



City of Hamilton
HAMILTON RENEWABLE POWER INCORPORATED
BOARD OF DIRECTORS
AGENDA

Date: July 22, 2025

Time: 9:30 a.m.

Location: Room 264, 2nd Floor, City Hall (hybrid) (RM)
71 Main Street West

1. CALL TO ORDER

2. APPROVAL OF AGENDA

3. DECLARATIONS OF INTEREST

4. ADOPTION OF MINUTES

4.1 February 13, 2025

5. ITEMS FOR INFORMATION

5.1 Operational and Business Updates

This item is a presentation.

5.2 HRP25001

Evaluative Framework to Guide Consultant Research – Response to September 12, 2024 Board Direction (City Wide)

6. ITEMS FOR CONSIDERATION

6.1 HRP25002

Additional Funding Request for Consultant - Led Biogas Feasibility Study (City Wide)

6.2 Outstanding Business List

Items to be Removed:

Evaluative Framework to Guide Consultant Research Response to September 12
2024 Board Direction (Addressed as Item 5.2 at today's meeting)

7. SHAREHOLDER RESOLUTIONS

7.1 Resolutions of the Hamilton Renewable Power Incorporated Board of Directors

Hamilton Renewable Power Inc. 2023 Financial Statements;
Hamilton Renewable Power Inc. 2024 Financial Statements - Draft;
Hamilton Renewable Power Inc. 2025 Draft Budget;
Report # HRP25001;
Report # HRP25002; and
Appointment of President

8. ADJOURNMENT

HAMILTON RENEWABLE POWER INCORPORATED
BOARD OF DIRECTORS
HRPB MINUTES 25-001
February 13, 2025
Room 264 (Hybrid), 2nd Floor
Hamilton City Hall

Present: **Board of Directors:**
Councillors C. Cassar (Chair), T. Hwang, M. Tadeson (Vice-Chair) and M. Wilson

Officers:
C. Khan, President
I. Simatis, Senior Vice-President
L. Campbell, Vice-President, Operations
S. Hesmer, Treasurer
J. Pilon, Acting Secretary

Also Present: C. Herstek, Director, Corporate Facilities and Energy Management, Public Works
D. McKenna, Solicitor
M. Gauthier, Legislative Coordinator
S. Salamone, Legislative Assistant

**Absent with
Regrets:** Mayor A. Horwath – City Business

1. CALL TO ORDER

Board Chair C. Cassar called the meeting to order at 1:30 p.m.

2. APPROVAL OF THE AGENDA

(Hwang/M. Wilson)

That the agenda for the February 13, 2025, Hamilton Renewable Power Inc. Board of Directors be approved, as presented.

CARRIED

3. DECLARATIONS OF INTEREST

There were no Declarations of Interest.

4. APPROVAL OF MINUTES OF PREVIOUS MEETING

4.1 September 12, 2024

(Tadeson/Hwang)

That the Minutes of the September 12, 2024, meeting of the Hamilton Renewable Power Inc. Board of Directors be adopted, as presented.

CARRIED

5. ITEMS FOR INFORMATION

5.1 Annual Audit and Financial Statement Updates (no copy)

Shelley Hesmer, Treasurer, Hamilton Renewable Power Inc. Board of Directors addressed Committee respecting Annual Audit and Financial Statement Updates.

(Hwang/Tadeson)

That the following verbal update from Shelley Hesmer, Treasurer, Hamilton Renewable Power Inc. Board of Directors, be received.

CARRIED

5.2 Cash Flow Forecast and Financial Position Update (no copy)

Shelley Hesmer, Treasurer, Hamilton Renewable Power Inc. Board of Directors addressed Committee respecting Cash Flow Forecast and Financial Position Update.

(Hwang/Tadeson)

That the following verbal update from Shelley Hesmer, Treasurer, Hamilton Renewable Power Inc. Board of Directors, be received.

CARRIED

5.3 Operational Recovery Efforts – 6-Month View (no copy)

Carlyle Khan, President, Hamilton Renewable Power Inc. Board of Directors addressed Committee respecting Operational Recovery Efforts – 6-Month View.

(Tadeson/Hwang)

That the following verbal update from Carlyle Khan, President, Hamilton Renewable Power Inc. Board of Directors, be received.

CARRIED

6. ITEMS FOR CONSIDERATION

There were no Items for Consideration.

7. MOTIONS

7.1 Resolutions of the Hamilton Renewable Power Incorporated Board of Directors

(Hwang/M. Wilson)

(a) REMOVAL AND APPOINTMENT OF PRESIDENT

BE IT RESOLVED:

- i) That Indra Maharjan is hereby removed from the role of President of the Corporation, effective as of November 21, 2024; and
- ii) That Carlyle Khan is hereby appointed as President of the Corporation, effective as of November 21, 2024 and continuing thereafter until their successor is duly appointed.

(b) APPOINTMENT OF SENIOR VICE PRESIDENT

BE IT RESOLVED that Ioannis Simatis is hereby appointed as Senior Vice President of the Corporation commencing on the date hereof and continuing thereafter until their successor is duly appointed.

THE FOREGOING RESOLUTIONS are hereby consented to by all of the directors of the Corporation pursuant to the Business Corporations Act (Ontario), R.S.O. 1990, c. B.16, as evidenced by such directors' signatures hereto.

CARRIED

8. ADJOURNMENT

There being no further business, the meeting was adjourned at 1:45 p.m.

Respectfully submitted,

Janet Pilon, Deputy Clerk
Acting Secretary to Hamilton Renewable
Power Inc.

Councillor Craig Cassar, Chair
Hamilton Renewable Power Inc.
Board of Directors

HRP Inc. Board Meeting Operational and Business Updates

July 22, 2025

Agenda

- **Welcome & Opening Remarks**
- **Financial Update**
- **Operational Update**
- **Feasibility Study & Funding Approach**
- **Information Report – Evaluative Framework**
- **Strategic Outlook & Next Steps**
- **Questions & Discussion**

Financial Update

1. 2023 Financial Statement Update
2. 2024 Financial Overview
3. 2025 Operating Budget
4. 2025 Year-to-Date (YTD) Actuals
5. City of Hamilton Benefits

2023 Financial Update

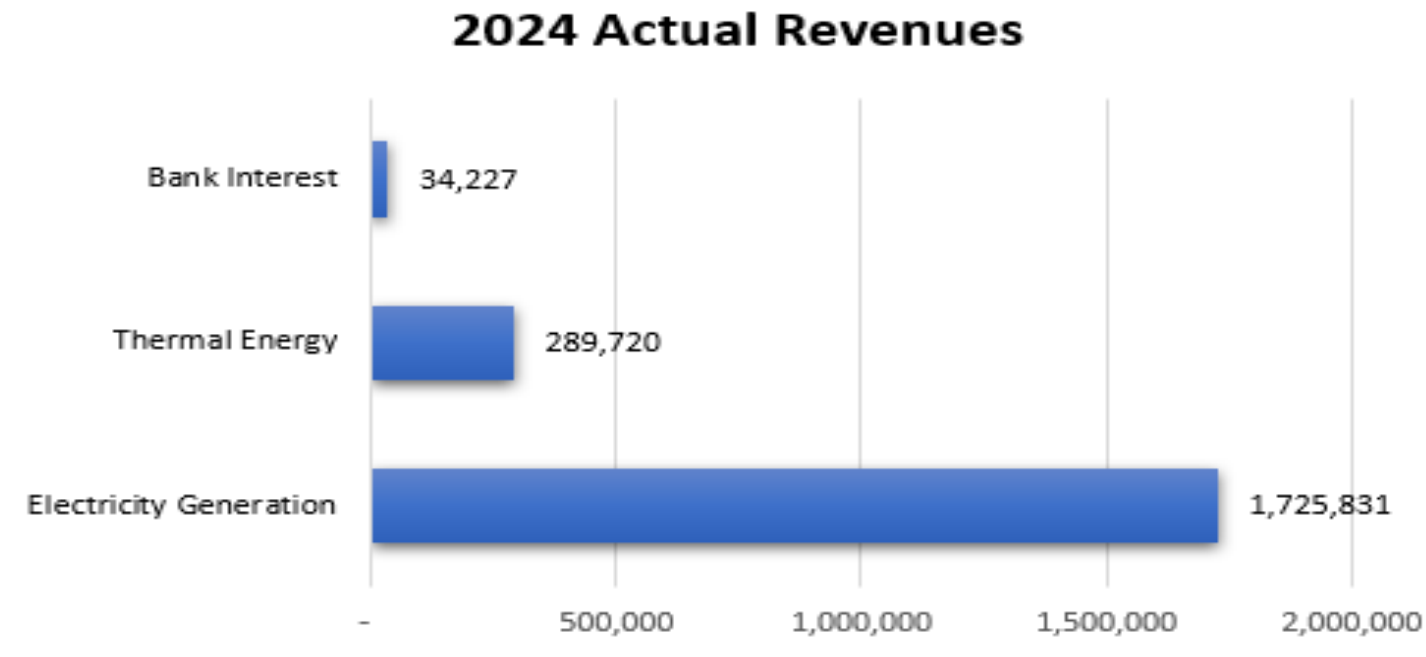
- Financial Statements presented to Board on June 13, 2024.
- Statement approval was deferred. Auditors were unable to confirm balances between HRP Inc. and the City.
- Auditors have since confirmed balances.
- No changes were made to the draft financial statements presented to Board on June 13, 2024.
- Resolution brought forward today to approve statements.

Financial Update

2024 Financial Statement Update:

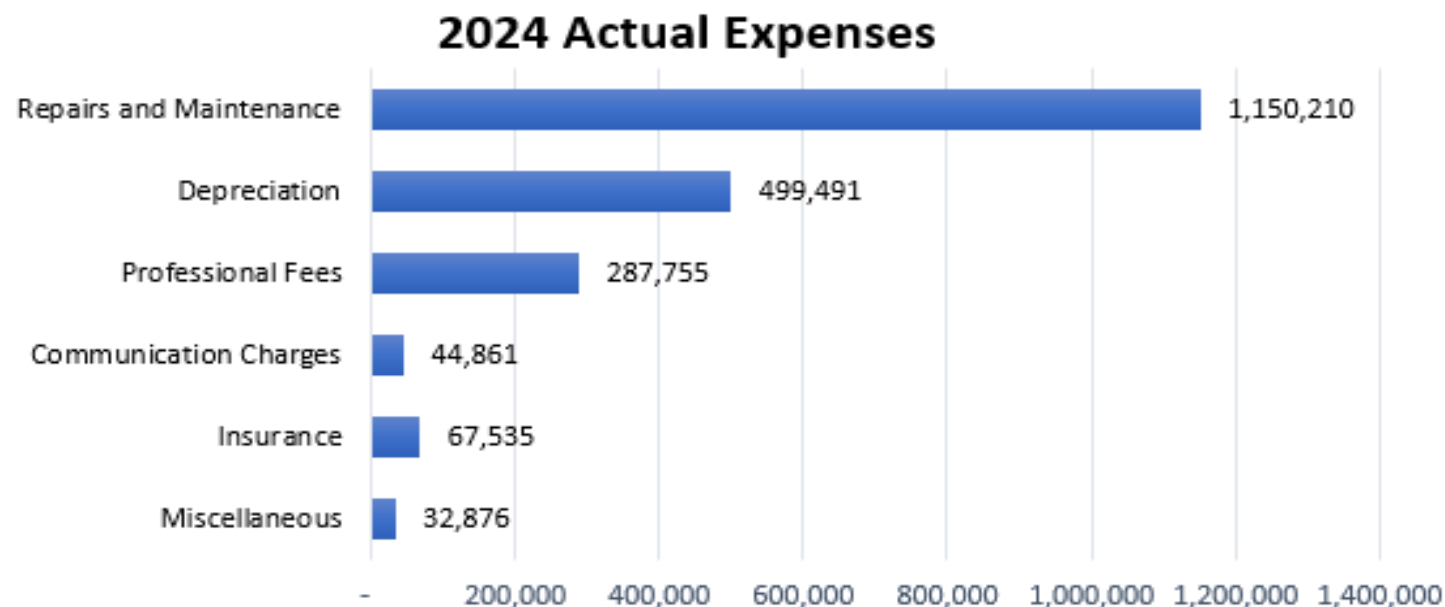
- 2024 Financial Statements were audited by KPMG
- No audit adjustments or restatements
- A net loss of \$392,502 is being reported for 2024 fiscal year (2023 - \$455,583 net loss)

2024 Financial Overview



2024 Actual Revenues = \$2,049,778

2024 Financial Overview



2024 Actual Expenses = \$2,082,728

2024 Financial Overview

2024 INCOME STATEMENT

Year Ended December 31

	Budget	Actual	Variance
Revenue	\$2,015,100	\$ 2,049,778	\$34,678
Cost of Goods Sold	474,200	500,793	(26,593)
Gross Profit	\$1,540,900	\$ 1,548,985	\$ 8,085
Expenses	2,184,340	2,082,728	101,612
Taxes	(170,510)	(141,241)	(29,269)
Net Loss	\$ (472,930)	\$ (392,502)	\$80,428

2024 Financial Overview

2024 BALANCE SHEET

	Year Ended December 31	
	2024	2023
Current Assets	\$ 1,103,868	\$ 1,250,867
Fixed Assets	3,155,064	3,654,555
Taxes Receivable	245,634	-
Total Assets	\$ 4,504,566	\$ 4,905,422
Current Liabilities	531,466	520,010
Non-Current Liabilities	-	19,810
Equity	3,973,100	4,365,602
Total Liabilities & Equity	\$ 4,504,566	\$ 4,905,422

2025 Operating Budget

2025 OPERATING BUDGET

Year Ended December 31

	2025 Budget	2024 Budget	Variance
Revenue	\$ 2,173,540	\$ 2,015,100	\$158,440
Cost of Goods Sold	522,830	474,200	(48,630)
Gross Profit	\$ 1,650,710	\$1,540,900	\$109,810
Expenses	2,315,770	2,184,340	(131,430)
Taxes	(176,250)	(170,510)	5,740
Net Loss	\$ (488,810)	\$ (472,930)	\$(15,880)

2025 Year-To-Date

2025 INCOME STATEMENT

Month Ended May 31

	YTD Budget	YTD Actuals	Variance
Revenue	\$ 931,145	\$ 933,018	\$ 1,873
Cost of Goods Sold	218,855	220,350	(1,495)
Gross Profit	\$ 712,290	\$ 712,668	\$ 378
Expenses	972,713	968,473	4,240
Taxes	(68,778)	(68,778)	-
Net Loss	\$(191,644)	\$ (187,027)	\$ 4,618

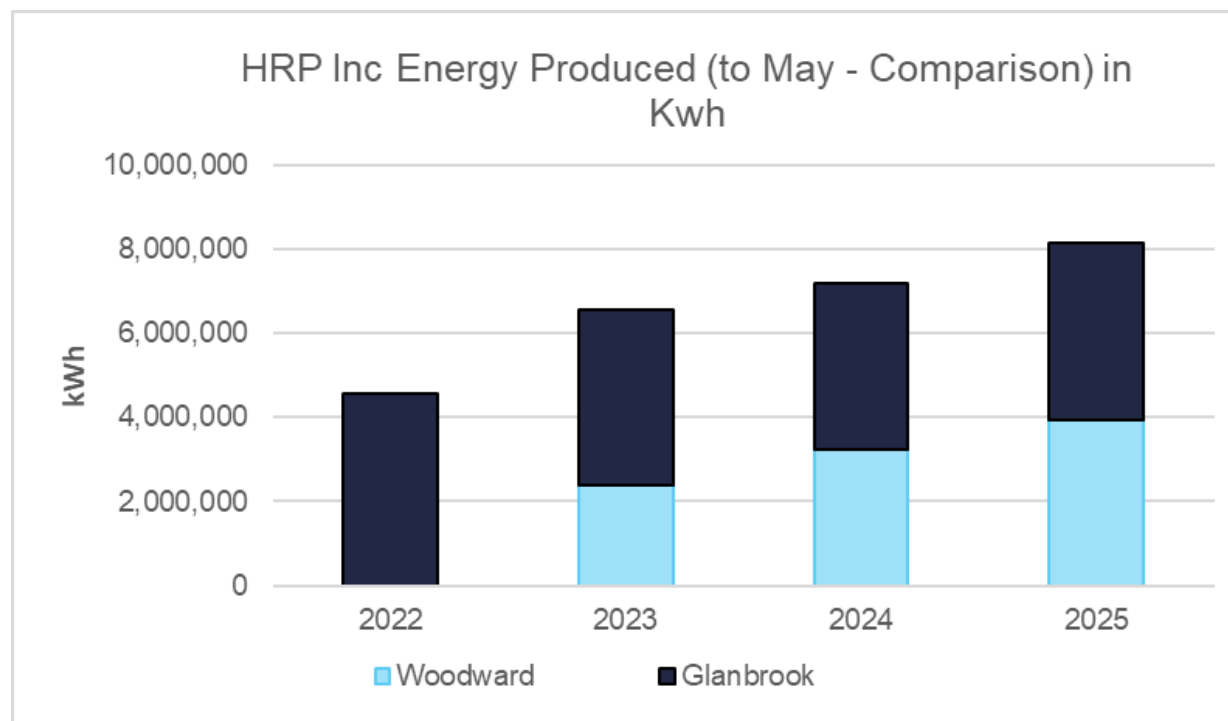
City of Hamilton Benefits

- Since inception (2006), the City of Hamilton has received approximately \$23 million in benefits from HRP Inc.
- Although dividends have not been paid in the last four years, the City continues to receive benefits in terms of salary recovery and payment for methane (approximately \$781K in 2024)

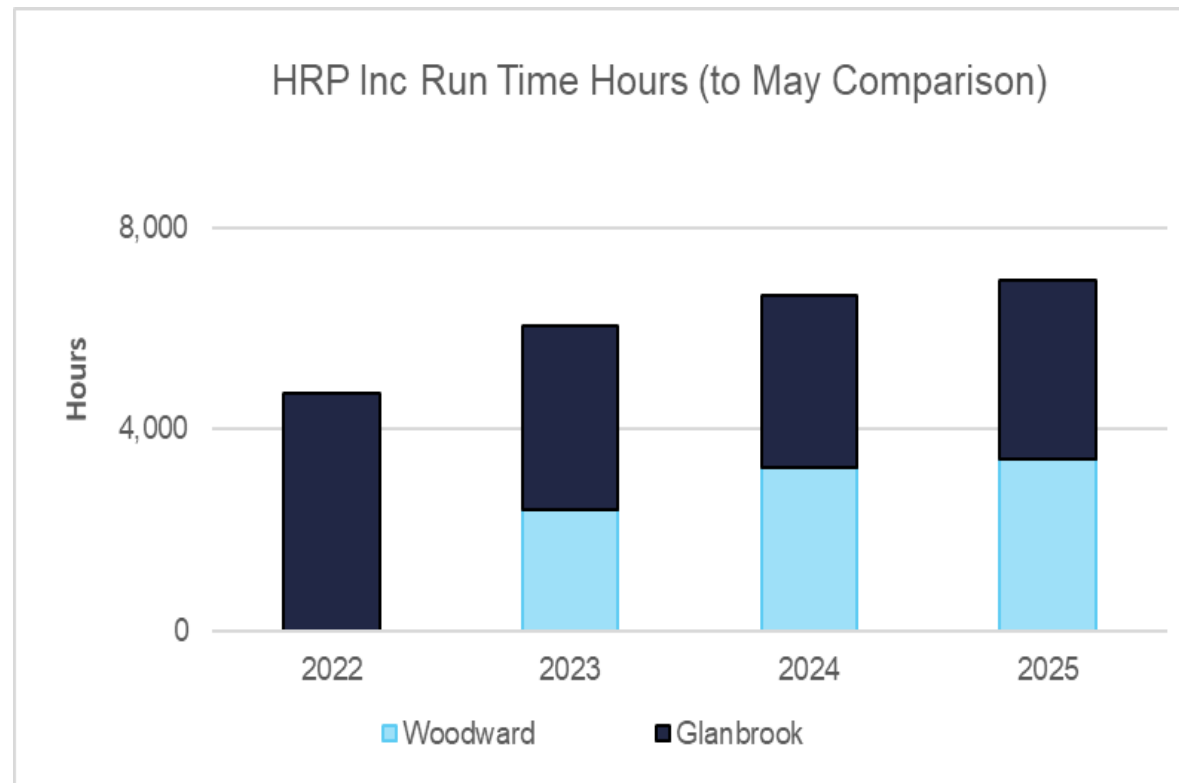
Updates on Existing Renewable Energy Generation Sites

Operations Updates

2025 Energy Production -Combined



2025 Engine Runtime Hours



Feasibility Study & Funding Approach

- RFP C11-40-25 issued for feasibility & 30% design
 - Consultant selected through competitive procurement (name withheld pending contract execution)
 - GMF application submitted – request for 50% cost-share
 - Recommendation Report (HRPI25002): Request up to an additional \$100,000 from Bank Account to cover funding shortfall between approved budget and estimated project cost
-

Information Report – Evaluative Framework

- Response to September 2024 Board Direction
 - Framework developed by HRP Inc. to guide consultant's work
 - Evaluates RNG, CHP, and hybrid models
 - Criteria include environmental, financial, and technical performance
 - Includes NPV business case to compare long-term value
 - Supports transparent business case and consultant work
-

Strategic Outlook & Next Steps

- Focus on returning Woodward and Glanbrook to profitability
 - Continue advancing feasibility study & monitor GMF results
 - Align with City's future vendor roster update; use existing rosters in the interim
 - Prepare for potential capital project delivery based on study outcomes
 - Maintain strong governance, reporting, and financial oversight during transition
-

Discussion & Questions



HRP Inc.



City of Hamilton Report for Information

To: Chair and Members
Hamilton Renewable Power Inc. Board of Directors

Date: July 22, 2025

Report No: HRP25001

Subject/Title: Evaluative Framework to Guide Consultant
Research – Response to September 12, 2024,
Board Direction

Ward(s) Affected: City Wide

Recommendations

That Report HRP25001 respecting Evaluative Framework to Guide Consultant Research – Response to September 12, 2024, Board Direction **BE RECEIVED** for information.

Key Facts

- This Report responds to the September 12, 2024, Board motion directing staff to report on the evaluative framework for consultant-led feasibility work.
- A verbal response to the Board was provided by the former President on February 13, 2025, in advance of issuing the RFP. This report serves to formally document that response.
- In April 2025, HRP Inc. issued RFP C11-40-25 to retain a consultant to study long-term options for biogas use at the Woodward Wastewater Treatment Plant. The RFP was issued through the City's Procurement Division and complied with all applicable legal and policy requirements.
- The successful proponent will co-develop a new evaluative framework with HRP Inc. and Hamilton Water.
- The framework will include criteria to assess environmental, financial, and technical performance of potential biogas end uses.

- The framework will inform the 30% design and recommendation of a preferred option aligned with HRP Inc. and City climate targets.
- This item is currently listed on the Outstanding Business List (OBL).

Financial Considerations

No financial impacts.

Background

At its September 12, 2024, meeting, the HRP Inc. Board of Directors directed staff to report back with details on the evaluative framework that would guide consultant research on the future of biogas utilization at the Woodward Renewable Energy Facility.

Analysis

The selected consultant will co-develop the evaluative framework in collaboration with HRP Inc. and Hamilton Water. While past work—such as the 2022 Jacobs Report—is referenced in the RFP, the framework is intended to be forward-looking and adaptable to emerging technologies and business models.

Key components of the framework will include:

- **Development of weighted evaluation criteria**, jointly established with HRP Inc. and Hamilton Water, to assess technical feasibility, environmental performance, and social and financial impacts.
- **Assessment of biogas utilization scenarios**, including Renewable Natural Gas (RNG) injection, Combined Heat and Power (CHP), and hybrid models.
- **Lifecycle cost analysis (LCCA)** and environmental performance assessment such as carbon intensity and Greenhouse Gas (GHG) reduction potential.
- **Net Present Value (NPV)** business case to compare long-term costs and revenues across scenarios.
- **Capital and operating cost estimates**, supported by high-level process flow diagrams and preliminary site layouts.
- **Selection of a preferred option**, justified through a transparent and evidence-based approach.

All work will align with the City of Hamilton's energy and climate goals and support HRP Inc.'s evolving operational and sustainability objectives.

Alternatives

There are no alternatives.

Relationship to Council Strategic Priorities

3.4 – Modernize City systems under **Responsiveness & Transparency**, by embedding data-driven, collaborative planning into infrastructure decision-making. The co-development of the evaluative framework ensures thoroughness, transparency, and accountability in how future energy investments are analyzed and selected.

Previous Reports Submitted

There are no relevant previous reports.

Consultation

- Jackie Kennedy, Acting General Manager, Public Works
- Shelley Hesmer, Treasurer of HRP Inc.
- Linda Campbell, Vice President of HRP Inc.

Appendices and Schedules Attached

Appendix A: Request for Proposals – Prime Consultant Services Required for Preliminary Design and Engineering of Biogas Upgrading Unit Installation and Connection to Utility Line

Prepared by: Yanni Simatis, Senior Vice President of HRP Inc.

Submitted and recommended by: Jackie Kennedy, Acting General Manager
Public Works



Hamilton

CITY OF HAMILTON

REQUEST FOR PROPOSALS

Contract Number: C11-40-25

**Prime Consultant Services Required for Preliminary
Design and Engineering of Biogas Upgrading Unit
Installation and Connection to Utility Line**

**Closes: 3:00 PM, Hamilton time
Monday April 14, 2025**

Issued at the request of and on behalf of Hamilton Renewable Power Inc (HRPI)

***** ELECTRONIC PROPOSAL SUBMISSIONS ONLY *****

**Procurement Section
Corporate Services Department**

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COMMUNICATIONS NOTICE

Revised: March 21, 2023

All requests for information, instructions or clarifications shall be submitted through the Bidding System by clicking on the “Submit a Question” button for the specified Request for Proposals document and shall be directed to:

Mathew Brown
Procurement Specialist

All questions related to this Request for Proposals (RFP) or any clarification with respect to this RFP must be made no later than **three Business Days prior** to the Closing Time of this RFP in order that City staff may have sufficient time to respond. The City reserves the right to extend the deadline for questions if required regarding this RFP.

Written answers or clarifications to issues of substance shall be shared with all Proponents and issued as part of the RFP in the form of an Addendum. **All Proponents are advised that any Addenda issued will only be posted on the following website:**

<https://hamilton.bidsandtenders.ca>

It is the sole responsibility of each Proponent to check the website for any and all Addenda that have been issued for this Request for Proposals.



City of Hamilton
Corporate Services Department
Procurement Section
Email: procurement@hamilton.ca

Mathew Brown
Procurement Specialist
Email: mat.brown@hamilton.ca

REQUEST FOR PROPOSALS NOTICE

Contract Number: C11-40-25

Prime Consultant Services Required for Preliminary Design and Engineering of Biogas Upgrading Unit Installation and Connection to Utility Line

Closing 3:00 PM, Hamilton time

Monday April 14, 2025

Only electronic Proposal submissions shall be accepted and received through the City's Bidding System by the closing date and time stated above.

There is no public opening for this Request for Proposals.

1. SCOPE OF WORK

The scope of work shall include comprehensive review of various opportunities as listed below:

- 1) Gather relevant information on biogas generation, infrastructure, and site conditions, including but not limited to the following activities:
 - assess current biogas production volumes, composition, and variability.
 - evaluate existing biogas collection, treatment, and handling systems.
 - conduct site visits and interviews with operational staff, as required.
- 2) Review Appendix A - 2022 Renewable Energy Options Assessment completed by Jacobs Inc. and confirm the recommendations made.
- 3) Assess the most beneficial usage of increased biogas produced, such as:
 - Electricity generation (similar to what is currently on-site at the Woodward Wastewater Treatment Plant, 700 Woodward Ave, Hamilton ON L8H 6P5).
 - Upgrading to clean fuel (Renewable Natural Gas - RNG) and injecting into a natural gas pipeline.

- 4) Evaluate proven biogas upgrading and purification technologies and identify necessary retrofits or upgrades to transform the existing cogeneration site for utility gas infrastructure connection.
- 5) Assess current municipal biogas projects, environmental and regulatory requirements, RNG offtake market, funding availability, and project delivery models.
- 6) Develop evaluation criteria in collaboration with HRPI. and Hamilton Water team to assess alternatives.
- 7) Deliver and complete 30% preliminary design and engineering work for the preferred option that aligns with the City's energy and GHG reduction targets.
- 8) Provide a technical and financial business case, including:
 - life cycle costing.
 - work plan and process block diagrams.
 - Capital and operational cost analysis.
- 9) Review and recommend biogas upgrading and beneficial use technologies, including:
 - Technology providers.
 - Reliability and scalability.
 - Carbon reduction potential.
- 10) Conduct lifecycle cost analysis (LCCA) for each proposed option and provide a comprehensive feasibility study.
- 11) Deliver process flow diagrams (PFDs) and preliminary layouts, including:
 - Key system components and specifications.
 - Integration points with existing infrastructure.
 - Preliminary cost estimates and recommended additional studies, if required.

The selected consultant will participate in an official project kickoff meeting and conduct an on-site walkthrough to:

- Review facility processes and layouts.
- Gather operator insights on challenges and limitations.
- Collect essential data for analysis.

Following this, the consultant will evaluate options for biogas processing and provide detailed feasibility studies, including:

- Sustainability evaluations.
- Financial projections.
- Environmental impact assessments.

Recommendations will prioritize economically feasible, scalable solutions for clean fuel production and WWTP sustainability transformation.

2. SITE MEETINGS

There are no scheduled site meetings for this Request for Proposals.

3.0 TO OBTAIN DOCUMENTS

3.1 Free Preview of Request for Proposals Document

A complete set of Request for Proposals documents may be viewed for free on the City of Hamilton's bid opportunities website <https://hamilton.bidsandtenders.ca>.

3.2 Purchase of Request for Proposals Document

The Request for Proposals documents are available for online purchase only.

Online: <https://hamilton.bidsandtenders.ca>

Fee: \$63.65 non-refundable, tax included + applicable bids&tenders™ fees

3.3 Accommodations for Proponents with Disabilities

In accordance with the Ontario Human Rights Code, Ontarians with Disabilities Act, 2001 (ODA) and Accessibility for Ontarians with Disabilities Act, 2005 (AODA), the City of Hamilton will accommodate for a disability, ensuring full and equitable participation throughout the bid process.

If a Proponent requires this Request for Proposals in a different format to accommodate a disability, the Proponent must contact the Procurement Specialist as soon as possible and in any event prior to the closing date. The Request for Proposals in the different format will be issued only to the requesting Proponent and all Addenda will be issued in such different format only to the requesting Proponent.

4.0 TRADE AGREEMENTS

This Request for Proposals is subject to the Canadian Free Trade Agreement (CFTA).

Procurement Manager
City of Hamilton

NOTICE

Note to Proponents: The Hamilton Renewable Power Inc. is a corporation within the City of Hamilton. All issues related to this Request for Proposals pre-Award shall be dealt with by the City of Hamilton, on behalf of the Hamilton Renewable Power Inc. All project management or other Work or Services-related issues post-Award (including issues related to the approval of Change Orders and Change Directives) shall be the responsibility of the City of Hamilton. The Contract shall be between the Hamilton Renewable Power Inc. and the Successful Proponent. Further, any payments made by the City of Hamilton under the Contract shall be made at the request of and on behalf of the Hamilton Renewable Power Inc.

Every attempt has been made in this Request for Proposals to correctly reference the City of Hamilton and the Hamilton Renewable Power Inc. respective roles herein. Any clarification required on this issue shall be considered in the same manner as set out above.

DEFINITIONS

Document Source: Request for Proposals – Prime Consultant Services
Revised: March 21, 2023

Whenever used in the RFP or the Agreement, the following words have the following meanings:

STANDARD DEFINITIONS

“Addendum” and “Addenda” means a written addendum or addenda issued with respect to the Request for Proposal.

“Agreement” or “Contract” means the formal agreement or contract executed by both the City and the Consultant, or by purchase order issued by the City, to perform the Work, including the supply and delivery of all labour, Goods, Services, equipment and incidentals necessary for the proper and satisfactory execution of the Work, and the fulfillment of all other contractual obligations and undertakings, all in accordance with the Request for Proposals, and including any written supplementary agreements, amendments, Change Orders and Change Directives, between the City and the Consultant which form part of the Agreement or Contract.

“Agreement Documents” means those documents as set out in Agreement for Work.

“Alternative” means anything for which the Successful Proponent provides a price in a manner that gives the City options in determining the actual Work of the Agreement and may include such items as an optional product, system, installation, method, design and requirement. The City shall not be obliged to purchase an Alternative when accepting a Proposal, but may, at its discretion elect to purchase all, some or none of the Alternatives offered.

“Alternative Price” means the amount stipulated by the Successful Proponent for an Alternative, which can be stated as an addition, a deduction, or no change to the Total Agreement Price. The Consultant or Prime Consultant shall be obliged to adhere to the Alternative Price quoted in its Proposal.

“Alternate Proposal” means a Proposal submitted by the same Proponent to the RFP that responds fully and completely to the RFP but which identifies a different way of fulfilling the RFP requirements. This is not the same and is not related to the definitions of Alternative or Alternative Price which relate specifically to identified requirements of the RFP. Alternate Proposals are not permitted unless expressly identified in the Special Instructions. Where an Alternate Proposal is not permitted and one is submitted it may be rejected.

“Bid” shall have the same meaning as Proposal.

“Bidder” shall have the same meaning as Proponent.

“Bidding System” means the web portal used by the City for the electronic advertisement of public bids as well as dissemination of all information by or on behalf of the City and the system for submissions from Proponents for this RFP.

“Business Day” means any day other than a Saturday, Sunday, public holiday or other day on which banks in Ontario are authorized or required by Law to be closed or any other day on which the administrative offices of the City are closed.

“Canadian Prime Interest Rate” means the rate of interest publicly quoted from time to time by the Royal Bank of Canada as its prime rate for Canadian dollar commercial loans made at its main branch in Toronto Ontario, or the corresponding rate of such other Canadian chartered bank as the City of Hamilton may designate from time to time.

“Change Directive” means a direction issued by the Consultant or Prime Consultant and signed by the City with respect to Work or a modification previously described in a change notice, where the Consultant or Prime Consultant is of the reasonable opinion that due to some material development it has become necessary or advisable to proceed with the work or modification in question without the delays that might otherwise be incurred under the Change Order process, whereby final agreement on or determination of any amendment to the Agreement will be made after the work has been completed in accordance with the terms and conditions contained in the Agreement.

“Change Order” means a direction issued by the Consultant or Prime Consultant to authorize an amendment to the work not contemplated in the original Agreement, or to modify the manner in which the Work or Project is to be carried out; and for greater certainty means a written amendment to the Agreement prepared by the Consultant or Prime Consultant and signed by the parties stating their agreement to:

- (a) a change in the Work;
- (b) the method of adjustment or the amount of the adjustment in the Total Agreement Price, if any; and
- (c) the extent of the adjustment in the time allowed for the completion of Work under the Agreement, if any, and for the sake of greater certainty, there shall be no presumption that a change or changes in the Work shall in any way necessitate or result in any extension of such time or any compensation for delay or otherwise.

“City” means the City of Hamilton, and where an authority or discretion is conferred upon the City under this Contract, means the appropriate official of the City as designated or appointed under its governing by-laws, resolutions or policies from time to time.

“City’s Representatives” includes the City’s elected officials, officers and employees, and those agents, representatives, Independent Consultant and other persons expressly authorized by the City to act on its behalf, excluding the Consultant and its Subconsultants.

“Closing Time” means the deadline by which to submit Proposals for this RFP set out in the RFP Notice, as may be amended by Addendum or other written notice of the City.

“Construction Contract” means the agreement(s) between the City and a Contractor for the provision of construction work on the Project, together with any request for proposals, tenders or quotes issued by the City and accepted submissions related to same, and any contract for works, general and supplementary conditions, drawings, specifications, special conditions and all other documents forming part of the agreement.

“Consultant” or “Successful Proponent” means the entity that submitted a proposal for the provision of the Work in accordance with and in response to the RFP which was subsequently evaluated and accepted by the City.

“Contractor” means a person or entity contracting with the City to provide labour, supplies, materials, equipment, and other resources for the supply, execution, fabrication, installation, and construction of the work on the Project.

“Default” means any act or event of default as contemplated in article 33.0 of the General Conditions and any act or event of default as contemplated in the Request for Proposals; and without restricting or limiting the rights and privileges of the City to any broader interpretation, any default of or in respect of a term, covenant, warranty, condition or provision of the Agreement, or a liability caused, by an officer, director, partner, employee, Subconsultant or agent (or an officer, director, partner or employee of a Subconsultant or agent) of the Consultant or Prime Consultant shall constitute a default by the Consultant or Prime Consultant.

“Disbursements” means those costs, expenses and disbursements necessary for, as well as incidental to, the provision of Services pursuant to, or required by, the Agreement which include, but are not limited to, software rights and licences and other intellectual property rights, plans, sketches, drawings, graphic representations, licences, fees, levies, permits and approvals, mileage, accommodations, telephone and other communication device charges (including long distance charges), transportation and fuel charges, postage and courier charges, all printing, binding, photocopying, paper document reproduction and other related expenses and all other things and incidentals necessary for completing the Services in accordance with the Agreement, provincial certificate of approval fees for air and noise, municipal building and related permit fees payable to the City and site plan approval application fees. All anticipated and foreseeable Disbursements are to be accounted for in the Total Agreement Price. No additional Disbursements will be paid by the City, except as otherwise specified in the Agreement or as otherwise expressly agreed to in advance and in writing by the City.

“Electronic Bidding” means a method of issuing this Request for Proposals and/or receiving Proposals where the process of using and/or receiving Proposals by internet is considered appropriate, and in particular includes the Bidding System operated by bids&tenders™ system operated by eSolutions Group, 455 Philip Street, Waterloo, Ontario N2L 3X2.

“Evaluation Team” means a team consisting of members of City staff and, where considered appropriate by the City in the exercise of an absolute discretion, Independent Consultants, who will perform the evaluation of each of the Proposals and make such reports and recommendations to the award of this RFP as they consider appropriate;

“Form of Proposal” means the proposal form relating to the Work, as the case may be, and for the sake of greater certainty includes the Proposal Form and Schedule of Prices.

“Goods” means supplies, equipment, materials, products, structures or fixtures to be delivered, installed or constructed and any item of tangible personal property or computer software required to be installed, supplied or consumed in order to complete the Work and or deliver the Services.

“Independent Consultant” means any consultant, other than the Consultant or Prime Consultant, retained by the City to advise and/or perform services on the behalf of the City with respect to the Work.

“Instruments of Service” means the design, drawings, specifications, and reports prepared by or on behalf of the Prime Consultant, including but not limited to plans, sketches, drawings, graphic representations and specifications, computer-generated design and materials.

"Law" means all statutes, laws, by-laws, regulations, requirements, ordinances, notices, rulings, orders, directives, policies and controls of the municipal, provincial, and federal governments and any other lawful authority and all court orders, judgments and declarations of a court of competent jurisdiction.

“Lump Sum Price” means an all-inclusive one price that applies to a single item or specific Service as set out in the Proposal.

“Prime Consultant” the means the person or entity that submitted a proposal for the provision of the Work in accordance with and in response to the RFP, which was subsequently evaluated and accepted by the City, which has the responsibility to coordinate the Services to complete Work and this may include working with various services and professionals including structural, mechanical, electrical, geotechnical and architectural.

“Procurement Manager” means the City's Procurement Manager or the City's Director of Financial Services.

“Project” means all the Work required to be completed by the Consultant or Prime Consultant as contemplated by the RFP.

“Project Manager” means the person designated by the City to manage the delivery or performance of the Work to which this Agreement relates, or to oversee the Work and/or the City's obligations under this Agreement and when there is no such designate appointed by the City, the Procurement Manager shall be the Project Manager.

“Proponent” means any person or entity submitting a Proposal in response to an RFP.

“Proposal” means the proposal made by the Consultant, Prime Consultant or Successful Proponent in response to the RFP.

“Proposal Submission Information” means the submission requirements and evaluation and selection process information for Proposals contained in this RFP;

“Provisional Item” means work or a portion of work the City may wish to have performed but which may be removed, at no additional cost to the City from the scope of the Work at any time. Where such item is removed, the City will deduct the relevant Provisional Price from the Total Agreement Price after the award of the Agreement.

“Provisional Price” means the amount stipulated by the Proponent for a Provisional Item which is to be included in the Total Agreement Price.

“RFP” means the Request for Proposals issued by the City, together with all Addenda to the RFP and any other documents expressly forming part of the RFP, with respect to the Work

(also collectively the "RFP Documents as set out in subsection 1(2) of these Instructions to Proponents).

"Services" means a service of any description required in order to complete the Work, whether commercial, industrial, trade, or otherwise, and includes without limitation:

- (a) all professional, technical and artistic services and the transporting, acquiring, supplying, storing and otherwise dealing in Goods;
- (b) all consulting services identified in the Agreement and those not identified in the Agreement but necessary and prudent in accordance with industry standards for the Work, to properly and fully complete the Work and perform the undertakings contemplated in the Agreement;
- (c) all incidentals necessary for proper, diligent and satisfactory execution of a Service and the fulfilment of all other contractual obligations and undertakings of the Consultant or Prime Consultant under the Agreement.

"Specifications" means the portion of the Agreement documents, wherever located and whenever issued, consisting of the written requirements and standards for products, systems, workmanship, quality, and the Services necessary for the performance of the Work.

"Subconsultant" or **"Subcontractor"** is a person or entity having a direct contract with the Consultant, Prime Consultant or Successful Proponent to perform a part or parts of the Services or to supply Goods or Services with respect to the Work, with the prior approval of the City.

"Successful Proponent" means the Proponent awarded the Agreement by the City. The Successful Proponent also means the Consultant, Prime Consultant or the Consultant's authorized representative.

"Terms of Reference" means the Terms of Reference forming part of this Request for Proposals and includes all written or printed requirements and standards otherwise forming part of the Request for Proposals and pertaining to the method and the manner of performing the Work or Service, to the scope of Work and to the quality of a Good to be furnished under the Agreement.

"Total Agreement Price" or "Total Contract Price" means the fully inclusive, all-in total contract price, constituting the sum of all costs quoted by the Consultant or Prime Consultant in its Proposal with respect to the Work, including incidentals, and shall include without limitation:

- (a) the purchase price for all professional fees, consulting services, subconsultants, Disbursements, materials, labour costs, service costs, costs for temporary structures and facilities, utility costs, warranty costs, life cycle costs, operating and disposal costs, expenses, allowances and charges; but
- (b) excluding any options or alternatives set out in this Agreement that the City elects not to purchase; and
- (c) excluding Value Added Taxes or other applicable sales taxes, imposed under the Laws of Ontario and the Laws of Canada applicable therein.

"Unit Price" means any unit price or other component of the Total Agreement Price.

“Value Added Taxes” means such sum as shall be levied upon the Total Agreement Price by the federal or provincial or territorial government and is computed as a percentage of the Total Agreement Price and includes the Goods and Services Tax, the Ontario Retail Sales Tax, the Quebec Sales Tax, the Harmonized Sales Tax, and any similar tax, the collection and payment of which have been imposed on the Consultant or Prime Consultant by the tax legislation.

“Work” means everything to be done, supplied or provided by the Consultant or Prime Consultant under this Agreement as applicable.

PROJECT SPECIFIC DEFINITIONS

“Benchmark” means the minimum required score by category and by overall score of a Proponent’s Proposal in order to proceed from Step 1 to Step 2 of the evaluation process, as set out in the Proposal Submission Information;

“Hamilton Renewable Power Inc.” is a corporation incorporated pursuant to the Business Corporations Act (Ontario), as amended (also collectively referred to as “HRPI.”) and is the municipally owned provider of renewable energy opportunities for the City of Hamilton. The award of the Agreement shall be between HRPI. and the Prime Consultant.

“Price Per Point” means the evaluation of the RFP will utilize a two step evaluation process. The City evaluates the technical Proposals received against the evaluation criteria and weightings set out in the RFP. For those technical Proposals that successfully meet the benchmark score stipulated in RFP, the City will then proceed to Step 2 – Schedule of Prices and open the price Proposal received. The City will then calculate the Price per Point for each Proposal meeting the technical benchmark score and the award will be made to the Proponent with the lowest Price per Point;

“Time Task Matrix” means a visual method of explaining project tasks and the anticipated time limit needed to complete each task in order to set the sequence of work and to identify the interrelationships among the tasks.

INSTRUCTIONS TO PROPONENTS

Request for Proposals

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These Instructions define your obligations and limit your rights.
Failure to follow the instructions may result in the disqualification of your Proposal.
Read carefully.

