter solar PV projects.
2. Continue developing the WWTP on-site generation opportunity.

## Attachment #2

### Community Engagement Plan

#### 1. High-level Engagement Process

##### CEI – Proposed Update Process



#### 2. Community Energy Initiative Update – Community Advisory Committee

##### Terms of Reference (includes Selection Criteria)

##### Background

The Community Energy Plan (CEP) was approved by Guelph City Council in April, 2007. In 2010, the CEP was relabelled the Community Energy Initiative (CEI) to reflect that the CEP had moved into the implementation phase.

# STAFF REPORT



The CEI, *with its 2031 implementation horizon*, has entered its 10<sup>th</sup> year of existence and is due to be updated. In the area of Community Energy Planning a great deal has changed since 2007. Major relevant changes are:

## **Purpose:**

The Community Advisory Committee (CAC) provides a forum for community-based stakeholder guidance, oversight and reporting to the community and to Council during the update of the Community Energy Initiative.

The CAC will be established at the outset of the Update Process and will support the Update Process through to its conclusion (anticipated to be the end of Q1, 2017).

## **Mandate:**

The mandate of the CAC is to provide an ongoing forum for consultation and feedback to the Community and Council at key points throughout the development of the Guelph Community Energy Initiative Update, including:

- Community engagement with a strong interaction with local stakeholders;
- Roles of Local Government, Local Government Agencies and local stakeholders;
- Reconfirmation of policy, program and regulation framework;
- Partnering opportunities with external third party advocacy and support groups. Analysis, reporting and oversight to set baselines and targets and communicate results

The Community Advisory Committee will also help the City staff Project Team ensure that Community Engagement efforts provide the public with a clear understanding of the project and encourage participation, in keeping with the City of Guelph's Community Engagement Framework.

## **Membership:**

The Community Advisory Committee consists of up to 16 key stakeholders, and includes members of the Project Team and the City's internal CEI Update Working Group. Participating members will be drawn from a variety of stakeholder groups, and represent a balance of interests that reflect the range of perspectives in the community in order to provide continuity and preserve previous learnings. Table 1 lists the recommended make-up of the Committee.



Table 1

Stakeholder Group	# Members (Up to)
Business/Industry	3
Home Builder/Developer	2
Energy/Environmental Interest Group	3
Academia	2
Public At Large/Residential Rate Payers	3
Guelph Chamber of Commerce	1
Provincial or Federal Representatives	2

CAC members are expected to serve for the full extent of the study, with the mandate of committee completed upon Council's approval of the 2017 Community Energy Initiative Update.

Membership is voluntary and open to participation from interested and eligible community members. It is required that CAC members must understand, and agree to the terms and conditions outlined in these Terms of Reference.

Project and consultant team members would also be resources to the committee, as required.

### **Recruiting:**

The Project Team – working with appropriate organizations and City staff – will identify potential stakeholder group representatives for all categories listed above, except community at large. The Project Team will contact the stakeholder groups to determine interest and availability of individuals.

Public at Large representation on the CAC will be fulfilled by the through call for submissions of interest. Criteria that will inform sector-based recruitment (as per the table above) and the selection of at-large participants will be:

- Private-sector market participants in one or more of:
  - Energy efficiency;
  - Energy generation;
  - Energy distribution.
- Representatives from large industrial and/or commercial energy consumers within the city;
- Representatives from organizations with large constituencies with a demonstrated interest in activities related to community energy.
  - Faith-based groups;
  - Community Groups;

# STAFF REPORT

- Educational institutions;
- Business groups;
- Clubs and other organized interest groups.
- Individuals with demonstrated experience in energy-related policy and programs at the Provincial and Federal government level;
- Individuals or organizations involved in academic research related to community energy;
- Individuals or organizations related to expertise and experience in the area of energy and transportation;
- Individuals or organizations with a demonstrated understanding of the relationship between energy and local economy.

## **Role of the Chair:**

Supported by the Project Team, the Chair will plan meeting agendas, preside over meetings and coordinate activities of the Community Advisory Committee.

The Chair will also assist the committee to develop and approve meeting process rules and other procedures related to committee effectiveness. The Chair will be supported by the Project Team in developing the details of the meeting protocols.

A Chair with extensive facilitation experience will be initially appointed from the Project Team to act as an administrator to the CAC and to enable all members to participate fully in the discussion. The Community Advisory Committee is expected to appoint a replacement Chair – by way of vote – from its membership, at the earliest possible time after it is struck.

