Office of the Auditor General

Audit of Recreation, Cultural and Facility Services Department – Building Engineering and Energy Management

Tabled at Audit Committee
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Original signed by:

Auditor General

Executive summary

Purpose

The audit examined key management systems, practices and processes within Building Engineering and Energy Management (BEEM) to ensure the unit is effectively contributing to the achievement of defined City energy efficiency and operational goals.

The Audit of Recreation, Cultural and Facility Services Department (RCFS) was included in the 2017 Audit Plan of the Office of the Auditor General (OAG), approved by City Council on December 14, 2016.

Rationale

BEEM, a unit of the Recreation, Cultural and Facility Services Department has a mandate of “Optimizing tomorrow’s energy use today” and has an overarching goal to align the City’s energy demand with opportunities to capitalize on conservation measures.

BEEM supports the City of Ottawa in meeting obligations to comply with the Province of Ontario’s Green Energy Act, which includes a requirement for municipalities to develop an Energy Conservation and Demand Management Plan at least every five years to provide information about how the municipality will conserve energy. In 2015, the City developed its initial Energy Conservation and Demand Management Plan, which presents the strategy for conservation for electricity, natural gas, oil, propane and water for the five-year period 2015 – 2019.

Aligned with the Energy Conservation and Demand Management Plan, the City developed a 2015 – 2019 Energy Management and Investment Strategy with the goal of managing the City’s increasing demand for energy while implementing reduction measures to offset this demand and increase efficiencies. BEEM is responsible for implementing this Council-approved strategy based on annual capital funding of $1 million with this investment intended to be used to implement energy reduction retrofits, which will deliver a 5.5-year simple payback and yield.

Given the broad objectives of BEEM, the audit aimed to assure Council of the adequacy of BEEM management practices in guiding the delivery of its services in meeting these objectives.

Findings

The audit focused on management processes, practices and controls in three key areas, which were selected based on risk:

- Mandate and strategic direction;
- Planning and management of energy efficiency initiatives; and
- Monitoring and reporting on the results of energy efficiency initiatives.

The key findings associated with each area are as follows:

1. **BEEM does not have a view of the size or priority of the addressable opportunity for energy efficiency in relation to the City's nearly 900 facilities and over $60 million annual spend on utilities**

Current term of Council expectations and directions for BEEM are defined in the 2015 City Energy Management and Investment Strategy and include an expectation that BEEM identify, develop and implement energy saving opportunities on behalf of the City of Ottawa. This strategy, based on a $1 million per year capital investment for energy efficiency projects, further summarizes the expected areas of BEEM focus, annual investments by area and expected benefits to be generated by area (e.g. lighting upgrades).

The audit found that BEEM projects are selected independent of the guidance provided by the 2015 Investment Strategy. Further, the audit found that BEEM does not have a systematic approach for identifying and prioritizing energy efficiency opportunities across City facilities. As the focus in BEEM project selection is driven by the $1 million annual capital budget as well as the 5.5-year payback expectation, BEEM does not maintain a view of energy efficiency project opportunities that extend beyond the current year.

In the absence of a systematic approach for identifying and prioritizing energy efficiency opportunities across the City, RCFS management are not able to demonstrate that BEEM funds are being invested in areas of highest priority or greatest energy efficiency benefit to the City, for example, relative to the City's $60 million expenditure on utilities.

2. Oversight roles and requirements for BEEM operations have not been fully implemented

Oversight of BEEM operations is provided by a BEEM unit lead who reports to the Director of Facility Operations Services (FOS) who in turn reports to the General Manager of the RCFS Department.

The BEEM unit lead oversees development of an annual plan of proposed energy efficiency projects and is responsible for monitoring and overseeing day-to-day BEEM operations and the completion of planned projects.

Based on analysis of the BEEM planned and actual project history for years 2015 – 2017 and 2018 (plan only), the audit observed:

- While there is a provision defined in the 2015 Energy Management and Investment Strategy that BEEM prepare business cases for the proposed investments ($1 million in capital spend per year) and these be presented for consideration by Council, the audit found no evidence that BEEM is satisfying this provision as there has been no reporting to Council in this regard.
- There was a significant difference between the BEEM projects planned for a given year and those that were completed during that year. The decision for which projects are included in the annual plan, or the in-year substitution of projects in the annual plan, resides with the BEEM unit lead. The role of those with oversight, including the Director of FOS and the General Manager of RCFS, is not clear in relation to the approval or amendment of the annual plan.