1. Interpretation

- (1) Where in this RFP a reference is made to the express written agreement of the City, it shall be understood that the City shall not be deemed or construed to have agreed to any stipulation, specification, exclusion, limitation or other term or condition set out in a Proposal that deviates from a provision set out in any of the RFP Documents, unless that deviation is expressly confirmed in a written and express amendment to that agreement.
- (2) In the event of a conflict or inconsistency between, or an omission or ambiguity with respect to, any term(s), condition(s) or provision(s) contained in any of the following documents, the term(s), condition(s) or provision(s) contained in the following RFP Documents shall apply and prevail in the following successive order of priority to the extent of such conflict, inconsistency, omission or ambiguity or incongruity:
 - (1) any Addenda to this RFP;
 - (2) Proposal Submission Information;
 - (3) Terms of Reference or Specifications;
 - (4) Definitions;
 - (5) Project Specific Special Conditions;
 - (6) Special Conditions;
 - (7) any contract drawings;
 - (8) Special Instructions;
 - (9) General Conditions;
 - (10) Instructions to Proponents;
 - (11) the sample Agreement for Work;
 - (12) Form of Proposal, including Schedule of Prices;
 - (13) any other documents that form a part of the Request for Proposals;
 - (14) Successful Proponent's Proposal, as accepted by the City.
- (3) Notwithstanding subsection 1(2) of these Instructions to Proponents, in the event of conflict between any of the provisions of the RFP Documents, the provision most favourable to the City, in the City's determination, shall prevail and apply.
- (4) The City shall not be bound by any oral representation or communication whatsoever, including but not limited to any instruction, amendment or clarification of these Instructions to Proponents or any of the RFP Documents, or any information, advice, inference or suggestion, from any person (including but not limited to an elected official, employee, agent, Independent Consultant or representative of the City) concerning a Proponent's submissions, the RFP, the RFP Documents, the proposed Contract or any other matter concerning the RFP or Work. In addition, the City shall not be bound by any written representation whatsoever concerning a Proponent's submissions, the

RFP, the RFP Documents, or any other matter concerning the RFP or Work, unless executed by the person designated and authorized in accordance with the RFP Documents or in accordance with a direction or authorization of City Council.

- (5) In these Instructions to Proponents, Special Instructions, Proposal Submission Information and Form of Proposal, unless expressly provided otherwise,
- (a) the provisions shall be read with changes of gender, number or corporate status as the context may require;
 - (b) a reference to any Law or to a provision thereof shall be deemed to include a reference to any Law enacted in substitution thereof or amendment thereof;
 - (c) the headings to each section are inserted for convenience of reference only and do not form part of the RFP;
 - (d) all accounting terms have the meaning recognized by or ascribed to those terms by the Canadian Institute of Chartered Accountants;
 - (e) all amounts are expressed in Canadian dollars and to be secured and payable in Canadian dollars;
 - (f) all references to time shall be deemed to be references to current time in the City;
 - (g) any reference to an officer of the City or to a person holding a specific position shall be construed to mean the person holding that office or position from time to time and shall include a designate, delegate or deputy of that person and successor to the office or position;
 - (h) any words and abbreviations, which have well-known professional, technical or trade meanings, are used in the RFP Documents in accordance with such recognized meanings;
 - (i) the number of days shall be calculated by,
 - (a) counting all days including Saturdays, Sundays and public holidays, provided, however, that if the final day of any period shall fall on a Saturday, Sunday or public holiday, then the final day shall be deemed to be the next day which is not a Saturday, Sunday or public holiday;
 - (b) where "month" is referred to, it shall be a calendar month.

2. Nature of the RFP

- (1) The RFP is an invitation to Proponents describing the intent, purpose, requirements and concerns of the City and prescribes how Proponents are to respond to this RFP.
- (2) This RFP may contain a general description of the City's requirements, including location constraints, information on space requirements, performance requirements and other technical specifications, warranty and maintenance requirements and other factors that the City intends to take into account in the award of the Contract.

- (3) These Instructions to Proponents, the Proposal Submission Information and other RFP Documents explain how Proponents are to submit Proposals and address certain legal requirements and implications relating to the Proposal process and Contract and summarize how the Contract will be concluded.
- (4) Without limiting any other right or privilege of the City contained in the RFP, the following rules shall govern the evaluation of Proposals:
- i) The City may consider the full range of options, amenities and enhancement features offered by a Proponent when awarding the Contract. The City shall be the sole judge as to whether the added value offered in respect thereof justifies any additional expenditure. This RFP may be subject to possible cost constraints, which the City shall not be obliged to disclose to any Proponent, which may rule out the selection of a Proposal. While the City shall not be obligated to consider optional features, no optional features will be considered by the City unless the Proponent's submission fully complies with the RFP in all respects.
 - ii) The City reserves the right to award the Contract based solely upon considerations of Total Agreement Price, or Total Agreement Price with Options, or upon performance, technical, warranty, maintenance, compatibility and other considerations contained in section 11 (Reserved Privileges of the City), section 15 (Obligation of Suppliers to Deal in Good Faith) and section 16 (Record and Reputation), or any combination thereof, as the City considers it in its best interests to do so.
 - iii) Where compliance with any specified criteria is stated to be a condition precedent to the award of the Contract, that condition shall be deemed to be for the exclusive benefit of the City, which may elect to waive that condition in its absolute discretion, and the City shall not be liable to any person by reason of so doing.
 - iv) Based upon the evaluation criteria set by the City, all compliant Proposals shall be evaluated, and a recommendation may be made to Council (or the designated person with authority delegated by Council to approve the recommendation for award) to award the Contract to the Proponent whose Proposal best satisfies the criteria that have been established by the City, but where the City for any reason in its sole discretion decides that all Proposals received were unsatisfactory, or that the terms and conditions set out in the RFP or an Addendum cannot be realized with that Proponent whose Proposal best satisfies the criteria that have been established by the City, then the City reserves the absolute right, as it sees fit,
 - (a) to revise and reissue the RFP;
 - (b) to cancel the RFP,

And in no such case shall any person have any legal claim or recourse against the City and the City's representatives on any ground whatsoever. The exercise of a right by the City shall not preclude the exercise by the City of any other right.
 - v) The Proposals will be evaluated based on the criteria listed in this RFP and any Addendum or Addenda thereto. Unless a specific weighting is indicated in this RFP or any Addendum or Addenda thereto,

- (a) The City may give such weighting to each of the identified criteria as the City considers appropriate; and
- (b) It is within the exclusive discretion of the City to determine which of the features specified by a Proponent and any other features specified in the RFP or any Addendum or Addenda thereto offers the City the best value for money.

Subject to the foregoing, the criteria for the evaluation of Proposals shall be as specified by the City from time to time, and the City shall be the sole authority to determine how those criteria are to be interpreted and applied, and the weighting to be given to each criterion, if any.

- vi) The Evaluation Team may include such members of the City's staff and outside Independent Consultants as the City considers is necessary or advisable to provide proper technical (including legal and financial) evaluation and analysis of the Proposals that have been made. Depending upon the background and expertise required, evaluators may not individually score every component. The Evaluation Team will meet as required to create a team score for each Proponent's Proposal. The Evaluation Team may modify the Evaluation Team's score to reflect additional information obtained during the clarification of Proposals or at any meetings or interviews scheduled with Proponents.
 - vii) The City shall not be obliged to disclose the evaluation scores of any individual member of the Evaluation Team, nor to justify any score awarded by that team or any member thereof. In the absence of evidence of manifest bad faith, any evaluation carried out by the Evaluation Team shall be considered to be fair and accurate for all purposes and shall not be subject to review by any court or other tribunal.
- (5) The City wishes to fully understand each Proponent's Proposal. Therefore, each Proponent is encouraged to submit any additional material that it believes will facilitate the evaluation process, subject to any page quantity submission restrictions contained in this RFP. Furthermore, the Proponent must make available to the City additional evaluation information as requested by the City.
 - (6) At its election, the City may use the RFP process to identify a short-list of Proponents. Following an initial evaluation, the City may invite such number of the top-ranked Proponent(s) as it considers advisable, to present their concept to the Evaluation Team in a formal interview session. Performance in this interview may be taken into account in the evaluation process.

3. Proposal Submissions and Form of Proposal

- (1) Every Proposal **shall**
 - (a) be submitted on the City's prescribed Form of Proposal in its entirety;
 - (b) be legible;
 - (c) be completed in English;

- (d) be submitted through the Bidding System;
 - (e) have all of the required blank spaces provided on the Form of Proposal completed by the Proponent;
 - (f) include all material, Goods, Services, equipment and labour, required to complete the Work; and
 - (g) state all prices in Canadian funds, unless otherwise stipulated.
- (2) Electronic Proposal submissions only, shall be accepted and received by the Bidding System, on or before the closing date and time stated in this Request for Proposals.

A Proposal submitted by mail, in person, fax, e-mail or other electronic means, other than through the Bidding System, will not be accepted.

- (3) Proponents shall have a Bidding System vendor account and must be registered as a plan taker for this Request for Proposals. Only plan takers will have access to download this Request for Proposals document, receive Addendum email notifications, download Addendum and to submit their Proposal electronically through the Bidding System.

If a Proponent has obtained the Request for Proposals document from a third party, the onus is on the Proponent to create a Bidding System vendor account and register as a plan taker for the bid opportunity.

- (4) Time is of the essence with respect to the submission of a Proposal. It is the **sole** responsibility of each Proponent to ensure that its Proposal is received by the Bidding System on or before the closing date and time stated in the Request for Proposals document. The closing time shall be determined by the Bidding System web clock.

Proponents are advised that the timing of their Proposal submission is based on when the Proposal is **RECEIVED** by the Bidding System, not when a Proposal is submitted by a Proponent, as Proposal transmission can be delayed in an "internet traffic jam" due to file transfer size, transmission speed, etc.

- (5) Proponents shall allow sufficient time to upload their Proposal submission, including any attachments. Late Proposal submissions shall not be accepted by the Bidding System.
- (6) The Bidding System will send a confirmation email to the Proponent advising that their Proposal was submitted successfully. If an email confirmation is not received, contact technical support at bids&tenders™ via email: support@bidsandtenders.ca or by telephone 1-800-594-4798.
- (7) It is the exclusive responsibility of each Proponent to submit a complete Proposal in accordance with the Request for Proposals.
- (8) All documents prepared and work carried out by a Proponent in preparing a Proposal, and all oral presentations to the City in connection with a Proposal, shall be without cost to the City, and neither the City's publication of a Request for Proposals nor the submission of a Proposal shall be construed to oblige the City to award a Contract.

- (9) A Proposal should, where printed or typed, be set out in print no smaller than Arial 12 point or Verdana 12 point and except where otherwise directed.
- (10) All words and phrases forming part of a Proposal should be written out in full, and abbreviations should not be used.
- (11) No amendment may be made to a Proposal after it has been submitted, except in the circumstances set out in section 7 and subsection 10(4) of these Instructions to Proponents.

4. Confidentiality

- (1) In accordance with the Municipal Freedom of Information and Protection of Privacy Act ("MFIPPA") and Personal Health Information Protection Act ("PHIPA"), this will notify the Proponents that any personal information Proponents provide is being collected under authority of the *Municipal Act, 2001*, SO. 2001, c. 25, as amended, and will be used in the evaluation process and, with respect to the Successful Proponent, for the purposes of the subsequent Contract. All correspondence, documentation and information provided to the City and/or the City's Representatives by any Proponent in connection with, or arising out of this RFP, and any Proposal submitted to the City will become the property of the City and a record of the City. The foregoing records and the RFP Documents are subject to the provisions of the MFIPPA and PHIPA and the City's obligations hereunder and may be released pursuant to such Acts. The Proponent's name at a minimum will be made public on request. In addition, certain contractual information must be disclosed to Council and accordingly may become part of the public record. All correspondence, documentation and information provided to the Evaluation Team may be reproduced for the purposes of evaluating the Proponent's submission to this RFP.
- (2) For the purposes of MFIPPA, Proponents may mark as confidential any scientific, technical, commercial, proprietary or similar confidential information contained in their submission, the disclosure of which could cause them injury, except the Total Agreement Price and their name. Complete Proposals are not to be identified as confidential. A watermark or rubber stamp imprint is suitable for this purpose. Subject to subsection (1), the City will use its best efforts not to disclose any information so marked but shall not be liable in any manner to a Proponent or any other person where information is disclosed by virtue of an order of the Privacy Commissioner, a court of competent jurisdiction or otherwise as required by Law. The City further makes no representations or warranties that the identification of a document as confidential will prevent its release under the provisions of MFIPPA, PHIPA or otherwise under Law. Any information in the Proponents' submissions that is not specifically identified as confidential may be treated as public information.
- (3) Information regarding the application of MFIPPA and PHIPA is available from the Access to Information and Privacy Section of the City Clerk's office at City Hall.
- (4) Confidentiality of records and information of the City relating to the Work must be maintained at all times. All correspondence, documentation and information provided by City and/or the City's Representatives to any Proponent in connection with, or arising out of this RFP or the acceptance of any Proposal remains the property of the City; must be treated as confidential; and must not be used for any purpose other than for

replying to this RFP and for fulfillment of any related subsequent Contract. Where any proprietary or confidential information belonging to or in the care of the City is disclosed to any Proponent in connection with the RFP, the Proponent shall

- (i) safeguard all information provided by the City and the City's Representatives, or any other person at the request of the City;
- (ii) maintain in strict confidence and not reproduce or disclose any such information to any person except as required by Law or as expressly permitted in advance by the City in writing;
- (iii) return forthwith and without demand all such information as may be in documentary form or recorded electronically by the Closing Time; and
- (iv) Not use any such information for any purpose other than the purpose for which it was provided by the City or by any other person at the request of the City.

5. Prices

- (1) The City shall not be required to cause prices to be read out publicly on the opening of Proposals or at any other time.
- (2) There is no public opening for this Request for Proposals. All Proposals shall be electronically opened and posted on the Bidding System, <https://hamilton.bidsandtenders.ca>, following the closing date and time of the Request for Proposals. Only the Proponents' name shall be posted for each Proposal received.
- (3) Following the electronic opening, Proposals shall be reviewed further to determine compliance with the Request for Proposals.
- (4) Unit Prices and other monetary components of the Total Agreement Price will not be disclosed.
- (5) Unless otherwise stipulated in the Special Instructions, all prices bid, including any Unit Prices, must be in stated in Canadian funds.
- (6) All prices shall be quoted exclusive of Value Added Taxes and the City may adjust any price quoted contrary to this requirement, unless otherwise specified in the Form of Proposal or any Special Instructions.
- (7) Subject to subsection (6), all prices include all excise taxes, customs duties, customs clearance and brokerage fees, royalties and patent or licence fees.
- (8) The award of the Contract may be based on considerations other than price and may employ the utilization of a scoring method using evaluation criteria, as provided in this RFP.
- (9) Once the Contract has been awarded, only the Total Agreement Price of the Successful Proponent will be disclosed. Official notification will only be given to the Successful Proponent; however, persons who submitted a Proposal may obtain the Total Agreement Prices for all Proponents upon request to the Procurement Specialist designated as the contact person for purposes of the RFP.

- (10) Award information will be posted on the following website:

<https://hamilton.bidsandtenders.ca>

6. Conflict of Interest (Proponents)

- (1) No employee of the City shall personally sell Goods or Services to the City, nor have a direct or indirect interest in a company that sells Goods or Services to the City.
- (2) The City may reject any Proposal submitted, or cancel any contract awarded, in contravention of this section.
- (3) Each Proponent respectively shall be deemed to have warranted that it has not employed or retained any person, other than a bona fide employee, agent or broker working for the Proponent, to solicit or secure the proposed contract, and that it has not paid or agreed to pay any person, other than a bona fide employee, agent or broker working solely for the Proponent, any fee, commission, percentage, gift or other consideration contingent upon or resulting from the award of that proposed contract, or as an inducement to be awarded that contract. Without prejudice to any of its other rights, the City reserves the right to annul any contract or other arrangement entered into with a Proponent where there is a breach of this warranty.
- (4) Prior to the award of the Contract, no Proponent shall contact any elected official of the City or member of City staff or Independent Consultant retained by the City with respect to its Proposal, the RFP or the proposed Contract, except the Procurement Specialist or other person designated for that purpose in the RFP Documents.
- (5) Except with the prior express written consent of the City,
 - (a) No Proponent shall act on behalf of the City with respect to any matter, issue or in connection with any property in which the Proponent or any director, officer, employee or Subcontractor of the Proponent has a direct or indirect pecuniary interest, including any contingent interest;
 - (b) Before submitting any Proposal to act on behalf of the City, the Proponent shall exercise reasonable due diligence to confirm that there is no conflict of interest within the contemplation of subsection (5) (a) or subsection (6);
- (6) Each Proponent shall not act in any case where there may be any conflict of interest between it (or any of its directors, officers, employees or Subcontractors) and the City, and each Proponent shall notify the City, in writing, immediately of any potential conflict of interest that may arise prior to the award of the Contract and fully disclose any details thereof.

7. Withdrawal of Proposals by Proponent

- (1) Proponents may withdraw their Proposal prior to the closing date and time of the Request for Proposals.
- (2) Requests to withdraw Proposals received by the Bidding System after the closing date and time of the Request for Proposals will be disregarded.

- (3) Proposals withdrawn may be edited and re-submitted prior to the closing date and time of the Request for Proposals. Proponents are solely responsible to ensure:
 - (a) any required adjustments are made to their Proposal;
 - (b) acknowledge all Addenda that have been issued for this Request for Proposal; and
 - (c) ensure the re-submitted Proposal is received by the Bidding System prior to the closing date and time of the Request for Proposals.

8. Proposals Open for Acceptance, Irrevocable, etc.

- (1) Proposals shall not be opened until after the Closing Time of the RFP, and so far as practicable, all Proposals shall be opened at one time.
- (2) Unless otherwise provided in a Special Instructions or Addendum to this RFP, a Proposal shall be irrevocable (i.e. open for acceptance by the City of Hamilton) for a period of **90 calendar days** following the closing date for the RFP.
- (3) Despite any requirement for the formal execution of an Agreement for Work, the Contract shall be deemed to arise upon the award of the Contract to the Successful Proponent. The Successful Proponent shall be responsible to the City for any costs, expenses, losses, damages and liabilities that the City may incur as a result of the Successful Proponent's failure or refusal to execute or perform the Contract as required.

9. Proponent's Responsibility

- (1) Unless otherwise expressly agreed to by the City in writing, where technical information or details is provided by the City and forms part of the RFP or any Addenda thereto (including any quantity estimates, soil condition reports, ground water or drainage reports or geophysical data, archaeological and heritage information and documentation, samples, or other documents of a similar kind or nature as may be provided together with the RFP Documents or incorporated by reference therein),
 - (a) the City shall exercise reasonable care in the preparation of those estimates, documents and information but shall not be taken to warrant their accuracy and shall not be liable for any inaccuracy therein unless that inaccuracy is the result of the deliberate misrepresentation of the City or a member of its staff;
 - (b) estimates, reports, data, or details shall be deemed to have been provided only as a guide for potential Proponents;
 - (c) Proponents are required to examine carefully that information and the responsibility for verification of the information so provided shall rest with each Proponent;
 - (d) the City shall not be responsible for the accuracy of information provided by the City from third party sources for use by a Proponent including the Successful Proponent. All such information shall be verified by the Proponent or the

Successful Proponent before relying on same; and

- (e) Proponents shall be deemed to have released and waived any rights and claims against the City and the City's Representatives for any negligent misrepresentation, error or omission.
- (2) Where the Work is to be carried out on City occupied or owned property, Proponents shall be responsible for visiting the job site and no allowance shall be made by the City for failure by the Proponent to examine carefully all conditions relating to the site or Work.
- (3) All persons submitting Proposals and all their Subcontractors shall be held to have thoroughly examined all RFP Documents and to have visited and inspected the site on which the Services and Work is to be carried out, and to have thoroughly familiarized themselves with all pertinent conditions before delivery of their respective Proposals, and no allowance shall be subsequently given by the City for or by reason of any error or omission on the part of any Proponent or Subcontractor with respect thereto. The City shall not be liable for any costs associated with any site inspection.
- (4) Where clarification of any information, document or matter is required by a Proponent, it shall be the responsibility of the Proponent to seek clarification in a timely manner from the City, in sufficient time to permit the City to respond, and satisfy itself with respect to same before submitting a Proposal. Notwithstanding the foregoing, the City shall have no obligation to respond.
- (5) It is the Proponent's responsibility to become familiar with and comply with all City procurement policies.
- (6) A Proponent shall be deemed to have included in the Total Agreement Price quoted in its Proposal, the entire cost of,
 - (a) all items that the Successful Proponent is responsible for under any of the RFP Documents, except where expressly provided otherwise;
 - (b) preparing and submitting such reports, drawings or documents as may be required by the City.

10. Addenda and Clarification of the Request for Proposals

- (1) The City reserves the right at any time prior to the award of the Contract,
 - (a) to withdraw or cancel the RFP;
 - (b) to extend the time for the submission of Proposals; or
 - (c) to modify the RFP,

by the publication of an Addendum, which shall become part of the RFP, and the City shall not be liable for any expense, cost, loss or damage incurred or suffered by any Proponent (or any other person) as a result of its so doing.

- (2) Without limiting the City's right, subsection (1) may apply to situations where no Proposal is compliant or an insufficient number of Proposals have been received.
- (3) Any Addendum shall be posted on the following website and is sufficiently served upon any prospective Proponent if so posted at:

<https://hamilton.bidsandtenders.ca>

- (a) In addition to the above method of posting, the City may also notify prospective Proponents of any Addendum by any other method it deems appropriate, including email, telephone, fax, courier, hand-delivery or by personal delivery. The need for additional notification and the method(s) to be used shall be in the absolute discretion of the City and notification shall be to the co-ordinates provided by the Proponent to the City at the time it obtained the RFP from the City.
 - (b) It is the sole responsibility of each Proponent to check the website and ensure that it has received any and all Addenda issued by the City. Proponents shall confirm in the Form of Proposal that they have received, examined and provided for all Addenda issued under the RFP. Proponents may in writing, seek confirmation of the number of Addenda issued under the RFP from the Procurement Specialist named in the Communications Notice page.
- (4) Where a Proponent submits their Proposal prior to the Request for Proposals closing date and time and an Addendum has been issued by the City, the Bidding System automatically **WITHDRAWS** the Proponent's Proposal submission and changes the Proposal submission to an **INCOMPLETE STATUS (NOT accepted by the City)**. The withdrawn Proposal can be viewed by the Proponent in the "**MY BIDS**" section of the Bidding System. The Proponent is solely responsible to:
- (a) Make any required adjustments to their Proposal;
 - (b) Acknowledge all Addenda that have been issued for this Request for Proposals; and
 - (c) Ensure the re-submitted Proposal is **RECEIVED** by the Bidding System before the closing date and time stated in the Request for Proposals.
- (5) Proponents shall acknowledge receipt of any Addenda when submitting their Proposal through the Bidding System. Proponents shall check a box for all Addenda and any applicable attachments that has been issued before a Proponent can re-submit their Proposal submission online.
- (6) All communication between a Proponent and the City (including requests for information or clarification) **shall** be set down in writing and directed to the Procurement Specialist as instructed in the Communications Notice page.
- (7) Any request directed to the City with respect to subsection (6) prior to the closing date of the RFP must allow sufficient time for a written response or clarification to be issued

by the City prior to the closing date, should the City consider it necessary to issue such response or clarification.

- (8) A written response or clarification of substance shall be shared with each Proponent and issued in the form of an Addendum.
- (9) The City shall not be bound by any oral:
 - (a) instruction;
 - (b) amendment or clarification of the RFP;
 - (c) information; or
 - (d) advice or suggestion,

provided by any member of the City's staff or consultant to the City concerning the RFP or the manner in which the Work is to be carried out and the Proponent bears any and all risk in relying on such representation.

- (10) If the City requires clarification of a Proponent's Proposal, that Proponent shall provide a written response to the City's request for clarification, in a timely manner, which shall bind the Proponent.
- (11) Each Proponent shall identify one senior individual by name, address and telephone number who will act as the Proponent's primary contact with the City with regard to this RFP and any subsequent Contract and has the authority to bind the Proponent.

11. Reserved Privileges of the City

Without limiting or restricting any other right or privilege of the City, the City shall have the following reserved rights and privileges, which may be exercised or waived in its absolute discretion:

- (1) the City may reject any Proposal, the lowest priced Proposal or all Proposals, or may cancel the RFP and require the submission of new Proposals for any reason within its absolute discretion;
- (2) the City is not bound to accept the lowest priced compliant Proposal submitted and may accept another compliant Proposal which, in the City's opinion, is more beneficial to the City's interests notwithstanding that it may not be the lowest priced compliant Proposal;
- (3) when evaluating Proposals and assessing Proposal prices in the evaluation of Proposals and the awarding the Contract, the City will consider its best interests and may exercise reasonable commercial judgment which may, but is not obliged to, include consideration of the following factors (without limitation):
 - (a) Proposal prices;
 - (b) the full lifetime cost implications to the City with respect to each Proposal, including life-expectancy, the inclusion or exclusion of alternate or optional equipment or configurations and the price implications thereof, training or re-

training costs, length and scope of warranty coverage, and long-term maintenance requirements;

- (c) the need to achieve economies of scale in supply;
- (d) the need to diversify sources of supply;
- (e) compatibility with existing equipment, such compatibility to be determined by tests conducted either by the City or by an independent testing agency satisfactory to the City;
- (f) compatibility with existing computer software and hardware, and capability to generate reports suitable to the City's existing reporting requirements; such compatibility and capability to be determined by tests conducted either by the City or by an independent testing agency satisfactory to the City;
- (g) potential cost savings to the City with existing City Contracts and other synergy benefits;
- (h) any extraordinary or unjustified disparity between the lowest priced Proposal and the other Proposals received by the City;
- (i) any prices contained in a Proposal that are, in the opinion of the Procurement Manager, below the Proponent's cost which do not appear to be offset by any other disclosed factors in the Proposal;
- (j) any prices contained in a Proponent's Schedule of Maximum Hourly Rates for Additional Services that are, in the opinion of the Procurement Manager, unreasonable or excessive compared to industry standards for the quality or type of personnel proposed for such Services;
- (k) the need to secure timely and reliable sources of supply;
- (l) the need to discontinue reliance on obsolete technology and methods;
- (m) the need to provide state of the art service to the residents of the City, or to integrate any aspect of City operations with those of its neighbours;
- (n) the need to avoid the use of unproven technology and methodologies;
- (o) the need to spread and minimize risk to the City;
- (p) the proximity of any service centre of a Proponent to the City;
- (q) the benefit in employing suppliers who have a proven track record of successful delivery and good reputation within the business community for integrity and competence;
- (r) the prior record of the Proponent as a vendor to the City;
- (s) whether in the opinion of the City or its professional advisors, the Proponent possesses the experience, or financial, technical, personnel or other resources that may reasonably be expected to be necessary in order to carry out the

obligations that the Proponent proposes to assume under the terms of its Proposal;

- (t) alternate Proposals;
 - (u) such other considerations as would influence the decision of a reasonable and prudent purchaser in the particular circumstances of the City at the time when the Contract is awarded.
- (4) in awarding the Contract the City may take into account the adherence or non-adherence of a particular Proponent to the social, economic or labour relations policies of the City;
 - (5) the City may waive compliance with any minor requirement governing the submission of Proposals;
 - (6) where in the view of the City, an insufficient number of Proposals have been received in response to a RFP, the City may publish a further such RFP (on the same or revised terms from the original request);
 - (7) the City may, in accepting any Proposal, impose conditions on such acceptance;
 - (8) where the lowest priced compliant Proposal exceeds the City's budgeted or estimated costs, the City in its sole and absolute discretion may, but is not obligated to:
 - (a) cancel the RFP;
 - (b) re-issue the RFP and accept new proposals based on revised specifications, terms and/or conditions;
 - (c) provide all Proponents, who submitted compliant Proposals to the RFP by the Closing Time, the opportunity to re-submit Proposals;
 - (d) enter into negotiations with the Proponent with the lowest priced compliant Proposal provided that the changes required to achieve a Proposal acceptable to the City will not materially change the general nature of the specifications, terms and conditions in the RFP;
 - (e) where only one Proposal has been received or only one Proposal is compliant with the RFP but the price is in excess of budgeted funds, proceed to negotiate conditions with such Proponent which will reduce costs to a level acceptable to the City.
 - (9) where the Contract is awarded to the Proponent with the lowest priced compliant Proposal, the City may, at its sole discretion, negotiate amendments to the Contract or to Services or Goods to be supplied under the Contract and no other Proponent shall have any right to object that its Proposal would have been lower had the negotiated amendments been included in the original RFP or RFP Notice.

12. Review of Proposals

- (1) All Proposals submitted by the Closing Time of the RFP will be examined by a

representative of the City's Procurement Section to confirm that they are compliant and otherwise complete, subject to the City's exercise of any right or privilege contained in this RFP. Proposals which are complete and compliant will be evaluated in accordance with the provisions of the RFP, subject to the City's exercise of any right or privilege contained in this RFP. The City reserves the right to examine the compliance and completeness of Proposals in phases.

- (2) At its sole discretion, the City may clarify any aspect of any Proposal received at any time and, without limiting or restricting the foregoing general right in any way, the purpose of such clarification may be to enable the City to determine whether the Proposal complies with the RFP and to resolve any ambiguity in the language used, or any other vague or uncertain aspect of the Proposal. No such clarification shall alter the Proposal or constitute negotiation or re-negotiation of the price or any aspect thereof, or the nature or quality of the Goods or Services to be supplied or performed as set out in the Proposal at the close of the RFP, and all correspondence with a Proponent for the purposes of such clarification shall be conducted through the Procurement Section.
- (3) Where the lowest compliant Proposal contains an otherwise legible, clear and unambiguous change such as an erasure, strike out, white out, cross out or overwrite which has not been initialed, the Proponent will be required to initial such change within one Business Day of the City's request. Failure to comply with the City's request within the time line provided, will result in the rejection of the Proposal and the Proponent shall be a banned from entering into or bidding on any contracts with the City for a period of one year in accordance with the City's Procurement Policy.
- (4) Without limiting subsection (2), the City's right to clarify shall include the right to request additional information relating to the terms of the Proposal submitted.
- (5) The right of clarification provided under this section is within the sole, complete and unfettered discretion of the City and is for its exclusive benefit, and may or may not be exercised by the City at any time and in respect to any or all Proposals.
- (6) Notwithstanding the City's right to request clarification, the City shall have no obligation whatsoever to do so. Where in the opinion of the City a Proposal or any part thereof is ambiguous, incomplete, non-compliant, deficient, or otherwise not acceptable in any aspect, the City may reject such Proposal whether clarification has been sought, obtained or neither.
- (7) The City's review of a Proponent's submission with a Proponent or its seeking of clarification under this section shall not, in any way, be deemed to be an acceptance of any term or provision so clarified or be deemed to be an acknowledgement of the compliance of the Proposal with the terms of the RFP; shall not constitute an acceptance of that Proposal or any other Proposal; and shall not oblige the City to enter into an Contract with that Proponent or any other Proponent.
- (8) All clarifications provided by a Proponent pursuant to a request by the City under this section shall be in writing, in a clear and unambiguous form satisfactory to bind the Proponent, and satisfactory to the City.
- (9) Any Proponent may be required to meet with officials of the City within 30 days of being

so requested to explain details of the submission, at a place in Hamilton specified by the City, and the Proponent shall bear all costs of its attendance and the attendance of any of its representatives at such meeting including but not limited to transportation to and from the meeting.

13. Rejection of Proposals by City

- (1) At its discretion, the City may (but shall not be obliged to) reject any Proposal that does not,
 - (a) comply with this RFP or any Addenda thereto; or
 - (b) contain in full all information required by this RFP, including all Appendices and all Addenda thereto.
- (2) The City may reject any Proposal submitted by a Proponent or cancel any contract awarded to that Proponent without any compensation whatsoever payable to the Proponent, where:
 - (a) any information provided by the Proponent in its Proposal or as part of any pre-qualification procedure is determined by the City, in its sole opinion, to be false or otherwise misleading in any material respect; or
 - (b) where the Proponent's declaration in its Form of Proposal that it is in compliance with all City of Hamilton by-laws be untrue or incorrect, the City shall be entitled at its sole discretion to reject the Proponent's Proposal.

14. Guidelines Regarding Proposal Irregularities

As a guide to the Proponent, but without qualifying any rights and privileges reserved to the City, the Proponents Guidelines set out below is indicative of the manner in which discretion reserved by the City is to be exercised with respect to non-compliant Proposals. However, the City shall not be liable to any Proponent or other person where it elects to exercise a discretion, reserved privilege or right in a manner different from that indicated below.

PROPONENTS GUIDELINES		
	IRREGULARITY	RESPONSE
1.	Proposals not legible or in English.	Automatic rejection.
2.	Qualified or conditional Proposal (A Proposal restricted by a statement amending the RFP or alterations made to the RFP).	Automatic rejection unless the Request for Proposals specifically permit such qualification or condition.
3.	A Proposal received in a format not specified in the Request for Proposals such as hardcopy submission, fax, email, etc.	Automatic rejection.
4.	A Proposal received on documents other than those documents supplied by the Bidding System.	Automatic rejection.

PROPOSERS GUIDELINES		
IRREGULARITY		RESPONSE
5.	<p>Proposal Security:</p> <p>Amount of Proposal Security provided by Proponent is insufficient, does not name correct Municipality as obligee, or no Proposal Security is provided or is not otherwise in compliance with the Request for Proposals requirements.</p>	Automatic rejection.
6.	<p>Execution of Proposal bond:</p> <p>Corporate seal or electronic signature of Proponent, or both, are missing.</p> <p>Corporate seal or electronic signature of bonding company, or both, are missing.</p>	<p>Automatic rejection.</p> <p>Automatic rejection.</p>
7.	<p>Proposal Security:</p> <p>Digital proposal bond not an electronically verifiable and enforceable e-Bond.</p>	Automatic rejection.
8.	<p>Where costing information is to be submitted separately from the Technical Proposal Submission but has been included in the Technical Proposal.</p> <p>(a) Where the costing information can:</p> <ol style="list-style-type: none"> 1. be easily physically removed or redacted from the Technical Proposal; and 2. where the removal does not change the Technical Proposal Submission in any way. <p>(b) Where the above removal conditions are not met.</p>	<p>(1) Within one Business Day of notification, Proponent will be required to provide written authorization for the Procurement Manager to remove applicable pages or redacted information and include them in Step 2 – Schedule of Prices. Any confirmation to proceed in this manner shall confirm that the Proponent waives its right to claim non-compliance or otherwise with the Request for Proposals.</p> <p>(2) Automatic rejection.</p>
9.	Other irregularities.	An irregularity that goes beyond the scope of the Proposers Guidelines may be considered by the Procurement Manager.

15. Obligation of Suppliers to Deal in Good Faith

- (1) Each Proponent is required to deal with the City in utmost good faith with respect to the submission of its Proposal.

- (2) Each Proponent shall meet the eligibility requirements of a vendor set out in the Procurement Policy By-law, Policy #1 Vendor Eligibility. Failure to meet those requirements shall entitle the City to exercise any remedies set out in the Procurement Policy By-law, the RFP Documents or otherwise at law or in equity.

<https://www.hamilton.ca/build-invest-grow/buying-selling-city/bids-and-tenders/procurement-policy-by-law>

16. Record and Reputation

- (1) See the City of Hamilton Procurement Policy for specific requirements and obligations at:

<https://www.hamilton.ca/build-invest-grow/buying-selling-city/bids-and-tenders/procurement-policy-by-law>

17. No Lobbying and Single Point of Contact

- (1) Each Proponent shall comply with the requirements and be entitled to the rights of a vendor set out in the Procurement Policy By-law, Policy #1 Vendor Eligibility and Policy #18 Vendor Complaint Resolution

<https://www.hamilton.ca/build-invest-grow/buying-selling-city/bids-and-tenders/procurement-policy-by-law>

18. Ownership of Documents, Use of Designs, etc.

- (1) All maps, drawings, plans, specifications, computer disks and other documents,
 - (a) provided by the City to a Proponent shall remain the property of the City and shall be returned by the Proponent to the City (whether or not the Proponent submits a Proposal) upon demand by the City for their return; or
 - (b) prepared by the Proponent as part of its Proposal shall be the property of the City and may be disposed of by the City as it considers fit.
- (2) Unless the City otherwise agrees in writing, where any plan, drawing or design is provided by a Proponent in connection with an RFP, then the submission of a Proposal by the Proponent shall be deemed to constitute a licence by that Proponent to construct one sample model of the work or project contemplated based upon that plan, drawing or design, where such a sample is required to make an informed decision concerning the attractiveness, functionality or other merit of the plan, drawing or design in question. The licence conferred herein shall not be deemed to constitute an assignment of any patent, copyright, trade mark or other intellectual property of the Proponent, unless otherwise provided in the RFP.

19. Copyright and Use of Documents

The Total Agreement Price shall include all payments made or to be made to any third party in respect of any right, patent, design, trademark or copyright used for the purpose of the Successful Proponent performing the Contract.

20. Governing Law

This Contract shall be governed by, subject to and construed in accordance with the laws of the Province of Ontario and the laws of Canada, as applicable to the matters herein. Unless the City otherwise agrees in writing, any action or other legal proceeding arising under or with respect to the Contract (including any motion or other interlocutory proceeding) shall be brought in a Court or a tribunal, whichever may be applicable, sitting in Hamilton, Ontario. In the event that there is no applicable Court or tribunal sitting in Hamilton, the proceeding shall be brought in the court (or other forum) of competent jurisdiction nearest to the City of Hamilton within the Province of Ontario.

21. Applicable Law and Limit on Liability

- (1) Without limiting any other rights or privileges of the City in this RFP with respect to delay, the Successful Proponent is not entitled to and releases and waives any rights to any remedies, claims, demands, costs, penalties, fines, fees, damages and causes of action, whether directly or indirectly related to any delays on the part of the City with respect to:
 - (a) awarding of the Contract; or
 - (b) providing notification to the Successful Proponent of award of the Contract.
- (2) The Proponent agrees that,
 - (a) any action or proceeding relating to the RFP process shall be brought in an Ontario court of competent jurisdiction and any such action or proceeding shall be issued at the Hamilton, Ontario office of that Court and for that purpose each party irrevocably and unconditionally attorns and submits to the jurisdiction of that Ontario court at Hamilton, Ontario;
 - (b) it irrevocably waives any right to and will not oppose any Ontario action or proceeding relating to the RFP process on any jurisdictional basis, including forum non conveniens; and
 - (c) it will not oppose, in any other jurisdiction, the enforcement against it of any judgment or order duly obtained from an Ontario court in Hamilton, Ontario as set out above.
- (3) If a Proponent is required by applicable law to hold or obtain a licence, permit, consent or authorization to carry on an activity contemplated in its Proposal, neither acceptance of the Proposal nor execution of the Contract shall be considered to be approval by the City of carrying on such activity without the requisite licence, permit, consent or authorization.
- (4) The Proponent agrees that if the City commits a material breach of the RFP (that is, a material breach of Contract A), the City's liability to the Proponent and the aggregate amount of damages recoverable against the City for any matter relating to or arising from that material breach, whether based upon an action or claim in contract, warranty, equity, negligence, intended conduct or otherwise, including any action or claim arising from the acts or omissions, negligent or otherwise, of the City, shall be no greater than

the Proposal preparation costs that the Proponent seeking damages from the City can demonstrate.

22. Agreement for Work

- (1) The City may require the Successful Proponent to execute a formal Agreement for Work with the City.
- (2) The formal Agreement for Work shall be based on the sample Agreement for Work issued as part of the RFP.
- (3) Within 10 Business Days of the City awarding the Contract to the Successful Proponent, or such later date as may be specified in the notice of award by the City, the Successful Proponent and the City will finalize and execute the formal Agreement for Work.
- (4) The City may finalize the terms and conditions of the formal Agreement for Work with the Successful Proponent, and as part of that process, may, in the City's sole discretion, negotiate changes, amendments or modifications to the sample Agreement for Work that are consistent with the RFP and in particular, the sample Agreement for Work.
- (5) Should the City not initiate any negotiations as described above, the Successful Proponent shall execute the Agreement for Work in the same form and substance as the sample Agreement for Work.
- (6) If the City does not require the Successful Proponent to execute a formal Agreement for Work with the City, the Contract shall be comprised of the sample Agreement for Work issued as part of the RFP, together with all the documents identified therein, notwithstanding that a formal Agreement for Work has not been physically executed by the parties.
- (7) The Successful Proponent shall, no later than 10 Business Days after the City has sent the notice of award to the Successful Proponent, or such later date as may be specified in the written notice given by the City:
 - (a) enter into and execute the formal Agreement for Work, where required by the City;
 - (b) submit to the City a certificate of insurance which,
 - a. references the Contract by name;
 - b. confirms that the requirements set out in the Contract have been met;
 - c. sets out any pertinent exclusions contained in the policy or policies; and
 - d. is otherwise acceptable to City;
 - (c) provide the AODA statement specified in the RFP Documents;
 - (d) submit to the City a Workplace Safety and Insurance Board clearance certificate;
 - (e) submit a Certificate of Status from the Companies and Personal Property Security Branch of the Ontario Ministry of Government Services, or other Ministry

acceptable to the City, which indicates that the Successful Proponent is an existing corporation and has not been dissolved; and

- (f) submit any other documents required by the Contract.
- (8) Any Proponent identified as a Successful Proponent acknowledges its obligation to finalize and execute the Agreement for Work, where required by the City, in good faith based on its Proposal selected by the City.
- (9) If the Successful Proponent fails or refuses to enter into the Contract or execute an Agreement for Work and provide all security, insurance and other ancillary documents required under the RFP and the RFP Documents, then the City reserves the absolute right as it sees fit, in addition to all other rights and remedies that the City has under the Request for Proposals, including but not limited to the City's rights and remedies respecting the Proposal Security supplied by the Successful Proponent, to take one or more of the following actions:
 - (a) terminate discussions with the Successful Proponent;
 - (b) select another Proponent as the Successful Proponent and may enter into Contract discussions to finalize and execute the Agreement for Work;
 - (c) revise and reissue the RFP or cancel the RFP;
 - (d) pursue any other rights or remedies available under the RFP, or otherwise at law or in equity.

23. Accommodations for Proponents with Disabilities

- (1) In accordance with the Ontario Human Rights Code, Ontarians with Disabilities Act, 2001 (ODA) and Accessibility for Ontarians with Disabilities Act, 2005 (AODA), the City of Hamilton will accommodate for a disability, ensuring full and equitable participation throughout the bid process.
- (2) If a Proponent requires this Request for Proposals in a different format to accommodate a disability, the Proponent must contact the Procurement Specialist as soon as possible and in any event prior to the closing date. The Request for Proposals in the different format will be issued only to the requesting Proponent and all Addenda will be issued in such different format only to the requesting Proponent.

SPECIAL INSTRUCTIONS

1. GENERAL

HRPI. is a corporation within the City of Hamilton. The City has issued this RFP on behalf of HRPI. For the purposes of the RFP and any Contract arising therefrom, the reference to City throughout this RFP shall be used interchangeably with HRPI.

The City will issue any Addenda required and will be the point of contact for questions related to this RFP. All issues related to this RFP prior to the award of the Contract shall be dealt with by the City of Hamilton, on behalf of the HRPI. All Project management or other Work or Services-related issues after the award of the Contract shall be the responsibility of HRPI. The Contract shall be between HRPI. and the Successful Proponent.

Every attempt has been made in this Request for Proposals to correctly reference the City of Hamilton and HRPI. roles herein. Any clarification required on this issue shall be considered in the same manner as set out above.

1. AWARD OF CONTRACT

Subject to the City's reserved rights and privileges set out in the Request for Proposals, the Contract shall be awarded to the compliant Proponent who has:

- (a) met the Benchmark;
- (b) met the minimum required score for each evaluation category, if any, as set out in Table 1: Criteria for the Evaluation of Proposals of the Proposal Submission Information section of this Request for Proposals; and
- (c) the lowest Price per Point.

If there is a tie, then the following tie-breaking measure will be used to select the Successful Proponent:

- i. The Proposal with the highest overall points; and if still tied,
- ii. The Proposal with the highest points for **D: Experience, Qualifications & Availability of Proponent's Team**
- iii. ; and if still tied the Proposal with the lowest Total Agreement Price.

2. TOTAL AGREEMENT PRICE

- (1) It shall be the Proponent's obligation to ensure that all aspects of the Work contemplated in the RFP have been adequately considered and accounted for in the Total Agreement Price in its Proposal. Proponents should ensure that they have carefully considered the Total Agreement Price, and that all Disbursements are included. No additional Disbursements or expenses will be paid by the City, except as otherwise specified in this RFP or as otherwise expressly agreed to in advance and in writing by the City.