## **CAC Meetings:**

It is anticipated that there will be a minimum of four (4) CAC meetings (i.e. – monthly over the course of the CEI Update). To facilitate a CAC meeting, a minimum of 10 members and/or alternate members is required. Meetings will be held at accessible locations in the evenings, such as City Hall – or as convenient to the majority of members – so as to encourage attendance at each meeting. All Committee meetings will be open to the public, with date, time and place of each meeting published on the City's website. Members of the public who wish to attend a Committee meeting should notify the Chair three days in advance of the meeting so that space and seating arrangements can be adjusted. The Chair will make every effort to accommodate members of the public, but cannot guarantee adequate space or seating if advance notification of attendance is not provided. Those seeking an opportunity to address the Committee should also make a request to the Chair three days prior to the meeting. Notification of attendance or requests to address the Committee can be made by telephone to 519-822-1260, ext. 2079 or by e-mail to [rob.kerr@guelph.ca](mailto:rob.kerr@guelph.ca).

# STAFF REPORT

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## **Decision-Making:**

As an advisory body, the CAC should operate by consensus to the extent possible. Consensus is where participants openly discuss views and opinions, seeking to develop common ground and narrow areas of disagreement to the best of their ability. Where differing viewpoints and opinions exist, these will be noted in the CAC meeting reports.

In the event that there is an unresolvable lack of consensus, the Committee will use a voting system to make decisions.

The Advisory Committee may establish working groups or sub-committees to address specific issues if necessary. Membership on working groups may be open to other interested stakeholders, with the consent of the committee.

## **Minutes, Documentation and Administration:**

Community Advisory meeting notes will be taken by a representative of the Consultant Team, and will be circulated to the Committee members following each meeting for review and comment. Minutes of the meeting will be approved by the CAC at the following meeting.

All minutes and documentation produced or received by the Advisory Committee will be made accessible to the public through the City's website (i.e., <http://guelph.ca/energy>). All administrative services associated with the Committee will be the responsibility of the Project or Consultant Team.

## **Roles and Responsibilities:**

In addition to the Participant Responsibilities identified in the City's Community Engagement Framework (see Appendix A,) Community Advisory Committee members will:

- Consider matters, issues or information provided by the Project Team relating to the Strategy Update process, and provide advice and recommendations as requested.
- Liaise with the organization they represent (if applicable) to bring forward advice, issues or comments from their organization and to return information and results to the organization from the CAC.
- Strive to operate in a consensus mode where participants openly discuss views and opinions and seek common ground.
- Ensure that the results of CAC discussions are accurately recorded in the meeting records, or in any additional documents that the CACs or the Project Team may determine are needed.
- Embrace the City of Guelph's Guiding Principles for Community Engagement and Community Engagement Framework when providing advice or recommendations and when interacting with the Project Team.

# STAFF REPORT



In addition to the Employee Responsibilities identified in the City's Community Engagement Framework (see Appendix A,) Project Team members will:

- Strive to provide accurate, understandable information to CAC members, so they can contribute informed advice and recommendations.
- Ensure that appropriate City staff, or other resource people, are present at discussions on specific issues or components of the planning process.
- Ensure that advice, recommendations, and consensus positions from the CAC are fully considered in developing the CEI Update.
- Be open, receptive, and give careful consideration to advice and ideas received from CAC members, and strive to reflect consensus positions in the Master Plan.
- Embrace the City of Guelph's Guiding Principles for Community Engagement and Community Engagement Framework when interacting or planning to interact with the CAC.

## Reporting Relationship

The CAC is an advisory body to the Project Team, and to City Council through the Project Team. All meeting minutes and recommendations from the Committee to the Project Team will be posted on the City's web site for review by Council and the public and will be included in the final Strategy Update documents.

By participating on this Committee, CAC members are not expected to waive their rights to the democratic process, and may continue to avail themselves of participation opportunities through delegation to committees of Council, and/or providing written briefs. Any positions taken by individual members are without prejudice.

## Community Engagement Framework – Select Excerpts

### Guiding Principles for Community Engagement

The following principles build on those approved by Guelph City Council in 1998. They have been updated to reflect emerging community engagement practices. Community engagement in the City of Guelph embraces these principles.

1. **Inclusive** – The City encourages participation by those who will be affected by a decision. The City builds relationships with stakeholders by using a range of tools to engage varied audiences.
2. **Early Involvement** – The City involves the public as early as possible in the community engagement process so stakeholders have time to learn about the issue and actively participate.
3. **Access to Decision Making** – The City designs processes that will give participants the opportunity to influence decisions.

4. **Coordinated Approach** – The City co-ordinates community engagement activities to use community and City resources effectively.
5. **Transparent and Accountable** – The City designs processes that are open and clear. Stakeholders will understand their role, the level of engagement and the outcome of the process.
6. **Open and Timely Communication** – The City provides information that is timely, accurate, objective, easily understood, accessible and balanced.
7. **Mutual Trust and Respect** – The City engages the community in a fair and respectful way that fosters understanding between diverse views, values and interests.
8. **Evaluation and Continuous Improvement** – The City commits resources to evaluating engagement processes to ensure engagement activities are effective.
9. **Equitable Engagement Process** – The City designs engagement processes that allow all community members a reasonable opportunity to contribute and to develop a balanced perspective.