3. The BEEM unit employs an *ad hoc* and informal approach to selecting energy efficiency projects

The audit found that the process for planning energy efficiency initiatives is *ad hoc* and informal and is not based on a broader or systematic assessment or prioritization of City-wide energy efficiency opportunities. Based on a one-year focus, the planning process does not take into consideration longer-term opportunities.

In some cases, planned BEEM projects are supported by the development of project concept documents, which define the project scope, recommended energy efficiency solution, project costs and expected project savings. Beyond the preparation of concept documents for some projects, BEEM has not defined expectations or implemented common requirements for the approval and initiation of energy efficiency projects. In

addition, BEEM has not fully defined or consistently implemented standard project requirements, for example, preparation of a project plan, production of status reports, production of project completion reports, etc.

4. The BEEM unit employs an *ad hoc* and informal approach to evaluating the results of energy efficiency projects

The audit found that BEEM's reported financial savings resulting from energy efficiency improvement projects are normally not calculated from before-and-after actual usage data but are instead estimated on a notional basis. For example, for a given project, BEEM will consider the energy consumption specifications, e.g. kWh of power consumed, of an existing piece of equipment, which are then compared to those of an upgraded piece of equipment. Beyond this estimate of project benefits, BEEM does not employ a systematic approach to evaluating the specific results of its energy efficiency projects, partly due to difficulty in isolating these figures, as well as the effort required to complete formal evaluations of results. Instead, BEEM project managers conduct *ad hoc* reviews of the results of some of their projects to compare energy usage before and after the completion of a project.

In relation to the calculation of project payback periods, the audit found that BEEM only includes the capital cost of a project and does not include consideration of BEEM internal costs such as project management. Not recognizing any of these internal costs in project cost and payback calculations results in the understatement of project costs and overstatement of project benefits.

Beyond the annual measurement of expenditure performance against the $1 million capital budget and notional measurement of the 5.5-year payback, the audit found that BEEM has not measured or reported against the broader performance expectations, e.g. $725,000 in annual savings, 250,000 cubic metres in natural gas reductions, defined in the 2015 Investment Strategy.

Conclusion

BEEM has a far-reaching goal to align the City's energy demand with opportunities to capitalize on conservation measures. As defined in the City's Energy Management and Investment Strategy, resources provided to the BEEM unit to execute this strategy included annual capital funding of $1 million, to be used on energy efficiency initiatives with a minimum 5.5-year payback.

The audit found that BEEM management systems, practices and processes have generally been established to support delivery against its financial objectives, including the $1 million annual budgeted capital funding provided to BEEM and the BEEM focus on delivery of projects with a minimum 5.5-year payback. The audit found, however, that opportunities exist to strengthen current management systems, practices and processes.

These opportunities include clarifying expectations for BEEM in relation to a broader based assessment of City-wide energy efficiency opportunities. Management attention is also required to address opportunities to improve BEEM management processes relating to the prioritization of energy efficiency opportunities, development and approval of BEEM annual and longer-term plans, approval of BEEM projects and business cases and the measurement and reporting on BEEM activities and results.

Recommendations and responses

Recommendation #1

That the Department clarify BEEM's mandate and objectives to confirm if the focus of BEEM should be on broad-based assessment and response to City-wide energy efficiency opportunities.

Management response:

Management agrees with this recommendation.

The City's Corporate Services Department is implementing a Corporate Energy Management Office to assume the lead on a broad range of energy-related initiatives that are currently decentralized. In collaboration with key stakeholders and decision-makers, the Corporate Energy Management Office will be responsible for developing a corporate energy policy to govern the prioritization of energy projects, project implementation, monitoring, and reporting on benefits; and compiling, analyzing and disseminating energy data and information between different operational areas and Corporate Finance (including utility spend, consumption, incentive dollars earned, funding secured, rebate analysis, and budget analysis).

By Q3 2019, and within the context of the creation of the new Corporate Energy Management Office, RCFS will refine BEEM's mandate and objectives with a focus on infrastructure project management expertise, delivery and oversight.

Recommendation #2

That the Department clarify BEEM requirements and establish supporting processes in respect of the:

- Identification of broader energy efficiency opportunities City wide;
- Prioritization of energy efficiency opportunities;
- Development and approval of annual and longer-term plans;
- Approval of energy efficiency projects and business cases;
- Substitution of planned energy efficiency projects; and
- Measurement and reporting on BEEM activities and results.