- (2) The Total Agreement Price set out in the Form of Proposal shall be apportioned among the pricing for each phase of the Services in accordance with the provisions of the RFP. The aggregate of the Lump Sum Prices for each of the phases of such Services shall add up to the Total Agreement Price.

3. PROPOSED TIMELINE

Milestones	Date
Closing Date	As listed within the RFP
Work Commencement	Approx four (4) weeks upon award

4. NOMINATION OF SUBCONSULTANTS AND SUBCONTRACTORS

- (1) Unless otherwise stipulated in this RFP or any Addendum thereto, the Proponent shall indicate the names and addresses of all nominated Subconsultants and Subcontractors that it proposes to use in the provision of Work contemplated by this RFP.
- (2) The City reserves the right to reject any Subconsultants and Subcontractor so nominated, without penalty or liability to the City of any kind whatsoever.
- (3) No change shall be made to the list of nominated Subconsultants and Subcontractors after the Closing Time of the RFP, without the prior written approval of the City and only on such terms and conditions as the City in the exercise of an absolute discretion may require.
- (4) Any Proponent requesting the City's consideration of a change of Subconsultants and Subcontractor shall be responsible for all costs of the City to review, investigate and approve, if acceptable, such change including but not limited to all of the City's internal staff costs and all legal, financial and consultant costs. No approval of the City shall be effective until the Proponent has first paid to the City its costs with respect to same.

5. ALTERNATE PROPOSALS AND OPTIONAL FEATURES ETC.

Alternate Proposals and Optional Features are not permitted for this RFP.

6. JOINT VENTURES

- (1) A Proposal must be submitted by a single entity as the Proponent. The City will not accept a Proposal from a collection of entities jointly submitting as the Proponent. The single entity submitting the Proposal must not be a special purpose company incorporated solely for the purpose of entering into a Contract with the City regarding the Work.

PROPOSAL SUBMISSION INFORMATION

Contract Number: C11-40-25

Prime Consultant Services Required for Preliminary Design and Engineering of Biogas Upgrading Unit Installation and Connection to Utility Line

1.0 GENERAL

All costs and expenses related to the preparation, submission and presentation, including interviews and demonstrations, of a Proposal and the provision of additional information necessary for the evaluation of a Proposal shall be at the sole expense of the Proponent.

Proposals will be evaluated by the Evaluation Team according to the criteria and requirements set out in this RFP. In submitting the Proposal, Proponents agree that the decision of the Evaluation Team is final and binding, and will not be subject to review by any court and any Proponent breaching this provision will indemnify the City for all its costs as a result of same, save and except where the City has acted in manifest bad faith.

Proposals shall not contain any external links and/or hyperlinks as any information contained in these links will not be considered and evaluated.

The RFP shall not obligate or commit the HRPI to award a contract.

2.0 PROPOSAL SUBMISSION REQUIREMENTS **STEP 1 – TECHNICAL PROPOSALS**

2.1 General

2.1.1 The Technical Proposal shall be uploaded in the Bidding System, in PDF format and not have a security password. It is the Proponent's sole responsibility to ensure all uploaded documents are not defective, corrupted, or blank and can be opened by the City. If the Technical Proposal cannot be downloaded by the City, the Proposal shall be rejected.

2.1.2 The Technical Proposal shall be evaluated in step 1. **No details of costs or rates are to be included in this part of the Proposal.**

2.2 Step 1 - Evaluation of Technical Proposals

2.2.1 During step 1 of the evaluation process, all Proposals will be initially reviewed to determine compliance with the RFP requirements.

2.2.2 Any Proposal not complying with the requirements of the RFP shall not be accorded any points or evaluated further, subject to the City exercising, in its absolute discretion, of any right or privilege it may have in this RFP, including without limitation its right to waive irregularities. The City may exercise its rights

and privileges under the RFP and reject a Proposal in accordance with same notwithstanding that it may be compliant with the remaining requirements of this RFP.

- 2.2.3 The Evaluation Team will evaluate compliant (or deemed compliant as a result of the waiver by the City of any non-compliance) Technical Proposals, which have not been rejected by the City in accordance with a right or privilege of the City, and assign points up to a maximum of **133** points. Proposals will be scored by consensus of the Evaluation Team. Proposals meeting or exceeding the Benchmark will proceed to step 2.
- 2.2.4 An initial determination of compliance (including deemed compliance at step 1) shall not preclude a finding by the City of non-compliance at step 2, particularly with respect to non-compliance with the requirements for the Schedule of Prices or any other discovered non-compliance with the RFP requirements.

2.3 Step 1 - Evaluation Criteria

- 2.3.1 The criteria in Table 1 will be used in the step 1 evaluation. Proposal submissions must address these criteria in the identification and order protocol shown below. Not following this identification and order creates the risk to the Proponent that, even if the information has been provided, it may be overlooked and consequently not considered in evaluation of the Proponent's score.
- 2.3.2 The following is a table listing the evaluation categories, indicating:
- i) the maximum score attainable in each category; and
 - ii) the required minimum score per category (if any) that must be attained in order to proceed to step 2 of the evaluation; and
 - iii) the overall minimum score that must be attained ("Benchmark") in order to proceed to step 2 of the evaluation.

TABLE 1: CRITERIA FOR THE EVALUATION OF PROPOSALS

Criteria	Maximum Score Attainable
<p>A. <u>Corporate Experience and Project Team</u></p> <p>1. Proponents to provide a company profile, including but not limited to the following:</p> <ul style="list-style-type: none"> 1.1 size of firm 1.2 area(s) of expertise 1.3 and depth of experience of the firm <p>Proponents are to highlight the experience in completing the project requirements outlined within the Terms of Reference</p> <p>2 Proponents are to provide two project examples that are similar in scope and magnitude to the RFP. Each similar project example will include:</p> <ul style="list-style-type: none"> 2.1 Project name, contact information, budget, and year completed. 2.2 Gathering relevant information on biogas generation, infrastructure, and site conditions. 2.3 Assessing the most beneficial usage of increased biogas produced. 2.4 Evaluating proven biogas upgrading and purification technologies and identify necessary retrofits or upgrades to transform the existing cogeneration site for utility gas infrastructure connection. 2.5 Assessing current municipal biogas projects, environmental and regulatory requirements, RNG offtake market, funding availability, and project delivery models. <p>3 Proponents are required to provide a reference for the submitted similar projects project examples that were completed. Each reference will identify a contact name, title of individual, phone number, and email address. References are provided for verification purposes only, and the City reserve the right to contact each reference if needed.</p>	<p>30 Points</p>
<p>B. <u>Understanding of the City's Objectives and Requirements</u></p> <p>Proponents are to provide a written statement demonstrating their understanding of the Project with respect to the following:</p> <p>1. An understanding of the Project's Terms of Reference and HRPI's Requirements.</p>	<p>15 Points</p>

<p>2. Proponents are requested to provide a description of how they plan to perform and complete the requested services outlined within the RFP.</p> <p>3. Challenges, constraints, limitations and significant issues impacting the objectives of the Project and how they are to be resolved. (5 Points)</p>	
<p>C. <u>Experience, Qualifications & Availability</u></p> <p>Proponents will identify a project lead and provide evidence of the expertise and experience for that individual.</p> <p>1. Proponent will identify the following information for the project lead:</p> <ul style="list-style-type: none">a) Name of project leadb) Total years of experience in identified role – identify the numbers of years this position has held with the Proponent company and total number of years in the industry. Preference will be given to the staff members with more than five (5) years of experience.c) Brief history with highlights of services provided by the project lead.d) Provide two similar Project examples demonstrating qualifications, expertise, specified role and outcomes.e) Description of this individual's role for this Project and availability for this project including capacity to respond to critical time and complex scope requirements.	<p>20 Points</p>

D: <u>Experience, Qualifications & Availability of Proponent's Team</u>	48 Points
<p>1. Proponents are to identify and provide resumes outlining evidence of the expertise and experience of the Prime Consultant team for the following key technical specialist resources.</p> <p>1.1 Required technical specialists:</p> <ul style="list-style-type: none">- Technical Specialist - Biogas upgrading experience- Technical Specialist - RNG production experience- Technical Specialist - Infrastructure design experience- Technical Specialist - Master planning and environment assessments experience <p>2. For the technical specialists identified above, Proponents are required to provide the following information for each individual:</p> <ul style="list-style-type: none">- Name- Total years of experience in identified role.- Describe qualifications, and expertise,- Provide a project example that highlights the experience the technical specialist has related to the role they will be providing for this RFP.- Description of the technical specialist's role(s) for this Project and availability for this Project including capacity to respond to critical time and complex scope requirements.- Highlight any personal skills or specialties that apply to this Project. (10 Points per technical specialist provided)	

<p><u>E. Work Plan and Schedule</u></p> <p>Proponents are to provide a detailed work plan, proposed approach to completing the assignment described in the Terms of Reference without pricing as part of the Technical Proposal.</p> <p>The Work Plan will include a detailed breakdown including:</p> <ol style="list-style-type: none"> 1. A description of Services (approach) with a work breakdown by phase of the overall Project including the sequence of the requirements set out in the Terms of Reference for each task of the overall Project and for the completion of all Services. 2. Description of the deliverables of the overall Project including a breakdown detailing the timing for the technical outputs, reports, and presentation. Outline of additional resources that will be made available by the Prime Consultant to met dates if slippage occurs. 3. Proponents shall identify key risks associated with the feasibility study and preliminary engineering design phase, including uncertainties in biogas production volumes, regulatory approval processes, technology feasibility, funding opportunities, and preliminary cost estimates. Proponents should outline their approach to mitigating these risks, including contingency measures for potential constraints that may impact project feasibility and future implementation. 4. Time Task Matrix which will include an estimated allocation of hours for each technical specialist and any staff working on this Contract under the project manager throughout the Project to complete the tasks. This Time Task Matrix will also include meetings with Stakeholders, technical resources and local authorities. This version of the Time Task Matrix will not include any pricing information. 5. Allotted times for the regulatory authorities to receive, review, and approve submittal and identified project deliverables, including time for review and revisions. 	<p>20 Points</p>
<p>Benchmark</p>	<p>93 Points</p>
<p>Maximum Attainable Points</p>	<p>133 Points</p>

2.4 Optional Interviews

- 2.4.1 Prior to step 2, the City, at its sole discretion, reserves the right to conduct interviews with Proponents who have met the Benchmark. The interviews will be held for the sole purpose of which will be to verify the scores which the Evaluation Team has applied to those Proponents being interviewed. The interviewers will ask questions relating to the criteria set out in step 1, the RFP

Documents, and the Proponent's Proposal. Proponents are not permitted to present any information not previously included in their Proposal.

- 2.4.2 The Proponent's project leader and key members of the project team, as named in the Proposal submission must be in attendance at the interview. Proponents shall keep the number of presenters to the interview to no more than three people.
- 2.4.3 No scoring will be given directly to the interview. The Evaluation Team will consider its prior scoring of the Proposals and adjust any, all, or none of the criteria up or down as the Evaluation Team agrees in consensus.
- 2.4.4 Any interviewed Proponent falling below the Benchmark will not move on to step 2. All interviewed Proponents whose scores remain at or greater than the Benchmark will move on to step 2.

3.0 PROPOSAL SUBMISSION REQUIREMENTS

STEP 2 – Schedule of Prices

3.1 General

- 3.1.1 The Schedule of Prices shall be evaluated in step 2, in conjunction with the Technical Proposal. The Schedule of Prices shall be provided and completed in the Bidding System and shall include any Cost Proposal Summary or additional costing information. Failure to complete the Schedule of Prices provided in the Bidding System shall cause your Proposal to be disqualified.
- 3.1.2 The Schedule of Prices must be completed in full.
- 3.1.3 The Schedule of Prices shall include all costs to complete the Work including any provisional costs.
- 3.1.4 A Time Task Matrix complete with hourly rates, disbursements and costs is to be uploaded into the Bidding System under Step 3 – Documents within the upload area titled "Time Task Matrix with Hourly Rates, Disbursements and Costs".

The Time Task matrix complete with hourly rates, disbursements and costs will not be opened or evaluated in step 1 - Technical Proposals evaluations.

Proponents are advised that the submission of the Time Task Matrix with hourly rates, disbursements and costs is only for informational purposes only and shall not be used to alter the Total Agreement Price at any time during the Work. The Total Agreement Price shall take precedence over any discrepancy in costs or in the calculations within the matrix at any time during the Work.

3.2 Step 2 – Evaluation of Schedule of Prices

- 3.2.1 Only those Proponents who have met or exceeded the Benchmark and met the

minimum required score(s), if any, in step 1, (Table 1 Criteria for the Evaluation of Proposals) will proceed to step 2.

3.2.2 In step 2, the Schedule of Prices is opened and evaluated.

- i) Each compliant Proposal will be evaluated for best value by calculating the Price per Point using the following formula:

$$\text{Total Agreement Price} / \text{Total Technical Proposal score} = \text{Price per Point}$$

Table 2: Sample Evaluation Table for Step 2 provides an example of how the Price per Point calculations will be made.

- ii) The compliant Proposal with the lowest Price per Point will be recommended for award.

TABLE 2: SAMPLE EVALUATION TABLE FOR STEP 2 – SCHEDULE OF PRICES

Evaluation Category	Minimum/ Maximum Score	Proposal A Points	Proposal B Points	Proposal C Points	Proposal D Points
1. Understanding of the City's Objectives and Requirements	110/140	130	140	120	130
2. Proposed Approach and Methodology	145/180	110	170	125	145
3. Scope of Services, Work Plan and Schedule	200/250	235	240	200	230
4. Experience, Qualifications and Availability of Consultant Team	200/250	220	240	200	200
5. Qualifications and Experience of Firm(s)	145/180	110	170	140	175
Total Score/Points	800/1000	805	960	785	880
Proposal \$	\$ X	Not Opened	\$470,000	Not Opened	\$450,000
Price per Point	\$X/Total Points	Not Applicable	\$489.58	Not Applicable	\$511.36

***Evaluation categories and scores listed in the above table are for sample purposes only and may not reflect the actual evaluation categories and scores of this RFP.**

Proposal A: Schedule of Prices would not be opened as the minimum required score of 145 in evaluation category 2 and the minimum required score of 145 in evaluation category 5 were not achieved.

Proposal B: Met the Benchmark score and achieved the minimum scores in each evaluation

category.

Proposal C: Schedule of Prices would not be opened as the Benchmark score of 800 points was not achieved.

Proposal D: Met the Benchmark score and achieved the minimum scores in each evaluation category.

Price per Points are calculated for Proposal B and Proposal D. Proposal B has the lowest Price per Point.

Therefore, in this example, the Proponent who submitted Proposal B would be the Successful Proponent and recommended for award.

4.0 PROPONENT DEBRIEFING

4.1 Unsuccessful Proponents may submit a written request for a debrief, addressed to the Procurement Specialist named in the Request for Proposals Notice page.

4.2 All requests must be received within thirty calendar days after the earlier of the following dates set out below has occurred:

- i) The date evaluation results have been posted to the Bidding System;
- ii) The date of contract award has been posted to the Bidding System

TERMS OF REFERENCE

1. Project Overview

The City of Hamilton (City) declared a Climate Emergency and to address this, developed a Corporate Energy and Sustainability Policy, including a net zero target by 2050.

Hamilton Renewable Power Inc. (HRPI.) engaged Jacobs Inc., formerly CH2M HILL Canada to review renewable energy options for the digester gas generated as a part of the treatment process at the Woodward Avenue Wastewater Treatment Plant (WWTP) in 2021. The final report is attached for reference in Appendix A - 2022 Renewable Energy Options Assessment.

The digester gas generated at the Woodward Avenue WWTP is used in part for creation of Renewable Natural Gas (RNG) or sold for use in the cogeneration facility, boilers, flared, or a combination thereof.

The existing 1.6 MW cogeneration facility was installed and commissioned in 2006. Electricity is generated by the facility at 4,160 V and stepped up to 13.8 kV to provide electricity feed into the local distribution system. Thermal energy is used to heat digester sludge and provide building heat. The facility is operated by HCE Energy and maintained by Toromont Power Systems (Toromont) under long-term contracts with terms ending on December 31, 2025.

The overall objective of this Work is to complete 30% preliminary design and engineering for biogas upgrading and compression technology selection and installation. The study scope starts from the digesters to the end of pipe and aims to recommend technically and financially viable option/s to upgrade biogas produced in this facility using proven technologies to allow for beneficial usage of biogas namely clean fuels hence contributing to GHG emission reduction and generating more volume of clean fuels and revenue transforming the WWTP to a sustainable Net Zero facility.

This scope will focus on biogas availability in the WWTP, gas cleaning and upgrading technologies, maximizing the generation of biogas, most beneficial use of biogas, sale of biogas and project delivery models.

2. Project Requirements

2.1 Scope of Services

The Successful Proponent will provide a comprehensive review of various opportunities as listed below:

- 2.1.1 Gather relevant information on biogas generation, infrastructure, and site conditions, including but not limited to the following activities:
 - assess current biogas production volumes, composition, and variability.
 - evaluate existing biogas collection, treatment, and handling systems.
 - conduct site visits and interviews with operational staff, as required.
- 2.1.2 Review 2022 Renewable Energy Options Assessment completed by Jacobs Inc. and confirm the recommendations made.
- 2.1.3 Assess the most beneficial usage of increased biogas produced, such as:
 - Electricity generation (similar to what is currently on-site).
 - Upgrading to clean fuel (Renewable Natural Gas - RNG) and injecting into a natural gas pipeline.
- 2.1.4 Evaluate proven biogas upgrading and purification technologies and identify necessary retrofits or upgrades to transform the existing cogeneration site for utility gas infrastructure connection.
- 2.1.5 Assess current municipal biogas projects, environmental and regulatory requirements, RNG offtake market, funding availability, and project delivery models.
- 2.1.6 Develop evaluation criteria in collaboration with HRPI. and Hamilton Water team to assess alternatives.
- 2.1.7 Deliver and complete 30% preliminary design and engineering work for the preferred option that aligns with the City's energy and GHG reduction targets.
- 2.1.8 Provide a technical and financial business case, including:
 - life cycle costing.
 - work plan and process block diagrams.
 - Capital and operational cost analysis.
- 2.1.9 Review and recommend biogas upgrading and beneficial use technologies, including:
 - Technology providers.
 - Reliability and scalability.
 - Carbon reduction potential.
- 2.1.10 Conduct lifecycle cost analysis (LCCA) for each proposed option and provide a comprehensive feasibility study.
- 2.1.11 Deliver process flow diagrams (PFDs) and preliminary layouts, including:
 - Key system components and specifications.
 - Integration points with existing infrastructure.
 - Preliminary cost estimates and recommended additional studies, if required.

The Successful Proponent will participate in an official project kickoff meeting and conduct an on-site walkthrough to:

- Review facility processes and layouts.

- Gather operator insights on challenges and limitations.
- Collect essential data for analysis.

Following this, the Successful Proponent will evaluate options for biogas processing and provide detailed feasibility studies, including:

- Sustainability evaluations.
- Financial projections.
- Environmental impact assessments.

Recommendations will prioritize economically feasible, scalable solutions for clean fuel production and WWTP sustainability transformation.

2.2 Deliverables Required

The Successful Proponent will be responsible but not limited to delivering the following deliverables:

2.2.1 Technical Outputs:

- Develop process flow diagrams (PFDs) and preliminary layouts.
- Technology evaluation and beneficial use options and market scan.
- Technical, regulatory and off-take market evaluation.
- Provide technical specifications for key system components and integration points.
- Submit a preliminary cost estimate for the recommended solution.
- Complete and submit a 30% preliminary design for the selected solution.

2.2.2 Reports

- Deliver a feasibility study, including:
 - Lifecycle cost analysis (LCCA) over the asset's lifespan (20, 25, or 30 years).
 - Sustainability evaluations.
 - Carbon reduction potential.
 - Spreadsheet to support LCCA and financial analysis.
- Provide a financial business case, including:
 - Capital and operational costs.
 - GHG reductions.
 - Funding opportunities.
- Submit a draft report for review.
- Deliver the final report incorporating feedback.

2.2.3 Presentations

- Conduct a project kickoff meeting with HRPI. and Hamilton Water.
- Deliver a final report presentation summarizing recommendations, technical findings, and financial projections.

2.3 Schedule

The Successful Proponent shall be responsible for the following key project milestones:

Task	Deliverable Description	Deliverable Date from Date Data Received
Execution of Project Agreement	Formal agreement execution and authorization to proceed.	Within ten (10) business days from award
Project Start Date	Official project commencement.	Within five (5) business days from contract execution
Kickoff Meeting and Site Visit	Initial project kickoff meeting with HRPI. and Hamilton Water, including facility walkthrough and data collection.	Within two (2) weeks from project start date
Technical Memo#1	Delivery of Background Information and Analysis, Technology Evaluation & Beneficial Use Options, Market Scan, and Regulatory and Off-take Market Evaluation.	Within six (6) weeks from kickoff meeting
Technical Memo#2	Delivery of Evaluation Sheet, Costing Template, and Process Block Diagram.	Within four (4) weeks from Tech Memo #1.
Process Flow Diagrams (PFDs) & Preliminary Layouts	Submission of draft PFDs, layouts, system components, and preliminary cost estimates.	Within four (4) weeks from Tech Memo #2.
30% Preliminary Design Submission	Completion and submission of the 30% design package, including engineering plans, layouts, and system specifications for the recommended solution.	Within six (6) weeks from PFD submission
Draft Report Submission	Completion of draft feasibility study, including life cycle cost analysis (LCCA), technical evaluations, and financial projections.	Within four (4) weeks from 30% design
Final Report Submission	Incorporation of feedback and submission of final feasibility report, including recommendations for biogas upgrading and utilization.	Within three (3) weeks from draft report feedback
Presentation of Final Report	Delivery of a final presentation summarizing findings, recommendations, and financial analysis to HRPI. and stakeholders.	Within two (2) weeks from final report submission
Optional: Board Presentation	Presentation of key project findings to HRPI. Board of Directors (if requested).	As scheduled with the HRPI. board.

2.4 Available Additional Information

The following information has been provided as links below as reference materials for the Successful Proponent in preparing their response to this RFP.

This information has been provided for the express review of the Successful Proponent in responding to this RFP and is not to be copied or submitted in any way or form to any person(s) or organization(s) without the written authorization of the HRPI. All copyright and intellectual rights to the material provided remain in the ownership of the HRPI.

- **Certificate of Approval for WWTP**
<https://www.accessenvironment.ene.gov.on.ca/instruments/4476-96FNZ3-14.pdf>
- **City of Hamilton Energy Conservation & Demand Management Plan**

<https://www.hamilton.ca/sites/default/files/2022-08/energy-conservation-demand-management-plan2019-2023.pdf>

- **City of Hamilton Climate Change Action Plan**

<https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>

AGREEMENT FOR WORK

Request for Proposals C11-40-25

CITY OF HAMILTON
(the "City")

-and-

LEGAL NAME OF CONSULTANT or PRIME CONSULTANT
(the "Consultant")

WHEREAS:

- A.** The City issued a Request for Proposals C11-40-25 (the "RFP") at the request of and on behalf of Hamilton Renewable Power Inc. with respect to Prime Consultant Services Required for Preliminary Design and Engineering of Biogas Upgrading Unit Installation and Connection to Utility Line.
- B.** The Consultant submitted a Proposal for the provision of such Goods or Services in accordance with and in response to the RFP which was subsequently evaluated and accepted by the City on behalf of HRPI; and
- C.** The Consultant acknowledges and agrees that it wishes to enter into a contract (the "Contract") with HRPI to clarify and provide the terms under which such goods or services shall be provided; and
- D.** The Consultant and HRPI are therefore the signing parties to this Contract.

IN CONSIDERATION of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are acknowledged by the HRPI and the Consultant, HRPI and the Consultant mutually covenant and agree as follows:

ENTIRE AGREEMENT

This Agreement, including:

- (1) All Addenda modifying the Agreement, including the Project Specific Special Conditions, Special Conditions and General Conditions, in reverse chronological order;
- (2) Terms of Reference or Specifications;
- (3) Definitions;
- (4) Project Specific Special Conditions;
- (5) Special Conditions;
- (6) any agreement drawings;
- (7) General Conditions;
- (8) this Agreement for Work;
- (9) Form of Proposal, including Schedule of Prices;

(10) Consultant's Proposal, as accepted by the City,

constitutes the entire agreement between the parties with respect to the subject matter contained in this Agreement and supersedes all prior oral and written representations and agreements.

It is agreed to by the parties that the City will assist HRPI throughout the Term of the Contract, on an as needed basis and such assistance by the City will be seen as on behalf of HRPI.

IN WITNESS WHEREOF, the parties have executed this Agreement on the dates set out below.

{CONSULTANT'S LEGAL NAME}

Signed for and on behalf of the Consultant by:

Signed _____

Name:

Title:

Date _____

I have the authority to bind the corporation.

Hamilton Renewable Power Inc.

Signed _____

Name:

Title:

Date _____

Signed _____

Name:

Title:

Date _____

GENERAL CONDITIONS

Revised: February 1, 2023

1.0 SCOPE OF CONTRACT

- 1.1 The Consultant agrees to do and perform or provide the whole of the Work mentioned and described in this Agreement, including without limitation those set out in the General Conditions, Special Conditions, Terms of Reference, Specifications (if any) and Definitions including to:
- (a) render all Services and provide all Goods necessary to perform same;
 - (b) furnish all labour, Services, Goods, materials, equipment and all incidentals;
 - (c) pay all applicable taxes and all other charges as specified; and
 - (d) fully, properly, diligently and in good faith undertake, perform and complete all of the Consultant's duties, obligations and responsibilities under this Agreement,
- with reasonable diligence and in a thoroughly competent manner, in strict accordance with this Agreement, and shall furnish all labour, materials, equipment, tools, skill and all other things required for this Agreement to the satisfaction of Hamilton Renewable Power Inc..
- 1.2 The Consultant shall be responsible for and shall give adequate attention to the provision, performance and completion of the Work in accordance with the terms of this Agreement and in strict conformity to the Terms of Reference and Specifications (if any) and shall only alter the Work performed at the request of Hamilton Renewable Power Inc.. Defective Work or equipment must be corrected whenever discovered by the Consultant or brought to its attention.

2.0 REPRESENTATIONS AND WARRANTIES OF CONSULTANT

- 2.1 The Consultant makes the following representations and warranties to and for the benefit of Hamilton Renewable Power Inc.:
- (a) if a corporation: is a duly incorporated, organized and subsisting corporation and has all requisite powers, capacities, authorities, permits, licences and permissions under its governing legislation and any other Law applicable to it, and under its Articles of Incorporation and by-laws under which it is organized, to carry on all businesses in which the Consultant is engaged; and enter into, exercise its rights and perform and comply with its responsibilities and obligations under this Agreement; and that all actions, conditions and things have been done, taken or fulfilled with respect thereto, that are required by Law, contract or otherwise; or
 - (b) if other than a corporation: is duly registered as a business under all applicable legislation, and as such has all requisite powers, capacities, permits, licences and permissions under its governing legislation and the other Law applicable to it, to carry on all businesses in which the Consultant is engaged; enter into, exercise its rights and perform and comply with its obligations under this

Agreement; and that all actions, conditions and things have been done, taken or fulfilled with respect thereto, that are required by Law, contract or otherwise.

- 2.2 The Consultant and its Subconsultants and the respective workforce of each are fully qualified to perform the Work and hold all requisite permits, licences, franchises and other authorizations required by this Agreement, and by Law, contract and otherwise with respect thereto. The Consultant and all the Subconsultants they propose to use on or in connection with the Services to be supplied under the Agreement shall be actively engaged and thoroughly experienced in the lines of work required by the Agreement and shall be able to refer to previous work of a similar nature satisfactorily performed by them.
- 2.3 The Consultant is not a party to any contract under the terms of which the Consultant is prohibited or restricted from entering into any of the obligations assumed, liabilities imposed, or restrictions accepted by the Consultant under this Agreement.
- 2.4 To the best of the Consultant's information and belief and after making diligent inquiries,
 - (a) the information concerning the business, affairs and financial and other condition of the Consultant that are contained in all documents, memoranda, records, statements made, sent or given by the Consultant to Hamilton Renewable Power Inc. prior to entering into this Agreement, and in its current regulatory filings, are true and accurate in all material respects; and
 - (b) the Consultant is not aware of any material facts or circumstances having a bearing upon its ability to perform its obligations under this Agreement which have not been disclosed to Hamilton Renewable Power Inc. in writing.
- 2.5 The Consultant shall forthwith advise Hamilton Renewable Power Inc. in writing in the event it becomes aware of any material fact or circumstance which may arise, at any time, that may have a bearing upon its ability to perform or assume its obligations under this Agreement.
- 2.6 The Consultant has the skill, ability and experience to perform the obligations set out in this Agreement according to the usual practices of the profession or industry and promises to carry out its obligations in accordance with those standards.
- 2.7 The Consultant shall employ properly qualified and experienced workers to carry out the Work and shall cause its Subconsultants to do the same.
- 2.8 The Consultant shall have an adequate work force with proper equipment in good working condition, and shall have ready access to all materials, equipment and accessories required to perform its obligations under this Agreement in a diligent and timely manner, and shall cause its Subconsultant(s) to do the same.
- 2.9 The Consultant has not employed or retained any person, other than a bona fide employee, agent or broker working for the Consultant, to solicit or secure this Agreement, and it has not paid or agreed to pay any person, other than a bona fide employee, agent or broker working solely for the Consultant, any fee, commission, percentage, gift or other consideration contingent upon or resulting from the entering

into of this Agreement, or as an inducement to enter into this Agreement. No elected official, officer or employee of Hamilton Renewable Power Inc. shall enjoy a direct or indirect interest in this Agreement or any subcontract under this Agreement, nor does any such official, officer or employee have a direct or indirect interest in the Consultant. Without prejudice to any of its other rights, Hamilton Renewable Power Inc. reserves the right to cancel this Agreement where there is a breach of this warranty.

- 2.10 The Consultant shall itself, and shall cause its agents and all workers and persons employed by them, or under its control, or employed by, or under the control of Subconsultant(s), to use due care that no persons or property is injured or damaged in the course of performing its obligations under the Agreement, and the Consultant shall be solely responsible for all losses and damages by whomsoever claimed in respect of any such injury or damage. Without limiting any other provision of the Request for Proposals, all loss or damage occasioned by or arising out of the nature of the activities and works to be done by the Consultant, or from the normal action of the elements or from any reasonably foreseeable circumstances in the prosecution of the same shall be sustained and borne by the Consultant at its own expense.
- 2.11 The Consultant agrees that in no way shall Hamilton Renewable Power Inc. be responsible for the theft of any tools, equipment, supplies, materials or other property owned or used by the Consultant or by any person performing the Services on behalf of the Consultant; nor shall Hamilton Renewable Power Inc., in any way, be responsible for any damage, loss, injury or death to person or property, however caused, resulting from the condition of the work site.
- 2.12 The Consultant shall at its own expense make such temporary arrangements as may be necessary to ensure the avoidance of any such damages or injury.
- 2.13 All loss or damage, including consequential, economic and special damages or losses (unless expressly provided otherwise in the Special Conditions or an Addendum to the Request for Proposals) arising from or as a result of the performance of the Services contemplated by the Request for Proposals, or any acts or omissions with respect to those Services, or from the normal action of the elements or from any reasonably foreseeable circumstances in the prosecution of the same, or from any normal obstruction or normal difficulties which may be encountered in the delivery of Services having regard to the nature thereof, shall be sustained and borne by the Consultant at its own expense. Anything required to replace or remedy any inadequate, deficient or unsatisfactory Services, or to remedy any failure or default shall be at the expense of the Consultant.
- 2.14 The Consultant shall not change any approved Project architect or any other key member of the Consultant or its team assigned to the Project without the prior written consent of Hamilton Renewable Power Inc..
- 2.15 The Consultant is an independent contractor engaged by Hamilton Renewable Power Inc. to perform the Services. Nothing in the Agreement is intended to create a partnership, a joint venture or an agency between t Hamilton Renewable Power Inc.

and the other party or parties. The Consultant must not represent itself as an agent or representative of t Hamilton Renewable Power Inc. to anyone. The Consultant is responsible for all deductions and remittances required by law in relation to its employees.

- 2.16 If at any time there is more than one legal entity constituting the Consultant, their covenants under the Agreement shall be considered to be joint and several and apply to each and every entity. If the Consultant is or becomes a partnership or joint venture, each legal entity who is a member or becomes a member of the partnership or joint venture or its successors is and continues to be jointly and severally liable for the performance of the services and all the covenants of the Consultant pursuant to this Agreement, whether or not that entity ceases to be a member of the partnership, joint venture or its successor.

3.0 CONFIDENTIALITY

- 3.1 The Consultant shall not disclose, distribute, publish or issue any information, details or document concerning any aspect of this Agreement, the Agreement documents, Work, Services and Project to a third party except:
- (a) where prior written consent of Hamilton Renewable Power Inc. has been provided, which consent may be unreasonably withheld;
 - (b) where such disclosure is necessary to perform the Work, is only to a person directly engaged in performing the Work under this Agreement and is only to the extent required for the Work to be performed; or
 - (c) is required to be disclosed by Law.
- 3.2 The Consultant shall oblige its employees, Subconsultants and Subcontractor(s) to comply with these confidentiality provisions.
- 3.3 The Consultant shall refer all inquiries from whatever source relating to this Agreement or the Work to the Project Manager.
- 3.4 The disclosure of information relating to this Agreement and this Agreement itself are governed in accordance with the disclosure requirements of applicable Law, including the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA).
- 3.5 In accordance with MFIPPA, this will notify the Consultant that any personal information it provides to t Hamilton Renewable Power Inc. during the performance of the Work is being collected under the authority of the Municipal Act, 2001.
- 3.6 All correspondence, documentation and information provided to Hamilton Renewable Power Inc. will become the property of Hamilton Renewable Power Inc. and a record of Hamilton Renewable Power Inc.. The foregoing records and this Agreement are subject to the provisions of MFIPPA and Hamilton Renewable Power Inc's obligations hereunder and may be released under such Act. The Consultant's name at a minimum will be made public on request. In addition, certain contractual information must be disclosed to Council and accordingly may become part of the public record.

- 3.7 For the purposes of MFIPPA, the Consultant may mark as confidential any scientific, technical, commercial, proprietary or similar confidential information, the disclosure of which could cause it injury. Its complete Proposal is not to be identified as confidential. A watermark or imprint is suitable for this purpose.
- 3.8 Hamilton Renewable Power Inc. makes no representations or warranties that the identification of a document as confidential will prevent its release under the provisions of MFIPPA or otherwise under any Law. Any information provided to Hamilton Renewable Power Inc. by the Consultant whether or not it is identified as confidential may be treated by Hamilton Renewable Power Inc. as public information. Hamilton Renewable Power Inc. shall not be liable in any manner to the Consultant or any other person if information is disclosed by virtue of an order of the Privacy Commissioner (as defined under MFIPPA), a court of competent jurisdiction or otherwise as required or permitted by Law.
- 3.9 Information regarding the application of MFIPPA is available from the Access to Information and Privacy Section of the City Clerk's office at City Hall.
- 3.10 All correspondence, documentation and information provided by the City to the Consultant remains the property of Hamilton Renewable Power Inc. and must not be used for any purpose other than for the fulfillment of the Consultant's obligations under this Agreement.
- 3.11 Confidentiality of records and information of Hamilton Renewable Power Inc. relating to the Work must be maintained at all times. All documentation and communications, written and verbal, related to the Work and Contract, whether provided by Hamilton Renewable Power Inc. or on the Hamilton Renewable Power Inc's behalf or otherwise is deemed confidential unless expressly provided otherwise. All correspondence, documentation and information provided by Hamilton Renewable Power Inc. and its Independent Consultant to the Consultant in connection with, or arising out of this Agreement remains the property of Hamilton Renewable Power Inc; must be treated as confidential; and must not be used for any purpose other than for fulfillment of this Agreement. Throughout the term of the Agreement and thereafter, the Consultant shall safeguard all information provided by Hamilton Renewable Power Inc. and its Independent Consultant and any other person at the request of Hamilton Renewable Power Inc, to the Consultant or any of its directors, officers, employees, agents and representatives and, in particular, the Consultant shall:
- (a) maintain in strict confidence all information concerning Hamilton Renewable Power Inc, its employees, representatives, consultants, residents or any other person that comes to it by reason of acting as a Consultant to Hamilton Renewable Power Inc,
 - (b) not reproduce or disclose any such information to any person except as required by Law or as expressly permitted in advance by Hamilton Renewable Power Inc.in writing,
 - (c) return forthwith and without demand all such information as may be in documentary form or recorded electronically upon the termination of its

Services as a Consultant,

- (d) not use any of the information, within the scope of this section, for any other purpose other than the purpose for which it was provided by Hamilton Renewable Power Inc. or by any other person at the request of Hamilton Renewable Power Inc.,
 - (e) not divulge or disclose any confidential information communicated to or acquired by it in the course of carrying out the Services provided for herein, except as may be required by Law or as expressly permitted in advance by Hamilton Renewable Power Inc. in writing, and
 - (f) not use any of the information, within the scope of this section, on any other project without the prior written approval of Hamilton Renewable Power Inc..
- 3.12 This Agreement is subject to the *Municipal Freedom of Information and Protection of Privacy Act* ("MFIPPA") and *Personal Health Information Protection Act* ("PHIPA") as well as Hamilton Renewable Power Inc's obligations thereunder. The Consultant shall strictly comply with the requirements of such legislation as well as the *Personal Information Protection and Electronic Documents Act*, 2000, c. 5. The Consultant shall safeguard and protect all personal and confidential information provided by Hamilton Renewable Power Inc and the Hamilton Renewable Power Inc's representatives, or any other person at the request of Hamilton Renewable Power Inc. together with that of any person required by the foregoing Acts, and shall not deposit, store or hold any such information in such a manner that it is subject to seizure or disclosure under the *Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA Patriot Act) Act of 2001*, as amended, in contravention of the provisions of MFIPPA, PHIPA or any other applicable Canadian privacy legislation.

4.0 INFORMATION PROVIDED BY HAMILTON RENEWABLE POWER INC.

- 4.1 Unless expressly provided otherwise in this Agreement, all information supplied by the City or on behalf of Hamilton Renewable Power Inc. to the Consultant for purposes of performing the Work shall be provided solely for information purposes and does not form part of this Agreement. The information is not guaranteed or warranted to be accurate by Hamilton Renewable Power Inc., nor is it necessarily comprehensive or exhaustive. Hamilton Renewable Power Inc. accepts no responsibility for and/or liability with respect to the completeness and accuracy of such information. The Consultant shall take all steps that it deems appropriate to satisfy itself of the accuracy of any such information and shall not make any claim against Hamilton Renewable Power Inc. because of any error or inaccuracy that might exist in such information.

5.0 EXCESSIVE CLAIMS

- 5.1 Hamilton Renewable Power Inc. may review and disallow an invoice, or reduce the amount of an invoice, submitted for hourly labour costs, or for material supplied, where the Project Manager concludes on reasonable grounds that the amount of that

invoice is excessive, taking into account the time and materials that would ordinarily be required by a competent professional or tradesman to carry out the Work to which the invoice relates, in accordance with the Construction Act.

- 5.2 Prior to disallowing or reducing an invoice under section 5.1, Hamilton Renewable Power Inc. shall notify the Consultant in writing of its intention to review the invoice in question and shall allow the Consultant to make written or oral representations to the Project Manager as to whether the amount invoiced is excessive. The Project Manager shall take those representations and all other relevant facts into account before reaching any conclusion under section 5.1. Any decision made by the Project Manager under this section is final and conclusive between the parties.

6.0 SET-OFF

- 6.1 The parties agree that Hamilton Renewable Power Inc. has the contractual right to set-off against any amounts owing by Hamilton Renewable Power Inc. to the Consultant under this Agreement with respect to any debts, claims or damages related to the Works, subject to the Construction Act, as applicable.
- 6.2 The costs to Hamilton Renewable Power Inc. of sending or publishing any notice or document required by the Construction Act may be retained by Hamilton Renewable Power Inc. in accordance with its set-off rights.

7.0 TAXES

- 7.1 All prices set out in the Consultant's Proposal are exclusive of Value Added Taxes, unless otherwise specified in this Agreement.
- 7.2 Subject to section 8.0, all prices include all excise taxes, customs duties, customs clearance and brokerage fees, royalties and patent or licence fees.

8.0 ELECTRONIC FUNDS TRANSFER

- 8.1 In this section, the term "EFT" refers to electronic funds transfer and may also include the payment information transfer. All payments made by EFT shall only be made as a direct deposit to a Canadian financial institution.

8.2 Method of Payment

All payments by Hamilton Renewable Power Inc. under this Agreement shall be made by electronic funds transfer (EFT) save and except where:

- (a) the funds payable under the terms of this Agreement are only payable in a single lump sum and not payable by installments or progress payments or otherwise than a single lump sum payment; or
- (b) Hamilton Renewable Power Inc. is unable to release one or more payments by EFT, in which case the Consultant agrees to either:
 - (i) accept payment by cheque or some other mutually agreeable method of payment; or

- (ii) request Hamilton Renewable Power Inc. to extend payment due dates until such time as Hamilton Renewable Power Inc. makes payment by EFT,

subject to section 8.4 Suspension of Payment.

8.3 **Mandatory Submission of Consultant's EFT Information**

- (a) The Consultant is required to provide Hamilton Renewable Power Inc. with the information required for the City to make payment by EFT. A purchase order may not be issued to the Consultant without this requisite information.
- (b) In the event that the EFT information changes, the Consultant shall be responsible for providing forthwith the updated information to Hamilton Renewable Power Inc..

8.4 **Suspension of Payment**

- (a) Hamilton Renewable Power Inc. is not required to make any payment under this Agreement until its designated officer has received the correct EFT payment information from the Consultant. Until receipt of the correct EFT information, any invoice or contract payment request shall be deemed not to be a proper invoice or valid request for the purpose of payment under this Agreement. No interest or any other manner of claim whatsoever for delayed or non-payment shall be permitted as a result of incorrect EFT information or improper delivery of EFT payment information.
- (b) If the EFT information changes after submission of correct EFT information, Hamilton Renewable Power Inc. shall have 30 days within which to update the changed EFT information after its receipt by the designated officer to the extent payment is made by EFT. However, the Consultant may request that no further payments be made until the updated EFT information is implemented by Hamilton Renewable Power Inc's payment office. If such suspension would result in a late payment under any payment terms of this Agreement, the Consultant's request for suspension shall extend the due date for payment by the number of days of the suspension.

8.5 **Liability for Uncompleted or Erroneous Transfers**

- (a) If an uncompleted or erroneous transfer occurs because Hamilton Renewable Power Inc. used the Consultant's EFT information incorrectly, Hamilton Renewable Power Inc. remains responsible for making a correct payment.
- (b) If an uncompleted or erroneous transfer occurs because the Consultant's EFT information was incorrect, or was revised within 30 days of Hamilton Renewable Power Inc's release of the EFT payment transaction instruction, and
 - (i) funds are no longer under the control of the Hamilton Renewable Power Inc's payment office, Hamilton Renewable Power Inc., after providing reasonable assistance to recover the funds, shall be deemed to have made payment and the Consultant is responsible for recovery of any erroneously directed funds; or

- (ii) if the funds remain under the control of the Hamilton Renewable Power Inc's payment office, Hamilton Renewable Power Inc. shall not make payment and the provisions of section 8.4 Suspension of Payment shall apply.

8.6 **EFT and Timely Payment**

A payment shall be deemed to have been made in a timely manner in accordance with the payment terms of this Agreement if, in Hamilton Renewable Power Inc's EFT payment transaction instruction released to its bank, the date specified for settlement of the payment is on or before the last date for due payment under the terms of this Agreement, provided the specified payment date is a valid date when Hamilton Renewable Power Inc.'s bank is open for business.