## **Council Responsibilities**

As key leaders within the City, the support of City Council is important for successful community engagement. Council is asked to:

- Review information gathered through community engagement processes to inform Council decisions.
- Consider appropriate project timelines and resources needed for community engagement.



# COUNCIL MEMO



DATE Monday, July 18, 2016

TO **City Council**

FROM Todd Salter, General Manager

DIVISION Planning, Urban Design and Building Services

DEPARTMENT Infrastructure, Development and Enterprise

**SUBJECT Amendment to Report 16-36 and Associated By-law (2016) – 20079**

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In staff report 16-36, under the authority of Section 36 of the *Planning Act* and Section 9.10.7.1 of the City's Official Plan, Planning staff recommended that a Holding Symbol ('H') be added in conjunction with the proposed Specialized General Apartment ('R.4A-51') Zone and Neighbourhood Commercial (NC) Zone being requested for 1229 Victoria Road South. The Zoning By-law Amendment request was to permit the development of a four storey, 101-unit apartment building and a 752.7 square metre commercial mall.

Planning staff were recommending the Holding Symbol ('H') be placed on both the General Apartment ('R.4A-51') Zone and Neighbourhood Commercial (NC) Zone to ensure that all required municipal site services adequate to accommodate the specific development proposal are in place prior to the development of the lands commencing. Section 4.1.1.vi of the Official Plan requires that prior to permitting any development proposal, the City is to be satisfied that adequate municipal services are in place. Section 4.1.1.ii(f) identifies facilities for transportation networks to be classified as "full municipal services".

A Traffic Impact Study (TIS) submitted by the developer with the applications in May 2015 identified and recommended three (3) specific areas of improvement to the City's transportation network, summarized as follows:

1. Signalization of the intersection of Victoria Road South and Frederick Drive, along with the widening of the southbound approach on Victoria Road South to Frederick Drive to include a dedicated right turn lane.
2. Installation of an eastbound left turn lane from Clair Road East to Samuel Drive.
3. Installation of back-to-back left turn lanes on Clair Road East for the eastbound approach to Victoria Road South and westbound approach to Megan Place.

Planning, Engineering and Traffic staff have reviewed the recommendations of the TIS, and are of the opinion that the three (3) improvements noted above are required municipal services to accommodate the development proposal.

Further, in accordance with the City's Local Service Policy from the most recent Development Charge Background Study (Watson & Associated Economists Ltd, March 21, 2014), staff are of the opinion that the required highway infrastructure as noted in the TIS are classified a local service. As per principle 1 c. of the Local

Service Guidelines, the costs of local services for intersection improvements that are specifically related to a development and any associated works thereto (excluding centre turn lanes) are to be the direct financial responsibility of the developer.

Subsequent to the Council Planning meeting of July 11, 2016, staff met with the applicant and property owner to discuss alternative wording to the proposed holding provisions as noted in staff report 16-36.

In consideration of the above, Planning staff are recommending that the Holding provision be amended as follows (the removal of original language is shown in strikethrough, and new language is shown with an underline):

Holding Provision (H)

*Purpose: To ensure that the development and use of the lands does not proceed until ~~the Owner has met~~ certain conditions have been met to the satisfaction of the City of Guelph.*

*The Uses permitted under Section 5.4.3.1.51.1 or Section 6.2.1.1 of the Zoning By-law are not permitted until the holding symbol (H) is removed by amendment to this By-law. The holding symbol (H) may be removed when all of the following conditions have been met:*

- 1. ~~The developer shall~~ Design and construction of traffic control signals and a southbound right turn lane at the Victoria Road South and Frederick Drive intersection, to the satisfaction of the City Engineer/General Manager of Engineering and Capital Infrastructure Services or ~~pay the~~ upon the actual cost for design and construction costs of these works being secured in a manner satisfactory to the City Engineer taking into account all previous contributions to these works.*
- 2. ~~The developer shall~~ Design and construction of a back to back left turn lane on Clair Road East between Victoria Road South and Samuel Drive/Megan Place, to the satisfaction of the City Engineer/General Manager of Engineering and Capital Infrastructure Services or ~~pay the~~ upon the actual cost for design and construction costs of these works being secured in a manner satisfactory to the City Engineer.*
- 3. ~~The developer shall~~ Design and construction of turning lanes on Clair Road East at the intersection of Samuel Drive/Megan Place, to the satisfaction of the City Engineer/General Manager of Engineering and Capital Infrastructure Services or ~~pay the~~ upon the actual cost for design and construction costs of these works being secured in a manner satisfactory to the City Engineer.*

The revised Holding language above removes explicit reference to the developer being fully responsible for all costs of the infrastructure. Although this continues to be staff's opinion at this time based on current information and interpretation of applicable policy. The revised wording allows staff and the applicant to continue to discuss the matter to determine if a mutually satisfactory solution can be arrived at.

Yours truly,

Todd Salter  
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