Management response:

Management agrees with this recommendation.

RCFS will work with the Corporate Energy Management Office and corporate partners involved to clarify roles and responsibilities with regards to city-wide energy efficiency opportunities and related strategic processes by Q4 2019.

RCFS will also leverage the preferential partnership relationship that the City maintains with Hydro Ottawa through the Master Service Agreement to optimize the benefits to the City of Hydro's energy retrofit and project delivery expertise.

Detailed audit report

Audit of Recreation, Cultural and Facility Services Department – Building Engineering and Energy Management

Introduction

The Audit of Recreation, Cultural and Facility Services Department (RCFS) was included in the 2017 Audit Plan of the Office of the Auditor General (OAG), approved by City Council on December 14, 2016.

Based on an audit risk assessment developed during the planning phase, the Building Engineering and Energy Management (BEEM) unit within the Facilities Operations Services Branch of RCFS was identified as an area of audit focus.

Background

The goal of RCFS is to provide access to high-quality recreation and cultural services in well-maintained spaces to contribute to Ottawa's quality of life, vibrancy and cultural identity and to improve health and economic well-being. To achieve this goal, the Department develops and delivers recreation and cultural programs to more than 215,000 participants annually. The Facilities Operations Services Branch (FOS) of the RCFS Department is responsible for providing centralized management of most of the City's buildings.

Within FOS, the BEEM unit has the mandate of "Optimizing tomorrow's energy use today" and has an overarching goal to align the City's energy demand with opportunities to capitalize on conservation measures. Examples of BEEM's responsibilities include:

- Identify, develop and implement energy saving opportunities;
- Contribute to the development of energy performance standards for equipment used either in new City facilities or to retrofit them;
- Capitalize on energy efficiency incentive programs;
- Analyze energy and water use in individual facilities;
- Upgrade and develop the use of the Building Automation System (BAS) (this centrally-monitored system was implemented in an effort to reduce wasted energy

costs through early identification and correction of operational and equipment problems); and
- Provide support and guidance to other City departments with respect to energy, HVAC, lighting, water, legislative codes and environmental issues and initiatives.

The unit is also responsible for delivering the commitments contained within City plans, updating and presenting subsequent plans with each new term of Council and preparing business cases for proposed investments and resource requirements. At its inception in 2008, the BEEM unit was housed within the Public Works Department at the City; however, it was transferred to RCFS as part of a 2016 reorganization.

The activities of the BEEM unit represent a strategic priority of the City, as evidenced by its role in supporting the following:

- The City of Ottawa is obliged to comply with the Province of Ontario's Green Energy Act, which includes a requirement for municipalities to develop an Energy Conservation and Demand Management Plan at least every five years to provide information about how the municipality will conserve energy. In 2015, the City developed its initial Energy Conservation and Demand Management Plan, which presents the strategy for conservation for electricity, natural gas, oil, propane and water for the five-year period 2015 – 2019.
- Aligned with the Energy Conservation and Demand Management Plan, the City developed a 2015 – 2019 Energy Management and Investment Strategy with the goal of managing the City's increasing demand for energy while implementing reduction measures to offset this demand and increase efficiencies. This strategy, initially based on a $2 million annual capital budget, was subsequently approved by Council based on annual capital funding of $1 million with this investment intended to be used to implement energy reduction retrofits, which will deliver a 5.5-year simple payback and yield.

While the BEEM unit represents a relatively small City investment relative to City expenditures on facilities (i.e. approximately $2.3 million in annual BEEM unit expenditures versus City annual facility energy costs in excess of $60 million), its strategic importance as well as the breadth and diversity of its programs and performance expectations were factors that contributed to its inclusion within the scope of the audit.

Audit objectives and criteria

The overall objective of this audit was to determine if there is a management control framework in place to ensure that the BEEM unit is effectively contributing to the achievement of defined City energy efficiency and operational goals as established in Committee and Council adopted plans.

Based on a prioritized assessment of risk, the objectives of the audit are to:

Audit objective #1

Assess the clarity of the BEEM mandate and strategic direction.

Criteria:

- BEEM has a clearly defined mandate and objectives that are aligned to Council/Committee adopted plans and priorities
- BEEM has comprehensive and clearly defined oversight processes and governance structures in place to support the approval of energy efficiency initiatives and delivery of initiatives in support of objectives

Audit objective #2

Assess the adequacy of processes in place to plan and manage BEEM energy efficiency initiatives.