9.0 **CONSULTANT'S COSTS**

- 9.1 Without limiting the generality of any other provision of this Agreement, unless otherwise provided in this Agreement, the Consultant shall be required to provide and pay for (as applicable):
 - (a) all material, labour and service costs, charges for use of software, intellectual property, tools and equipment whether owned, licensed or rented, and where any Work is to be carried out on property owned or occupied by Hamilton Renewable Power Inc, all protective and safety provisions, site signs and site conveniences, together with all Work and associated equipment and materials or other incidentals whether shown or specified or required by best practices (as applicable);
 - (b) insurance, licences, permits and inspections; all applicable taxes, worker's compensation and all other applicable labour-compensation charges necessary to carry out its duties with respect to the Work;
 - (c) all other Work required to carry out the Consultant's responsibilities and duties with respect to the Work, in accordance with this Agreement and all instructions given by Hamilton Renewable Power Inc. thereunder, in accordance with governing regulations and codes and in compliance with best industrial and commercial practices for first class workmanship.
- 9.2 The Consultant shall provide cost control and reporting on the Services to Hamilton Renewable Power Inc. in regular Project status reports. If at any time the Consultant considers its estimates indicate costs which exceed the Project budget forecast, the Consultant will immediately advise Hamilton Renewable Power Inc.. If the excess is due to, discretionary design elements under the control of or reasonably foreseeable by the Consultant, or the negligence or default of the Consultant in performance of this Agreement, Hamilton Renewable Power Inc. may require the Consultant to redesign the project at the Consultant's expense to bring the cost estimate within the approved Project budget forecast.
- 9.3 Any costs resulting from design errors on the part of the Consultant, Subconsultants or agents, or employees of the Consultant or of any Subconsultant chosen by the Consultant will be the responsibility of the Consultant to remedy. However, where Hamilton Renewable Power Inc. and not the Consultant chooses a Subconsultant to do hazardous materials studies, environmental reports, geotechnical reports, topographical

or legal surveys, construction testing services or other work, the Consultant shall not be held responsible for design errors attributed to incomplete or incorrect hazardous materials studies, environmental reports, geotechnical reports, topographical or legal surveys, or construction testing services, done by Subconsultants chosen by Hamilton Renewable Power Inc., unless those design errors are directly caused by the Consultant.

10.0 QUANTITIES AND ESTIMATES

- 10.1 Unless otherwise expressly stated in this Agreement, where technical information or details form part of this Agreement (including any quantity estimates, samples or other documents of a similar kind or nature as may be provided in this Agreement or incorporated by reference therein),
- (a) Hamilton Renewable Power Inc. shall exercise reasonable care in the preparation of those estimates and information but shall not be taken to warrant their accuracy and shall not be liable for any inaccuracy therein unless that inaccuracy is the result of the deliberate misrepresentation of Hamilton Renewable Power Inc. or a member of its staff;
 - (b) estimates, reports, data, or details shall be deemed to have been provided only as a guide for the Consultant;
 - (c) the City does not guarantee, represent or warrant a minimum amount of Work.

11.0 SITE INSPECTION

- 11.1 Where the Work is to be carried out on City occupied or owned property, the Consultant shall be responsible for visiting the job site and no allowance shall be made by the Hamilton Renewable Power Inc for failure by the Consultant to examine carefully all conditions relating to the site or Work.
- 11.2 The Consultant and all its Subconsultants shall be held to have thoroughly examined this Agreement and to have visited and inspected the site on which the Work is to be carried out, and to have thoroughly familiarized themselves with all pertinent conditions before entering into this Agreement, and no allowance shall be subsequently given by Hamilton Renewable Power Inc. for or by reason of any error or omission on the part of the Consultant or Subconsultant with respect thereto. Hamilton Renewable Power Inc. shall not be liable for any costs associated with any site inspection.

12.0 OCCUPATIONAL HEALTH AND SAFETY

- 12.1 The Work shall be conducted in a safe manner. The Consultant and all Subconsultants used on the Work shall comply with all Law, including but not limited to the Occupational Health and Safety Act, and all applicable regulations thereunder.
- 12.2 Without limiting any of the foregoing, the Consultant shall have both a written occupational health and safety policy and program to implement that policy, and that

all of its employees, Subconsultants and any other persons performing the Work shall be appropriately trained, licensed and certified, as required to perform the Work.

- 12.3 Hamilton Renewable Power Inc. shall in no way be considered the constructor with respect to any part of the Work for the purposes of the Occupational Health and Safety Act.

13.0 PERMITS, LICENCES AND APPROVALS

- 13.1 The Consultant shall be responsible for applying for, obtaining and maintaining, at its own cost (other than the building permit fees, municipal site plan approval or committee of adjustment application fees) all necessary permits, licences, consents and approvals relating to the Work in accordance with this Agreement and shall not do or suffer to be done anything in violation of any such permits, licences, consents and approvals. If the attention of the Consultant is called to any such violation on the part of the Consultant, or of any person employed or engaged by the Consultant, the Consultant shall immediately desist from and correct such violation.
- 13.2 The Consultant shall be licensed to practice in the area in which the primary services under this Contract are to be provided, by the applicable professional body. In the case of architects, pursuant to the Architects Act, the Consultant shall be licensed by the Ontario Association of Architects. In the case of engineers, pursuant to the Professional Engineers Act, the Consultant shall be licensed by the Association of Professional Engineers Ontario or any successor body.
- 13.3 The Consultant shall, upon request of Hamilton Renewable Power Inc., provide proof of compliance satisfactory to Hamilton Renewable Power Inc., at the Consultant's own cost.

14.0 STANDARD WARRANTY

- 14.1 The Consultant shall promptly repair or replace, at no cost to Hamilton Renewable Power Inc., all defects in materials or workmanship of which the Consultant has been properly notified within a period of one year from the date of completion of the Work.
- 14.2 This warranty shall not apply where a different warranty is specified in the Cover Agreement, Terms of Reference or Specifications.

15.0 STANDARD OF CARE

- 15.1 The standard of care for all professional services, including architectural, engineering, consulting and related services, performed, furnished or retained by the Consultant and its employees under this Agreement will be the care and skill ordinarily used by members of the Consultant's profession or trade in Ontario.

16.0 COMPLIANCE WITH LAW

- 16.1 The Consultant shall be familiar with and comply with all Law applicable to the Work, including but not limited to all City procurement policies. The Consultant shall, upon

request of the City, provide proof of compliance satisfactory to the City, at the Consultant's own cost.

17.0 INDEMNIFICATION

17.1 The Prime Consultant shall indemnify and shall defend and save the Owner, its elected officials, officers, and employees harmless from and against any claims, proceedings, fines, penalties, expenses and costs (including legal costs on a solicitor and client basis) that are incurred by, or made or instituted against, any of them or to which any of them may be liable by reason of,

- (a) the Prime Consultant, under the Contract,
 - (i) negligently carrying out any obligation to which it is subject,
 - (ii) failing to carry out any obligation to which it is subject,
 - (iii) negligently exercising any right to which it is entitled, or,
 - (iv) exercising any right to which it is entitled in a manner which is inconsistent with the terms and conditions of the Contract,or any combination thereof, except to the extent that the same are caused by the negligence or deliberate wrong-doing of the Owner or other person entitled to indemnification under this section, or
- (b) any patent, trademark, copyright infringement or other breach of any intellectual property right of any person, for which the Prime Consultant or any Sub-Consultant or sub-contractor to the Prime Consultant is responsible.

17.2 The right of indemnification granted to Hamilton Renewable Power Inc., owner or other person entitled to indemnification under subsection (1) shall extend to any amount paid by that person in the settlement of any claim against it, and in entering into any such settlement, that person may exercise its reasonable discretion as to the amount to be paid, but that person shall serve prior notice of any intended settlement on the Prime Consultant, at least five (5) Business Days prior to agreeing to any such settlement.

18.0 WSIB

18.1 The Consultant prior to commencing the Work,

- (a) shall submit to the City an original Clearance Certificate from the Ontario Workplace Safety and Insurance Board and shall provide additional certificates with respect to such coverage as often as the City deems necessary during the term of this Agreement to ensure continued good standing with the Workplace Safety and Insurance Board; or
- (b) furnish proof in a form satisfactory to the City from the Workplace Safety and Insurance Board that the Consultant does not require Workplace Safety and Insurance Board insurance, but in such a case if the Consultant changes its status during the term of this Agreement so that such coverage is required, the Consultant shall immediately provide the City with the certificate required under paragraph (a).

- 18.2 Where a substantial portion of the work to be done under this Agreement is to be carried out by a Subconsultant, the City may require the Consultant to furnish the same evidence as provided under section 18.1 for that Subconsultant.

19.0 NON-PERFORMANCE

- 19.1 Hamilton Renewable Power Inc. reserves the right to determine of non-performance or poor quality of Work. The opinion of Hamilton Renewable Power Inc. in this regard shall be final in all instances.

20.0 TIME FOR COMPLETION AND FORCE MAJEURE

- 20.1 The Consultant shall;

- (a) commence the Work by the start date specified, or within the time provided in this Agreement, and
- (b) complete fully the Work with due expediency and due diligence by the date specified in this Agreement or otherwise as stipulated by Hamilton Renewable Power Inc..

- 20.2 In this section, "Force Majeure" means a delay in the performance of the Work occurring other than as a result of the deliberate act or negligence of either party respectively, and which

- (a) could not have been reasonably foreseen, and
- (b) was caused by an event beyond the reasonable control of each party respectively,

and for the sake of greater certainty shall include any one or more of the following:

- (i) acts of God, His Majesty the King or His enemies;
- (ii) civil war; insurrections or riots;
- (iii) fires; floods; explosions; earthquakes or serious major accidents;
- (iv) unusually severe weather; pandemics, epidemics or quarantine restrictions;
- (v) governmental priorities or allocation regulations or orders affecting materials, labour, equipment and facilities;
- (vi) fuel shortages or freight embargoes; or
- (vii) strikes or labour troubles causing cessation, slowdown, interruption of Work or other similar events relating to a person other than the Consultant (or any Subconsultant).

Financial difficulties experienced by the Consultant or Hamilton Renewable Power Inc. will not be considered Force Majeure under this Agreement.

- 20.3 In the event of the occurrence of a Force Majeure,
- (a) the time for completing that portion of the Work, or the completion of the Work, which has been delayed by reason of the Force Majeure shall be extended by a period equal to the delay so caused;
 - (b) the parties shall minimize all costs and expenses relating to the Services that may occur during the period of Force Majeure;
 - (c) the date for the payment of any portion of the price or any costs or fees shall be adjusted accordingly, without adjustment of the price; and
 - (d) the party claiming the relief of a Force Majeure shall use its best efforts to remedy any delay or non-performance caused by the Force Majeure;

subject to the foregoing, each party shall be excused from performance so long as the Force Majeure persists and shall not be considered to be in default under this Agreement, if and to the extent that its failure of, or delay in performance is due to that Force Majeure.

- 20.4 Where a Force Majeure occurs, Hamilton Renewable Power Inc. shall determine in its reasonable discretion the number of days (if any) to be allowed by reason thereof in accordance with the Force Majeure provisions of this Agreement. The Consultant may propose a number of days to be allowed for this purpose which Hamilton Renewable Power Inc. shall consider but shall not be bound to. Where Hamilton Renewable Power Inc. rejects the proposal made by the Consultant, it shall provide a written explanation for so doing.
- 20.5 Where the Consultant has given a number of days to proceed with the Work and it fails or neglects to commence or to proceed with the Work diligently and at a rate of progress that in the opinion of Hamilton Renewable Power Inc. will ensure entire completion within the time provided for as extended by the Force Majeure or fails to meet a time requirement provided for in this Agreement, Hamilton Renewable Power Inc. shall be entitled to recover from the Consultant all losses, damages and expenses incurred by Hamilton Renewable Power Inc. or may be incurred by Hamilton Renewable Power Inc. by reason of such default by the Consultant.
- 20.6 Where a Force Majeure remains in effect for more than 90 days, either party may terminate this Contract upon at least 30 days' written notice to the other party, provided at the time when that notice is given the Force Majeure is then continuing.
- 20.7 While a Force Majeure exists which prevents the Consultant from performing its obligations with respect to the Work, Hamilton Renewable Power Inc. may engage another contractor or supplier to perform those obligations on an interim basis. If Hamilton Renewable Power Inc. exercises such right, Hamilton Renewable Power Inc. shall not be obligated to make any payments or compensation to the Consultant during the time that such right is exercised by Hamilton Renewable Power Inc.. Hamilton Renewable Power Inc. shall have no liability to the Consultant or any other person for any claims, demands, actions, causes of action, interest, costs, damages, expenses, fines, penalties, loss, suits or other proceedings for loss, damage, injury or death resulting from any such action or performance of this Agreement, or any part

thereof, by Hamilton Renewable Power Inc. or another consultant or supplier retained by Hamilton Renewable Power Inc., except to the extent that such loss, damage, injury or death results from the negligence or wilful misconduct of Hamilton Renewable Power Inc., the substituted consultant or supplier.

21.0 DELAY

- 21.1 Without limiting any other rights or privileges of Hamilton Renewable Power Inc. in this Agreement with respect to delay, the Consultant is not entitled to and releases and waives any rights to any remedies, claims, demands, costs, penalties, fines, fees, damages and causes of action, whether directly or indirectly related to any delays on the part of Hamilton Renewable Power Inc. with respect to the commencement of the Consultant's Work.

22.0 MODIFICATIONS OF METHODS AND EQUIPMENT

- 22.1 The Consultant shall make such alterations in its methods, equipment and working forces, as Hamilton Renewable Power Inc. in writing directs, without cost to Hamilton Renewable Power Inc., if at any time the methods or equipment or working force are found by Hamilton Renewable Power Inc. to be: not in compliance with the requirements of this Agreement; unsafe; or inadequate to ensure the protection, safety, or quality of the Work or to ensure a rate of progress sufficient in the reasonable opinion of Hamilton Renewable Power Inc. to fully complete the Work within the completion time required under this Agreement or with due diligence.

23.0 USE OF CITY PROPERTY AND CHARACTER AND CONDUCT OF EMPLOYEES

- 23.1 Where any part of the Work is to be carried out on property owned or occupied by the City, the Consultant shall,
- (a) use that property and require its employees and Subconsultants to use that property, only for such purposes as are reasonably within the scope of this Agreement;
 - (b) refrain from committing waste on that property and use reasonable care to avoid causing any damage to any person or thing on that property or any neighbouring property;
 - (c) employ only orderly, experienced and competent persons to perform the Work; and
 - (d) comply, and cause its agents, directors, officers, employees and Subconsultants to comply, with the City's zero tolerance of violence policy.
- 23.2 The Consultant and its employees, agents, servants and Subconsultants shall neither bring onto nor allow the introduction or use of tobacco (except in strict compliance with the City's Smoking By-law), alcohol, cannabis and its derivatives, or illegal narcotics or controlled substances or any paraphernalia associated with any of these substances, upon any City property.

- 23.3 The Consultant agrees to accept the Work site in its present condition and acknowledges and agrees that the City has not given any representation, warranty or condition, express or implied, in fact or by Law, as to the state, quality or condition in, on, or of the site, whether with respect to environmental matters or otherwise, or as to any other matter or thing, whether or not related to the foregoing. Furthermore, the Consultant any and all risks relating to the physical condition of the site. Neither the Consultant nor any permitted occupant shall have any recourse to the City as a result of the nature or condition of the Work site, whether or not the City has or had actual or imputed knowledge of such nature and condition as at the commencement of this Agreement or at any other time during the term of this Agreement.

24.0 CONFLICT OF INTEREST

- 24.1 See the City of Hamilton Procurement Policy By-law for specific requirements and obligations at:
<https://www.hamilton.ca/build-invest-grow/buying-selling-city/bids-and-tenders/procurement-policy-by-law>
- 24.2 In performing the duties, providing advice and exercising all other rights and discretion associated with its role as a consultant, the Consultant shall,
- (a) act diligently, honestly and in good faith and in the best interests of Hamilton Renewable Power Inc.;
 - (b) to the best of its ability make every effort to promote the interests and reputation of Hamilton Renewable Power Inc.; and
 - (c) to the best of its ability assist Hamilton Renewable Power Inc. in achieving its objectives and goals.
- 24.3 The Consultant shall act diligently, ethically and fairly in the performance of its duties and all of its dealings with Hamilton Renewable Power Inc., elected officials, officers, employees and Independent Consultants of Hamilton Renewable Power Inc. and co-operate with them in respect of the discharge of their duties to Hamilton Renewable Power Inc.. The Consultant will, to the best of its ability, make every effort to promote the interests and reputation of Hamilton Renewable Power Inc. to assist it in achieving its objectives and goals.
- 24.4 The Consultant shall not act in any case where there may be any conflict of interest between it (or any of its directors, officers, employees) and Hamilton Renewable Power Inc. The Consultant shall notify Hamilton Renewable Power Inc. of and fully disclose to Hamilton Renewable Power Inc., in writing and immediately upon same becoming known to the Consultant, any potential or actual conflict of interest that may arise or has arisen prior to entering into this Agreement or during the performance of its duties under this Agreement.
- 24.5 If Hamilton Renewable Power Inc. determines that a conflict of interest exists, Hamilton Renewable Power Inc. may, at its sole discretion, suspend or defer the Work until the conflict is removed to the satisfaction of Hamilton Renewable Power Inc. or

terminate the Work. If, during the course of the Work, the Consultant is retained by another client for a new assignment, giving rise to a potential conflict of interest, then the Consultant shall so inform the Project Manager immediately. If the Project Manager determines that a conflict of interest exists, the Consultant shall refuse the new assignment or shall take such steps as are necessary to remove the conflict of interest and, where the Consultant fails to do this within a reasonable time, Hamilton Renewable Power Inc. may terminate the Work. The Consultant shall be responsible and indemnify Hamilton Renewable Power Inc. for all of Hamilton Renewable Power Inc.'s costs, expenses, losses and damages whatsoever which may be incurred or arise as a result of the Consultant's breach of its obligations herein including but not limited to all costs incurred to replace the Work of the Consultant, all delay costs, legal and other professional service costs, and lost revenue and opportunities.

24.6 Without limiting the foregoing provisions, except with the prior written consent of Hamilton Renewable Power Inc.,

- (c) the Consultant shall not act on behalf of Hamilton Renewable Power Inc. with respect to any issue or in connection with any property in which the Consultant or any director, officer or employee of the Consultant has a direct or indirect pecuniary interest, including any contingent interest;
- (d) before accepting any retainer to act on behalf of Hamilton Renewable Power Inc., the Consultant shall exercise reasonable due diligence to confirm that there is no conflict of interest within the contemplation of this section;
- (e) the Consultant shall accept no commission, gratuity or other payment of any kind from any person, other than Hamilton Renewable Power Inc.'s payment for Work in accordance with this Agreement, in respect of its performance or intended performance, duties or exercise or intended exercise of any influence, power or discretion associated with its provision of Work to Hamilton Renewable Power Inc.; and
- (f) within two years of the date of performing Work for or on behalf of Hamilton Renewable Power Inc. relating to any identifiable piece of land within the City (or any building or structure upon such land), the Consultant shall not enter into any contract with any other person under which the Consultant or any director, officer, employee or nominee of the Consultant may acquire any interest in that land (or building or structure).

24.7 This section shall apply to all Subconsultants of the Consultant with necessary modifications.

25.0 ASSIGNMENT

25.1 The Consultant shall not assign, transfer or encumber in any manner this Agreement or part thereof, without the prior written approval of Hamilton Renewable Power Inc.. Any attempt to assign, transfer or encumber any of the rights, duties or obligations of this Agreement without such approval of Hamilton Renewable Power Inc. is void. An "assignment" herein includes any reorganization, amalgamation, a change in voting control, bulk sale of assets, dissolution, any transfer or issue by sale, assignment, bequest, inheritance, operation of law, or other disposition, or by subscription, of any

part, or all of, the shares or units of the Consultant which would result in any change in the direct or indirect control of the Consultant, or other restructuring of any material kind.

- 25.2 No assignment by the Consultant shall relieve the Consultant of any responsibility for the full performance of all its obligations under this Contract which shall enure to the benefit of Hamilton Renewable Power Inc. and the Consultant and their respective permitted assigns, successors and legal representatives.
- 25.3 The Consultant shall be responsible for all costs of Hamilton Renewable Power Inc. to investigate and consider a proposed assignee including but not limited to its internal staff costs and all legal, financial and consultant costs. Such costs shall be payable by the Consultant regardless of whether an approval is granted or not.
- 25.4 Hamilton Renewable Power Inc. may, at its sole discretion, assign this Contract.

26.0 PROJECT IDENTIFICATION

- 26.1 The Consultant shall not use the City's logo or other insignia identifiable with the City without the prior written approval of the City.

27.0 LIENS TO BE DISCHARGED

- 27.1 The Consultant shall pay punctually all amounts owing to its suppliers and any subconsultants in respect of all services and materials supplied by them with respect to this Agreement, including any applicable interest, taxes, costs and other charges. The Consultant shall forthwith cause every lien or charge preserved or perfected by any person with respect to this Agreement or the subject matter of this Agreement to be vacated or discharged, and as between the Consultant and Hamilton Renewable Power Inc. all costs relating thereto shall be paid by the Consultant and shall be at its sole expense.
- 27.2 In the event that the Consultant fails or refuses to vacate or discharge a construction lien or charge against Hamilton Renewable Power Inc. within ten (10) calendar days of receiving notice, Hamilton Renewable Power Inc. shall, at its option, be entitled to take all steps necessary to vacate and/or discharge the lien or charge, and all costs and expenses incurred by Hamilton Renewable Power Inc. in so doing (including, without limitation, legal fees on a solicitor and client basis) and any payment which may ultimately be made out of or pursuant to security posted to vacate the lien or charge shall be for the account of the Consultant. Hamilton Renewable Power Inc. may deduct such amounts from amounts otherwise due or owing to the Consultant to the Construction Act.

28.0 OWNERSHIP OF DOCUMENTS, USE OF DESIGNS AND INTELLECTUAL PROPERTY

- 28.1 The Total Agreement Price shall include all payments made or to be made to any third party in respect of any right, patent, design, trademark or copyright used for the purpose of the Consultant performing the Agreement.

28.2 Unless Hamilton Renewable Power Inc. otherwise agrees in writing, where any plan, drawing or design is provided by the Consultant in connection with this Agreement, then the submission of such plan, drawing or design shall be deemed to constitute a licence by the Consultant in favour of Hamilton Renewable Power Inc. to:

- (a) construct one sample model of the work or project contemplated based upon that plan, drawing or design, where such a sample is required to make an informed decision concerning the attractiveness, functionality or other merit of the plan, drawing or design in question; and
- (b) to use that plan, drawing or design for its intended purposes.

The licence conferred herein shall not be deemed to constitute an assignment of any patent, copyright, trade mark or other intellectual property of the Consultant, unless otherwise provided in this Agreement.

28.3 The Instruments of Service shall be the property of Hamilton Renewable Power Inc., which shall also include the signed Agreement document sets, including electronic and paper as-built documents. For greater certainty, the Consultant hereby grants to Hamilton Renewable Power Inc. (at no additional charge) the right to use the Instruments of Service for the purposes of construction, operation, maintenance, renovation, expansion and alteration of the Project and its lands, now and in future.

28.4 Models, software applications developed by the Consultant for Hamilton Renewable Power Inc., and calculations furnished by the Consultant at Hamilton Renewable Power Inc.'s expense are the property of Hamilton Renewable Power Inc.. In addition, the Consultant acknowledges and agrees that Hamilton Renewable Power Inc. shall have access to and the right and irrevocable license to use, in connection with the Project and any additions to or alterations to the Project and/or the Work to be made or carried out at any time, all specifications, drawings (including CAD), electronic technical documents, software (to the extent the Consultant is authorized to do so under the terms of its own software ownership and licensing agreements), calculations, 2 and 3 dimensional models and all shop drawings prepared or furnished by the Consultant with respect to the Project. Further, the Consultant agrees that, if this Contract is terminated by Hamilton Renewable Power Inc. for any reason, the Consultant shall, upon termination, provide to Hamilton Renewable Power Inc. such plans, drawings, specifications, designs, information and documents which are in the possession or control of the Consultant and which are reasonably required for the continuance and completion of the Project and which Hamilton Renewable Power Inc. may use for such purpose and for any addition to, or alteration of, the Project. The Consultant on behalf of itself and its principals and employees, hereby waives any and all moral rights in all of the work of the Consultant that may have accrued to the Consultant and any of its principals and employees as the author of such work.

28.5 No illegal commerce or gray market Goods shall be supplied to Hamilton Renewable Power Inc., and every person supplying Work to Hamilton Renewable Power Inc. shall be deemed to have warranted that they are genuine and lawfully supplied.

29.0 DEVIATION FROM AGREEMENT DOCUMENTS AND "GOOD PRACTICE"

- 29.1 The Consultant shall not deviate from the Agreement without the prior written consent of Hamilton Renewable Power Inc..
- 29.2 The Consultant covenants that it shall inspect and shall cause all of its Subconsultants to do so as well, all elements, parts, items or surfaces affecting or involving their work and inform Hamilton Renewable Power Inc. immediately, in writing, of any and all deviations from the drawings and specifications approved by Hamilton Renewable Power Inc. and/or from accepted good practice and standards involving or affecting their work. Without limiting the Consultant's obligations and responsibilities under this Agreement, neither the Consultant nor any of its Subconsultants shall proceed with their work if these deviations will influence or affect the appearance or quality of their work or any aspect of the Work until same are corrected by the Consultant. The Consultant shall bear the cost of any delay caused by a deviation by it or any of its Subconsultants from this Agreement or any accepted practice or standard required under this Agreement, without the prior consent of Hamilton Renewable Power Inc.. Nothing herein shall alter or derogate from the responsibility of the Consultant under this Agreement.

30.0 PERFORMANCE REVIEW

- 30.1 Where the Procurement Manager so directs, Hamilton Renewable Power Inc. and the Consultant shall carry out a periodic performance review in accordance with this section concerning the Work of the Consultant.
- 30.2 Performance under this Agreement shall be assessed by reference to the following criteria:
- (a) general responsiveness of the work relationship;
 - (b) conformity of the Work with this Agreement;
 - (c) general conformity with the reasonable expectations of Hamilton Renewable Power Inc. under the terms of this Agreement in their entirety;
 - (d) general dependability of the Work supplied;
 - (e) turn-around time on the placement of orders (to the extent applicable);
 - (f) accuracy of carrying out instructions.
- 30.3 The respective representatives of Hamilton Renewable Power Inc. and Consultant shall meet at mutually agreeable times within ten Business Days of the end of each consecutive six month period of Work under this Agreement.
- 30.4 Where a performance review is conducted under section 30.2, each of the agreed aspects of the Consultant's performance shall be ranked by Hamilton Renewable Power Inc. at one of the following standards:
- (a) Satisfactory (performance in accordance of general standard of City suppliers);
 - (b) Unacceptable (performance well below the general standard of City suppliers).

- 30.5 At any performance review under this section, the Consultant shall be entitled to identify any aspect of Hamilton Renewable Power Inc.'s operations that is undermining the Consultant's ability to deliver at least a satisfactory level of performance with respect to some criteria of assessment, and where Hamilton Renewable Power Inc. concludes that this is in fact the case, the ranking given to the Consultant with respect to that criteria of assessment will be adjusted accordingly.
- 30.6 Where at a performance review, one or more criteria of assessment are ranked as unacceptable,
- (a) the parties shall agree at the time of the conduct of the review or within ten Business Days thereafter, on the measures to be taken by the Consultant during the ensuing contract review period to improve its performance to at least a good standard;
 - (b) within ten Business Days of agreeing on those measures, the Consultant shall confirm in writing that the measures in question have been implemented.
- 30.7 Where the Consultant fails or refuses to implement measures as provided in section 30.6, it shall be deemed to be in default under this Contract, and Hamilton Renewable Power Inc. may take such remedies as provided for in this Contract or are otherwise available at Law or in equity.
- 30.8 In addition to the regular performance review provided for under sections 30.2 through 30.7, where in the opinion of the Procurement Manager the performance of the Consultant is not satisfactory, then in addition to such other rights and remedies to which Hamilton Renewable Power Inc. may be entitled to by Law or under this Agreement, Hamilton Renewable Power Inc. may,
- (a) issue an oral warning to the Consultant, identifying the non-compliance with the specifications or other grounds of unsatisfactory performance, and requiring the Consultant to correct the same;
 - (b) issue a written notice, setting a time period for the Consultant to correct the unsatisfactory performance, and warning that this Agreement may be terminated without further warning if the unsatisfactory performance is not corrected within the time allowed;
- and until Hamilton Renewable Power Inc. is satisfied that the unsatisfactory performance has been corrected, Hamilton Renewable Power Inc. may dispute payment in an amount sufficient to rectify the unsatisfactory performance until its requirements have been met.
- 30.9 Where the unsatisfactory performance of is not corrected within the time allowed under section 30.8,
- (a) Hamilton Renewable Power Inc. may cancel this Agreement with the Consultant without further warning; and
 - (b) that fact may be taken into account by Hamilton Renewable Power Inc. with regard to the award of any future contract.

- 30.10 Nothing in sections 30.8 or 30.9 shall restrict the right of Hamilton Renewable Power Inc. to terminate this Agreement at any time under any other provision of this Agreement or under any rule of Law, but any such right may be exercised by Hamilton Renewable Power Inc. in its absolute discretion.

31.0 OBLIGATION OF CONSULTANT TO DEAL IN GOOD FAITH

- 31.1 The Consultant shall deal with Hamilton Renewable Power Inc. in utmost good faith with respect to the performance of this Agreement.
- 31.2 The Consultant shall meet the eligibility requirements of a vendor set out in the Procurement Policy By-law, Policy #1 Vendor Eligibility. Failure to have met those requirements prior to the commencement of this Agreement or to meet those requirements during the term of this Agreement shall entitle Hamilton Renewable Power Inc. to exercise any remedies set out in this Agreement, the Procurement Policy By-law or otherwise at law or in equity.

<https://www.hamilton.ca/build-invest-grow/buying-selling-city/bids-and-tenders/procurement-policy-by-law>

32.0 RECORD AND REPUTATION

See the City of Hamilton Procurement Policy By-law for specific requirements and obligations at:

[hamilton.ca/buying-selling-city/bids-tenders/procurement-policy-by-law](https://www.hamilton.ca/buying-selling-city/bids-tenders/procurement-policy-by-law)

33.0 CONSULTANT'S DEFAULT AND CITY REMEDIES

- 33.1 The provisions of this section are in addition to any other rights, privileges and remedies to which Hamilton Renewable Power Inc. is entitled by Law, in equity or otherwise in this Agreement.
- 33.2 The following shall constitute, without limitation, acts or events of default ("Default") by the Consultant (including any of its employees, officers, agents, partners, Subcontractors, Subconsultants or any other representative performing Work) under, or otherwise connected with, the subject matter of this Agreement:
- (a) where the Consultant fails or neglects to commence or to proceed with the Work diligently and at a rate of progress that in the opinion of Hamilton Renewable Power Inc. will ensure entire completion within the time provided for in this Agreement;
 - (b) where Hamilton Renewable Power Inc. determines reasonably that the Consultant has abandoned its duties with respect to the Work or failed to observe and perform any of the provisions of the Agreement, the determination of which Hamilton Renewable Power Inc. shall be the sole judge;
 - (c) where the Consultant publicly disparages Hamilton Renewable Power Inc., its

elected officials and/or its officers, directors or employees;

- (d) where the Consultant has made any material misrepresentation with respect to this Agreement;
- (e) where the Consultant fails to prosecute the Services with the required skill and diligence;
- (f) where the Consultant fails to comply with and maintain in good standing any insurance policies, professional certificates, permits, licences or approvals required by the Agreement or commits any acts or omissions that jeopardizes or may jeopardize these policies, permits, licences or approvals;
- (g) where the Consultant fails to comply with or perform any provision, condition or obligation, or breaches any warranty, of this Agreement;
- (h) where the Consultant fails to comply with any instruction or direction of Hamilton Renewable Power Inc;
- (i) where a lien or charge arises with respect to the Work undertaken by the Consultant under this Contract and remains unpaid by the Consultant after demand to pay therefor, unless vacated or discharged and released by payment into a court of competent jurisdiction or otherwise, within five Business Days of such demand, save and except a valid lien or charge of the Consultant against the property affected by this Agreement;
- (j) where any of the Goods, chattels or effects of the Consultant shall at any time during the term of this Agreement be seized or taken in execution of attachment; or if a writ of execution shall be issued against the goods, chattels or effects of the Consultant; or if the Consultant shall make any assignment for the benefit of creditors; or if the Consultant shall be adjudged bankrupt or insolvent, commit any act of bankruptcy or insolvency or make any proposal under or take advantage of any of the provisions of any act or statutes whatsoever that may be in force regarding bankrupt or insolvent debtors or debtors who are not able to or do not pay their debts promptly and in full; or if a receiving order or winding up order shall be made against or in respect of the Consultant; or if any actions or proceedings shall be taken to wind up, dissolve or liquidate the Consultant or its assets by, against or in respect of the Consultant; or where a resolution is passed or any other act undertaken for the winding up of the Consultant; or a receiver, manager or trustee is appointed in respect of the business or assets of the Consultant, or any part thereof, by a court of competent jurisdiction, or under any contract;
- (k) where the Consultant ceases or threatens to cease to carry on its business, or where the Consultant makes or agrees to make a bulk sale of its assets; or defaults in payment of any indebtedness or liability to a bank or other lending institution, whether secured or not;
- (l) where the Consultant subconsults or subcontracts the whole or any part of the Agreement or the Services or makes an assignment of the Agreement or the Services thereunder or any part thereof, without the prior written consent of

Hamilton Renewable Power Inc.;

- (m) where the Consultant defaults in the completion of the Services within the time limit under the Agreement or within a Hamilton Renewable Power Inc.-extended time limit;
 - (n) where the Consultant fails or refuses to correct, rectify or remedy any unsatisfactory or defective Services when so ordered by Hamilton Renewable Power Inc. in writing;
 - (o) where the Consultant fails to correct, rectify or remedy a deficiency or fails to desist from a violation of any of the provisions of the Agreement after receiving written notice from Hamilton Renewable Power Inc. to do so; and
 - (p) Where the Consultant fails to comply with the Law.
- 33.3 In the event of a Default, Hamilton Renewable Power Inc. may, without prejudice to any other right or remedy Hamilton Renewable Power Inc. may have, notify the Consultant in writing that the Consultant is in default of the Consultant's contractual obligations and instruct the Consultant to correct the Default within five Business Days, or such greater or lesser period of time determined by the Project Manager in their sole discretion, following the receipt of such notice.
- 33.4 Notwithstanding subsection 33.3 and without prejudice to or foregoing any other right, privilege or remedy of Hamilton Renewable Power Inc., in the event that emergency Work and/or Services is/are necessitated as a result of the Default of the Consultant, such Work and/or Services may be undertaken immediately, without notice, by Hamilton Renewable Power Inc. and all reasonable costs, expenses and expenditures of Hamilton Renewable Power Inc. of such emergency Work and/or Services shall be borne by the Consultant and payable forthwith upon written demand by Hamilton Renewable Power Inc., with particulars of the emergency and Work and/or Services necessitated thereby, and Hamilton Renewable Power Inc. shall have no liability to the Consultant for any loss or damage whatsoever resulting from such action by Hamilton Renewable Power Inc..
- 33.5 If the Default cannot be corrected in the five Business Days or other time period specified, the Consultant shall be in compliance with Hamilton Renewable Power Inc.'s instructions if the Consultant:
- (a) commences the correction of the Default within the specified time;
 - (b) provides Hamilton Renewable Power Inc. with an acceptable schedule for such correction; and
 - (c) corrects the Default in accordance with such schedule.
- 33.6 If the Consultant fails to correct the Default to the satisfaction of Hamilton Renewable Power Inc. in the time specified or subsequently agreed upon, without restricting, limiting, precluding or otherwise prejudicing any other right, privilege or remedy of Hamilton Renewable Power Inc. provided in the Agreement or by Law or in equity,

Hamilton Renewable Power Inc. may have, Hamilton Renewable Power Inc. may do any one or more of the following:

- (a) itself correct the Default or retain one or more third parties to correct the Default, and deduct the cost thereof from any payment then or thereafter due to the Consultant;
 - (b) itself perform the Agreement or any part thereof or retain one or more third parties to perform the Agreement or any part thereof, and deduct from any payment then or thereafter due to the Consultant the costs incurred by Hamilton Renewable Power Inc. in excess of what would have been owed to the Consultant for the applicable part of the Work for the period of time and the extent of the Work provided;
 - (c) suspend the performance of the Agreement by the Consultant;
 - (d) terminate all payments to the Consultant to the extent that the Work is performed by Hamilton Renewable Power Inc. or by one or more third parties;
 - (e) suspend all payments to the Consultant;
 - (f) enforce any performance security provided by the Consultant, but such enforcement shall not preclude Hamilton Renewable Power Inc. from recovering any further amounts or damages incurred by Hamilton Renewable Power Inc. as a result of the Default by the Consultant;
 - (g) terminate the Consultant's right to continue with the Work in whole or in part or terminate the Contract; and
 - (h) ban the Consultant from competing for or entering into any City contracts for a period of up to ten years, or take the Consultant's default into account with regard to the award of any future contract,
- 33.7 The Consultant upon receiving notice of suspension or termination from Hamilton Renewable Power Inc. shall suspend the Work as soon as reasonably possible except Work which, in the Consultant's opinion, acting reasonably, is necessary for the safety of personnel and for the care and preservation of the Work.
- 33.8 During the period of suspension, the Consultant shall not remove from Hamilton Renewable Power Inc.'s property any part of the Work, vehicles, equipment or other materials without the prior written consent of the Project Manager.
- 33.9 A waiver of a Default shall not extend to, or be taken in any manner whatsoever to affect the rights of Hamilton Renewable Power Inc. with respect to any subsequent default, whether similar or not.
- 33.10 The remedies provided in this section are in addition to all other legal, equitable or statutory remedies to which Hamilton Renewable Power Inc. is otherwise entitled, as well as any other remedies stipulated in this Agreement, and the taking of any one remedy shall not preclude the taking of any other remedy.

- 33.11 All costs of Hamilton Renewable Power Inc. herein shall be deemed an additional charge due to Hamilton Renewable Power Inc. and shall be paid by the Consultant upon demand and, if not so paid, shall bear interest at the Canadian Prime Interest Rate plus five percent (5%) calculated from the time the funds were due and payable to Hamilton Renewable Power Inc. "Canadian Prime Interest Rate" means the rate of interest publicly quoted from time to time by the Royal Bank of Canada as its prime rate for Canadian dollar commercial loans made at its main branch in Toronto Ontario, or the corresponding rate of such other Canadian chartered bank as Hamilton Renewable Power Inc. may designate from time to time.
- 33.12 If Hamilton Renewable Power Inc. terminates the Agreement as a result of an Act or Event of Default, in addition to any other rights, privileges and remedies it is entitled to, Hamilton Renewable Power Inc. may:
- (a) take possession of all of the work in progress, Goods, materials and equipment then at the Work site (at no additional charge for the retention or use of the equipment), and complete the Services by whatever means Hamilton Renewable Power Inc. may deem appropriate under the circumstances;
 - (b) withhold any further payments to the Consultant until the completion of the Services and the expiry of all obligations; and
 - (c) recover from the Consultant loss, damage and expense incurred by Hamilton Renewable Power Inc. or may be incurred by Hamilton Renewable Power Inc. by reason of the Consultant's default (which may be deducted from any monies due or becoming due to the Consultant, with any balance remaining to be paid by the Consultant to Hamilton Renewable Power Inc.).
- 33.13 Unless Hamilton Renewable Power Inc. otherwise agrees in writing and without limiting any other provision of this section, the failure, refusal or neglect by the Consultant to deliver the Services in a diligent manner within the time specified or to promptly replace, remedy or correct the Consultant's performance and/or Services as required pursuant to the Agreement (when that originally supplied is rejected as unsatisfactory, unacceptable or deficient) shall be deemed to constitute an authority for Hamilton Renewable Power Inc. to purchase and/or replace the Services in question on the open market. The Consultant shall forthwith reimburse Hamilton Renewable Power Inc. for all of its extra costs and expenses incurred to purchase and/or replace such Services, and Hamilton Renewable Power Inc.'s internal costs and any delay costs.

34.0 ACCOMMODATIONS FOR CONSULTANT WITH DISABILITIES

- 34.1 In accordance with the Ontario Human Rights Code and Accessibility for Ontarians with Disabilities Act, 2005, the City will accommodate for a disability, ensuring full and equitable participation throughout this Agreement.
- 34.2 If the Consultant requires this Agreement in a different format to accommodate a disability, the Consultant must contact the Project Manager as soon as possible.

35.0 ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT, 2005 (AODA)

35.1 The Consultant shall ensure that all of its employees, agents, volunteers and any Subconsultants comply with all applicable accessibility laws, regulations and by-laws, including but not limited to the Accessibility for Ontarians with Disabilities Act, 2005 (AODA), and Ontario Regulation 191/11 (Integrated Accessibility Standards), during the term of this Agreement.

35.2 Without limiting the generality of the foregoing, the Consultant shall ensure that all of its employees, agents, volunteers and any Subconsultants and Subcontractors who, as part of this Agreement:

- (a) deal with members of the public or other third parties, or
- (b) participate in developing policies, practices and procedures governing the provision of goods or services to members of the public or other third parties,

receive training about the provision of its goods or services to persons with disabilities. The Consultant shall ensure that such training includes, without limitation, a review of the purposes of the AODA and the requirements of Ontario Regulation 191/11.

35.3 Prior to commencing Work, the Consultant shall provide a Statement of Acknowledgement to the City that it has read and understands the City's AODA Integrated Accessibility Standards and Customer Service Standard Handbook; that it has provided the training required by said Handbook; and that it will comply with the requirements of said Handbook and applicable accessibility laws, regulations and by-laws.

35.4 The City reserves the right to inspect the Consultant's training records relating to Ontario Regulation 191/11, which must describe its training policy and summarize the training, including to whom the training has been given and when the training was given. The City also reserves the right to require the Consultant to amend its training policies, practices and procedures if the City deems the training is not compliant with the requirements of Ontario Regulation 191/11.

35.5 See City of Hamilton's AODA Integrated Accessibility Standards and Customer Service Standard Handbook at: <https://www.hamilton.ca/people-programs/equity-diversity-inclusion/accessibility-services/accessibility-guidelines-policies#policies-procedures>

36.0 GENERAL

36.1 Amendment. No amendment of this Contract shall be deemed valid unless reduced to writing and signed by both parties.

36.2 Waiver. No condoning, excusing or overlooking by Hamilton Renewable Power Inc. of any default, breach or non-observance by the Consultant at any time or times in respect of any provision herein contained shall operate as a waiver of Hamilton Renewable Power Inc's

right hereunder in respect of any continuing or subsequent default, breach or non-observance, or so as to defeat or affect in any way the rights of Hamilton Renewable Power Inc. herein in respect of any such continuing or subsequent default or breach. No waiver shall be inferred from or implied by anything done or omitted by Hamilton Renewable Power Inc. save only by express waiver in writing.

The doing of anything by Hamilton Renewable Power Inc. required by the Agreement documents to be done by the Consultant shall not relieve the Consultant of its continuing obligations under the Agreement.

36.3 Entire Agreement. This Agreement constitutes the entire agreement between the parties pertaining to the subject matters herein. There are no warranties, conditions, or representations (including any that may be implied by statute) and there are no agreements in connection with this subject matter except as specifically set forth or referred to in this Agreement. No reliance is placed on any warranty, representation, opinion, advice or assertion of fact made by Hamilton Renewable Power Inc. or the Consultant or its directors, officers, employees or agents except to the extent that it has been reduced to writing and included as a term of this Agreement. Accordingly, there shall be no liability, either in tort or in contract, assessed in relation to any warranty, representation, opinion, advice or assertion of fact, except to the extent as stated above.

36.4 Number. Unless the context otherwise requires, words importing the singular include the plural and vice versa and words importing gender include all genders.

36.5 Further Assurances. Each party shall, from time to time, and upon reasonable request by the other party, execute, perform and make or cause to be executed, performed and made all such further acts, deeds, assurances and things as may be reasonably required in order to give full effect to this Agreement.

36.6 Reference to Law. A reference to any Law or to a provision thereof shall be deemed to include a reference to any Law enacted in substitution thereof or amendment thereof.

36.7 Attornment. The parties agree that

- (a) any action or proceeding relating to this Agreement (including any motion or other interlocutory proceeding) shall be brought in a court or a tribunal, whichever may be applicable, sitting in Hamilton and for that purpose each party irrevocably and unconditionally attorns and submits to the jurisdiction of that court;
- (b) in the event that there is no applicable court or tribunal sitting in Hamilton, the proceeding shall be brought in the court (or other forum) of competent jurisdiction nearest to Hamilton;
- (c) they irrevocably waive any right to, and will not, oppose any action or proceeding relating to this Contract as aforementioned on any jurisdictional basis, including forum non conveniens; and
- (d) they will not oppose the enforcement against them, in any other jurisdiction, of any judgment or order duly obtained from the court as contemplated by this

section.

36.8 Headings. The headings to each section are inserted for convenience of reference only and do not form part of this Agreement.

36.9 Rights Cumulative. All rights and remedies of Hamilton Renewable Power Inc. recognized in this Agreement are cumulative and may be exercised at any time as specified in this Agreement and from time to time independently or in combination. Neither the expiry nor termination of this Agreement shall prejudice or affect any right of action, privilege or remedy which shall have accrued or shall thereafter accrue to Hamilton Renewable Power Inc..

36.10 Accounting. All accounting terms have the meaning recognized by or ascribed to those terms by the Canadian Institute of Chartered Accountants.

36.11 Currency. Unless otherwise expressly provided, all amounts in this Contract are stated and shall be paid in Canadian currency.

36.12 Invalidity. If any provision or provisions of this Agreement or parts thereof or the application thereof to any person or circumstances shall be found by any court to any extent to be invalid or unenforceable or to be void or illegal, such provision or provisions or parts thereof shall be deemed severable and all other provision or provisions or parts of this Agreement shall be deemed to be separate and independent therefrom and continue in full force and effect unless and until similarly found void and/or illegal. The remainder of this Agreement and its application to any person or circumstances shall not be affected thereby; and the parties hereto shall negotiate in good faith to amend this Agreement to implement the intentions set forth herein. Each provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

36.13 Current Time. All references to time shall be deemed to be references to current time in the City.

36.14 Officers of the City. Any reference to an officer of the City shall be construed to mean the person holding that office from time to time, and the designate or deputy of that person, and shall be deemed to include a reference to any person holding a successor office or the designate or deputy of that person.

36.15 Abbreviations. Any words and abbreviations, which have well-known professional, technical or trade meanings, are used in this Agreement in accordance with such recognized meanings.

36.16 Applicable Law. This Agreement shall be construed and enforced in accordance with the Law of the Province of Ontario and the federal laws applicable therein.

36.17 Survival. All obligations of the parties shall expressly, or by their nature, survive termination or expiry of this Agreement until, and unless, they are fulfilled, or by their nature expire or until the parties mutually agree to a release of the obligation.

36.18 Time of the Essence. Time is of the essence of this Agreement and if the Consultant fails to perform its obligations at the time fixed for performance under the terms of the Agreement Hamilton Renewable Power Inc. may elect to terminate this Agreement pursuant to the terms and conditions herein.

36.19 Approvals. Anything in this Agreement requiring the approval of Hamilton Renewable Power Inc. or Project Manager, shall not be undertaken until such approval is given. Where this Agreement requires the Consultant to submit a plan, schedule, design, document, information or any other thing which requires the approval of Hamilton Renewable Power Inc. or Project Manager, and where Hamilton Renewable Power Inc. or Project Manager requires revisions to the plan, schedule, design, document, information or other thing before providing its approval, the Contractor shall forthwith undertake such revisions and again seek Hamilton Renewable Power Inc.'s or Project Manager's approval and shall continue undertaking revisions until Hamilton Renewable Power Inc.'s or Project Manager's approval has been given. Hamilton Renewable Power Inc. or Project Manager may exercise absolute discretion in granting or withholding such approval and may require the Consultant to apply for such approval using form(s) prescribed by Hamilton Renewable Power Inc. or Project Manager.

36.20 No Exclusivity. Unless otherwise expressly provided in this Agreement, no contract shall be deemed or construed to confer upon the Consultant an exclusive right to supply the Work to Hamilton Renewable Power Inc..

36.21 Relationship Between Parties. This Agreement shall not be construed to constitute an agency, partnership or joint venture between the Consultant and Hamilton Renewable Power Inc..

36.22 Enurement. This Agreement shall be binding upon and shall ensure to the benefit of Hamilton Renewable Power Inc. and the Consultant and their respective heirs, executors, administrators and permitted assigns and successors.

SPECIAL CONDITIONS

Revised: February 1, 2023

Request for Proposals C11-04-25

1.0 INTERPRETATION

- 1.1 Any capitalized word not defined herein shall have the meaning set forth in the Definitions.
- 1.2 The Agreement shall be comprised of the following documents, and where there is any ambiguity, conflict or inconsistency between the terms and conditions contained in any of these documents, the order of precedence shall be as follows:

- (a) All Addenda modifying the Agreement, including the Special Conditions and General Conditions, in reverse chronological order;
- (b) any executed agreement between the Consultant or Prime Consultant and Hamilton Renewable Power Inc.;
- (c) any purchase order issued pursuant to the Consultant;
- (d) Terms of Reference or Specifications;
- (e) Definitions;
- (f) Special Conditions;
- (g) any agreement drawings;
- (h) General Conditions;
- (i) Form of Proposal, including the Schedule of Prices;
- (j) Consultant's Proposal, as accepted by the City; and
- (k) any other completed forms or documents required by the Agreement;

and notwithstanding the foregoing, in the event of any ambiguity, conflict or inconsistency between the terms and conditions contained in the documents comprising the Agreement, the provision most favourable to Hamilton Renewable Power Inc., in Hamilton Renewable Power Inc.'s determination, shall prevail and apply.

- 1.3 If Hamilton Renewable Power Inc. does not require the Consultant to physically execute a formal agreement, then the Agreement shall be deemed to consist of the documents set out in section 1.2 and shall be a binding agreement between Hamilton Renewable Power Inc. and the Consultant as of acceptance of the Consultant's Proposal by Hamilton Renewable Power Inc. and award of the RFP to the Consultant.

2.0 PRICE AND PAYMENTS

- 2.1 The payments to the Consultant shall be based on the Total Agreement Price (including but not limited to Unit Prices) as set out in the Consultant's Proposal. Unless expressly agreed in writing by Hamilton Renewable Power Inc., the prices listed therein shall be deemed to have been quoted on an all-in basis, and the Consultant shall accept such prices as full payment for furnishing:

- (a) all necessary labour, goods, materials, services, tools, equipment, supplies, light, power, water, and other incidentals, and for performing the Work

contemplated under this Agreement; and

- (b) all reports, drawings and documents as may be required by Hamilton Renewable Power Inc..
- 2.2 The payment of the Total Agreement Price (including but not limited to Unit Prices) with respect to the Work performed by the Consultant shall be made in accordance with the City's Procurement Policy By-law. Payment of additional work shall be made in the same manner.
 - 2.3 Hamilton Renewable Power Inc. reserves up to fourteen (14) Business Days from the date of the receipt of the Consultant's invoice for reviewing, inspecting and confirming the receipt and performance of the Work in accordance with this Agreement. Hamilton Renewable Power Inc. will pay to the Prime Consultant the amount shown on such invoice, less the ten percent (10%) holdback unless Hamilton Renewable Power Inc. files a notice of non-payment in dispute.
 - 2.4 Hamilton Renewable Power Inc. may refuse to pay all or any portion of the amount payable under the proper invoice by giving the Consultant a notice of non-payment, in the prescribed form and manner of the Construction Act, specifying the amount of the proper invoice that is not being paid and detailing all of the reasons for non-payment.
 - 2.5 A progress payment certificate may be given by Hamilton Renewable Power Inc.'s Project Manager using the Consultant's invoice as a guide only, once a month, as to the estimated amount of Work done and material furnished to the satisfaction of the Project Manager and of the value thereof in the opinion of the Project Manager according to the terms of the Agreement.
 - 2.6 Where a contingency allowance is expressly provided for in this Agreement, the Consultant shall not be entitled to payment of the whole or any part of that amount, except to the extent that it can be shown that extra or additional Work has been carried out by the Consultant beyond that contemplated within this Agreement, and such extra Work has been approved, in advance, by the Project Manager.
 - 2.7 If the Work has been completed to the satisfaction of the Project Manager, subject to and upon such approval, and subject to a current Workplace Safety and Insurance Board Certificate, a completion payment certificate will be issued to the Consultant. Payment shall then be made in an amount equal to the amount of the said certificate less ten percent (10%) holdback provided that Hamilton Renewable Power Inc. may retain any proportion or all of such payment that it deems necessary for its protection against liens, charges, liabilities, damages, or costs or for any claims that Hamilton Renewable Power Inc. may have or have notice of against the Consultant under this Agreement. No later than ten (10) days after the issuance of the completion payment certificate, the Consultant shall notify the Project Manager of any errors or omissions therein.
 - 2.8 The Consultant shall discharge all liabilities incurred by it for labour, materials or services, used or reasonably required for use in the performance of the Agreement on the date upon which each become due. The Consultant shall cause each Subconsultant engaged in the performance of the Agreement to discharge all

liabilities incurred by such Subconsultant for labour, materials, or services used or required for use in the performance of the Agreement.

- 2.9 At the request of Hamilton Renewable Power Inc., the Consultant shall furnish Hamilton Renewable Power Inc. with evidence satisfactory to Hamilton Renewable Power Inc. that the Consultant's liabilities and those of its Subconsultants as aforesaid have been discharged and this shall include a Certificate of Clearance or statement of status from the Workplace Safety and Insurance Board (WSIB) that the Consultant has complied with the requirements of the Workplace Safety and Insurance Board and is in good standing before the Board. Further, the Consultant shall immediately advise Hamilton Renewable Power Inc. if there is any change in the Consultant's status with the WSIB and provide the Owner with the necessary certificate or statement associated therewith.
- 2.10 Payments shall be subject to the Construction Act, as applicable.

3.0 SUBCONSULTING

- 3.1 The Consultant shall not enter into an agreement with any Subconsultants or make any change to the list of nominated Subconsultants without the prior written approval of Hamilton Renewable Power Inc., which may be granted with conditions as determined by Hamilton Renewable Power Inc..
- 3.2 Hamilton Renewable Power Inc. reserves the right to reject any Subconsultant nominated by the Consultant, without penalty or liability to Hamilton Renewable Power Inc. of any kind whatsoever. If Hamilton Renewable Power Inc. requires the Consultant to change any nominated Subconsultant, the Consultant shall do so and in no event shall an increase in the Unit Price or Total Agreement Price be permitted.
- 3.3 If the Consultant requests Hamilton Renewable Power Inc.'s consideration for a change of Subconsultant(s), the Consultant shall be responsible for all costs of Hamilton Renewable Power Inc. to review, investigate and approve, if acceptable, such change including but not limited to all of Hamilton Renewable Power Inc.'s internal staff costs and all legal, financial and consultant costs. Such costs shall be payable by the Consultant regardless of whether an approval is granted or not. No approval of Hamilton Renewable Power Inc. shall be effective until the Consultant has first paid to Hamilton Renewable Power Inc. its costs with respect to same.
- 3.4 It shall be the Consultant's responsibility to co-ordinate, control and check the Work of its own forces and of all its Subconsultants and to ascertain that all Work is done in accordance with this Agreement.
- 3.5 No subconsulting by the Consultant shall relieve the Consultant of any responsibility for the full performance of all its obligations under this Agreement. The Consultant shall be fully responsible for all Subconsultant activities, works, services and acts or omissions and shall receive all notices and communications as if the Consultant were performing the subconsultant portion of the Work with its own resources.
- 3.6 Neither Hamilton Renewable Power Inc. nor the Project Manager shall be construed to have any contractual relationship with any of the Consultant and or Subconsultant

employees.

4.0 INSURANCE REQUIREMENTS

4.1 Throughout the term of the Agreement (including any renewal thereof), the Consultant shall obtain and maintain at its own expense, including the cost of any applicable deductible, the following policies of insurance.

(a) Commercial General Liability Insurance, written on IBC Form 2100 or its equivalent, including but not limited to bodily and personal injury liability, property damage, products liability, completed operations liability, owners & contractors protective liability, blanket contractual liability, premises liability, broad form property damage, employer's liability and voluntary compensation and contingent employer's liability coverage, having an inclusive limit of not less than \$5,000,000.00 per occurrence. If a policy has an aggregate limit, the amount of the aggregate shall be double the required per occurrence limit. Coverage shall be included for injury/loss/damage, due to pollution arising from "hostile fires". The policy shall be endorsed to include the City of Hamilton and Hamilton Renewable Power Inc. as additional insured.

(b) Standard Form Automobile Liability Insurance that complies with all requirements of the current legislation of the Province of Ontario, having an inclusive limit of not less than \$2,000,000.00 per occurrence for Third Party Liability, in respect of the use or operation of vehicles owned, operated or leased by the Consultant for the provision of services;

(c) Non-Owned Automobile Liability Insurance in standard form having an inclusive limit of not less than \$1,000,000.00 per occurrence, in respect of vehicles not owned by the Consultant, that are used or operated on its behalf for the provision of services under the Agreement;

(d) Errors & Omissions Liability Insurance having a limit of not less than \$1,000,000.00 per claim; or alternatively, the Consultant shall purchase and maintain in force for the duration of the Project, single Professional Errors & Omissions Liability Insurance with limits dedicated to the Project and having an inclusive limit of not less than \$1,000,000 per claim. If the Project or Work involves construction, the coverage will include a two-year maintenance period following substantial performance.

4.2 The Consultant shall maintain Property Insurance, as may be applicable, with respect to loss or damage (including fire, theft, burglary, etc.) of its own property and property in its care, custody and control, including its equipment, tools, stock, used in connection with the Agreement.

4.3 All policies of insurance within the scope of subsection (1) shall;

(a) be recorded as being a primary policy and shall be in a form and issued by an insurance company satisfactory to the City, that is licensed to carry on business in Ontario;

- (b) be maintained continuously during the course of carrying out the Project or Work; or for such period of time as may be required after completion of the Project or Work, as deemed necessary by the City,
 - (c) provide for a deductible amount of no greater than \$10,000.00;
 - (d) (except in the case of automobile liability insurance, non-owned automobile liability insurance, professional errors & omissions liability insurance, and medical malpractice liability insurance) include the City and Hamilton Renewable Power Inc. named as Prime Consultant's obligations to Hamilton Renewable Power Inc. under the Agreement Documents;
 - (e) contain cross liability and severability of interest provisions, as may be applicable;
 - (f) preclude subrogation claims against the City and Hamilton Renewable Power Inc. and any other person insured under the policy; and
 - (g) provide that at least 30 days prior written notice (15 days, in the case of automobile liability insurance, and 10 days in the event of non-payment of premiums) shall be given to the City and Hamilton Renewable Power Inc. by the insurer before the insurer or Consultant takes any steps to cancel, terminate, fail to renew, amend or otherwise change or modify the insurance or any part thereof.
- 4.4 Hamilton Renewable Power Inc. reserves the right to require the Consultant to purchase such additional insurance coverage as Hamilton Renewable Power Inc. may reasonably require. Hamilton Renewable Power Inc. reserves the right to request such higher limits of insurance or otherwise alter the types of coverage requirements (taking into consideration such matters as the nature of the work, contract value, industry standards, and availability of insurance) as Hamilton Renewable Power Inc. may reasonably require from time to time.
- 4.5 Any insurance coverage acquired under the Agreement shall in no manner discharge, restrict or limit the liabilities assumed by the Consultant under the Agreement. The dollar limit of insurance coverage shall not be limited by the dollar amount of the Agreement.
- 4.6 The Consultant shall pay all premiums on the policies as they become due provided that Hamilton Renewable Power Inc. may pay premiums as they become due and deduct the amount thereof from moneys due from Hamilton Renewable Power Inc. to the Consultant.

5.0 PROOF OF INSURANCE

- 5.1 The Consultant shall deposit with the City such evidence of its insurance as required under this Agreement,
- (a) at the time of execution of the Agreement for Work (if any), or

- (b) in any event prior to commencing the Work; and
 - (c) and thereafter during the term of this Agreement, no later than 20 Business Days prior to the renewal date of each applicable policy, the Consultant shall deposit with the City's Procurement Manager an original certificate of insurance originally signed by an authorized insurance representative, confirming thereon relevant coverage information including but not limited to name/description of City contract, name of insurer, name of broker, name of insured, name of additional insureds as may be applicable, commencement and expiry dates of coverage, dollar limits of coverage, deductible levels as may be applicable, cancellation/termination provisions; or (at the City's election) a certified copy of the insurance policy or policies. Certificate Holder will be addressed as the City of Hamilton, 100 King St W, Hamilton, Ontario M5X 1A9; Attn: **(Senior Vice president of Hamilton Renewable Power Inc.)**. All certificates, cancellation, nonrenewal or adverse change notices should be mailed to this address.
- 5.2 The Consultant shall not do or omit to do anything that would impair or invalidate the insurance policies.
- 5.3 Delivery to and examination or approval by the City of any certificates of insurance or policies of insurance or other evidence of insurance shall not relieve the Consultant of any of its indemnification or insurance obligations under this Agreement. The City shall be under no duty either to ascertain the existence of or to examine such certificates of insurance or policies of insurance or to advise the Consultant in the event such insurance coverage is not in compliance with the requirements set out in this Agreement.
- 6.0 BARRIER FREE DESIGN GUIDELINES (BFDG) 2006 (if applicable)**
- 6.1 The City's Barrier Free Design Guidelines 2006 ("BFDG"), as amended from time to time, shall be incorporated into all newly constructed, renovated and retrofitted buildings owned, leased or funded (partially or fully) by the City. Compliance is a condition upon which a building permit will be issued. These standards are to be used as minimum requirements to the design and construction of new and renovated buildings, parks, and facilities within the City of Hamilton. In addition, the Consultant shall comply with the Accessibility for Ontarians with Disabilities Act, 2005 (AODA), in the performance of its Work.
- 6.2 Where there is a conflict between the minimum accessibility standards contained in the
- (i) Ontario Building Code;
 - (ii) City of Hamilton's Barrier Free Design Guidelines 2006; and
 - (iii) Accessibility for Ontarians with Disabilities Act, 2005 (AODA);
- the requirements which are more onerous will take precedent and the Consultant shall make a recommendation about which standard should apply, with reasons therefor, and the City shall decide which standard shall apply.
- 6.3 Without limiting paragraphs 6.1 and 6.2, the Consultant shall, where the BFDG apply

to the Project, provide the following:

- (i) a completed BFDG Checklist, satisfactory to the City, which will include:
 - a list of accessibility features that have been incorporated into the design that comply with BFDG, and
 - a list of the accessibility features incorporated into the design that do not comply with BFDG but meet minimum standards of the Ontario Building Code (OBC), together with an explanation as to why compliance with BFDG was not possible;
- (ii) updated lists at the phases described in the BFDG or as otherwise required by the City; and
- (iii) identification of which features, if any, move from compliant to non-compliant with the BFDG, and the reasons for the change.

The Consultant shall obtain City permission at each phase before moving on.

The BFDG are available on the City's website at:

<https://www.hamilton.ca/build-invest-grow/planning-development/planning-policies-guidelines/barrier-free-guidelines>

7.0 STANDARD OF CARE

- 7.1 In performing the services, the Consultant shall provide and exercise the standard of care, skill and diligence required by customarily accepted professional practices and procedures developed by professional bodies in the performance of similar services at the time when and at the location in which the services are provided.
- 7.2 The Consultant will, at his expense, promptly and duly execute and deliver to Hamilton Renewable Power Inc. such further documents and assurances, and take such further action as t Hamilton Renewable Power Inc. may from time to time request, in order to more effectively carry out the intent and purpose of this Agreement and to establish and protect the rights, interest and remedies intended to be created in favour of Hamilton Renewable Power Inc..

8.0 BRAND NAME

- 8.1 Any reference to the trade name, brand name or catalogue number of a particular manufacturer has been made solely for the purpose of establishing and describing general performance and quality levels of the item to be supplied, unless specified otherwise.
- 8.2 If an item other than the one specified is proposed, it is the Consultant's responsibility to demonstrate that the product proposed meets the specifications identified in this Agreement, and the Consultant shall submit brochures and samples upon request and provide full specifications in detail on the item(s) proposed. Hamilton Renewable

Power Inc. shall be the sole judge (in its absolute discretion) as to whether an item bid meets its specifications.

9.0 OMISSIONS OR MISSTATEMENTS OF WORK

- 9.1 If it is found that anything has been omitted or misstated which is necessary for the proper performance and completion of any part of the Work contemplated, the Consultant will at its own expense, and without making any extra claim therefore, execute the same as if it had been properly described. The decision of Hamilton Renewable Power Inc. in regard thereto shall be final and the correction of any such omission or misstatement shall not be deemed to be an addition to or deviation from the Work herein described.
- 9.2 Despite the foregoing, the Consultant shall be responsible for reviewing all drawings, reports, tests or other documents with respect to site, subsurface or otherwise concealed physical conditions which were provided or made available to the Consultant by Hamilton Renewable Power Inc. in relation to the RFP and shall only be responsible for any site, subsurface or otherwise concealed physical condition set out in or inferable from any such report. The cost of any Work which results from encountering any condition that is described in or properly inferable from the information referred to herein shall have been included in the Consultant's Cost Proposal.

10.0 OWNERSHIP OF DOCUMENTS, USE OF DOCUMENTS AND DESIGNS, ETC.

- 10.1 The Instruments of Service shall be the property of Hamilton Renewable Power Inc., which shall also include the signed Contract document sets, including electronic and paper as-built documents. All Instruments of Service shall be provided to Hamilton Renewable Power Inc. in the format requested by Hamilton Renewable Power Inc.. For greater certainty, the Consultant hereby grants to Hamilton Renewable Power Inc. (at no additional charge) the right to use the Instruments of Service for the purposes of construction, operation, maintenance, renovation, expansion and alteration of the Project and its lands, now and in future.

11.0 PATENTS AND COPYRIGHTS

- 11.1 The Consultant shall defend, indemnify and save harmless Hamilton Renewable Power Inc. from all and every claim for damages, royalties, or fees for the infringement of any patented invention or copyright occasioned by them in connection with work done or material furnished by them under the Agreement.
- 11.2 No illegal commerce or grey market Goods shall be supplied to Hamilton Renewable Power Inc., and every person supplying Goods and/or Services to Hamilton Renewable Power Inc. shall be deemed to have warranted that they are genuine and lawfully supplied.
- 11.3 The Total Agreement Price shall include all payments made or to be made to any third party in respect of any right, patent, design, trademark or copyright used for the

purpose of the Consultant performing the Agreement.

12.0 NOTICE

- 12.1 All notices, requests, demands and other communications under this Agreement shall be in writing and shall be deemed to have been given:
- (a) on the day of delivery when delivered by hand;
 - (b) if transmitted by facsimile or e-mail, on the day of sending if sent on a Business Day during regular business hours (8:30 a.m. to 4:30 p.m.), or on the next Business Day if sent after regular business hours; or
 - (c) on the fifth Business Day after posting, if sent, during normal postal conditions, by registered or certified mail to the party for which it is intended and addressed as follows:

to the Consultant at:

the address, email address, office and cell phone numbers and any fax number to the attention of the individual set out in the Form of Proposal

to the City at:

City of Hamilton
71 Main Street West
Hamilton, ON L8P 4Y5
Attention: Office of the City Clerk

with a copy to:

Attention: Yanni Simatis
100 King St West
Hamilton, ON M5X 1A9

Unless otherwise indicated in this Agreement or otherwise specified in writing, the name and contact information for the Consultant above shall be the Consultant's primary contact with the City with regard to this Agreement.

Each party may change their address by giving five Business Days' prior written notice of such change to the other party in the manner prescribed above.

Appendix A - Review of Renewable Energy Options at the Woodward WWTP

The logo for Jacobs, featuring the word "Jacobs" in a bold, black, sans-serif font.

Renewable Energy Options Assessment**June 2, 2022 Hamilton****Renewable Power Inc.****Document History and Status**

Revision	Date	Description	Author	Checked	Reviewed	Approved
R0	27-Sept-2021	Draft	T. Davis	T. Davis	D. Ross	D. Ross
R1	25-Oct-2021	Revision	T. Davis	T. Davis	D. Ross P. Burrowes	D. Ross
R2	2-Jun-2022	Final	T. Davis	T. Davis	D. Ross	D. Ross

Review of Renewable Energy Options at the Woodward WWTP

Project No: CE820000
Document Title: Renewable Energy Options
Assessment
Revision: 2
Date: June 2, 2022
Client Name: HRPI
Client No: Client Reference
Project Manager: Taryn Davis
Author: Taryn Davis
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1. Introduction

The City of Hamilton (City) declared a Climate Change Emergency and to achieve its goals, developed a Corporate Energy and Sustainability Policy, including a net zero target by 2050. Currently, energy is recovered from anaerobic digester gas generated from the treatment of residual solids at the Woodward Avenue Wastewater Treatment Plant (WWTP). A portion of the gas is purified by the City and sold as renewable natural gas (RNG), and a portion is used as fuel to a Cogeneration Facility, owned by Hamilton Renewable Power Inc. (HRPI), which generates electricity that is sold and heat that is used at the Woodward Avenue WWTP. Excess gas can also be flared.

The existing 1.6 MW Cogeneration Facility was commissioned in 2006. Electricity is generated behind-the-meter at 4,160 V and stepped up to 13.8 kV to provide electricity feed to the Woodward Avenue WWTP. Thermal energy is used to heat the Woodward Avenue WWTP digestion process. The facility is operated and maintained by Toromont Power Systems (Toromont) and Hamilton Community Energy (HCE) under contract with HRPI, with the contract term ending in 2025.

The existing Cogeneration Facility includes a gas compressor system (located in the Compressor Building), pressurized gas storage sphere, chiller and combined heat and power (CHP) unit. The CHP unit is approaching the end of its expected service life and HRPI would like to understand the net value of refurbishing/replacing the facility relative to other potential alternatives, considered in conjunction with or instead of the biogas purification unit (BPU) at the WWTP, which was commissioned in 2012. The decision will be based on optimizing the energy recovery from digester gas while balancing economic and non-economic benefits, where non-economic factors include technical, environmental and social considerations.

HRPI retained Jacobs (operating as legal entity CH2M HILL Canada Limited) to review renewable energy options for the digester gas generated at the Woodward Avenue Wastewater Treatment Plant (WWTP).

This report presents a review and analysis of renewable energy alternatives for the digester gas produced at the Woodward Avenue WWTP and presents a roadmap for developing an operating system that represents the best value to HRPI and the City, considering the City's greenhouse gas (GHG) and energy targets and goals.

1.1 REPORT LAYOUT

The report is organized into the following Sections:

1. Background Review
2. Shortlisted Alternatives
3. Multi-criteria Evaluation Approach
4. Digester Heating Requirements
5. Energy Intensity
6. GHG Emissions
7. Carbon Intensity
8. Renewable Energy Options Assessment and Recommendation

The **Background Review** section provides an overview of the existing digesters and digester gas equipment at the Woodward Avenue WWTP and how they are interconnected. It also provides a high-level summary of the Corporate Energy and Sustainability Policy, a significant driver for this assessment. Historical plant data reviewed are summarized in this section as well as existing contract/agreement structures, which influence non-economic and economic evaluation criteria.

Alternatives carried forward in the assessment are listed in the **Shortlisted Alternatives** section and their evaluation criteria detailed in the **Multi-criteria Evaluation Approach** section. In this section, non-economic (technical, environmental, and social) criteria as well as economic criteria are outlined, and weighting rationale provided.

The **Digester Heating Requirements**, **Energy Intensity**, **GHG Emissions**, and **Carbon Intensity** sections provide respective breakdowns of calculations completed to support both non-economic and economic values used in the assessment for each of the shortlisted alternatives. Digester heating requirements dictate how much natural gas is required to heat the digesters, a significant cost for the City, but also a significant source of GHG emissions. Energy Intensity and GHG emissions are two key performance indicators that the City uses to evaluate Corporate Energy and Sustainability Policy efforts, and as such are calculated for each of the shortlisted alternatives, where applicable. Carbon intensity impacts RNG market pricing. The development of calculations is presented in the corresponding section, to provide an understanding of how RNG contract prices may fluctuate.

The **Renewable Energy Options Assessment and Recommendation** section presents detailed scoring for noneconomic and economic criteria as well as a comparison between the benefits and revenue of each shortlisted alternative. A sensitivity analysis, in which assessment weightings and economic unit prices are varied, is also presented in this section to show which

items impact the evaluation scores the most, and to explicitly note which factors HRPI should consider in their ultimate selection process. Recommendations are made in this section based on these factors.

2. Background Review

2.1 PROCESS OVERVIEW

At the Woodward Avenue WWTP, thickened raw sludge (TRS) and thickened waste activated sludge (TWAS) are stabilized in three (3) primary anaerobic digesters, producing digester gas as a byproduct. The plant currently uses the digester gas in either the on-site BPU or as fuel to the HRPI CHP unit, and any excess gas is flared (Figure 1).

The Greenlane™ BPU uses scrubbers to reduce constituents such as carbon dioxide (CO₂), hydrogen sulphide (H₂S), and siloxanes, refining the digester gas into 98 percent methane, also known as RNG. The RNG is sold by the City to a third party and distributed via the local natural gas distribution grid. Upstream of the Toromont Cat CHP unit, digester gas (sold to HRPI from the City) is passed through a chiller-condenser, de-mister and fine particulate filter. The digester gas is then combusted in the 1.6-megawatt (MW) combined heat and power (CHP) engine, producing electrical and thermal energy. The electricity produced is used behind-the-meter at the Woodward Avenue WWTP and the thermal energy produced is sold by HRPI to the City to heat digesters and offset the use of natural gas fueled boiler heat. The City's boilers can only operate on natural gas.

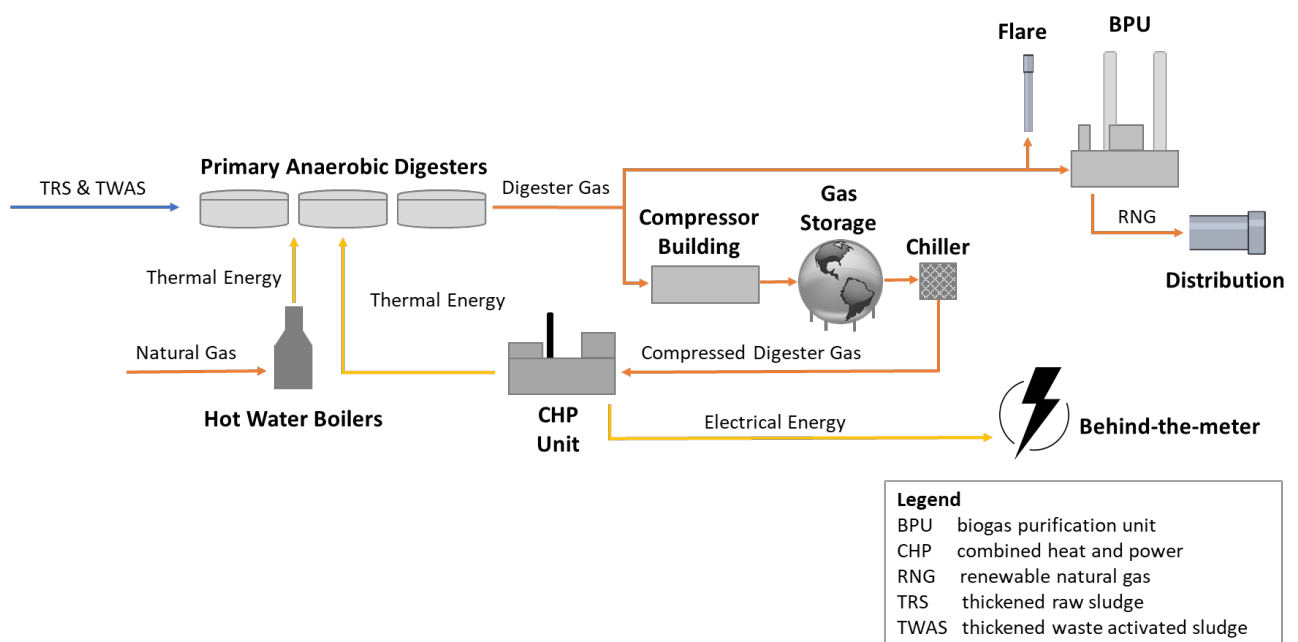


Figure 1. Woodward Avenue WWTP Digester Gas Production and Use

2.2 CORPORATE CLIMATE CHANGE ACTION

In 2019, Hamilton City Council declared a Climate Change Emergency (City of Hamilton, 2021). Subsequently, a Corporate Climate Change Task Force (CCCTF) was formed, with the mission to achieve net zero greenhouse gas emissions by 2050. The CCCTF collects, coordinates and advocates for corporate-wide climate change actions under the following nine (9) overarching goals:

1. Buildings
2. Active and Sustainable Travel
3. Transportation

Renewable Energy Options Assessment

4. Planning
5. Procurement
6. Protect and Restore the Natural Environment
7. Climate Adaptation
8. Diversity, Health, and Inclusion
9. Education and Awareness

This assessment falls under the Planning Goal, to encourage climate mitigation and adaptation practices at a planning level.

Table 1 outlines the 2020 Corporate Energy and Sustainability Policy energy intensity and GHG emission reduction targets (City of Hamilton, 2020).

Table 1. Corporate Energy Intensity and GHG Emission Reduction Targets

Year	Energy Intensity Reduction Targets	GHG Emissions Reduction and Offset Target
2030	45%	50%
2050	60%	100%
Basis <ul style="list-style-type: none"> “Energy Intensity” refers to the energy usage or consumption of a facility or facility operations using a common measure over a specific timeframe. For wastewater treatment plants, this is kWh/ML/d. “GHG Emissions” refers to the release of gases such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxides (N₂O) which trap heat in the atmosphere. For wastewater treatment plants the total emissions are measured in tonnes CO₂e/ML/d. For the purposes of this evaluation, the facility’s rated capacity of 409 ML/d will be used 		

2.3 HISTORICAL PLANT DATA

2.3.1 Digester Gas Use

On average, the Woodward Avenue WWTP produces approximately 611,000 m³ of digester gas per month, with 50 percent used by the CHP unit, 33 percent used by the BPU, and the remainder flared (Figure 2).

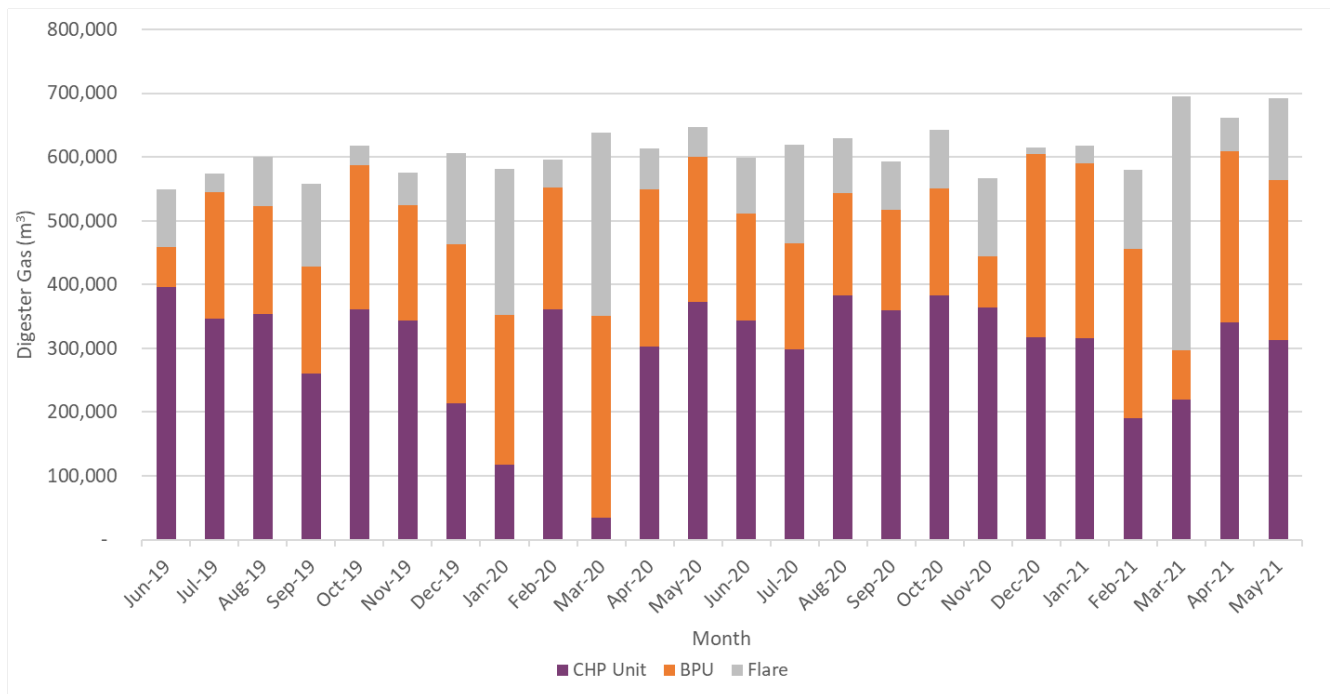


Figure 2. Historical Distribution of Digester Gas Use

2.3.2 Thermal Energy Consumption

The Woodward Avenue WWTP uses thermal energy produced by the CHP unit to heat its digesters. Based on invoice data provided for 2018 through 2020, the plant uses approximately 23,000 gigajoules (GJ), or 22,000 million British Thermal Units (mmBTU), annually from the CHP unit to heat digesters.

2.3.3 Natural Gas Consumption

The Woodward Avenue WWTP uses natural gas to supplement heating its digesters. The amount of natural gas used in the boilers to heat digester sludge was estimated since utility data available records plant-wide totals only. Based on the historical distribution of digester gas use, it is estimated that approximately 37,000 m³ of natural gas is purchased annually by the City for digester sludge heating.

2.4 Historical Operation and Maintenance Costs

HRPI provided the following operation and maintenance (O&M) costs for the BPU and CHP unit:

- BPU: \$400,000 per year (55,000 GJ at \$7/GJ) – includes electricity, service costs and RNG contract costs
- CHP unit: \$480,000 per year – Toromont and administrative costs

2.5 Contract/Agreement Structures

Table 2 outlines the current digester gas, electricity, thermal energy and RNG contracts/agreements relevant to this assessment. The financial details of these contracts were not available for this report.

Renewable Energy Options Assessment

Table 2. Current Contract Structures

Commodity	Parties	Contract/Agreement Description
Digester Gas	City, HRPI	<ul style="list-style-type: none"> ▪ The agreement between the City and HRPI defines the terms for the City to provide HRPI with digester gas to fuel the Cogeneration Facility ▪ The 1.6 MW Cogeneration Facility can consume upwards of 15,000 m³ of digester gas per day
Electricity	HRPI, Independent Electricity System Operator (IESO)	<p>The Cogeneration Facility is connected to the Woodward Avenue WWTP through a behind-the-meter installation (metered at the CHP unit)</p> <p>HRPI currently holds a 20-year power purchase agreement contract with the IESO, to sell electrical energy produced by the Cogeneration Facility to the IESO</p> <p>This contract is coming to an end and roll-over of the existing contract is not likely</p>
Thermal Energy	HRPI, City	<ul style="list-style-type: none"> ▪ Thermal energy produced by the Cogeneration Facility is sold by HRPI to the City to heat the Woodward Avenue WWTP digesters ▪ On average, HRPI sells 23,200 GJ (22,000 mmBTU) of thermal energy to the City annually
RNG	City, Third Party, Enbridge	The City sells RNG generated in the BPU to a third party, who also receives the associated carbon credits

		The City has an agreement (M13) with Enbridge to manage the distribution of the RNG to the third party
--	--	--

3. Shortlisted Alternatives

The shortlisted alternatives for energy recovery from digester gas generated at the Woodward Avenue WWTP and available to HRPI were documented at the project's kick-off meeting and further refined to capture a full range of potential scenarios, as follows:

1. 100% RNG
2. 75% RNG and 25% CHP
3. 50% RNG and 50% CHP
4. 25% RNG and 75% CHP
5. 100% CHP

These shortlisted alternatives are based on 15,000 m³/d of digester gas being available to HRPI. The first four (4) alternatives can further be broken down into sub-alternatives:

- A. Sell RNG to a third party (leveraging significant revenue benefits but giving up the associated GHG emission credit)
- B. Use RNG within the City (offsetting natural gas purchase with lower economic benefit, but maintaining GHG emission credit, aligning with Corporate Energy and Sustainability targets)

Fuel cells are an emerging power generation technology that produces electricity and heat from a chemical reaction between hydrogen and oxygen. Hydrogen can be extracted from digester gas feed using a high-pressure reformer, which produces and/or increases the concentration of hydrogen while decreasing the concentration of gas species toxic to fuel cells. Hydrogen production, however, is considered an emerging technology with few full-scale installations, and as a result was not shortlisted for this assessment.

Renewable Energy Options Assessment

4. Multi-criteria Evaluation Approach

A multi-criteria evaluation approach was used to assess the shortlisted alternatives. The approach includes the following components:

- **Evaluation Criteria and Category:** A set of criteria was developed to compare the features of each alternative, grouped into the following categories:
 - Economic (capital, O&M, carbon tax, revenue, and 20-year life-cycle costs)
 - Non-economic (technical, environmental and social considerations)
- **Category Weights (Non-economic):** Each non-economic category of criteria was assigned a weight that reflects the category's importance relative to other categories. Categories with higher weight will have more impact on the total score and ranking of the alternatives. The total weight of all non-economic categories adds up to 100 percent.
- **Criterion Weights (Non-economic):** Within each non-economic category, each criterion was assigned a weight (between 1 and 5) that reflects the criterion's importance relative to other criteria. Criteria with higher weights will have more impact on the total benefit score and ranking of the alternatives.
- **Criterion Scores (Non-economic):** A score (between 1 and 5) was assigned for each criterion, unique to each alternative, scored on a scale of 1 (most negative impact) to 5 (most benefit or improvement). The score of each criterion was weighted based on the criteria weights and normalized to the category weights in developing the total **benefit score** (out of 100) for each alternative.
- **Category Scores (Non-economic):** A score calculated based on the category weight, criterion weight and criterion score, using the following formula:

$$\frac{\text{Criterion Weight}}{(\text{Category Weight} * 100) * \frac{\text{Criterion Score}}{5}}$$

Category Score = \sum Criterion Weights within Category

Where: Category Weight is a percentage out of 100

Criterion Weight is between 1 and 5

Criterion Score is between 1 and 5

- **Economic Criteria:** The absolute values (20-year life-cycle cost) are presented for comparative evaluation and weighted based on the lowest net present value (NPV) having a score of 100.
- **Total Score:** This was calculated for each alternative as the total of the benefit and economic scores (where benefit and economic scores have equal weighting) to represent the overall cost-effectiveness of each alternative.

4.1 Non-Economic

Figure 3 presents the category weight and criterion weight distribution. Table 3 summarizes criteria details. The category weightings were selected by Jacobs based on typical weightings from other evaluations and a sensitivity analysis on the category weightings performed.

The Technical Category is divided into seven (7) criteria: performance reliability, operating requirements and complexity, maintenance requirements and complexity, constructability, market resilience, footprint/land use and adaptability to future requirements. Higher criterion weightings were given to O&M requirements and complexity as these criteria will significantly impact day-to-day operations and maintenance completed by Operations or third party contractors.

The Environmental Category aligns with the City's Corporate Energy and Sustainability Policy – comparing the energy intensity and GHG emissions of alternatives, based on the potential/opportunity to reduce energy consumption and release GHGs. Scores were assigned based on ranking the absolute energy intensities and GHG emissions of the alternatives.

The Social Category encompasses three (3) criteria important to Operations and the community: noise impact, odour impact, and occupational health and safety risk. The occupational health and safety risk was given a slightly higher weighting than the other criteria as unhealthy/unsafe conditions are more difficult to mitigate than noise/odour impacts.