Criteria:

- Approved BEEM energy efficiency initiatives are supported by comprehensive definition of initiative objectives and activities, planned investments and resource requirements, planned benefits and timing
- Management identifies operational risks that may preclude the achievement of planned objectives or benefits, and management develops and maintains appropriate risk management strategies

Audit objective #3

Assess the adequacy of processes in place to monitor and report on the results of BEEM energy efficiency initiatives.

Criteria:

- Management regularly monitors progress against energy efficiency initiative planned results in order to make course corrections, as required
- Management has access to comprehensive and timely performance information and reports actual performance against planned results as defined in Council/Committee adopted energy efficiency plans

Scope

The scope of this audit included an examination of RCFS and FOS management processes related to the planning, delivery, monitoring and reporting of BEEM unit activities. The time period under examination includes BEEM activities and initiatives undertaken from January 2015 to December 2017.

Audit approach and methodology

The audit methodology included the following activities:

- Interviews with RCFS management and BEEM unit representatives and other departmental staff supporting or impacted by BEEM initiatives (e.g. Facilities supervisors);
- Review of documentation relevant to the audit scope areas (e.g. available governance documentation (e.g. initiative approval processes), key initiative planning documentation, initiative business cases, key initiative progress updates and reports (e.g. Committee presentations)); and
- Analysis and testing of audit evidence gathered for the selected areas of examination.

The audit plan was finalized in November 2017, and the audit fieldwork was substantially completed by December 31, 2017.

Audit observations and recommendations

Audit objective #1

Assess the clarity of the BEEM mandate and strategic direction.

1.1 Mandate and strategic direction

The audit expected to find that BEEM has a clearly defined mandate and its objectives are aligned to Council/Committee adopted plans and priorities.

BEEM does not have a view of the size or priority of the addressable opportunity for energy efficiency in relation to the City's nearly 900 facilities and over $60 million annual spend on utilities (electricity, natural gas, water).

Current term of Council expectations and directions for BEEM are defined in the 2015 City Energy Management and Investment Strategy and include an expectation that BEEM identify, develop and implement energy saving opportunities on behalf of the City of Ottawa. This strategy, based on a $1 million per year capital investment for energy efficiency projects, further summarizes the expected areas of BEEM focus, annual investments by area and expected benefits to be generated by area.

Table 1: Planned energy efficiency area of focus

Planned energy efficiency area of focus	Planned annual capital investment (one time) (000's)	Planned annual utility savings (ongoing) (000's)
Lighting upgrades to the interior of buildings	$300	$55
Building Automation Controls (BAS) and upgrade to high efficient systems	$160	$30
Building exterior lighting replacement (wall-packs) to LED	$150	$25

Planned energy efficiency area of focus	Planned annual capital investment (one time) (000's)	Planned annual utility savings (ongoing) (000's)
Replacement of low efficiency gas furnaces and boilers with high efficiency condensing equipment	$150	$25
Lighting upgrade in building parking lots to LED	$100	$18
Addition of variable speed drives (VFD) to pumps/fans/motors	$50	$9
Low flow toilets, urinals, faucets at various facilities	$50	$10
Garage door controls	$40	$7
Total	**$1,000**	**$179**

On an annual basis, BEEM develops a summary of planned projects (approximately 40 – 50 per year) which aligns to the $1 million annual capital investment budget but is not clearly aligned to the energy efficiency areas of focus defined in the 2015 Investment Strategy.

The audit found that BEEM projects are selected independent of the guidance provided by the 2015 Investment Strategy. Further, based on analysis of the BEEM project history over the past three years, the audit found that BEEM does not have a systematic approach for identifying and prioritizing energy efficiency opportunities across the City's facilities. As the focus in BEEM project selection is driven by the $1 million annual capital budget (as well as the 5.5-year payback expectation), BEEM does not maintain a view of energy efficiency project opportunities that extend beyond the current year. Consequently, BEEM does not have a complete view of the size or priority of the addressable opportunities for energy efficiency across the City's nearly 900 facilities.

The City of Ottawa currently spends more than $60 million per year on utilities (electricity, natural gas, water) to operate its facilities. In the absence of a systematic approach for identifying and prioritizing energy efficiency opportunities across the City, RCFS management are not able to demonstrate that BEEM funds are being invested in areas of highest priority or greatest energy efficiency benefit to the City.