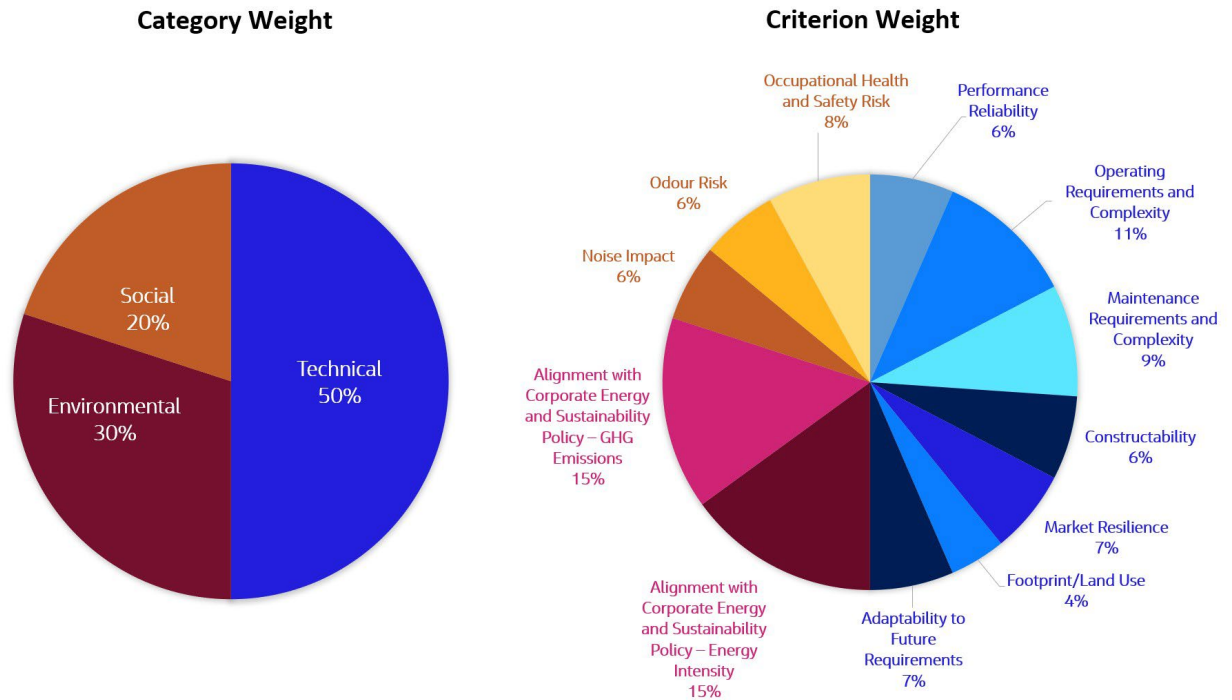


Figure 3. Summary of Category and Criterion Weight Distribution

Table 3. Evaluation Criteria Details

Category/ Weight (%)	Criterion	Criterion Weight (1 to 5)	Potential Max. Category Score	What is Evaluated?
Technical/ 50%	Performance Reliability	3	6.5	Ability to reliably meet regulated performance objectives and criteria
	Operating Requirements and Complexity	5	10.9	Ease of operation and number of process components required, considering the degree of training and experience required for operations staff and number of operators required, and

Category/ Weight (%)	Criterion	Criterion Weight (1 to 5)	Potential Max. Category Score	What is Evaluated?
				certification requirements; impacts on upstream/downstream processes ((e.g., whether a technology requires additional treatment process upstream or downstream)
	Maintenance Requirements and Complexity	4	8.7	Maintenance requirements associated with staffing, training, and equipment, as well as availability of service and replacement parts; impacts on upstream/downstream processes (e.g., whether a technology results in additional maintenance upstream or downstream)
	Constructability	3	6.5	Compatibility with existing system; ease of implementation (e.g., permits and approvals, construction timing); operational risks during construction; interference with other projects
	Market Resilience	3	6.5	Vendor and/or market dependency of technology (e.g., whether the technology is patented or proprietary), associated consumables (e.g., material and equipment replacement), and/or final products (e.g., renewable natural gas from digester gas purification).
	Footprint/Land Use	2	4.3	Estimated footprint: ability to optimize site use efficiency (e.g., by allowing existing processes to be decommissioned and land reclaimed for future use)
	Adaptability to Future Requirements	3	6.5	Ability to be optimized to meet more stringent regulatory requirements in the future (e.g., air emissions); ability to easily expand to increase capacity (e.g., modular design)

Environmental/ 30%	Alignment with Corporate Energy and Sustainability Policy – Energy Intensity	4	15.0	Potential/opportunity to reduce overall corporate energy intensity
	Alignment with Corporate Energy and Sustainability	4	15.0	Potential/opportunity to reduce overall corporate GHG emissions
Category/ Weight (%)	Criterion	Criterion Weight (1 to 5)	Potential Max. Category Score	What is Evaluated?
	Policy – GHG Emissions			
Social/20%	Noise Impact	3	4.6	Impact on noise or attenuation requirement for noise (e.g., from traffic, construction, or equipment operation)
	Odour Risk	3	4.6	Impact on off-site odour risk or treatment requirement for odour control
	Occupational Health and Safety Risk	4	6.2	Potential health and safety impacts to operations staff, considering the potential exposure to odour, noise, dust, and digester gas
100%			100	

4.2 Economic

4.2.1 Capital Cost Basis

Capital costs were estimated by scaling the original BPU and CHP unit capital costs, accounting for 1 percent annual inflation since installation, to match current equipment prices:

- BPU commissioned in 2012 with a supply and installation cost of \$2.5 million, with a capacity of 10,000 m³/d
- CHP unit commissioned in 2006 with a supply and installation cost of \$5.5 million, with a capacity of 15,000 m³/d

The capital cost estimates in this report exclude external funding, representing the most conservative cost estimate to HRPI.

4.2.2 O&M Cost and Revenue Basis

Key to the O&M and revenue for the shortlisted alternatives is the new Federal carbon tax regime, which applies to provinces that do not have a cap-and-trade or equivalent program. The Federal Government has proposed to increase carbon tax by \$10 per tonne per year until 2022 and \$15 per tonne per year thereafter until 2030, reaching \$170 per tonne. Figure 4 shows the projected natural gas rates in Ontario. The federal increase in carbon tax will increase the cost of natural gas and the market value of RNG.

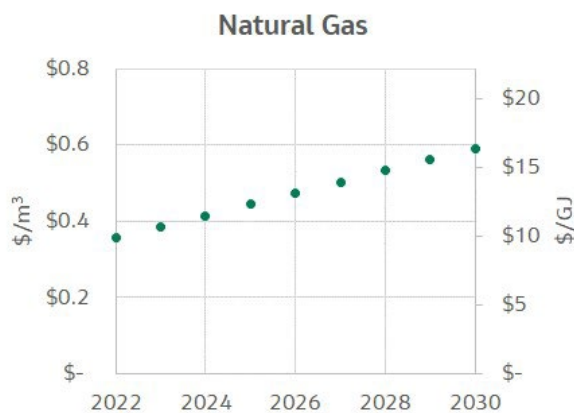


Figure 4. Projected Future Natural Gas Cost (Ontario) with Federal Carbon Tax Regime

Table 4 outlines the O&M and revenue items that have been considered in the economic evaluation of the shortlisted alternatives, based on the year 2025.

Table 4. O&M and Revenue Basis for Evaluation of Shortlisted Alternatives (\$2025)

Item	Unit Cost	Source/Basis
O&M		
BPU labour, maintenance, and electricity	\$7/GJ	Based on historical labour and maintenance costs Includes electricity, service costs and RNG contact costs
CHP labour and maintenance	\$300,000/MWe	Based on historical Toromont and administrative costs for a 1.6 MWe engine
CHP electricity	\$ 0.08/kWh	Per HRPI
Digester gas	\$2.58/GJ (\$2.72/mmBTU)	Per HRPI; part of HRPI's O&M costs

Revenue		
Electricity contract	\$0.08/kWh	Per HRPI
Thermal energy contract	\$11.04/GJ (\$11.65/mmBTU)	Per HRPI
RNG contract with third party	\$25/GJ	Per HRPI
RNG contract with City	\$ 13.40/GJ (\$ 0.48/m ³)	Contract rate equivalent to natural gas price, considering Federal carbon tax regime

4.2.3 Life-cycle Cost Basis

A 20-year planning period between 2025 and 2044, carbon tax regime and inflation rate of 2 percent were used for the life-cycle analysis, where applicable (i.e., natural gas pricing based on carbon tax regime and labour, maintenance and electricity based on inflation rate). Contract unit prices were fixed for the full 20-year period and the sensitivity of the unit prices on the results was analyzed.

5. Digester Heating Requirements

5.1 Sludge Heating Demand

To support sludge digestion and the production of digester gas, the sludge in the primary digesters must be heated to 37 degrees Celsius and mixed. Based on the shortlisted alternatives, the sludge can be heated by purchased natural gas fired in the boilers, from thermal energy recovered from cogeneration, or a combination thereof. A seasonal mass balance was established to estimate the total heating requirements for warmer and cooler months. Table 5 presents this analysis.

Table 5. Digester Heating Requirements

Month	Sludge Temp.	Sludge Heating Requirement		Digester Heat Loss			Total Heating Requirement	
	(°C)	(GJ/d)	(MWh/d)	(°C loss/d/kg)	(GJ/d)	(MWh/d)	(GJ/d)	(MWh/d)
Jan	15.8	107	30	1	97	27	204	57
Feb	14.2	115	32	1	97	27	212	59
Mar	13.7	118	33	1	97	27	214	60
Apr	14.6	113	31	1	97	27	210	58
May	17.6	98	27	1	97	27	195	54
Jun	20.2	85	24	1	97	27	181	50

Jul	22.1	75	21	0.3	29	8	104	29
Aug	24.5	63	18	0.3	29	8	92	26
Sep	25.1	60	17	0.3	29	8	89	25
Oct	23.4	69	19	0.3	29	8	98	27
Nov	20.8	82	23	0.3	29	8	111	31
Dec	17.3	100	28	0.3	29	8	129	36

Basis

From the Wastewater Treatment Facilities 2016 Annual Report (City of Hamilton, 2017):

- Influent flow: 291 ML/d
- Influent wastewater temperatures
- TRS flow rate: 21,103 m³/month
- TRS total solids (TS): 6.3%
- TRS volatile solids (VS): 73.0%
- TWAS flow rate: 15,592 m³/month
- TWAS TS: 4.7%
- TWAS VS: 77.7%

From Sewage ECA 9410-B65QRT dated May 14, 2019 (MECP, 2019): - Total primary

digester volume: 31,478 m³ □ Constants:

- Specific heat capacity of sludge: 4.18 J/g/°C (typical)

5.2 Cogeneration Thermal Energy Recovery

If cogeneration is implemented in some capacity, thermal energy can be recovered to offset natural gas used by boilers to heat the digesters. Table 6 outlines the potential thermal energy that can be offset from a typical CHP unit, seasonally, and on average. Based on these estimates, during warmer months, it is possible for sludge heating requirements to be fully met by the recovery of thermal energy from CHP if 15,000 m³/d of digester gas is used for cogeneration. Any excess thermal energy can be used to heat buildings.

Table 6. Potential CHP Thermal Energy Available to Offset Natural Gas Purchase for Digester Heating

	Unit	Shortlisted Alternatives				
		1	2	3	4	5
		100% RNG	75% RNG/ 25% CHP	50% RNG/ 50% CHP	25% RNG/ 75% CHP	100% CHP
Digester Gas Use						
RNG Component	%	100	75	50	25	0
CHP Component	%	0	25	50	75	100

CAT G3520C CHP thermal efficiency: 39.9%; electrical efficiency: 39.8% (Toromont Cat, 2013)

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6. Energy Intensity

Based on the City's Corporate Energy and Sustainability Policy, energy intensity refers to the energy usage or consumption of a facility or facility operations using a common measure over a specific timeframe. For wastewater treatment plants, this is kWh/ML/d. The energy intensity reduction for each of the alternatives was estimated based on the amount of electrical energy generated by the CHP unit, offsetting the plant's overall electricity consumption. Table 7 summarizes the energy intensity of each scenario. Table 7. Energy Intensity Reduction Estimate

Parameter	Unit	Scenarios				
		1	2	3	4	5
		100% RNG	75% RNG/ 25% CHP	50% RNG/ 50% CHP	25% RNG/ 75% CHP	100% CHP
Electrical Energy Production	GJ/d	0	30	59	89	118
Electrical Energy Production	kWh/d	0	8,215	16,431	24,646	32,861
Energy Intensity Reduction	kWh/ML/d per annum	0	7,332	14,663	21,995	29,326
Basis Plant rated capacity of 409 ML/d Total digester gas available to HRPI: 15,000 m ³ /d as per HRPI Typical energy in digester gas: 22 MJ/ m ³ 90 percent uptime for CHP unit CAT G3520C CHP thermal efficiency: 39.9%; electrical efficiency: 39.8% (Toromont Cat, 2013) Electrical energy required for compressing digester gas upstream of the CHP unit is not included in calculations as distinct metered data were not available						

7. GHG Emissions

GHG emissions are produced when hydrocarbons, such as natural gas and digester gas, are combusted. GHGs include CO₂, methane (CH₄), and nitrous oxides (N₂O). The following lists the potential GHG emission sources related to this evaluation:

- Combustion of natural gas in boilers to heat digester sludge, resulting in mostly CO₂
- Combustion of digester gas and methane slip (from BPU) in flares, resulting in methane release due to incomplete combustion and the release of biogenic CO₂
- Combustion of digester gas in the CHP unit to produce electrical and thermal energy, resulting in mostly biogenic CO₂

7.1 GHG Emissions Estimate

The **total digester sludge heating required** consists of sludge heating and digester heat loss through the digester walls. Both were calculated from first principles based on available plant data (2016 Annual Wastewater Treatment Report), the plant's current sewage ECA (9410-B65QRT dated May14, 2019) and typical thermal loss coefficients. The **natural gas heat required** is equivalent to the balance of digester heat required after all available heat from CHP unit is used. The **GHG emissions** from combusting natural gas and digester gas, were calculated using emission factors from Environment and Climate Change Canada's *2021 National Inventory Report: Greenhouse Gas Sources and Sinks in Canada* (Environment and Climate Change Canada, 2021).

Table 8 summarizes the GHG emission factors associated with different gas utilization methods, including digester gas combustion (e.g., in flare and CHP engine) and un-combusted digester gas (e.g., incomplete combustion in flares, methane slips during digester gas purification process to generate RNG). The emissions were calculated based on the Intergovernmental Panel on Climate Change (IPCC) Guidelines (IPCC, 2006) for CO₂, CH₄ and N₂O emissions, and the associated Global Warming Potentials (GWP; 25 g CO_{2eq}/g CH₄ emission and 298 g CO_{2eq}/g N₂O emission). The portion of CO₂ emission from biogas combustion (approximately 1,200 g CO_{2eq}/m³) does not count towards the total GHG emission because it is considered biogenic. In addition, a GHG credit was included for RNG grid injection to account for the reduced GHG emission from using RNG instead of natural gas, regardless of the end user (i.e., RNG injected to the grid to be used by Woodward Avenue WWTP or other users). Table 9 summarizes the estimated GHG emissions based on these emission factors. Detailed calculations are available in Appendix A.

Renewable Energy Options Assessment

Table 8. GHG Emission Factors Associated with Natural Gas and Biogas Utilization

Gas	Utilization	GHG Factor	Emission	Basis
Natural Gas	Boiler	1,899 g CO ₂ /m ³		Based on complete combustion in boilers (i.e., no slip)
Digester Gas	Flare	151 g CO ₂ /m ³		Based on enclosed type waste gas burners with combustion efficiency of 99% Includes the flaring of digester gas only; the flaring of methane slip from the BPU is estimated as 'RNG generation'
	CHP	1.21 g CO ₂ /m ³		Based on complete combustion in CHP engines (i.e., no slip)
	RNG Generation	151 g CO ₂ /m ³		Based on 1% of RNG slip during the purification process; slipped RNG is captured and combusted in the flare
	RNG Grid Injection Credit	1,869 g CO ₂ /m ³		Based on the biogenic CO ₂ emission from RNG combustion which does not count towards the total emission
Basis <ul style="list-style-type: none"> Total digester gas available to HRPI: 15,000 m³/d as per HRPI Typical energy in digester gas: 22 MJ/ m³ Typical energy in natural gas: 36 MJ/m³ 90 percent uptime for BPU and CHP units; flare combusting digester gas during downtime CAT G3520C CHP thermal efficiency: 39.9%; electrical efficiency: 39.8% (Toromont Cat, 2013) 				

Table 9. GHG Emissions Estimate

Parameter	Unit	Scenarios								
		1A	2A	3A	4A	1B	2B	3B	4B	5
		100% RNG	75% RNG/ 25% CHP	50% RNG/ 50% CHP	25% RNG/ 75% CHP	100% RNG	75% RNG/ 25% CHP	50% RNG/ 50% CHP	25% RNG/ 75% CHP	100% CHP
GHG Emissions	tonnes CO ₂ e/d	8	7	5	4	-17	-12	-8	-3	2
GHG Emissions	tonnes CO ₂ e/ML/d per annum	7	6	5	3	-15	-11	-7	-2	2

'A' indicates that RNG is sold to a third party and 'B' indicates that RNG is sold to the City, keeping the RNG grid injection credit

Basis

Plant rated capacity of 409 ML/d
Complete combustion in boilers and CHP unit
99 percent flare efficiency
1 percent RNG slip during purification process; slipped RNG is captured and combusted in the flare

8. Carbon Intensity

Carbon intensity (CI) is defined as the ratio of GHG emissions associated with the production, transportation, and use of a given fuel to the energy that is displaced by the fuel (RNG, electrical energy, etc.). A traditional gas source like natural gas has a higher carbon intensity than that of digester gas from a wastewater treatment plant. Even further, methane captured from a dairy farm can have a negative carbon intensity.

The Federal government has proposed a Clean Fuel Standard (CFS), which would regulate GHG emissions from fossil fuel suppliers with the aim of making supply cleaner and less polluting overall (Government of Canada, 2021). Regulatory requirements would come into place late 2022. Suppliers can reduce their own emissions associated with the production of fuels or they can purchase credits created by other parties who have reduced the life-cycle emissions of fuels. Carbon intensity is a measure of these life-cycle emissions. The lower the carbon intensity, the lower the life-cycle emissions, the greater the credit.

As a result, the carbon intensity of RNG produced at the Woodward Avenue WWTP is significant in determining the contract price of RNG with a third party. The carbon intensity of RNG however, is not as significant if the RNG is used within the City's corporate framework, such as to fuel fleet vehicles. Corporate-wide environmental benefits would be the focus of such an internal agreement compared to a high negotiation price.

8.1 Carbon Intensity Estimates

The **energy** generated by the BPU was estimated based on the available amount of digester gas, a LHV of 22 MJ/m³, and a 1 percent methane slip rate (captured and flared). The **electrical energy generated** was estimated based on the available amount of digester gas, a LHV of 22 MJ/m³, and a CHP electrical efficiency of 39.8 percent.

The CI for RNG and CHP were estimated individually for each scenario using the following general equation: $CI = \text{GHG emissions from renewable energy generated} / \text{total energy value of renewable energy generated}$

Where: CI is in units of kg CO₂e/ GJ

GHG emissions per amount of energy input to generate renewable energy (electricity or RNG) is in kg CO₂e/d

Renewable energy generated in GJ/d

Table 10 summarizes the combined GHG emission rates, energy produced and the CI for each of the scenarios based on RNG being sold to a third party (i.e., no GHG emission credit).

Table 10. RNG and CHP CI Estimate

Parameter	Unit	Scenarios				
		1	2	3	4	5
		100% RNG	75% RNG/ 25% CHP	50% RNG/ 50% CHP	25% RNG/ 75% CHP	100% CHP
RNG						
GHG Emission Rate	kg CO ₂ e/d	8,103	6,077	4,051	2,026	0
Energy Produced	GJ/d	294	221	147	74	0
CI	kg CO ₂ e/GJ	28	28	28	28	N/A

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Parameter	Unit	Scenarios				
		1	2	3	4	5
		100% RNG	75% RNG/ 25% CHP	50% RNG/ 50% CHP	25% RNG/ 75% CHP	100% CHP
CHP						
GHG Emission Rate	kg CO ₂ e/d	0	518	1,036	1,554	2,072

Energy Produced (Electrical)	GJ/d	0	30	59	89	118
CI	kg CO ₂ e/GJ	N/A	18	18	18	18
Combined						
Combined GHG Emission Rate	kg CO ₂ e/d	8,103	6,595	5,087	3,579	2,072
Combined Energy Produced (RNG + CHP)	GJ/d	294	250	206	162	118
Combined CI (RNG + CHP)	kg CO ₂ e/GJ	28	26	25	22	18

Basis

Based on RNG being sold to a third party (i.e., no GHG emission credit)
Total digester gas available to HRPI: 15,000 m³/d as per HRPI
Typical energy in digester gas: 22 MJ/ m³
Typical energy in natural gas: 36 MJ/m³
90 percent uptime for BPU and CHP units; flare combusting digester gas during downtime
CAT G3520C CHP thermal efficiency: 39.9%; electrical efficiency: 39.8% (Toromont Cat, 2013)
Electrical energy required for compressing digester gas upstream of the CHP unit is not included in calculations as distinct metered data were not available

9. Renewable Energy Options Assessment and Recommendation

9.1 Non-Economic Evaluation

A non-economic evaluation was performed based on the criteria and weightings outlined in Section 4. Maximum scores received for each of the scenarios are presented in Table 11. For evaluation details, including rationale for scores, refer to Appendix B.

Of note, the following had the most impact on differing scores between the shortlisted alternatives:

- Operating requirements and complexity:
 - Both BPU and CHP are automated during normal operation; CHP, however, is more complex from an operating and training perspective
 - More difficult to operate/monitor two systems □ Maintenance requirements and complexity
 - BPU has fewer components than CHP, requiring less overall maintenance
 - More difficult to maintain two systems
- Adaptability to future requirements

- BPU has a more modular design than CHP □ Energy intensity
- Ranked based on estimated energy intensities detailed in Section 6
- Since the BPU does not produce electricity, it does not contribute to overall energy intensity reduction within the City
- The CHP unit produces electricity, reducing the plant's electricity consumption and as a result reducing the City's overall energy intensity
- GHG emissions
 - Ranked based on estimated GHG emissions detailed in Section 7
 - When RNG is sold to a third party, the third party also receives the associated RNG grid injection GHG emissions credit (equivalent to the biogenic emissions from combusting RNG), decreasing the overall environmental score
 - When RNG is used within the City, the City can apply the RNG grid injection GHG emissions credit to the City's overall GHG emissions and improve overall environmental score

Table 11. Technical, Environmental, and Social Evaluation of Shortlisted Alternatives

Category	Criterion	Max. Potential Category Score	Shortlisted Alternatives								
			1A	2A	3A	4A	1B	2B	3B	4B	5
			100% RNG	75% RNG/ 25% CHP	50% RNG/ 50% CHP	25% RNG/ 75% CHP	100% RNG	75% RNG/ 25% CHP	50% RNG/ 50% CHP	25% RNG/ 75% CHP	100% CHP
Technical	Performance Reliability	6.5	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	6.5
	Operating Requirements and Complexity	10.9	10.9	4.3	4.3	4.3	10.9	4.3	4.3	4.3	8.7
	Maintenance Requirements and Complexity	8.7	8.7	3.5	3.5	3.5	8.7	3.5	3.5	3.5	7.0
	Constructability	6.5	5.2	3.9	3.9	3.9	5.2	3.9	3.9	3.9	6.5
	Market Resilience	6.5	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
	Footprint/Land Use	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	Adaptability to Future Requirements	6.5	6.5	5.2	5.2	5.2	6.5	5.2	5.2	5.2	3.9
Environmental	Energy Intensity	15.0	3.0	6.0	9.0	12.0	3.0	6.0	9.0	12.0	15.0
	GHG Emissions	15.0	3.0	6.0	6.0	9.0	15.0	15.0	12.0	12.0	9.0
Social	Noise Impact	6.0	6.0	4.8	4.8	4.8	6.0	4.8	4.8	4.8	6.0
	Odour Risk	6.0	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
	Occupational Health and Safety Risk	8.0	6.4	4.8	4.8	4.8	6.4	4.8	4.8	4.8	4.8
Totals, Rounded											
Technical Subtotal		50	46	32	32	32	46	32	32	32	42

Environmental Subtotal	30	6	12	15	21	18	21	21	24	24
Social Subtotal	20	17	14	14	14	17	14	14	14	16
Total	100	69	58	61	67	81	67	67	70	82
‘A’ indicates that RNG is sold to a third party and ‘B’ indicates that RNG is sold to the City, keeping the RNG grid injection GHG emissions credit										

9.2 Economic Evaluation

Table 12 details the capital, O&M costs and revenue associated with each of the shortlisted alternatives, based on the year 2025 and from the perspective of HRPI. The 20-year NPV estimate covers 2025 through 2044.

Table 12. HRPI Life-cycle Costs and Cost Score for Shortlisted Alternatives

	Shortlisted Alternatives				
	1	2	3	4	5
	100% RNG	75% RNG/ 25% CHP	50% RNG/ 50% CHP	25% RNG/ 75% CHP	100% CHP
BPU Capital Costs					
Replace existing CHP unit with a BPU	\$4,268,000	\$3,201,000	\$2,134,000	\$1,067,000	--
CHP Capital Costs					
Replace existing CHP unit with another CHP unit	--	\$1,661,000	\$3,323,000	\$4,984,000	\$6,645,000
Annual BPU O&M Costs					
Digester gas	\$280,000	\$210,000	\$140,000	\$70,000	--
Labour, maintenance, and electricity	\$751,000	\$563,000	\$376,000	\$188,000	--
Annual CHP O&M Costs					
Digester gas	--	\$70,000	\$140,000	\$210,000	\$280,000
Electricity	--	\$19,000	\$38,000	\$58,000	\$77,000
Labour and maintenance	--	\$102,000	\$204,000	\$309,000	\$411,000
BPU Revenue					
A - RNG contract with third party	\$2,683,000	\$2,012,000	\$1,342,000	\$671,000	--
B - RNG contract with City	\$1,438,000	\$1,078,000	\$719,000	\$359,000	--
CHP Revenue					

Electricity contract	--	\$240,000	\$480,000	\$720,000	\$960,000
Thermal energy contract	--	\$119,000	\$239,000	\$358,000	\$478,000
20-y Life-cycle Revenue NPV					
A - RNG sold to third party	\$87,374,000	\$75,899,000	\$64,495,000	\$53,117,000	\$41,662,000
B - RNG used within City	\$54,679,000	\$51,371,000	\$48,135,000	\$44,924,000	
Revenue Score					
A - RNG sold to third party	100	87	74	61	48
B - RNG used within City	63	59	55	51	
'A' indicates that RNG is sold to a third party and 'B' indicates that RNG is sold to the City, keeping the RNG grid injection GHG emissions credit					
Basis					
<div><div><input type="checkbox"/></div>Capital costs:</div> <div><div>-</div>Existing BPU had a capital cost of \$2.5 million (2012)</div> <div><div>-</div>Existing Cogeneration Facility had a capital cost of \$5.5 million (2006)</div> <div><div>-</div>Scenario capital costs scaled based on original BPU and CHP unit costs, inflated by 1 percent per year to match current equipment prices</div> <div><div>-</div>Engine sizes: 25% CHP – 0.3 MWe; 50% CHP – 0.7 MWe; 75% CHP – 1.0 MWe; 100% CHP – 1.4 MWe</div> <div>Cont'd on next page</div>					

Basis Continued

□ **Variable O&M costs:**

2 percent inflation applies to labour, maintenance and electricity

BPU labour, maintenance, and electricity at \$7/GJ in 2025

CHP labour and maintenance based on \$300,000/MWe (engine size) in 2025

CHP unit: 8 percent of engine rating (based on Jacobs' cogeneration project experience)

Electricity for operating auxiliary equipment - Electricity purchase price: \$0.08/kWh in 2025 □ **Fixed O&M costs:**

Digester gas contract unit price of \$2.58/GJ (\$2.72/mmBTU) □ **Revenue:**

All contract prices are static over 20-year life-cycle

RNG third party contract unit price of \$25/GJ

RNG City contract unit price of \$13.40/GJ, increasing annually until 2030 with the Federal carbon tax regime -

Electricity contract unit price of \$0.08/kWh

Thermal energy contract unit price of \$11.04/GJ (\$11.65/mmBTU)

BPU has 99% purification energy capture; digester gas contains 22 MJ/m³ of energy

CHP units have 39.8% electrical efficiency and 39.9% thermal efficiency based on G3520C

100% RNG produces 294 GJ/d of RNG

75% RNG produces 221 GJ/d of RNG

50% RNG produces 147 GJ/d of RNG

25% RNG produces 74 GJ/d of RNG

25% CHP produces 342 kWh of electrical energy and 30 GJ/d thermal energy

50% CHP produces 684 kWh of electrical energy and 59 GJ/d thermal energy

75% CHP produces 1,026 kWh of electrical energy and 89 GJ/d thermal energy

100% CHP produces 1,368 kWh of electrical energy and 119 GJ/d thermal energy

The O&M costs at the Woodward Avenue WWTP will also be affected by HRPI's decision to install a BPU or CHP unit, primarily with respect to the amount of natural gas required to heat the digesters. Table 13 summarizes the Wastewater Operations costs (i.e., natural gas) associated with each scenario, accounting for the Federal carbon tax regime increases through 2030.

Table 13. Wastewater Operations Costs for Shortlisted Alternatives

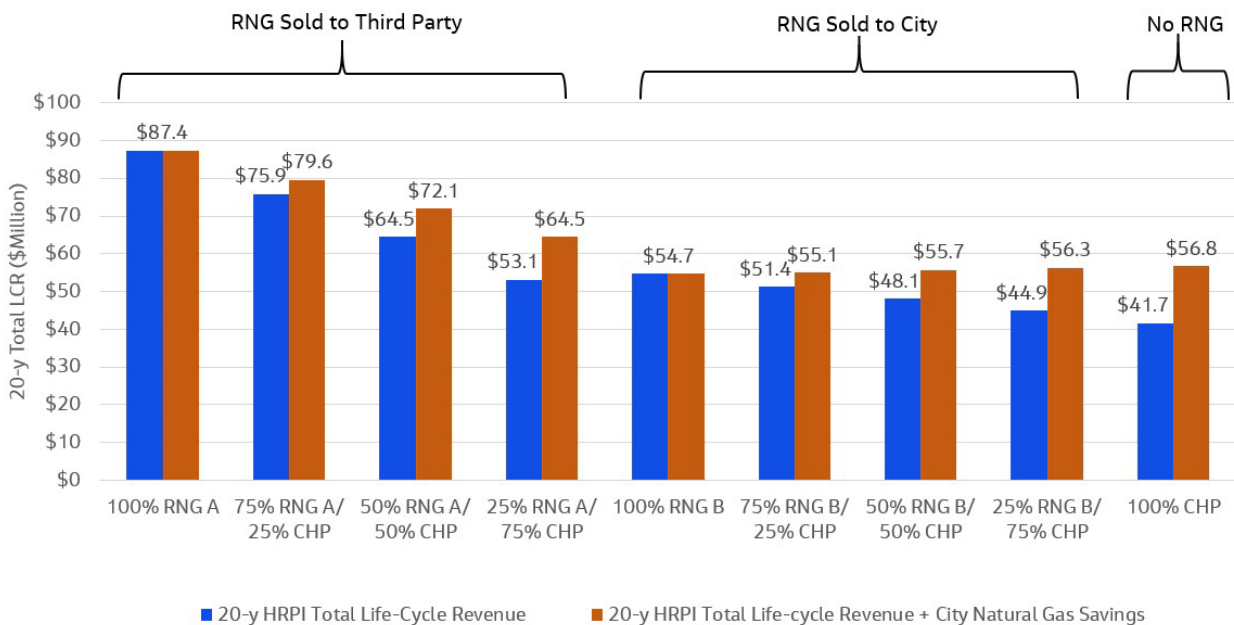
	Shortlisted Alternatives				
	1	2	3	4	5
	100% RNG	75% RNG/ 25% CHP	50% RNG/ 50% CHP	25% RNG/ 75% CHP	100% CHP
Annual natural gas cost (2025) ¹	\$748,000	\$606,000	\$460,000	\$313,000	\$171,000
20-y NPV natural gas cost ¹	\$19,643,000	\$15,914,000	\$12,080,000	\$8,220,000	\$4,491,000

¹ 2025 – 2030 based on natural gas tax regime

9.3 Comparison

A revenue comparison (Figure 5) was developed to present the 20-year life-cycle revenue for each of the shortlisted alternatives. Of these alternatives, producing RNG from digester gas and selling to a third party provides HRPI with the greatest revenue opportunities.

The cost savings (i.e., savings in natural gas consumption) realized by the City for each of the alternatives is also an important consideration in the overall decision-making process. The 100% CHP alternative will save the City \$15.15 million over 20 years compared to the 100% RNG alternatives (\$19.64 million - \$4.49 million). Figure 5 presents the difference between the 100% CHP 20-y HRPI total lifecycle revenue plus City natural gas savings and the 100% RNG 20-y HRPI total lifecycle revenue values.



'A' indicates that RNG is sold to a third party and 'B' indicates that RNG is sold to the City

Figure 5. Revenue Comparison of Shortlisted Alternatives

The total scores for shortlisted alternatives, based on the non-economic benefit score and the revenue score being equally weighted, are presented in Figure 6. The 100% RNG alternatives provide the greatest overall benefit to HRPI. When the natural gas savings to the City over the 20-year timeframe are considered, the total score for the 100% CHP alternative increases

significantly.

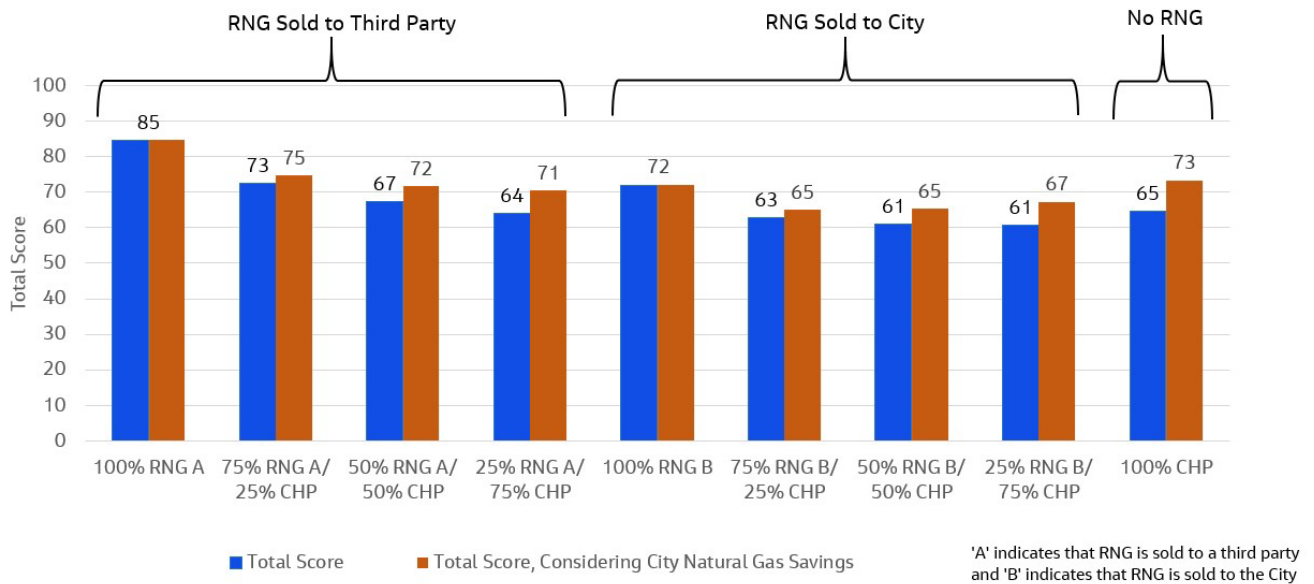


Figure 6. Total Non-Economic and Economic Score of Shortlisted Alternatives

9.4 Sensitivity Analysis

A sensitivity analysis was performed for both non-economic and economic parameters. Details are presented in Appendix C. For the non-economic sensitivity analysis, weightings were changed to better understand their impact on total scores. For the economic sensitivity analysis, RNG and electricity contract prices changed to better understand their impact on total scores. The outcome of this analysis is presented in Table 14 and Figure 7.

The RNG third party contract price strongly factors into total scores. Similarly, the cost of electricity purchase/electricity contract prices strongly factors into total scores. The CHP total score increases in proportion to the electricity unit prices. When the non-economic scores receive more weighting than the economic scores, total scores are expressed in a tighter band (64 to 92 as opposed to the baseline of 63 to 100).

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Table 14. Sensitivity Analysis Summary

Scenario	Total Score								
	100% RNG A	75% RNG A/ 25% CHP	50% RNG A/ 50% CHP	25% RNG A/ 75% CHP	100% RNG B	75% RNG B/ 25% CHP	50% RNG B/ 50% CHP	25% RNG B/ 75% CHP	100% CHP
Baseline	100	91	82	74	63	63	64	64	65
All criteria equal weighting	89	78	75	72	74	67	67	68	74
All category equal weighting	83	75	72	71	71	66	66	68	73
High energy intensity weighting	85	75	73	71	69	63	65	67	75
High technical weighting	92	76	73	69	75	64	64	65	74
High social weighting	86	76	73	71	72	66	66	68	73
RNG third party contract price - \$20/GJ	85	71	64	58	73	62	58	55	57
RNG third party contract price - \$30/GJ	85	68	59	51	54	45	43	43	47
Electricity purchase/contract price - \$0.10/kWh	85	71	64	59	60	52	52	53	58
Electricity purchase/contract price - \$0.14/kWh	85	75	73	72	60	56	60	66	75
Low total score economic weighting – 30%	79	67	65	65	76	65	64	65	72

Low total score economic weighting – 40%	82	70	66	65	74	64	62	63	68
'A' indicates that RNG is sold to a third party and 'B' indicates that RNG is sold to the City, keeping the RNG grid injection GHG emissions credit									

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9.5 Summary and Recommendations

9.5.1 100% RNG

Using digester gas produced on-site at the Woodward Avenue WWTP for RNG production and sale to a third party (100% RNG A) provides the highest combined non-economic and economic score from the perspective of HRPI. From a City perspective, using the RNG within the City (100% RNG B) instead of selling to a third party has less of an economic benefit, however, reduces GHG emissions by almost three-fold (Table 9; 100% RNG A and 100% RNG B produce 7 tonnes CO₂e/ML/d per annum and -15 tonnes CO₂e/ML/d per annum, respectively).

9.5.2 100% CHP

The 100% CHP alternative helps the City reduce its overall energy intensity by producing electricity to be used at the Woodward Avenue WWTP (Table 7; 29,326 kWh/ML/d). This alternative would also reduce the City's reliance on purchasing natural gas for heating of the digesters, which is scheduled to a price increase in line with the Federal tax regime. During the summer months, the thermal energy recovered from the CHP unit is estimated to offset the entire primary digester heating demand. In the winter months, the thermal energy recovered from the CHP unit is estimated to offset approximately 60 percent of the primary digester heating demand. The 100% CHP alternative would save the City \$15.15 million in natural gas costs over the 20-year life-cycle timeframe compared to either of the 100% RNG alternatives

(Table 13). These savings could be captured in the City's digester gas pricing for HRPI. If the City's natural gas savings are considered, the 100% CHP alternative is a more viable option from the perspective of HRPI and the City collectively (Figure 5 and Figure 6).

9.5.3 Recommendations

It is recommended that HRPI further consider other GHG emission reduction initiatives within the City and discuss

RNG contract pricing prior to selecting a renewable energy approach for the use of the digester gas at the Woodward Avenue WWTP. Regardless of the alternative selected, it is recommended that HRPI and City consider upsizing BPU/CHP unit equipment capacity beyond 15,000 m³/d to accommodate digester gas projections over the next 20 years. Upsizing would also reduce the amount of digester gas going to flare.

Renewable Energy Options Assessment

10. References

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Renewable Energy Options Assessment

Appendix A. GHG Emission Estimates

GHG Emission Calculations

GHG Emission Factors Associated with Biogas/Natural Gas Utilization

GHG Emission Parameters

Energy in digester gas	22 MJ/m ³	Utilization	GHG Emission Factor
Energy in natural gas	36 MJ/m ³	Flare - Unused Digester Gas	151 g CO ₂ /m ³
Electrical energy produced by 100% CHP	118 GJ/d	RNG Generation - Slip	151 g CO ₂ /m ³
RNG produced	294 GJ/d	Boiler - NG	1,899 g CO ₂ /m ³
Amount of digester gas available to HRP1	15,000 m ³ /d	CHP - Digester Gas	1.21 g CO ₂ /m ³
Required NG for 100% RNG	153 GJ/d	RNG Grid Injection Credit	-1,869 g CO ₂ /m ³
Required NG for 100% CHP	35 GJ/d		

Days per year 365

Annual downtime 10%

RNG slip 1%

Flare efficiency 99%

100% RNG									
Direct Emissions	Equipment	Notes	Fuel/ Process	GHG Emission	Activity Data	Emission Factor	Emission Rate	GWP	Annual Emissions
Methane from biogas uncombusted in flare			Uncombusted biogas	CH ₄	5,475 m ³ /a	0.60 kgCH ₄ /m ³	3.29 tCH ₄ /a	25	82 tCO ₂ eq/a
Methane from oxidation of biogas in flare			Oxidation of biogas	CH ₄	11.92 TJ/a	1.00 kgCH ₄ /TJ	0.0119 tCH ₄ /a	25	0.30 tCO ₂ eq/a
Nitrous oxide from oxidation of biogas in flare			Oxidation of biogas	N ₂ O	11.92 TJ/a	0.10 kgN ₂ O/TJ	0.00119 tN ₂ O/a	298	0.36 tCO ₂ eq/a
Methane from oxidation of natural gas in boiler			Oxidation of natural gas	CH ₄	1,552,882 m ³ /a	0.037 gCH ₄ /m ³	0 tN ₂ O/a	25	1 tCO ₂ eq/a
Nitrous oxide from oxidation of natural gas in boiler	Boilers	NG feed for digester heating requirements; complete combustion	Oxidation of natural gas	N ₂ O	1,552,882 m ³ /a	0.035 gN ₂ O/m ³	0 tN ₂ O/a	298	16 tCO ₂ eq/a
Carbon dioxide from oxidation of natural gas in boiler				CO ₂	1,552,882 m ³ /a	1,888 gCO ₂ /m ³	2,932 tCO ₂ /a	1	2,932 tCO ₂ eq/a
Methane from biogas uncombusted in flare		Combustion of 1% methane slip; enclosed type, 99% flare efficiency	Uncombusted biogas	CH ₄	493 m ³ /a	0.60 kgCH ₄ /m ³	0.30 tCH ₄ /a	25	7 tCO ₂ eq/a
Methane from oxidation of biogas in flare RNG			Oxidation of biogas	CH ₄	0.12 TJ/a	1.00 kgCH ₄ /TJ	0.0001 tCH ₄ /a	25	0.00 tCO ₂ eq/a
Nitrous oxide from oxidation of biogas in flare			Oxidation of biogas	N ₂ O	0.00 TJ/a	0.10 kgN ₂ O/TJ	0.00000 tN ₂ O/a	298	0.00 tCO ₂ eq/a
Sub-Total Direct Emissions					Activity Data	Emission Factor	Emission Rate	GWP	Annual Emissions
					-4,878,225 m ³ /a	1,888 gCO ₂ /m ³	9,210 tCO ₂ /a	1	2,958 tCO ₂ eq/a
Indirect Emissions									Annual Emissions
RNG (CO ₂ e) Emissions Credit - Biogenic Portion (if RNG used within City)									-9,210 tCO ₂ eq/a
Sub-Total Indirect Emissions									-9,210 tCO ₂ eq/a
									-25,233 kgCO ₂ eq/d
Total GHG Emissions									17,130 tCO ₂ eq/a
100% CHP									
Direct Emissions	Equipment		Fuel/ Process	GHG Emission	Activity Data	Emission Factor	Emission Rate	GWP	Annual Emissions
Methane from biogas uncombusted in flare			Uncombusted biogas	CH ₄	5,475 m ³ /a	0.60 kgCH ₄ /m ³	3 tCH ₄ /a	25	82 tCO ₂ eq/a
Methane from oxidation of biogas in flare	Flare	10% downtime; enclosed type, 99% flare efficiency	Oxidation of biogas	CH ₄	12 TJ/a	1.00 kgCH ₄ /TJ	0 tCH ₄ /a	25	0 tCO ₂ eq/a
Nitrous oxide from oxidation of biogas in			Oxidation of biogas	N ₂ O	12 TJ/a	0.10 kgN ₂ O/TJ	0 tN ₂ O/a	298	0 tCO ₂ eq/a

flare									
Methane from oxidation of natural gas in boiler		Oxidation of natural gas	CH ₄	351,393 m ³ /a	0.037	gCH ₄ /m ³	0 t _{CH₄} /a	25	0 t _{CO₂e} /a
Nitrous oxide from oxidation of natural gas in boiler		Oxidation of natural gas	N ₂ O	351,393 m ³ /a	0.035	gN ₂ O/m ³	0 t _{N₂O} /a	298	4 t _{CO₂e} /a
Carbon dioxide from oxidation of natural gas in boiler	Boilers	NG feed for digester heating requirements; complete combustion	CO ₂	351,393 m ³ /a	1,888	gCO ₂ /m ³	663 t _{CO₂} /a	1	663 t _{CO₂e} /a
Methane from oxidation of biogas in engine	Combustion of biogas; complete combustion	Oxidation of biogas	CH ₄	108 TJ/a	1.00	kgCH ₄ /TJ	0.108 t _{CH₄} /a	25	2.71 t _{CO₂e} /a
Nitrous oxide from oxidation of biogas in engine		Oxidation of biogas	N ₂ O	108 TJ/a	0.10	kgN ₂ O/TJ	0.0108 t _{N₂O} /a	298	3.23 t _{CO₂e} /a
Sub-Total Direct Emissions									756 t _{CO₂e} /a 2,072 kg _{CO₂e} /d
Total GHG Emissions									756 t _{CO₂e} /a 2,072 kg _{CO₂e} /d



Appendix B. Non-Economic Evaluation Matrix

Shortlisted Opportunities - Non-Economic Evaluation

Category Weight (%)	Criterion	Criterion Weight (1 to 5)	Potential Max. Category Score	What is Evaluated?	100% RNG			75% RNG/ 25% CHP			50% RNG/ 50% CHP			25% RNG/ 75% CHP			100% CHP		
					Criterion Score (1 to 5)	Weighted Category Score	Rationale	Criterion Score (1 to 5)	Weighted Category Score	Rationale	Criterion Score (1 to 5)	Weighted Category Score	Rationale	Criterion Score (1 to 5)	Weighted Category Score	Rationale	Criterion Score (1 to 5)	Weighted Category Score	Rationale
Technical 50%	Performance Reliability	3.0	6.5	Ability to reliably meet regulated performance objectives and criteria; resilient to process upsets; ability to provide robust performance under flow/loading variations and adverse conditions	4	5.2	BPU performance objectives are more stringent than CHP performance objectives as quality of RNG is critical to supply contract (to third party or within Corporation).	4	5.2	BPU performance objectives are more stringent than CHP performance objectives as quality of RNG is critical to supply contract (to third party or within Corporation).	4	5.2	BPU performance objectives are more stringent than CHP performance objectives as quality of RNG is critical to supply contract (to third party or within Corporation).	4	5.2	BPU performance objectives are more stringent than CHP performance objectives as quality of RNG is critical to supply contract (to third party or within Corporation).	5	6.5	BPU performance objectives are more stringent than CHP performance objectives as quality of RNG is critical to supply contract (to third party or within Corporation).
	Operating Requirements and Complexity	5.0	10.9	Ease of operation and number of process components required, considering the degree of training and experience required for operations staff and number of operators required, and certification requirements; impacts on upstream/downstream processes ((e.g., whether a technology requires additional treatment process upstream or downstream)	5	10.9	Both BPU and CHP are automated during normal operation. CHP however, is more complex from an operation and training perspective. No certification requirements. No impacts to upstream processes.	2	4.3	Both BPU and CHP are automated during normal operation. CHP however, is more complex from an operating and training perspective. No impacts to upstream processes. No certification requirements. More difficult to operate/monitor two	2	4.3	Both BPU and CHP are automated during normal operation. CHP however, is more complex from an operating and training perspective. No impacts to upstream processes. No certification requirements. More difficult to operate/monitor two	2	4.3	Both BPU and CHP are automated during normal operation. CHP however, is more complex from an operating and training perspective. No impacts to upstream processes. No certification requirements. More difficult to operate/monitor two	4	8.7	Both BPU and CHP are automated during normal operation. CHP however, is more complex. No certification requirements. No impacts to upstream processes.
	Maintenance Requirements and Complexity	4.0	8.7	Maintenance requirements associated with staffing, training, and equipment, as well as availability of service and replacement parts; impacts on upstream/downstream processes (e.g., whether a technology results in additional maintenance upstream or downstream)	5	8.7	BPU has fewer components than CHP, requiring less overall maintenance.	2	3.5	BPU has fewer components than CHP, requiring less overall maintenance. More difficult to maintain two systems.	2	3.5	BPU has fewer components than CHP, requiring less overall maintenance. More difficult to maintain two systems.	2	3.5	BPU has fewer components than CHP, requiring less overall maintenance. More difficult to maintain two systems.	4	7.0	BPU has fewer components than CHP, requiring less overall maintenance.
	Constructability	3.0	6.5	Compatibility with existing system; ease of implementation (e.g., permits and approvals, construction timing); operational risks during construction; interference with other projects	4	5.2	New BPU required. Decommissioning of CHP required. Air ECA permit will require updating.	3	3.9	New BPU required. Replacement of CHP unit required. Air ECA permit will require updating.	3	3.9	New BPU required. Replacement of CHP unit required. Air ECA permit will require updating.	3	3.9	New BPU required. Replacement of CHP unit required. Air ECA permit will require updating.	5	6.5	Replacement of CHP engine and auxiliary equipment, as necessary. Air ECA permit will require updating.
	Market Resilience	3.0	6.5	Vendor and/or market dependency of technology (e.g., whether the technology is patented or proprietary), associated consumables (e.g., material and equipment replacement), and/or final products (e.g., renewable natural gas from biogas purification, fertilizer product from struvite recovery).	4	5.2	Technology is not patented/proprietary. Various equipment vendors on the market. Programming may be proprietary.	4	5.2	Technology is not patented/proprietary. Various equipment vendors on the market. Programming may be proprietary.	4	5.2	Technology is not patented/proprietary. Various equipment vendors on the market. Programming may be proprietary.	4	5.2	Technology is not patented/proprietary. Various equipment vendors on the market. Programming may be proprietary.	4	5.2	Technology is not patented/proprietary. Various equipment vendors on the market. Programming may be proprietary.
	Footprint/Land Use	2.0	4.3	Estimated footprint; ability to optimize site use efficiency (e.g., by allowing existing processes to be decommissioned and land reclaimed for future use)	5	4.3	BPU and CHP require similar footprints.	5	4.3	BPU and CHP require similar footprints.	5	4.3	BPU and CHP require similar footprints.	5	4.3	BPU and CHP require similar footprints.	5	4.3	BPU and CHP require similar footprints.
	Adaptability to Future Requirements	3.0	6.5	Ability to be optimized to meet more stringent regulatory requirements in the future; ability to defer or avoid capacity expansion of existing processes (e.g., by allowing existing infrastructure to accommodate high flows/loadings), or easily expanded to increase treatment capacity (e.g., modular design)	5	6.5	BPU has a more modular design than CHP. Exhaust treatment can be added in future if required.	4	5.2	BPU has a more modular design than CHP. Exhaust treatment can be added in future if required.	4	5.2	BPU has a more modular design than CHP. Exhaust treatment can be added in future if required.	4	5.2	BPU has a more modular design than CHP. Exhaust treatment can be added in future if required.	3	3.9	BPU has a more modular design than CHP. Exhaust treatment can be added in future if required.

Shortlisted Opportunities - Non-Economic Evaluation

Environmental 30%	Alignment with Corporate Energy and Sustainability Policy – Energy Intensity	4.0	15.0	Potential/opportunity to reduce overall corporate energy intensity	1	3.0	Ranked based on energy intensity reduction of 0 kWh/MLd per annum relative to other scenarios	2	6.0	Ranked based on energy intensity reduction of 7,332 kWh/MLd per annum relative to other scenarios	3	9.0	Ranked based on energy intensity reduction of 14,663 kWh/MLd per annum relative to other scenarios	4	12.0	Ranked based on energy intensity reduction of 21,995 kWh/MLd per annum relative to other scenarios
	Alignment with Corporate Energy and Sustainability Policy – GHG Emissions	4.0	15.0	Potential/opportunity to reduce overall corporate GHG emissions	5	15.0	Ranked based on GHG emission credit of 15 tonnes CO ₂ e/ML/d per annum relative to other scenarios	5	15.0	Ranked based on GHG emission credit of 11 tonnes CO ₂ e/ML/d per annum relative to other scenarios	4	12.0	Ranked based on GHG emission credit of 7 tonnes CO ₂ e/ML/d per annum relative to other scenarios	4	12.0	Ranked based on GHG emission credit of 2 tonnes CO ₂ e/ML/d per annum relative to other scenarios

	50	Technical Subtotal		46		32		32		32	
	15	Environmental Subtotal		18		21		21		24	
	20	Social Subtotal		17		14		14		14	
	100	Total Score		81		67		67		70	

Opportunities																			
Category Weight (%)	Criterion	Criterion Weight (1 to 5)	Potential Max. Category Score	What is Evaluated?	100% RNG			75% RNG/ 25% CHP			50% RNG/ 50% CHP			25% RNG/ 75% CHP			100% CHP		
					Criterion Score (1 to 5)	Weighted Category Score	Rationale	Criterion Score (1 to 5)	Weighted Category Score	Rationale	Criterion Score (1 to 5)	Weighted Category Score	Rationale	Criterion Score (1 to 5)	Weighted Category Score	Rationale	Criterion Score (1 to 5)	Weighted Category Score	Rationale
Environmental 30%	Alignment with Corporate Energy and Sustainability Policy – Energy Intensity	4.0	15.0	Potential/opportunity to reduce overall corporate energy intensity	1	3.0	Ranked based on energy intensity reduction of 0 kWh/MLd per annum relative to other scenarios	2	6.0	Ranked based on energy intensity reduction of 7,332 kWh/MLd per annum relative to other scenarios	3	9.0	Ranked based on energy intensity reduction of 14,663 kWh/MLd per annum relative to other scenarios	4	12.0	Ranked based on energy intensity reduction of 21,995 kWh/MLd per annum relative to other scenarios	5	15.0	Ranked based on energy intensity reduction of 29,326 kWh/MLd per annum relative to other scenarios
	Alignment with Corporate Energy and Sustainability Policy – GHG Emissions	4.0	15.0	Potential/opportunity to reduce overall corporate GHG emissions	1	3.0	Ranked based on GHG emissions of 7 tonnes CO ₂ e/ML/d per annum relative to other scenarios	2	6.0	Ranked based on GHG emissions of 6 tonnes CO ₂ e/ML/d per annum relative to other scenarios	2	6.0	Ranked based on GHG emissions of 5 tonnes CO ₂ e/ML/d per annum relative to other scenarios	3	9.0	Ranked based on GHG emissions of 4 tonnes CO ₂ e/ML/d per annum relative to other scenarios	3	9.0	Ranked based on GHG emissions of 2 tonnes CO ₂ e/ML/d per annum relative to other scenarios
Social 20%	Noise Impact	3.0	6.0	Impact on noise or attenuation requirement for noise (e.g., from traffic, construction, or equipment operation)	5	6.0	Construction: limited noise impacts as system is modular in nature. Operation: noise attenuation included in design of modular components.	4	4.8	Construction: limited noise impacts as system is modular in nature. Operation: noise attenuation included in design of modular components.	4	4.8	Construction: limited noise impacts as system is modular in nature. Operation: noise attenuation included in design of modular components.	4	4.8	Construction: limited noise impacts as system is modular in nature. Operation: noise attenuation included in design of modular components.	5	6.0	Construction: limited noise impacts as system is modular in nature. Operation: noise attenuation included in design of modular components.
	Odour Risk	3.0	6.0	Impact on off-site odour risk or treatment requirement for odour control	4	4.8	BPU exhaust contains mostly CO ₂ , some H ₂ S and siloxanes. Exhaust quality within MECP requirements without additional treatment. CHP unit exhaust contains CO, NOx, NMHC and PM. Exhaust quality within MECP requirements without additional treatment.	4	4.8	BPU exhaust contains mostly CO ₂ , some H ₂ S and siloxanes. Exhaust quality within MECP requirements without additional treatment. CHP unit exhaust contains CO, NOx, NMHC and PM. Exhaust quality within MECP requirements without additional treatment.	4	4.8	BPU exhaust contains mostly CO ₂ , some H ₂ S and siloxanes. Exhaust quality within MECP requirements without additional treatment. CHP unit exhaust contains CO, NOx, NMHC and PM. Exhaust quality within MECP requirements without additional treatment.	4	4.8	BPU exhaust contains mostly CO ₂ , some H ₂ S and siloxanes. Exhaust quality within MECP requirements without additional treatment. CHP unit exhaust contains CO, NOx, NMHC and PM. Exhaust quality within MECP requirements without additional treatment.	4	4.8	BPU exhaust contains mostly CO ₂ , some H ₂ S and siloxanes. Exhaust quality within MECP requirements without additional treatment. CHP unit exhaust contains CO, NOx, NMHC and PM. Exhaust quality within MECP requirements without additional treatment.
	Occupational Health and Safety Risk	4.0	8.0	Potential health and safety impacts to operations staff, considering the potential exposure to odour, noise, dust, wastewater and biosolids	4	6.4	Minimal health and safety risk from BPU. Operators could be exposed to digester gas, however system is outfitted with safety measures/interlocks. Potential for safety impacts is higher with CHP due to combusive nature of process. CHP enclosure is outfitted with safety measures/interlocks.	3	4.8	Minimal health and safety risk from BPU. Operators could be exposed to digester gas, however system is outfitted with safety measures/interlocks. Potential for safety impacts is higher with CHP due to combusive nature of process. CHP enclosure is outfitted with safety measures/interlocks.	3	4.8	Minimal health and safety risk from BPU. Operators could be exposed to digester gas, however system is outfitted with safety measures/interlocks. Potential for safety impacts is higher with CHP due to combusive nature of process. CHP enclosure is outfitted with safety measures/interlocks.	3	4.8	Minimal health and safety risk from BPU. Operators could be exposed to digester gas, however system is outfitted with safety measures/interlocks. Potential for safety impacts is higher with CHP due to combusive nature of process. CHP enclosure is outfitted with safety measures/interlocks.	3	4.8	Potential for safety impacts is higher with CHP due to combusive nature of process. CHP enclosure is outfitted with safety measures/interlocks.
			50	Technical Subtotal		46			32			32			32			42	
			15	Environmental Subtotal		6			12			15			21			24	
			20	Social Subtotal		17			14			14			14			16	
			100	Total Score		69			58			61			67			82	

Adjustment - RNG Used within Corporation

Renewable Energy Options Assessment

Appendix C. Sensitivity Analysis

Non-Economic Sensitivity Analysis

Raw Score			Raw Criterion Score									(max)
		5										
Category	Criterion	Max. Raw Criterion Score	100% RNG A	75% RNG A/ 25% CHP	50% RNG A/ 50% CHP	25% RNG A/ 75% CHP	100% RNG B	75% RNG B/ 25% CHP	50% RNG B/ 50% CHP	25% RNG B/ 75% CHP	100% CHP	
Technical	Performance Reliability	5.0	4	4	4	4	4	4	4	4	5	
	Operating Requirements and Complexity	5.0	5	2	2	2	5	2	2	2	4	
	Maintenance Requirements and Complexity	5.0	5	2	2	2	5	2	2	2	4	
	Constructability	5.0	4	3	3	3	4	3	3	3	5	
	Market Resilience		4	4	4	4	4	4	4	4	4	
	Footprint/Land Use		5	5	5	5	5	5	5	5	5	
	Adaptability to Future Requirements		5	4	4	4	5	4	4	4	3	
Environmental	Alignment with Corporate Energy and Sustainability Policy – Energy Intensity	5.0	1	2	3	4	1	2	3	4	5	
	Alignment with Corporate Energy and Sustainability Policy – GHG Emissions	5.0	1	2	2	3	5	5	4	4	3	
Social	Noise Impact	5.0	5	4	4	4	5	4	4	4	5	
	Odour Risk	5.0	4	4	4	4	4	4	4	4	4	
	Occupational Health and Safety Risk		4	3	3	3	4	3	3	3	3	
All Criteria Equal Weighting			Weighted Category Score									
Category	Criterion	Max. Weighted Category Score	100% RNG A	75% RNG A/ 25% CHP	50% RNG A/ 50% CHP	25% RNG A/ 75% CHP	100% RNG B	75% RNG B/ 25% CHP	50% RNG B/ 50% CHP	25% RNG B/ 75% CHP	100% CHP	
Technical	Performance Reliability	8.3	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	8.3	
	Operating Requirements and Complexity	8.3	8.3	3.3	3.3	3.3	8.3	3.3	3.3	3.3	6.7	
	Maintenance Requirements and Complexity	8.3	8.3	3.3	3.3	3.3	8.3	3.3	3.3	3.3	6.7	
	Constructability	8.3	6.7	5.0	5.0	5.0	6.7	5.0	5.0	5.0	8.3	
	Market Resilience	8.3	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	
	Footprint/Land Use	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	
	Adaptability to Future Requirements	8.3	8.3	6.7	6.7	6.7	8.3	6.7	6.7	6.7	5.0	
Environmental	Alignment with Corporate Energy and Sustainability Policy – Energy Intensity	8.3	1.7	3.3	5.0	6.7	1.7	3.3	5.0	6.7	8.3	
	Alignment with Corporate Energy and Sustainability Policy – GHG Emissions	8.3	1.7	3.3	3.3	5.0	8.3	8.3	6.7	6.7	5.0	
Social	Noise Impact	8.3	8.3	6.7	6.7	6.7	8.3	6.7	6.7	6.7	8.3	
	Odour Risk	8.3	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	
	Occupational Health and Safety Risk	8.3	6.7	5.0	5.0	5.0	6.7	5.0	5.0	5.0	5.0	
Technical			58	53	40	40	53	40	40	40	50	
Environmental			8	2	3	5	2	3	5	7	8	
Social			25	22	18	18	22	18	18	18	20	
Total Non-economic Score			100	78	65	67	85	70	70	72	83	
Economic Score, from a HRPI and City Perspective				100	91	82	74	63	64	64	65	
Total Score				89	78	75	72	74	67	68	74	

All Category Equal Weighting

			Weighted Category Score								
Category	Criterion	Max. Weighted Category Score	100% RNG A	75% RNG A/ 25% CHP	50% RNG A/ 50% CHP	25% RNG A/ 75% CHP	100% RNG B	75% RNG B/ 25% CHP	50% RNG B/ 50% CHP	25% RNG B/ 75% CHP	100% CHP
Technical	Performance Reliability	4.3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.3
	Operating Requirements and Complexity	7.2	7.2	2.9	2.9	2.9	7.2	2.9	2.9	2.9	5.8
	Maintenance Requirements and Complexity	5.8	5.8	2.3	2.3	2.3	5.8	2.3	2.3	2.3	4.6
	Constructability	4.3	3.5	2.6	2.6	2.6	3.5	2.6	2.6	2.6	4.3
	Market Resilience	4.3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	Footprint/Land Use	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	Adaptability to Future Requirements	4.3	4.3	3.5	3.5	3.5	4.3	3.5	3.5	3.5	2.6
Environmental	Alignment with Corporate Energy and Sustainability Policy – Energy Intensity	16.7	3.3	6.7	10.0	13.3	3.3	6.7	10.0	13.3	16.7
	Alignment with Corporate Energy and Sustainability Policy – GHG Emissions	16.7	3.3	6.7	6.7	10.0	16.7	16.7	13.3	13.3	10.0
Social	Noise Impact	10.0 10.0	10.0	8.0	8.0	8.0	10.0	8.0	8.0	8.0	10.0
	Odour Risk	13.3	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	Occupational Health and Safety Risk		10.7	8.0	8.0	8.0	10.7	8.0	8.0	8.0	8.0
Technical		33	31	21	21	21	31	21	21	21	28
Environmental		17	3	7	10	13	3	7	10	13	17
Social		33	29	24	24	24	29	24	24	24	26
Total Non-economic Score		100	66	58	62	68	79	68	68	72	81
Economic Score, from a HRPI and City Perspective			100	91	82	74	63	63	64	64	65
Total Score			83	75	72	71	71	66	66	68	73

High Energy Intensity Weighting

			Weighted Category Score								
Category	Criterion	Max. Weighted Category Score	100% RNG A	75% RNG A/ 25% CHP	50% RNG A/ 50% CHP	25% RNG A/ 75% CHP	100% RNG B	75% RNG B/ 25% CHP	50% RNG B/ 50% CHP	25% RNG B/ 75% CHP	100% CHP
Technical	Performance Reliability	6.5	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	6.5
	Noise Impact	10.9	10.9	4.3	4.3	4.3	10.9	4.3	4.3	4.3	8.7
	Maintenance Requirements and Complexity	8.7	8.7	3.5	3.5	3.5	8.7	3.5	3.5	3.5	7.0
	Constructability	6.5	5.2	3.9	3.9	3.9	5.2	3.9	3.9	3.9	6.5
	Market Resilience	6.5	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
	Footprint/Land Use	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	Adaptability to Future Requirements	6.5	6.5	5.2	5.2	5.2	6.5	5.2	5.2	5.2	3.9
Environmental	Alignment with Corporate Energy and Sustainability Policy – Energy Intensity	22.5	4.5	9.0	13.5	18.0	4.5	9.0	13.5	18.0	22.5
	Alignment with Corporate Energy and Sustainability Policy – GHG Emissions	7.5	1.5	3.0	3.0	4.5	7.5	7.5	6.0	6.0	4.5
Social	Noise Impact	6.0	6.0	4.8	4.8	4.8	6.0	4.8	4.8	4.8	6.0
	Odour Risk	6.0	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
	Occupational Health and Safety Risk	8.0	6.4	4.8	4.8	4.8	6.4	4.8	4.8	4.8	4.8
Technical		50	46	32	32	32	46	32	32	32	42
Environmental		23	5	9	14	18	5	9	14	18	23
Social		20	17	14	14	14	17	14	14	14	16
Total Non-economic Score		100	69	58	63	69	75	63	66	70	85
Economic Score, from a HRPI and City Perspective			100	91	82	74	63	63	64	64	65
Total Score			85	75	73	71	69	63	65	67	75

High Technical Weighting

			Weighted Category Score								
Category	Criterion	Max. Weighted Category Score	100% RNG A	75% RNG A/ 25% CHP	50% RNG A/ 50% CHP	25% RNG A/ 75% CHP	100% RNG B	75% RNG B/ 25% CHP	50% RNG B/ 50% CHP	25% RNG B/ 75% CHP	100% CHP
Technical	Performance Reliability	10.4 17.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	10.4 13.9
	Operating Requirements and Complexity	13.9 10.4	17.4	7.0	7.0	7.0	17.4	7.0	7.0	7.0	11.1
	Maintenance Requirements and Complexity	10.4	13.9	5.6	5.6	5.6	13.9	5.6	5.6	5.6	10.4
	Constructability	7.0	8.3	6.3	6.3	6.3	8.3	6.3	6.3	6.3	8.3
	Market Resilience	10.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	7.0
	Footprint/Land Use		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.3
			10.4	8.3	8.3	8.3	10.4	8.3	8.3	8.3	

	Adaptability to Future Requirements										
Environmental	Alignment with Corporate Energy and Sustainability Policy – Energy Intensity	6.0	1.2	2.4	3.6	4.8	1.2	2.4	3.6	4.8	6.0
	Alignment with Corporate Energy and Sustainability Policy – GHG Emissions	6.0	1.2	2.4	2.4	3.6	6.0	6.0	4.8	4.8	3.6
Social	Noise Impact	2.4	2.4	1.9	1.9	1.9	2.4	1.9	1.9	1.9	2.4
	Odour Risk	2.4	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	Occupational Health and Safety Risk	3.2	2.6	1.9	1.9	1.9	2.6	1.9	1.9	1.9	1.9
Technical		80	74	51	51	51	74	51	51	51	67
Environmental		6	1	2	4	5	1	2	4	5	6
Social		8	7	6	6	6	7	6	6	6	6
Total Non-economic Score		100	83	61	63	65	88	65	65	66	83
Economic Score, from a HRPI and City Perspective			100	91	82	74	63	63	64	64	65
Total Score			92	76	73	69	75	64	64	65	74
High Social Weighting			Weighted Category Score								
Category	Criterion	Max. Weighted Category Score	100% RNG A	75% RNG A/ 25% CHP	50% RNG A/ 50% CHP	25% RNG A/ 75% CHP	100% RNG B	75% RNG B/ 25% CHP	50% RNG B/ 50% CHP	25% RNG B/ 75% CHP	100% CHP
Technical	Performance Reliability	4.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	4.6
	Operating Requirements and Complexity	7.6	7.6	3.0	3.0	3.0	7.6	3.0	3.0	3.0	6.1
	Maintenance Requirements and Complexity	6.1	6.1	2.4	2.4	2.4	6.1	2.4	2.4	2.4	4.9
	Constructability	4.6	3.7	2.7	2.7	2.7	3.7	2.7	2.7	2.7	4.6
	Market Resilience	4.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
	Footprint/Land Use	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Adaptability to Future Requirements	4.6	4.6	3.7	3.7	3.7	4.6	3.7	3.7	3.7	2.7
Environmental	Alignment with Corporate Energy and Sustainability Policy – Energy Intensity	12.5	3	5	8	10	3	5	8	10	13
	Alignment with Corporate Energy and Sustainability Policy – GHG Emissions	12.5	3	5	5	8	13	13	10	10	8
Social	Noise Impact	12.0 12.0	12.0	9.6	9.6	9.6	12.0	9.6	9.6	9.6	12.0
	Odour Risk	16.0	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
	Occupational Health and Safety Risk		12.8	9.6	9.6	9.6	12.8	9.6	9.6	9.6	9.6
Technical		35	32	22	22	22	32	22	22	22	30
Environmental		13	3	5	8	10	3	5	8	10	13
Social		40	34	29	29	29	34	29	29	29	31
Total Non-economic Score		100	72	61	64	69	82	69	69	71	81
Economic Score, from a HRPI and City Perspective			100	91	82	74	63	63	64	64	65
Total Score			86	76	73	71	72	66	66	68	73
Sensitivity Analysis - Total Score Summary			Total Non-economic and Economic Score								
Scenario			100% RNG A	75% RNG A/ 25% CHP	50% RNG A/ 50% CHP	25% RNG A/ 75% CHP	100% RNG B	75% RNG B/ 25% CHP	50% RNG B/ 50% CHP	25% RNG B/ 75% CHP	100% CHP
Baseline			100	91	82	74	63	63	64	64	65
All Criteria Equal Weighting			89	78	75	72	74	67	67	68	74
All Category Equal Weighting			83	75	72	71	71	66	66	68	73
High Energy Intensity Weighting			85	75	73	71	69	63	65	67	75
High Technical Weighting			92	76	73	69	75	64	64	65	74
High Social Weighting			86	76	73	71	72	66	66	68	73

Economic Sensitivity Analysis

Sensitivity Analysis - Total Score Summary, from a HRPI and City Perspective			Total Non-economic and Economic Score								
Scenario			100% RNG A	75% RNG A/ 25% CHP	50% RNG A/ 50% CHP	25% RNG A/ 75% CHP	100% RNG B	75% RNG B/ 25% CHP	50% RNG B/ 50% CHP	25% RNG B/ 75% CHP	100% CHP

Baseline	100	91	82	74	63	63	64	64	65
RNG contract price - \$20/GJ	85	71	64	58	73	62	58	55	57
RNG contract price - \$30/GJ	85	68	59	51	54	45	43	43	47
Electricity grid/ contract price - \$0.10/kWh	85	71	64	59	60	52	52	53	58
Electricity grid/ contract price - \$0.14/kWh	85	75	73	72	60	56	60	66	75
Low total score economic weighting - 30%	79	67	65	65	76	65	64	65	72
Low total score economic weighting - 40%	82	70	66	65	74	64	62	63	68

C11-40-25 - Prime Consultant Services Required for Preliminary Design and Engineering of Biogas Upgrading Unit Installation and Connection to Utility Line

Opening Date: March 18, 2025 12:00 PM

Closing Date: April 14, 2025 3:00 PM

***** *IMPORTANT* *****

Proponents are advised to review and confirm their bids&tendersTM vendor account is set up in the Proponent's correct LEGAL name.

This name must exactly match the name on all documentation required of the Successful Proponent, eg; insurance certificate, WSIB certificate.

Schedule of Prices

* Denotes a **"MANDATORY"** field

Do not enter \$0.00 dollars unless you are providing the line item at zero dollars to the City of Hamilton (unless otherwise specified).

If the line item and/or table is **"NON-MANDATORY"** and you are not bidding on it, leave the table and/or line item blank. Do not enter a \$0.00 dollar value.

Milestone Schedule of Prices

Milestone	Lump Sum Cost *	Total Cost
Execution of Project Agreement		
Project Start Date		
Kickoff Meeting and Site Visit		
Technical Memo#1		
Technical Memo#2		
Process Flow Diagrams (PFDs) & Preliminary Layouts		
30% Preliminary Design Submission		
Draft Report Submission		
Final Report Submission		
Presentation of Final Report		
Optional: Board Presentation		

Specifications

Proponent's Business Structure

The City of Hamilton reserves the right to verify the business name and structure of the Proponent, whether or not this section is completed, to ensure that the Proponent is an existing legal entity. If the Proponent is not an existing legal entity, the Proposal will be rejected.

Business Structure of Proponent *	If 'Corporation' Selected, Specify Where Incorporated:	If 'Other' Selected, Specify Business Structure:	Registered Business Name of Proponent (if applicable):
Select A Value ▼			

Documents

It is your responsibility to ensure the uploaded file(s) is/are not defective or corrupted and are able to be opened and viewed by the City. If the attached file(s) cannot be opened or viewed, your Bid shall be rejected.

TECHNICAL PROPOSAL SUBMISSION

No details of costs or rates are to be included in the Technical Proposal (unless otherwise specified in the Request for Proposals document). Failure to follow this instruction may result in the disqualification of your Proposal.

- Technical Submission * (mandatory)
- Time Task Matrix with Hourly Rates, Disbursements and Costs * (mandatory)

Form of Proposal

The Proponent/Bidder hereby acknowledges and agrees:

1. Submission of Proposal

The undersigned Proponent, having carefully examined the RFP Documents, hereby proposes and offers:

- (a) to complete the Work, render all Services and provide all things necessary to perform same;
 - (b) to furnish all labour, service, Goods, materials, equipment and all incidentals;
 - (c) to pay all applicable Value Added Taxes and all other charges as specified; and
 - (d) to fully, properly, diligently and in good faith undertake, perform and complete all of the Proponent's (and upon any award of the Contract those of the Successful Proponent) duties, obligations and responsibilities under the Agreement Documents,
- in full accordance with the Agreement Documents.

Receipt of the RFP Documents from the City is hereby acknowledged.

2. Total Agreement Price

The Total Agreement Price is submitted in the Schedule of Prices. The Total Agreement Price is in Canadian dollars and excludes Value Added Taxes. Value Added Taxes payable (as defined in the RFP Document) are for the account of the City and are in addition to the Total Agreement Price.

3. Addenda

I/We have made any necessary inquiries with respect to Addenda issued by the City and have ensured that we have received, examined and provided for all Addenda to the Request for Proposal in this Proposal.

4. Commencement and Completion

If awarded the Contract, I/we, the Proponent, agrees to commence and complete work as per the Agreement Documents. I/We undertake that:

- I/we will provide all necessary documents required as set forth prior to the commencement of this project;
- Completion of the Project will be achieved within the time allowed for completion as prescribed in the Terms of Reference.

5. Contract

It is understood and agreed by me/us that a binding Contract shall come into being upon acceptance of this Proposal by the City. The subsequent execution of any Agreement or contract for works, if any, is a formality and not a condition precedent to the existence of a binding Contract. The Agreement Documents for this RFP shall constitute the Agreement, including any Addenda issued, subject to such modifications as may be agreed to in writing between the parties.

6. Execution

If this Proposal is accepted by the City and the City is proceeding with the internal approvals for the award of the Contract, then I/we shall provide required proof of Insurance, WSIB clearance certificate, performance of contract security and a labour and material payment bond as required by the Contract Documents, my/our health & safety manual and any other document identified in the award letter as being required by the City prior to it being able to issue a purchase order, and to execute the Agreement if applicable, in quadruplicate, all within 10 Business Days after the City has issued its award letter or within such longer time period as the City may specify.

7. Additional Work

I/We also agree that if this Proposal is accepted, I/we shall execute whatever additional or extra work that may be required, in accordance with the RFP Documents.

8. Time Open for Acceptance

This offer is irrevocable and is to continue open to acceptance by the City for the time period specified in the Request for Proposals after the date and time set for closing (submission) of Proposals. The City may at any time within the open for acceptance period accept this Proposal whether or not any other Proposal has previously been accepted, upon notice of acceptance in writing to me/us personally delivered or mailed to me/us by ordinary prepaid mail to the address provided in this Proposal submission and any notice so mailed shall be deemed to have been received on the date of mailing thereof and any notice so delivered shall be deemed to have been received on the date the notice is so delivered.

9. Electronic Funds Transfer

I/We acknowledge and agree to provide the City with the information required for the City to make payment by EFT.

10. Occupational Health and Safety

I/We understand and agree that the Work must be conducted in a safe manner. Accordingly, I/we confirm that I/we and all Subconsultants used on the Work for the City of Hamilton will comply with all applicable laws, regulations and by-laws of Canada, the Province of Ontario and the City of Hamilton, including but not limited to the Occupational Health and Safety Act, and all applicable regulations thereunder. Further, without limiting any of the foregoing, I/we confirm that I/we have both a written occupational health and safety policy and program to implement that policy, and that all of our employees, Subconsultant and any other persons performing the Work are appropriately trained, licenced and certified, as required to perform the Work.

11. No Collusion / Conflict of Interest

I/We hereby declare that no person, firm or corporation other than me/us has any interest in this Proposal or in the proposed Contract(s) for which this Proposal is made. I/We further declare that this Proposal is made without any connection to, comparison of figures, arrangements with or knowledge of, any other corporation, firm or persons making a Proposal for the same work and is in all respects fair and without fraud or collusion.

I/We confirm that we have complied with section 15 of the Instructions to Proponents, including Policy #1 of the Procurement Policy By-law regarding affiliates and corporations which are not at arm's length.

I/We declare that no member of the City of Hamilton, and no officer, employee or agent of the City of Hamilton has or will have an interest indirectly or directly as a contracting party, partner, shareholder, surety or otherwise in the performance of the Contract(s), or in the supply, work or business to which they relate or in any portion of the profits thereof, or in any of the monies to be derived there from.

12. Interpretation

I/We confirm that I/we have received no oral communication, representation, information, instruction or advice (collectively referred to as "representation") from any officer, employee, agent, or any other person acting on the behalf of or at the direction of the City which in any way amends or modifies the content of this Request for Proposals, any Addenda thereto, or any performance of Services, Work, obligations or responsibilities or the exercise of any rights thereunder or with respect thereto. I/We specifically release and waive any right and claim I/we may have to a claim for negligence, misrepresentation, misstatement or otherwise for any oral communication or representation whatsoever. I/We represent that I/we have not been induced by any oral communication or representation whatsoever to submit this offer and acknowledge that the City is relying on the representations and waiver made by us herein. I/We further acknowledge that I/we have carefully reviewed, understand and agree to the communication provisions of the Instructions to Proponents.

I/We acknowledge and agree that I/we have not assumed that any information concerning our operations, business or personnel or any other information required to be provided by me/us when submitting our Proposal is known to the City, regardless of whether such information may be actually previously known to the City or not. Further, I/we acknowledge and agree that all information to be provided by me/us is to be complete and full and in such detail as required.

13. Accessibility for Ontarians with Disabilities Act, 2005

I/We confirm that I/we and all Subconsultants used on the Work for the City of Hamilton will comply with all applicable accessibility laws, regulations and by-laws of Canada, the Province of Ontario and the City of Hamilton, including but not limited to the Ontarians with Disabilities Act, 2001 (ODA), the Accessibility for Ontarians with Disabilities Act, 2005 (AODA),

Ontario Regulation 429/07 (Accessibility Standards for Customer Service) and Ontario Regulation 118/07 (Integrated Accessibility Standards), throughout the term of the Contract. Without limiting the generality of the foregoing, I/we shall provide to the City, prior to commencing Work, a Statement of Acknowledgement that I/we have read and understand the City's AODA Integrated Accessibility Standards and Customer Service Standard Handbook (the "Handbook"), that I/we have provided the training required by the Handbook, and that I/we will comply with the requirements of the Handbook and applicable accessibility laws, regulations and by-laws. See City of Hamilton's AODA Integrated Accessibility Standards and Customer Service Standard Handbook at: <https://www.hamilton.ca/people-programs/equity-diversity-inclusion/accessibility-services/accessibility-guidelines-policies#policies-procedures>

14. Compliance with the City of Hamilton By-laws

I/We declare that I/we are in compliance with all municipal by-laws as they pertain to the City of Hamilton in respect of the operation of my/our business and in respect of the Work described in the Request for Proposals. I/We understand and agree that if this statement is untrue or incorrect, the City of Hamilton shall be entitled at its sole discretion to reject this Proposal, or if such untruth or incorrectness comes to light after this Proposal is accepted, to terminate or refuse to enter into, as applicable, any Contract and to pursue any other legal recourse the City deems appropriate, and that such untruth or incorrectness shall be a default under the Contract.

15. Procurement Policy

In submitting a Proposal in response to the RFP, I/we agree and acknowledge that I/we have read and will be bound by the terms and conditions of the City's Procurement Policy. I/We understand that the City's Procurement Policy can be viewed on the City's website at: <https://www.hamilton.ca/build-invest-grow/buying-selling-city/bids-and-tenders/procurement-policy-by-law>

16. Barrier Free Design Guidelines (BFDG) 2006

I/We are familiar with the BFDG, I/We will be incorporating the Guidelines, if specified by the Request for Proposals, and that they are to be used as a minimum standard. I/We acknowledge that I/we will provide the Accessibility Features list and that I/We require that City approval is required prior to proceeding with each phase of development.

☐ I/WE agree to be bound by the terms and conditions and have authority to bind the Bidder and submit this Bid on behalf of the Bidder.

Conflict of Interest

Except with the prior express written consent of the City, **prior to submitting this Bid**, vendors are required to notify the City in writing, of any potential conflict of interest that may arise prior to the award of any contract and fully disclose any details thereof. Failure on the part of a vendor to declare a conflict of interest to the City and to obtain the City's prior express written consent to waive the conflict of interest shall result in the vendor being ineligible to Bid and shall form a basis for rejection of a Bid submitted to the City.

Do you have a potential conflict of interest? ☒ Yes ☐ No

Acknowledgement of Addenda

The Bidder acknowledges and agrees that any Addenda below form part of the bid document.

Please check the box in the column "**I have reviewed this addendum**" below to acknowledge each of the Addenda.

File Name	I have reviewed the below addendum and attachments (if applicable)	Pages
There have not been any addenda issued for this bid.		



City of Hamilton Report for Consideration

To: Chair and Members
Hamilton Renewable Power Inc. Board of Directors

Date: July 22, 2025

Report No: HRP25002

Subject/Title: Additional Funding Request for Consultant - Led Biogas Feasibility Study

Ward(s) Affected: City Wide

Recommendations

That the Board of Directors of Hamilton Renewable Power Inc. (HRP Inc.) **APPROVE** up to an additional \$100,000 from HRP Inc.'s Bank Account to cover the shortfall between the previously approved \$150,000 and the total project cost of \$250,000, to allow HRP Inc to proceed with award of RFP C11-40-25: Prime Consultant Services Required for Preliminary Design and Engineering of Biogas Upgrading Unit Installation and Connection to Utility Line.

Key Facts

- At the September 12, 2024, Board of Directors meeting, HRP Inc. Board directed staff to engage a consultant to develop a work plan for the biogas utilization strategy at the Woodward Wastewater Treatment Plant, to be funded from HRP Inc. Bank Account at an upset limit, including contingency, not to exceed \$150,000.
- This report presents a funding request to address the shortfall of up to \$100,000 for the biogas feasibility study and 30% design, based on the revised estimated project cost of \$250,000.
- Drawing from HRP Inc.'s bank account would enable the project to proceed without delay, allowing HRP Inc to remain agile, maintain ownership and control, and advance its strategic energy and climate goals. A successful proponent was identified through RFP C11-40-25 following a formal evaluation process.

- Project work will commence pending approval of additional funding and the procurement award process.
- HRP Inc. has committed \$150,000 to the project and submitted a Green Municipal Fund (GMF) application for matching funds prior to confirming the final project budget.

Financial Considerations

HRP Inc. has allocated \$150,000 to this initiative. The total project cost is estimated at \$250,000.

Background

At its September 12, 2024 meeting, the HRP Inc. Board directed staff to engage a consultant to develop a work plan for the biogas utilization strategy at the Woodward Wastewater Treatment Plant, to be funded from the Bank Account at an upset limit, including contingency, not to exceed \$150,000.

RFP C11-40-25 was issued in April 2025 to procure a Prime Consultant to lead the feasibility study and 30% design. The RFP closed on May 2, 2025, and two submissions were received. One submission was eliminated through legal review, and the remaining proponent was evaluated and identified as successful submission.

As the proposed project cost exceeds the Board approved budget, this report outlines a funding option to address the shortfall in budget and allow the work to proceed.

Analysis

An application was submitted to the Federation of Canadian Municipalities (FCM) Green Municipal Fund (GMF) requesting \$150,000 in matching funding, based on the original estimated budget. At the time, the final project cost had not yet been confirmed. The GMF program provides dollar-for-dollar matching for eligible expenses. This means that if the application is successful, GMF would fund approximately \$125,000, covering half the cost of the feasibility study. A response from GMF is expected between September and November 2025.

To avoid delays with the feasibility study, a funding decision is required now. To proceed without waiting for the outcome of the GMF application, HRP Inc. is proposing to draw up to an additional \$100,000 from its Bank Account to cover the funding shortfall. This approach allows the consultant-led work to begin immediately, ensuring continuity in project momentum, and maintaining flexibility to adjust the funding strategy once GMF results are known. If the GMF application is ultimately unsuccessful, HRP Inc. would remain responsible for the full project cost estimated at \$250,000.

Alternatives

1. Delay Project Until GMF Results Are Received

Under this approach, HRP Inc. would postpone the feasibility study until a funding decision is received from FCM, expected between September and November 2025. While this eliminates the need for interim funding, it would delay project advancement, potentially affect consultant availability, and stall momentum in achieving long-term climate and infrastructure goals. This approach also risks cost increases and reduced alignment with broader City initiatives. This is the second time HRP Inc. has taken this to market. As per procurement specialists' recommendation, it would be difficult to run another RFP for this requirement without treading into the potential “bid shopping” optics.

2. Scale Back Scope to \$150,000

This option would reduce the project scope to fit within the currently approved \$150,000 HRP Inc. budget. While some foundational elements of the feasibility study could proceed, key components—specifically the 30% Preliminary Design, Process Flow Diagrams (PFDs), and Preliminary Layouts—would need to be removed.

Removing these elements would limit the level of detail and completeness of the study, which could impact HRP Inc.'s ability to move efficiently into implementation. The absence of design drawings and technical layouts may also result in delays during future phases, including permitting, cost estimating, and construction planning, and could introduce additional costs at a later stage. This option represents a more conservative upfront investment but may require additional work and funding in the future.

Relationship to Council Strategic Priorities

1. Sustainable Economic & Ecological Development

- **1.2 – Facilitate the growth of key sectors**
The feasibility study supports the expansion of Hamilton's cleantech and renewable energy sectors, opening opportunities for local employment, innovation, and green investment.
- **1.3 – Accelerate our response to climate change**
The project explores scalable RNG solutions that directly contribute to reducing greenhouse gas emissions and aligning with corporate and provincial climate targets.
- **1.4 – Protect green space and waterways**
Enhanced utilization of biogas contributes to better wastewater byproduct management, reducing flaring and associated environmental impacts.

3. Responsiveness & Transparency

- **3.4 – Modernize City systems**

The study integrates sustainability into infrastructure planning and helps position HRP Inc. and Hamilton Water as leaders in low-carbon municipal operations, using data-driven decision-making.

Previous Reports Submitted

[Hamilton Renewable Power Inc. \(HRP Inc.\) Renewable Natural Gas Development \(HRP202201\)](#), Hamilton Renewable Power Inc. Board Meeting, August 30, 2022

Hamilton Renewable Power Inc. (HRP INC.), [Hamilton Renewable Power Board Meeting September 12, 2024.](#)

Consultation

- Jackie Kennedy, Acting General Manager, Public Works
- Shelley Hesmer, Treasurer of HRP Inc.
- Linda Campbell, Vice President of HRP Inc.

Appendices and Schedules Attached

None

Prepared by: Yanni Simatis, Senior Vice President of HRP Inc.

Submitted and recommended by: Jackie Kennedy, Acting General Manager
Public Works

HAMILTON RENEWABLE POWER INC.
(the "Corporation")

RESOLUTIONS OF THE BOARD OF DIRECTORS OF THE CORPORATION

1. 2023 AUDITED FINANCIAL STATEMENTS

BE IT RESOLVED that the audited financial statements for the 2023 fiscal year (attached hereto as Schedule "A") be received and approved.

2. 2024 AUDITED FINANCIAL STATEMENTS

BE IT RESOLVED that the audited financial statements for the 2024 fiscal year (attached hereto as Schedule "B") be received and approved.

3. 2025 BUDGET

BE IT RESOLVED that the 2025 budget (attached hereto as Schedule "C") be approved and adopted.

4. REPORT # HRP25001

BE IT RESOLVED that Corporation Report # HTDC25001 (attached hereto as Schedule "D") be received.