Recommendation #1

That the Department clarify BEEM's mandate and objectives to confirm if the focus of BEEM should be on broad-based assessment and response to City-wide energy efficiency opportunities.

Management response:

Management agrees with this recommendation.

The City's Corporate Services Department is implementing a Corporate Energy Management Office to assume the lead on a broad range of energy-related initiatives that are currently decentralized. In collaboration with key stakeholders and decision-makers, the Corporate Energy Management Office will be responsible for developing a corporate energy policy to govern the prioritization of energy projects, project implementation, monitoring, and reporting on benefits; and compiling, analyzing and disseminating energy data and information between different operational areas and Corporate Finance (including utility spend, consumption, incentive dollars earned, funding secured, rebate analysis, and budget analysis).

By Q3 2019, and within the context of the creation of the new Corporate Energy Management Office, RCFS will refine BEEM's mandate and objectives with a focus on infrastructure project management expertise, delivery and oversight.

1.2 Oversight processes and governance

The audit expected to find that clearly defined oversight and governance processes have been established to support the approval and completion of BEEM energy efficiency initiatives.

Oversight roles and requirements for BEEM operations have not been fully implemented.

Oversight of BEEM operations is provided by a BEEM unit lead who reports to the Director of Facility Operations Services (FOS) who in turn reports to the General Manager of the RCFS Department.

The BEEM unit lead oversees development of an annual plan of proposed energy efficiency projects and is responsible for monitoring and overseeing day-to-day BEEM operations and the completion of planned projects.

Additional BEEM oversight expectations are defined in the City's 2015 Energy Management and Investment Strategy, which includes the following provisions:

- A maximum of $1 million per year capital investment for BEEM energy efficiency projects that are expected to have at least a 5.5-year payback;
- A requirement that BEEM develop an annual project plan (supporting the $1 million capital investment) developed in the fourth quarter of the previous year; and
- A requirement that BEEM prepare business cases for the proposed investments, and these be presented for consideration to Council.

In relation to these requirements, the audit found that BEEM does produce an annual plan of proposed energy efficiency projects that aligns to the $1 million capital budget and 5.5-year payback expectation. For each project, the plan includes an estimate of the project cost (ranging in investment size from hundreds of dollars per project to greater than $100,000), estimated benefits (energy efficiency and water or fuel switching savings) and estimated payback period. BEEM also maintains a summary of the actual projects completed for the year.

Based on analysis of the BEEM planned and actual project history for years 2015, 2016, 2017 and 2018 (plan only), the audit observes the following in relation to the oversight of BEEM operations:

- While there is a provision defined in the 2015 Energy Management and Investment Strategy that BEEM prepare business cases for the proposed investments ($1 million in capital spend per year) and these be presented for consideration by Council, the audit found no evidence that BEEM is satisfying this provision as there has been no reporting to Council in this regard.

- The 2015 Investment Strategy included the definition of planned annual investments by area of focus (e.g. $300,000 per year on lighting upgrades to the interiors of buildings). The audit found that in developing the annual plan, BEEM projects are selected independent of the guidance provided in the 2015 Investment Strategy.
- The audit found that there was a significant difference between the BEEM projects planned for a given year and those that were in fact performed during that year. The decision for which projects are included in the annual plan, or the in-year substitution of projects in the annual plan, resides with the BEEM unit lead. The role of those with oversight, including the Director of FOS and the General Manager of RCFS, is not clear in relation to the approval or amendment of the annual plan.

Recommendation #2 addresses these observations.

Audit objective #2

Assess the adequacy of processes in place to plan and manage BEEM energy efficiency initiatives.

2.1 Energy efficiency initiative planning

The audit expected to find that approved BEEM energy efficiency initiatives are supported by detailed definition of initiative objectives and activities, planned investments and resource requirements, planned benefits and timing and consideration of initiative risks.

The BEEM unit employs an *ad hoc* and informal approach to selecting energy efficiency projects.

Identification of potential projects is determined by the BEEM unit lead based on input from a variety of sources including BEEM project managers, City facility staff and other City functions (e.g. Life Cycle). The primary drivers for project inclusion in the annual plan are the limitations of the $1 million annual capital budget and the expected 5.5-year project payback.