5. REPORT # HRP25002

BE IT RESOLVED that Corporation Report # HRP25002 (attached hereto as Schedule "E") be received and the recommendations contained therein be approved, namely that:

- (i) the Board of Directors of the Corporation hereby approves funding of up to One Hundred Thousand Dollars (\$100,000 CDN) to be taken from the Corporation's bank account to be used to address the shortfall between the previously approved One Hundred Fifty Thousand Dollars (\$150,000 CDN) and the total project cost of Two Hundred Fifty Thousand Dollars (\$250,000 CDN) to allow the Corporation to proceed with awarding RFP C11-40-25: Prime Consultant Services Required for Preliminary Design and Engineering of Biogas Upgrading Unit Installation and Connection to Utility Line.

6. APPOINTMENT OF PRESIDENT

BE IT RESOLVED that Jackie Kennedy is hereby appointed as President of the Corporation commencing on the date hereof and continuing thereafter until their successor is duly appointed.

7. CONFIRMATORY ACTIONS

BE IT RESOLVED that the officers of the Corporation are, and each acting alone is, hereby authorized and directed to do and perform any and all such acts, including execution of any other agreements, documents, notices, articles and/or certificates, as such officers shall deem necessary or advisable, to carry out the purposes and intent of the foregoing resolutions.

THE FOREGOING RESOLUTIONS are hereby consented to by all of the directors of the Corporation pursuant to the *Business Corporations Act* (Ontario), R.S.O. 1990, c. B.16, as evidenced by such directors' signatures hereto.

DATED the 22nd day of July, 2025.

Andrea Horwath

Maureen Wilson

Tammy Hwang

Mark Tadeson

Craig Cassar

Financial Statements of

**HAMILTON RENEWABLE
POWER INCORPORATED**

And Independent Auditor's Report Thereon

Year ended December 31, 2023

INDEPENDENT AUDITOR'S REPORT

To the Shareholder of Hamilton Renewable Power Incorporated

Opinion

We have audited the accompanying financial statements of Hamilton Renewable Power Incorporated (the "Entity"), which comprise:

- the statement of financial position as at December 31, 2023
- the statement of loss and comprehensive loss for the year then ended
- the statement of changes in equity for the year then ended
- the statement of cash flows for the year then ended
- and notes to the financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Entity as at December 31, 2023, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the ***"Auditor's Responsibilities for the Audit of the Financial Statements"*** section of our auditor's report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards (IFRS), and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusion is based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Entity to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

DRAFT

Chartered Professional Accountants, Licensed Public Accountants

Hamilton, Ontario

Date

HAMILTON RENEWABLE POWER INCORPORATED

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HAMILTON RENEWABLE POWER INCORPORATED

Statement of Financial Position

December 31, 2023, with comparative information for 2022

	2023	2022
Assets		
Current assets:		
Cash	\$ 842,315	\$ 964,365
Accounts receivable	145,681	132,584
Due from related party (note 7)	80,737	88,406
HST receivable	12,981	22,757
Payment in lieu of taxes receivable	167,405	151,803
Prepaid expenses	1,748	1,725
	1,250,867	1,361,640
Deposit (note 3)	32,000	32,000
Property, plant and equipment (note 4)	3,622,555	4,095,066
	\$ 4,905,422	\$ 5,488,706
Liabilities and Shareholder's Equity		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 98,574	\$ 133,669
Due to related party (note 7)	421,436	402,941
	520,010	536,610
Non-current liabilities:		
Deferred payment in lieu of taxes (note 6)	19,810	130,911
Total liabilities	539,820	667,521
Shareholder's equity:		
Common shares (note 5)	6,000,010	6,000,010
Deficit	(1,634,408)	(1,178,825)
	4,365,602	4,821,185
Economic dependence (note 8)		
	\$ 4,905,422	\$ 5,488,706

The accompanying notes are an integral part of these financial statements.

On behalf of the Board:

Director

Director

HAMILTON RENEWABLE POWER INCORPORATED

Statement of Loss and Comprehensive Loss

Year ended December 31, 2023, with comparative information for 2022

	2023	2022
Revenue:		
Electricity distribution service charges	\$ 1,587,232	\$ 1,489,346
Thermal energy (note 7)	243,282	170,769
	1,830,514	1,660,115
Cost of goods sold:		
Methane purchases (note 7)	473,680	486,083
Gross profit	1,356,834	1,174,032
Expenses:		
Repairs and maintenance	1,094,848	998,497
Depreciation	472,511	446,450
Professional fees	269,261	254,722
Communication charges	43,053	41,199
Insurance	67,429	62,214
Bank charges and interest	559	520
Miscellaneous	31,053	33,344
	1,978,714	1,836,946
Loss from operating activities	(621,880)	(662,914)
Finance income	39,594	16,704
Loss before recovery in lieu of taxes	(582,286)	(646,210)
Recovery in lieu of taxes (note 6):		
Current	(15,602)	(124,201)
Deferred	(111,101)	(47,020)
	(126,703)	(171,221)
Net loss and comprehensive loss	\$ (455,583)	\$ (474,989)

The accompanying notes are an integral part of these financial statements.

HAMILTON RENEWABLE POWER INCORPORATED

Statement of Changes in Equity

Year ended December 31, 2023, with comparative information for 2022

	Common shares	Deficit	Total
Balance at January 1, 2022	\$ 6,000,010	\$ (703,836)	\$ 5,296,174
Net loss and comprehensive loss	—	(474,989)	(474,989)
Dividends	—	—	—
Balance at December 31, 2022	\$ 6,000,010	\$ (1,178,825)	\$ 4,821,185
Balance at January 1, 2023	\$ 6,000,010	\$ (1,178,825)	\$ 4,821,185
Net loss and comprehensive loss	—	(455,583)	(455,583)
Dividends	—	—	—
Balance at December 31, 2023	\$ 6,000,010	\$ (1,634,408)	\$ 4,365,602

The accompanying notes are an integral part of these financial statements.

HAMILTON RENEWABLE POWER INCORPORATED

Statement of Cash Flows

Year ended December 31, 2023, with comparative information for 2022

	2023	2022
Operating activities:		
Net loss and comprehensive loss	\$ (455,583)	\$ (474,989)
Adjustments for:		
Depreciation	472,511	446,450
Recovery in lieu of income taxes expense	(15,602)	(124,201)
Finance income	(39,594)	(16,704)
Deferred payment in lieu of income taxes expense	(111,101)	(47,020)
Accounts receivable	(13,097)	14,538
HST receivable	9,776	(2,278)
Prepaid expenses	(23)	(17)
Accounts payable and accrued liabilities	(35,095)	43,341
Cash used in operating activities	(187,808)	(160,880)
Finance charges received	39,594	16,704
Payments in lieu of income taxes received	-	83,831
Net cash used in operating activities	(148,214)	(60,345)
Financing activities:		
Advances from the City of Hamilton	26,164	(131,708)
Net cash provided by (used in) financing activities	26,164	(131,708)
Decrease in cash	(122,050)	(192,053)
Cash, beginning of year	964,365	1,156,418
Cash, end of year	\$ 842,315	\$ 964,365

The accompanying notes are an integral part of these financial statements.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements

Year ended December 31, 2023

1. Purpose of the organization:

Hamilton Renewable Power Inc. ("the Entity") owns and operates two renewable power generation facilities in Hamilton, Ontario. The Woodward Plant is a 1.6 Megawatt ("MW") cogeneration facility, which is fueled by methane gas provided from the City of Hamilton's wastewater treatment facility. The Glanbrook Plant, is comprised of two 1.6 MW generators (3.2 MW in total) and is fueled by methane gas provided by a landfill gas collection system in the Glanbrook Landfill. Electricity produced by both plants is sold to the Independent Electricity System Operator. Thermal energy produced at Woodward is used by the wastewater treatment facility processes and for space heating.

The address of the Entity's registered office is 71 Main Street West, Hamilton, Ontario, Canada.

2. Material accounting policies:

a) Basis of presentation:

These financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

These financial statements were authorized by the Board of Directors on **DATE**.

b) Functional and presentation currency:

These financial statements are presented in Canadian dollars, which is the Entity's functional currency.

c) Revenue recognition:

Electricity distribution and thermal energy service charges

These charges comprise charges to customers for use of the Entity's electricity and thermal distribution systems. The performance obligations are recognized over time using an output method to measure the satisfaction of the performance obligation. The value of the electricity and thermal services transferred to the customer is determined on the basis of cyclical meter readings plus estimated customer usage since the last meter reading date to the end of the year and represents the amount that the Entity has the right to bill.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2023

2. Material accounting policies (continued):

d) Expenses:

Expenses are reported on the accrual basis of accounting which recognizes expenses as they are incurred and measurable as a result of a receipt of goods or services and the creation of a legal obligation to pay.

e) Property, plant and equipment and depreciation:

Property, plant and equipment and depreciation are initially recorded at acquisition cost or manufacturing cost, including any costs directly attributable to bringing the assets to the location and condition necessary for it to be capable of operating in the manner intended by the Entity's management. All property, plant and equipment are subsequently measured using the cost model, cost less accumulated depreciation and impairment losses.

Depreciation is calculated on a straight-line basis over the estimated service life of property, plant and equipment, less its residual value as follows:

Asset	Service life
Building	20 years
Generating equipment	45,000-180,000 hours
Interconnect to Grid	20 years
Pipeline	20 years

Material residual value estimates and estimates of useful life are updated as required, but are reviewed at least annually.

Gains or losses arising on the disposal of property, plant and equipment are determined as the difference between the disposal proceeds and the carrying amount of the assets and are recognized in profit or loss.

f) Impairment:

(i) Financial assets measured at amortized cost:

A loss allowance for expected credit losses on financial assets measured at amortized cost is recognized at the reporting date. The loss allowance is measured at an amount equal to the lifetime expected credit losses for the asset.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2023

2. Material accounting policies (continued):

f) Impairment (continued):

(ii) Non-financial assets:

The carrying amounts of the Entity's non-financial assets, other than materials and supplies and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

For the purpose of impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit" or "CGU"). The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

An impairment loss is recognized if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss.

g) Payments in Lieu of Taxes ("PILs"):

The Entity is currently exempt from taxes under the Income Tax Act of Canada ("ITA") and the Ontario Corporations Tax Act ("OCTA"). Pursuant to the Electricity Act, 1998 (Ontario) ("EA"), the Entity is required to compute taxes under the ITA and OCTA and remit such amounts to the Ontario Electricity Financial Corporation ("OEFC").

Current tax comprises the expected tax payable or receivable on the taxable income or loss for the year using rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable with respect to previous years.

Deferred tax assets and liabilities is recognized in respect of temporary differences between the tax basis of assets and liabilities and their respective carrying amounts for accounting purposes. A deferred tax asset is recognized to the extent that it is probable that future taxable income will be available against which the temporary difference can be utilized. Deferred tax assets and liabilities are measured using enacted or substantively enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the date of enactment or substantive enactment.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2023

2. Material accounting policies (continued):

h) Equity and dividend payments:

Share capital represents the nominal value of shares that have been issued. Retained earnings include all current and prior period retained profits. Dividend distributions payable to the shareholder are included in liabilities when the dividends have been approved in a general meeting prior to the reporting date.

All transactions with the shareholder are recorded separately within equity.

i) Financial instruments:

All financial instruments are recognized on the balance sheet when the Entity becomes a party to the contractual provision of the financial instrument and are measured initially at fair value adjusted by transactions costs, except for those carried at fair value through profit or loss which are measured initially at fair value. Subsequent measurement of all financial assets and liabilities, except those held-for-trading and available for sale, are measured at amortized cost determined using the effective interest rate method.

All financial assets and financial liabilities are classified as amortized cost. These financial instruments are recognized initially at fair value plus any directly attributable transaction costs. Subsequently, they are measured at amortized cost using the effective interest method less any impairment for the financial assets as described in note 1 (f). The Entity does not enter into derivative instruments.

j) Capital disclosures:

The Entity is not subject to externally imposed capital requirements and there has been no change with respect to the overall capital risk management strategy during the year.

k) Provisions:

A provision is recognized if, as a result of a past event, the Entity has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic resources will be required to settle the obligation.

l) Finance income and finance charges:

Finance income is recognized as it accrues in net income and comprises interest earned on cash and cash equivalents.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2023

2. Material accounting policies (continued):

m) Estimation uncertainty:

The preparation of financial statements requires that the Entity's management make assumptions and estimates of effects of uncertain future events on the carrying amounts of the Entity's assets and liabilities at the end of each reporting period. Actual results may differ from those estimates as the estimation process is inherently uncertain. Actual future outcomes could differ from present estimates and assumptions potentially having a material future effect on the Entity's historical experience and other facts and circumstances. Revisions to estimates and the resulting effects on the carrying amounts of the Entity's assets and liabilities are accounted for prospectively.

Areas requiring the use of assumptions and that have a risk of resulting in adjustments to the carrying amounts of the Entity's assets and liabilities are as follows:

Useful lives of depreciable assets

Management reviews its estimate of useful lives of depreciable assets at each reporting date, based on the expected utility of the assets. Uncertainties in these estimates relate to technical obsolescence that may change the utility of the asset.

Impairment of property, plant and equipment

Management reviews property, plant and equipment for possible impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable

n) New accounting policy changes adopted in 2023:

• Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2)

The amendments to IAS 1 help companies provide useful accounting policy disclosures. The key amendments include:

- requiring companies to disclose their material accounting policies rather than their significant accounting policies;
- clarifying that accounting policies related to immaterial transactions, other events or conditions are themselves immaterial and as such need not be disclosed; and
- clarifying that not all accounting policies that relate to material transactions, other events or conditions are themselves material to a company's financial statements.

The amendments were effective on January 1, 2023 and were applied prospectively. The implementation of these amendments did not have a significant impact on the Entity's consolidated financial statements.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2023

2. Material accounting policies (continued):

n) New accounting policy changes adopted in 2023 (continued):

- Changes in Accounting Estimates and Errors (Amendments to IAS 8)

The amendments to IAS 8 provide guidance to assist entities in distinguishing between accounting policies and accounting estimates. The amendments replace the definition of a change in accounting estimates with the definition of accounting estimates. Under the new definition, accounting estimates are monetary amounts in financial statements that are subject to measurement uncertainty. The amendments also clarify that a change in accounting estimate that results from new information or new developments is not the correction of an error. The amendments were effective on January 1, 2023 and were applied prospectively. The implementation of these amendments did not have a significant impact on the Entity's consolidated financial statements.

o) New standards and interpretations not yet adopted:

The following amended standards and interpretations are effective on or after January 1, 2024. The Entity is still assessing the impact of adopting these amendments on its future financial statements:

- Presentation of Financial Statements (Amendments to IAS 1)

The amendments to IAS 1 provide a more general approach to the classification of liabilities based on the contractual arrangements in place at the reporting date and clarify that the classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period. The amendments are to be applied retrospectively and are effective for annual reporting periods beginning on or after January 1, 2024.

- Investments in Associates and Joint Venture (Amendments to IFRS 10 and IAS 28)

The amendments to IFRS 10 and IAS 28 were to address a conflict between the standards and clarify that in a transaction involving an associate or joint venture, the extent of gain or loss recognition depends on whether the assets sold or contributed, constitute a business. The effective date of these amendments is yet to be determined; however early adoption is permitted.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2023

3. Deposit:

The balance is made up of a security deposit of \$32,000 (2022 - \$32,000) paid to the Ontario Electricity Financial Corporation ("OEFC"). On December 23, 2004, Hamilton Renewable Power Inc. (then called Hamilton Hydro Energy Inc.) signed a Renewable Power Energy Supply contract with the OEFC, which was subsequently transferred by the OEFC to the Independent Electricity System Operator ("IESO"), for the supply of 1.6 MW of electricity. During 2007, the IESO determined the security required under this contract to be \$32,000.

4. Property, plant and equipment:

	Building	Generating equipment	Interconnect to grid	Pipeline	Total
<i>Cost or deemed cost</i>					
Balance at January 1, 2022	\$ 498,509	\$ 8,278,911	\$ 2,659,720	\$ 1,528,917	\$ 12,966,057
Additions	—	—	—	—	—
Transfers	—	—	—	—	—
Disposals	—	—	—	—	—
Balance at December 31, 2022	\$ 498,509	\$ 8,278,911	\$ 2,659,720	\$ 1,528,917	\$ 12,966,057
Balance at January 1, 2023	\$ 498,509	\$ 8,278,911	\$ 2,659,720	\$ 1,528,917	\$ 12,966,057
Additions	—	—	—	—	—
Transfers	—	—	—	—	—
Disposals	—	—	—	—	—
Balance at December 31, 2023	\$ 498,509	\$ 8,278,910	\$ 2,659,720	\$ 1,528,917	\$ 12,966,057
<i>Accumulated Depreciation</i>					
Balance at January 1, 2022	\$ 366,342	\$ 5,212,796	\$ 1,780,689	\$ 1,064,714	\$ 8,424,541
Additions	24,925	212,093	132,986	76,446	446,450
Transfers	—	—	—	—	—
Disposals	—	—	—	—	—
Balance at December 31, 2022	\$ 391,267	\$ 5,424,889	\$ 1,913,675	\$ 1,141,160	\$ 8,870,991
Balance at January 1, 2023	\$ 391,267	\$ 5,424,889	\$ 1,913,675	\$ 1,141,160	\$ 8,870,991
Additions	24,925	238,154	132,986	76,446	472,511
Transfers	—	—	—	—	—
Disposals	—	—	—	—	—
Balance at December 31, 2023	\$ 416,192	\$ 5,663,042	\$ 2,046,661	\$ 1,217,606	\$ 9,343,502
<i>Carrying amount</i>					
December 31, 2022	\$ 107,242	\$ 2,854,022	\$ 746,045	\$ 387,757	\$ 4,095,066
December 31, 2023	\$ 82,317	\$ 2,615,868	\$ 613,059	\$ 311,311	\$ 3,622,555

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2023

5. Common shares:

The Entity is authorized to issue an unlimited number of common shares. Any invitation to the public to subscribe for shares of the Entity is prohibited.

	2023	2022
Issued:		
600,001 Common shares	\$ 6,000,010	\$ 6,000,010

The Entity did not pay any dividends in the year on common shares (2022 - \$nil).

6. Payments in lieu of income taxes:

The provision for payments in lieu of income taxes ("PILs") recognized in income is as follows:

	2023	2022
Current PILs:		
Current year recovery	\$ (15,602)	\$ (124,201)
Deferred PILs:		
Origination and reversal of temporary differences	(111,101)	(47,020)
	\$ (126,703)	\$ (171,221)

Reconciliation of effective tax rate

The provision for PILs is computed by applying the Entity's combined statutory income tax rate of 26.5% (2022 – 26.5%) to income before payment in lieu of taxes.

Deferred payments in lieu of income tax

Significant component of the Entity's deferred PILs is as follows:

	2023	2022
Deferred PILs liability:		
Property, plant and equipment	\$ 19,810	\$ 130,911

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2023

7. Related party transactions:

The Entity sold \$243,282 (2022 - \$170,769) of thermal energy to the sole shareholder, the City of Hamilton, and incurred methane purchase costs of \$473,680 (2022 - \$486,083) from the City of Hamilton, which are included in cost of goods sold. These transactions are recorded at fair value.

The Entity paid \$261,761 (2022 - \$247,955) to the City of Hamilton for administrative support.

The Entity paid \$167,070 (2022 - \$197,770) to a corporation under common control for operation charges related to the Woodward co-generation facility.

These transactions are in the normal course of operations and are measured at the exchange amount as agreed upon by the related parties.

Amounts due to and from related party included in current assets \$80,737 (2022 - \$88,406) and current liabilities \$421,436 (2022 - \$402,941) were due to/from the City of Hamilton. These balances have payment terms of net 30, with interest accruing at prime plus 2%.

8. Economic dependence:

The Entity earns thermal energy revenue from the City of Hamilton and electricity generated revenue from the Independent Electricity System Operator based on the terms of two supply contracts that expire in July 2026 and November 2028.

9. Financial instruments:

Fair value

The carrying value of the Entity's financial instruments as at December 31, 2023 approximate fair value.

Financial risk management

The types of financial risk exposure and the way in which such exposure is managed by the Entity are as follows:

Credit risk

The Entity's exposure to credit risk is influenced mainly by the individual characteristics of each customer. 100% of the Entity's revenue is attributable to sales transactions with three customers. The carrying amounts of the Entity's accounts receivable is reduced through the use of an allowance for impairment and the amount of the related impairment loss is recognized in net income. The balance of the allowance for impairment as at December 31, 2023 is \$nil (2022 - \$nil). The Entity's exposure to credit risk and management of this risk has not changed from the previous year. Management believes that the exposure is minimal as all amounts receivable are not past due.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2023

9. Financial instruments (continued):

Liquidity risk

Liquidity risk is the risk that the Entity will be unable to meet its financial obligations as they become due. The Entity manages liquidity risk by ensuring that it has sufficient cash available to meet its obligations. The Entity forecasts cash flows for a period of 12 months to identify financial requirements. These requirements are met through cash flows from operations. Management believes that the Entity's exposure to liquidity risk and management of this risk has not changed from the previous year.

At December 31, 2023, the Entity's current liabilities consisted of accounts payable and accrued liabilities and due to related party. The Entity's cash and cash equivalents together with projected cash flows over the next 12 months is sufficient to pay these current liabilities.

Financial Statements of

**HAMILTON RENEWABLE
POWER INCORPORATED**

And Independent Auditor's Report Thereon

Year ended December 31, 2024

INDEPENDENT AUDITOR'S REPORT

To the Shareholder of Hamilton Renewable Power Incorporated

Opinion

We have audited the accompanying financial statements of Hamilton Renewable Power Incorporated (the "Entity"), which comprise:

- the statement of financial position as at December 31, 2024
- the statement of loss and comprehensive loss for the year then ended
- the statement of changes in equity for the year then ended
- the statement of cash flows for the year then ended
- and notes to the financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Entity as at December 31, 2024, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the ***"Auditor's Responsibilities for the Audit of the Financial Statements"*** section of our auditor's report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards (IFRS), and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusion is based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Entity to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

DRAFT

Chartered Professional Accountants, Licensed Public Accountants

Hamilton, Ontario

Date

HAMILTON RENEWABLE POWER INCORPORATED

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HAMILTON RENEWABLE POWER INCORPORATED

Statement of Financial Position

December 31, 2024, with comparative information for 2023

	2024	2023
Assets		
Current assets:		
Cash	\$ 850,084	\$ 842,315
Accounts receivable	175,306	145,681
Due from related party (note 7)	76,730	80,737
HST receivable	-	12,981
Payment in lieu of taxes receivable	-	167,405
Prepaid expenses	1,748	1,748
	1,103,868	1,250,867
Deposit (note 3)	32,000	32,000
Property, plant and equipment (note 4)	3,123,064	3,622,555
Deferred payment in lieu of taxes receivable (note 6)	245,634	-
	\$ 4,504,566	\$ 4,905,422
Liabilities and Shareholder's Equity		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 116,870	98,574
Due to related party (note 7)	398,250	421,436
HST payable	16,346	-
	531,466	520,010
Non-current liabilities:		
Deferred payment in lieu of taxes (note 6)	-	19,810
Total liabilities	531,466	539,820
Shareholder's equity:		
Common shares (note 5)	6,000,010	6,000,010
Deficit	(2,026,910)	(1,634,408)
	3,973,100	4,365,602
Economic dependence (note 8)		
	\$ 4,504,566	\$ 4,905,422

The accompanying notes are an integral part of these financial statements.

On behalf of the Board:

Director

Director

HAMILTON RENEWABLE POWER INCORPORATED

Statement of Loss and Comprehensive Loss

Year ended December 31, 2024, with comparative information for 2023

	2024	2023
Revenue:		
Electricity distribution service charges	\$ 1,725,831	\$ 1,587,232
Thermal energy (note 7)	289,720	243,282
	2,015,551	1,830,514
Cost of goods sold:		
Methane purchases (note 7)	500,793	473,680
Gross profit	1,514,758	1,356,834
Expenses:		
Repairs and maintenance	1,150,210	1,094,848
Depreciation	499,491	472,511
Professional fees	287,755	269,261
Communication charges	44,861	43,053
Insurance	67,535	67,429
Bank charges and interest	482	559
Miscellaneous	32,394	31,053
	2,082,728	1,978,714
Loss from operating activities	(567,970)	(621,880)
Finance income	34,227	39,594
Loss before recovery in lieu of taxes	(533,743)	(582,286)
Payment (recovery) in lieu of taxes (note 6):		
Current	124,203	(15,602)
Deferred	(265,444)	(111,101)
	(141,241)	(126,703)
Net loss and comprehensive loss	\$ (392,502)	\$ (455,583)

The accompanying notes are an integral part of these financial statements.

HAMILTON RENEWABLE POWER INCORPORATED

Statement of Changes in Equity

Year ended December 31, 2024, with comparative information for 2023

	Common shares	Deficit	Total
Balance at January 1, 2023	\$ 6,000,010	\$ (1,178,825)	\$ 4,821,185
Net loss and comprehensive loss	—	(455,583)	(455,583)
Dividends	—	—	—
Balance at December 31, 2023	\$ 6,000,010	\$ (1,634,408)	\$ 4,365,602
Balance at January 1, 2024	\$ 6,000,010	\$ (1,634,408)	\$ 4,365,602
Net loss and comprehensive loss	—	(392,502)	(392,502)
Dividends	—	—	—
Balance at December 31, 2024	\$ 6,000,010	\$ (2,026,910)	\$ 3,973,100

The accompanying notes are an integral part of these financial statements.

HAMILTON RENEWABLE POWER INCORPORATED

Statement of Cash Flows

Year ended December 31, 2024, with comparative information for 2023

	2024	2023
Operating activities:		
Net loss and comprehensive loss	\$ (392,502)	\$ (455,583)
Adjustments for:		
Depreciation	499,491	472,511
Recovery in lieu of income taxes expense	124,203	(15,602)
Finance income	(34,227)	(39,594)
Deferred payment in lieu of income taxes expense	(265,444)	(111,101)
Accounts receivable	(29,625)	(13,097)
HST payable	29,327	9,776
Prepaid expenses	—	(23)
Accounts payable and accrued liabilities	18,296	(35,095)
Cash used in operating activities	(50,481)	(187,808)
Finance charges received	34,227	39,594
Income taxes refund received	43,202	-
Net cash used in operating activities	26,948	(148,214)
Financing activities:		
Advances from the City of Hamilton	(19,179)	26,164
Net cash (used in) provided by financing activities	(19,179)	26,164
Increase (decrease) in cash	7,769	(122,050)
Cash, beginning of year	842,315	964,365
Cash, end of year	\$ 850,084	\$ 842,315

The accompanying notes are an integral part of these financial statements.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements

Year ended December 31, 2024

1. Purpose of the organization:

Hamilton Renewable Power Inc. ("the Entity") owns and operates two renewable power generation facilities in Hamilton, Ontario. The Woodward Plant is a 1.6 Megawatt ("MW") cogeneration facility, which is fueled by methane gas provided from the City of Hamilton's wastewater treatment facility. The Glanbrook Plant, is comprised of two 1.6 MW generators (3.2 MW in total) and is fueled by methane gas provided by a landfill gas collection system in the Glanbrook Landfill. Electricity produced by both plants is sold to the Independent Electricity System Operator. Thermal energy produced at Woodward is used by the wastewater treatment facility processes and for space heating.

The address of the Entity's registered office is 71 Main Street West, Hamilton, Ontario, Canada.

2. Material accounting policies:

In February 2021, the IASB amended IAS 1, Presentation of Financial Statements, and IFRS Practice Statement 2, Making Materiality Judgements, to require entities to disclose material accounting policies rather than significant accounting policies. Further amendments to IAS 1 were made to explain how an entity can identify a material accounting policy. The amendments did not have a material impact on the Entity's financial statements. The accounting policies set out below have been applied consistently in all years presented in these financial statements.

a) Basis of presentation:

These financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

These financial statements were authorized by the Board of Directors on **DATE**.

b) Functional and presentation currency:

These financial statements are presented in Canadian dollars, which is the Entity's functional currency.

c) Revenue recognition:

Electricity distribution and thermal energy service charges

These charges comprise charges to customers for use of the Entity's electricity and thermal distribution systems. The performance obligations are recognized over time using an output method to measure the satisfaction of the performance obligation. The value of the electricity and thermal services transferred to the customer is determined on the basis of cyclical meter readings plus estimated customer usage since the last meter reading date to the end of the year and represents the amount that the Entity has the right to bill.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2024

2. Material accounting policies (continued):

d) Expenses:

Expenses are reported on the accrual basis of accounting which recognizes expenses as they are incurred and measurable as a result of a receipt of goods or services and the creation of a legal obligation to pay.

e) Property, plant and equipment and depreciation:

Property, plant and equipment and depreciation are initially recorded at acquisition cost or manufacturing cost, including any costs directly attributable to bringing the assets to the location and condition necessary for it to be capable of operating in the manner intended by the Entity's management. All property, plant and equipment are subsequently measured using the cost model, cost less accumulated depreciation and impairment losses.

Depreciation is calculated on a straight-line basis over the estimated service life of property, plant and equipment, less its residual value as follows:

Asset	Service life
Building	20 years
Generating equipment	45,000-180,000 hours
Interconnect to Grid	20 years
Pipeline	20 years

Material residual value estimates and estimates of useful life are updated as required, but are reviewed at least annually.

Gains or losses arising on the disposal of property, plant and equipment are determined as the difference between the disposal proceeds and the carrying amount of the assets and are recognized in profit or loss.

f) Impairment:

(i) Financial assets measured at amortized cost:

A loss allowance for expected credit losses on financial assets measured at amortized cost is recognized at the reporting date. The loss allowance is measured at an amount equal to the lifetime expected credit losses for the asset.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2024

2. Material accounting policies (continued):

f) Impairment (continued):

(ii) Non-financial assets:

The carrying amounts of the Entity's non-financial assets, other than materials and supplies and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

For the purpose of impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit" or "CGU"). The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

An impairment loss is recognized if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss.

g) Payments in Lieu of Taxes ("PILs"):

The Entity is currently exempt from taxes under the Income Tax Act of Canada ("ITA") and the Ontario Corporations Tax Act ("OCTA"). Pursuant to the Electricity Act, 1998 (Ontario) ("EA"), the Entity is required to compute taxes under the ITA and OCTA and remit such amounts to the Ontario Electricity Financial Corporation ("OEFC").

Current tax comprises the expected tax payable or receivable on the taxable income or loss for the year using rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable with respect to previous years.

Deferred tax assets and liabilities is recognized in respect of temporary differences between the tax basis of assets and liabilities and their respective carrying amounts for accounting purposes. A deferred tax asset is recognized to the extent that it is probable that future taxable income will be available against which the temporary difference can be utilized. Deferred tax assets and liabilities are measured using enacted or substantively enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the date of enactment or substantive enactment.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2024

2. Material accounting policies (continued):

h) Equity and dividend payments:

Share capital represents the nominal value of shares that have been issued. Retained earnings include all current and prior period retained profits. Dividend distributions payable to the shareholder are included in liabilities when the dividends have been approved in a general meeting prior to the reporting date.

All transactions with the shareholder are recorded separately within equity.

i) Financial instruments:

All financial instruments are recognized on the balance sheet when the Entity becomes a party to the contractual provision of the financial instrument and are measured initially at fair value adjusted by transactions costs, except for those carried at fair value through profit or loss which are measured initially at fair value. Subsequent measurement of all financial assets and liabilities, except those held-for-trading and available for sale, are measured at amortized cost determined using the effective interest rate method.

All financial assets and financial liabilities are classified as amortized cost. These financial instruments are recognized initially at fair value plus any directly attributable transaction costs. Subsequently, they are measured at amortized cost using the effective interest method less any impairment for the financial assets as described in note 1 (f). The Entity does not enter into derivative instruments.

j) Capital disclosures:

The Entity is not subject to externally imposed capital requirements and there has been no change with respect to the overall capital risk management strategy during the year.

k) Provisions:

A provision is recognized if, as a result of a past event, the Entity has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic resources will be required to settle the obligation.

l) Finance income and finance charges:

Finance income is recognized as it accrues in net income and comprises interest earned on cash and cash equivalents.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2024

2. Material accounting policies (continued):

m) Estimation uncertainty:

The preparation of financial statements requires that the Entity's management make assumptions and estimates of effects of uncertain future events on the carrying amounts of the Entity's assets and liabilities at the end of each reporting period. Actual results may differ from those estimates as the estimation process is inherently uncertain. Actual future outcomes could differ from present estimates and assumptions potentially having a material future effect on the Entity's historical experience and other facts and circumstances. Revisions to estimates and the resulting effects on the carrying amounts of the Entity's assets and liabilities are accounted for prospectively.

Areas requiring the use of assumptions and that have a risk of resulting in adjustments to the carrying amounts of the Entity's assets and liabilities are as follows:

Useful lives of depreciable assets

Management reviews its estimate of useful lives of depreciable assets at each reporting date, based on the expected utility of the assets. Uncertainties in these estimates relate to technical obsolescence that may change the utility of the asset.

Impairment of property, plant and equipment

Management reviews property, plant and equipment for possible impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable

3. Deposit:

The balance is made up of a security deposit of \$32,000 (2022 - \$32,000) paid to the Ontario Electricity Financial Corporation ("OEFC"). On December 23, 2004, Hamilton Renewable Power Inc. (then called Hamilton Hydro Energy Inc.) signed a Renewable Power Energy Supply contract with the OEFC, which was subsequently transferred by the OEFC to the Independent Electricity System Operator ("IESO"), for the supply of 1.6 MW of electricity. During 2007, the IESO determined the security required under this contract to be \$32,000.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2024

4. Property, plant and equipment:

	Building	Generating equipment	Interconnect to grid	Pipeline	Total
<i>Cost or deemed cost</i>					
Balance at January 1, 2023	\$ 498,509	\$ 8,278,911	\$ 2,659,720	\$ 1,528,917	\$ 12,966,057
Additions	—	—	—	—	—
Transfers	—	—	—	—	—
Disposals	—	—	—	—	—
Balance at December 31, 2023	\$ 498,509	\$ 8,278,911	\$ 2,659,720	\$ 1,528,917	\$ 12,966,057
Balance at January 1, 2024	\$ 498,509	\$ 8,278,911	\$ 2,659,720	\$ 1,528,917	\$ 12,966,057
Additions	—	—	—	—	—
Transfers	—	—	—	—	—
Disposals	—	—	—	—	—
Balance at December 31, 2024	\$ 498,509	\$ 8,278,911	\$ 2,659,720	\$ 1,528,917	\$ 12,966,057
<i>Accumulated Depreciation</i>					
Balance at January 1, 2023	\$ 391,267	\$ 5,424,889	\$ 1,913,675	\$ 1,141,160	\$ 8,870,991
Additions	24,925	238,154	132,986	76,446	472,511
Transfers	—	—	—	—	—
Disposals	—	—	—	—	—
Balance at December 31, 2023	\$ 416,192	\$ 5,663,043	\$ 2,046,661	\$ 1,217,606	\$ 9,343,502
Balance at January 1, 2024	\$ 416,192	\$ 5,663,043	\$ 2,046,661	\$ 1,217,606	\$ 9,343,502
Additions	24,925	265,134	132,986	76,446	499,491
Transfers	—	—	—	—	—
Disposals	—	—	—	—	—
Balance at December 31, 2024	\$ 441,117	\$ 5,928,177	\$ 2,179,647	\$ 1,294,052	\$ 9,842,993
<i>Carrying amount</i>					
December 31, 2023	\$ 82,317	\$ 2,615,868	\$ 613,059	\$ 311,311	\$ 3,622,555
December 31, 2024	\$ 57,392	\$ 2,350,734	\$ 480,073	\$ 234,865	\$ 3,123,064

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2024

5. Common shares:

The Entity is authorized to issue an unlimited number of common shares. Any invitation to the public to subscribe for shares of the Entity is prohibited.

	2024	2023
Issued:		
600,001 Common shares	\$ 6,000,010	\$ 6,000,010

The Entity did not pay any dividends in the year on common shares (2023 - \$nil).

6. Payments in lieu of income taxes:

The provision for payments in lieu of income taxes ("PILs") recognized in income is as follows:

	2024	2023
Current PILs:		
Current year expense (recovery)	\$ 124,203	\$ (15,602)
Deferred PILs:		
Origination and reversal of temporary differences	(265,444)	(111,101)
	\$ (141,241)	\$ (126,703)

Reconciliation of effective tax rate

The provision for PILs is computed by applying the Entity's combined statutory income tax rate of 26.5% (2023 – 26.5%) to income before payment in lieu of taxes.

Deferred payments in lieu of income tax

Significant component of the Entity's deferred PILs is as follows:

	2024	2023
Deferred PILs asset (liability):		
Property, plant and equipment	\$ (19,810)	\$ (71,130)
Non-capital loss	265,444	51,320
	\$ 245,634	\$ (19,810)

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2024

7. Related party transactions:

The Entity sold \$289,720 (2023 - \$243,282) of thermal energy to the sole shareholder, the City of Hamilton, and incurred methane purchase costs of \$500,793 (2023 - \$473,680) from the City of Hamilton, which are included in cost of goods sold. These transactions are recorded at fair value.

The Entity paid \$280,255 (2023 - \$261,761) to the City of Hamilton for administrative support.

The Entity paid \$178,646 (2023 - \$167,070) to a corporation under common control for operation charges related to the Woodward co-generation facility.

These transactions are in the normal course of operations and are measured at the exchange amount as agreed upon by the related parties.

Amounts due to and from related party included in current assets \$76,730 (2023 - \$80,737) and current liabilities \$398,251 (2023 - \$421,436) were due to/from the City of Hamilton. These balances have payment terms of net 30, with interest accruing at prime plus 2%.

8. Economic dependence:

The Entity earns thermal energy revenue from the City of Hamilton and electricity generated revenue from the Independent Electricity System Operator based on the terms of two supply contracts that expire in July 2026 and November 2028.

9. Financial instruments:

Fair value

The carrying value of the Entity's financial instruments as at December 31, 2024 approximate fair value.

Financial risk management

The types of financial risk exposure and the way in which such exposure is managed by the Entity are as follows:

Credit risk

The Entity's exposure to credit risk is influenced mainly by the individual characteristics of each customer. 100% of the Entity's revenue is attributable to sales transactions with three customers. The carrying amounts of the Entity's accounts receivable is reduced through the use of an allowance for impairment and the amount of the related impairment loss is recognized in net income. The balance of the allowance for impairment as at December 31, 2024 is \$nil (2023 - \$nil). The Entity's exposure to credit risk and management of this risk has not changed from the previous year. Management believes that the exposure is minimal as all amounts receivable are not past due.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2024

9. Financial instruments (continued):

Liquidity risk

Liquidity risk is the risk that the Entity will be unable to meet its financial obligations as they become due. The Entity manages liquidity risk by ensuring that it has sufficient cash available to meet its obligations. The Entity forecasts cash flows for a period of 12 months to identify financial requirements. These requirements are met through cash flows from operations. Management believes that the Entity's exposure to liquidity risk and management of this risk has not changed from the previous year.

At December 31, 2024, the Entity's current liabilities consisted of accounts payable and accrued liabilities and due to related party. The Entity's cash and cash equivalents together with projected cash flows over the next 12 months is sufficient to pay these current liabilities.

10. New standards and interpretations not yet effective:

The following new accounting standards/amendments have been published by the International Accounting Standards Board (IASB) but are not effective as at December 31, 2024, and have not been adopted in these financial statements:

Classification and measurement of financial instruments (amendments to IFRS 9 and IFRS 7)

In May 2024, the IASB issued Amendments to the classification and Measurement of Financial Instruments which amended IFRS 9 and IFRS 7. The requirements will be effective for annual reporting periods beginning on or after January 1, 2025, with early adoption permitted, and are related to:

- settling financial liabilities using electronic payments systems; and
- assessing contractual cash flow characteristics of financial assets, including those with sustainability-linked features.

The Entity is in the process of assessing the impact of the new amendments.

IFRS 18 Presentation and Disclosures in Financial Statements

IFRS 18 will replace IAS 1 Presentation of Financial Statements and applies for annual reporting periods beginning on or after January 1, 2027. The new standard introduces the following key new requirements:

- entities are required to classify all income and expenses into five categories in the statement of comprehensive income, namely the operating, investing, financing, discontinued operations and income tax categories. Entities are also required to present a newly-defined operating profit subtotal. Entities' net profit will not change.
- management-defined performance measures ("MPMs") are disclosed in a single note in the financial statements.
- enhanced guidance is provided on how to group information in the financial statements.

HAMILTON RENEWABLE POWER INCORPORATED

Notes to Financial Statements (continued)

Year ended December 31, 2024

10. New standards and interpretations not yet effective (continued):

In addition, all entities are required to use the operating profit subtotal as the starting point for the statement of cash flows when presenting operating cash flows under the indirect method.

The Entity is in the process of assessing the impact of the new standard, particularly with respect to the structure of the Corporation's statement of comprehensive income, statement of cash flows and the additional disclosure required for MPMs. The Corporation is also assessing the impact on how information is grouped in the financial statements, including for items currently labeled as 'other'.

DRAFT

HAMILTON RENEWABLE POWER INC.
2025 DRAFT OPERATING BUDGET

July 22, 2024

FISCAL PERIOD: JANUARY 1 TO DECEMBER 31, 2025

		2024			2025		
		Approved Budget	Actuals	Variance	Draft Budget	\$ Change	% Change
Revenue							
Electricity Generation		\$ 1,714,480	\$ 1,725,831	\$ 11,351	\$ 1,842,850	\$ 128,370	7.5%
Thermal Energy Sales		261,020	289,720	28,700	303,770	42,750	16.4%
Interest Earned		39,600	34,227	(5,373)	26,920	(12,680)	-32.0%
Total Revenue		\$ 2,015,100	\$ 2,049,778	\$ 34,678	\$ 2,173,540	\$ 158,440	7.9%
Cost of Goods Sold							
Methane Gas		\$ 474,200	\$ 500,793	\$ (26,593)	\$ 522,830	\$ (48,630)	-10.3%
Gross Profit		\$ 1,540,900	\$ 1,548,985	\$ 8,085	\$ 1,650,710	\$ 109,810	7.1%
Expenses							
Operations Charge		\$ 479,080	\$ 475,527	\$ 3,553	\$ 485,480	\$ (6,400)	-1.3%
Maintenance Contracts		637,270	672,548	(35,278)	720,090	(82,820)	-13.0%
Unscheduled Maintenance		12,000	2,135	9,865	17,890	(5,890)	-49.1%
Dues and Subscriptions		2,400	2,900	(500)	2,400	-	0.0%
Software/Hardware Expense		-	-	-	-	-	
Communications		46,770	44,861	1,909	45,680	1,090	2.3%
Utilities (Electric)		25,800	25,569	231	25,300	500	1.9%
Portable Toilet Rental		1,620	1,765	(145)	1,620	-	0.0%
Ground Maintenance		2,000	2,160	(160)	2,160	(160)	-8.0%
Insurance		67,530	67,535	(5)	73,610	(6,080)	-9.0%
Professional Fees							
	Consulting	150,000	-	150,000	150,000	-	100.0%
	Legal	55,860	55,860	-	55,860	-	0.0%
	Audit	7,500	7,500	-	7,500	-	0.0%
	City Staff	216,000	224,395	(8,395)	216,000	-	0.0%
Financial Charges							
	Bank Service	560	482	78	480	80	14.3%
Non Operating Expenses							
	Depreciation	479,950	499,492	(19,542)	511,700	(31,750)	-6.6%
Total Expenses		\$ 2,184,340	\$ 2,082,728	\$ 101,612	\$ 2,315,770	\$ (131,430)	-6.0%
Net Income Before Taxes		(643,440)	(533,743)	109,697	(665,060)	(21,620)	3.4%
Current and Deferred PIL Taxes		(170,510)	(141,241)	(29,269)	(176,250)	5,740	-3.4%
Net Income After Taxes		\$ (472,930)	\$ (392,502)	\$ 80,428	\$ (488,810)	\$ (15,880)	3.4%

Summary of Benefits of HRP Inc. Operations to City of Hamilton

		2024			2025		
		Approved Budget	Actuals	Variance	Draft Budget	\$ Change	% Change
Dividend	*	\$ -	\$ -	\$ -	** \$ -	\$ -	0.0%
Methane Gas Purchased		474,200	500,793	26,593	522,830	48,630	10.3%
Professional Fees - City staff		271,860	280,255	8,395	271,860	-	0.0%
Total Net Benefit to City		\$ 746,060	\$ 781,048	\$ 34,988	\$ 794,690	\$ 48,630	6.5%

Dividend Calculation:

- * 2024 budgeted dividend equal \$0 due to reported net loss in 2023
- ** 2025 budgeted dividend eqaul \$0 due to reported net loss in 2024