This planning process is *ad hoc* and informal and is not based on a broader or systematic assessment or prioritization of City-wide energy efficiency opportunities.

Based on the one-year focus, the planning process does not take into consideration longer-term opportunities.

In some cases, planned BEEM projects are supported by the development of project concept documents, which define the project scope, recommended energy efficiency solution, project costs and expected project savings. Beyond the preparation of concept documents for some projects, BEEM has not defined expectations or implemented common requirements for the approval and initiation of energy efficiency projects. In addition, BEEM has not fully defined or consistently implemented standard project requirements (e.g. preparation of a project plan, production of status reports, production of project completion reports, etc.).

As noted previously, the audit found that there was a significant difference between the BEEM projects planned and the BEEM projects that were completed. The requirements (e.g. approval) or conditions under which project substitution is acceptable have not been defined.

Recommendation #2 addresses these observations.

Audit objective #3

Assess the adequacy of processes in place to monitor and report on the results of BEEM energy efficiency initiatives.

3.1 Energy efficiency initiative monitoring and reporting

The audit expected to find that management regularly monitors progress against energy efficiency initiative planned results, have access to complete and timely performance information, and report actual performance against planned results as defined in Council/Committee adopted energy efficiency plans.

The BEEM unit employs an *ad hoc* and informal approach to evaluating the results of energy efficiency projects.

The audit found that the BEEM unit maintains a detailed annual inventory of planned projects (including estimated costs) and actual projects completed (including estimated projects costs, financial savings generated from energy efficiencies and the resulting project payback period).

In addition, BEEM produces an Annual Energy Report which summarizes a multi-year trend analysis of comparative energy consumption within City facilities (beyond those

impacted by BEEM activities), including electricity, natural gas and water consumption per square meter.

The audit found that BEEM's reported financial savings resulting from energy efficiency improvement projects are normally not calculated from before-and-after actual usage data, but are instead estimated on a notional basis. For example, for a given project, BEEM will consider the energy consumption specifications (e.g. kWh of power consumed) of an existing piece of equipment which are then compared to those of an upgraded piece of equipment. Beyond this estimate of project benefits, BEEM does not employ a systematic approach to evaluating the specific results of its energy efficiency projects, partly due to difficulty in isolating these figures, as well as the effort required to complete formal evaluations of results. Instead, BEEM project managers conduct *ad hoc* reviews of the results of some of their projects to compare energy usage before and after the completion of a project.

In relation to the calculation of project payback periods, the audit found that BEEM only includes the capital cost of a project and does not include consideration of BEEM internal costs such as project management. In addition to the approximate $1 million in BEEM capital expenditures per year, BEEM incurs approximately $1.3 million in compensation and operating costs, approximately 50 per cent of which relates to BEEM's energy efficiency focus. Not recognizing any of these internal costs in project cost and payback calculations results in the understatement of project costs and overstatement of project benefits.

In terms of broad-based measurement of BEEM unit results, the 2015 Energy Management and Investment Strategy defines the following benefit expectations:

> *Staff estimate that the annual capital measures identified would require an ongoing capital budget of $1M per year, with a 5.5-year simple payback. This would generate an estimated $725k in total annual savings after four years and would yield the following conservation benefits:*
>
> - *4,500,000 kWh hours of electricity reductions*
> - *250,000 m3 of natural gas reductions*
> - *20,000 m3 of water reductions*

Beyond the annual measurement of expenditure performance against the $1 million capital budget and notional measurement of the 5.5-year payback, the audit found that

BEEM has not measured or reported against the broader performance expectations defined in the 2015 Investment Strategy.

Recommendation #2

That the Department clarify BEEM requirements and establish supporting processes in respect of the:

- Identification of broader energy efficiency opportunities City wide;
- Prioritization of energy efficiency opportunities;
- Development and approval of annual and longer-term plans;
- Approval of energy efficiency projects and business cases;
- Substitution of planned energy efficiency projects; and
- Measurement and reporting on BEEM activities and results.

Management response:

Management agrees with this recommendation.

RCFS will work with the Corporate Energy Management Office and corporate partners involved to clarify roles and responsibilities with regards to city-wide energy efficiency opportunities and related strategic processes by Q4 2019.

RCFS will also leverage the preferential partnership relationship that the City maintains with Hydro Ottawa through the Master Service Agreement to optimize the benefits to the City of Hydro’s energy retrofit and project delivery expertise.