



## **Capital Infrastructure Committee**

Cycle 3 - Wednesday, March 6, 2024

Start Time: 10:30 a.m.

Participation via TEAMS

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Phone Conference ID: 553 888 454#

### **Agenda**

#	Item	By	Start Time	Length	Action
1.	Call to Order and Land Acknowledgement	RW	10:30	2	
2.	Declaration of Conflict of Interest	RW	10:32	1	
3.	Approval of Agenda (including consent items)	RW	10:33	1	Approval
4.	Business Arising from the Minutes	RW	10:34	1	Information
<b><u>KEY ITEMS</u></b>					
5.	<u>Committee Charter Review (including appendix 1)</u>	YR	10:35	5	Information
6.	<u>Campus Space Plan</u>	SJ/JG	10:40	10	Information
7.	<u>T2 Financial Update on Capital and Related Projects (including appendix 1)</u>	JT/SJ/ GA	10:50	10	Information
8.	<u>Major Capital Projects Update - Facilities Management</u>	SJ/SS/ JG	11:00	10	Information
9.	<u>Energy Conservation and Demand Management - Annual Update &amp; Scorecard (including appendix 1)</u>	SJ/MQ/ JG	11:10	10	Information
10.	<u>Burlington Campus Update (including appendix 1)</u>	SJ/JG	11:20	10	Information
<b>KEY ITEMS (IN CAMERA)</b>					
11.	Quarry View Residence Lease Extension (IN CAMERA) (including appendices 1-4)	EW/SJ/ JT/JG	11:30	15	Recommendation
12.	Property Matter (IN CAMERA) (including appendices 1-2)	CC	11:45	15	Information

#	Item	By	Start Time	Length	Action
13.	ITS Major Projects Update and Student Information System Update ( <b>IN CAMERA</b> ) (including appendices 1-2)	GA/JG	<b>12:00</b>	10	Information
<b>CONSENT ITEMS (<b>IN CAMERA</b>)</b>			<b>12:10</b>		
14.	IN CAMERA Record of Proceedings - Meeting #2 (2023-24) held on December 6, 2023 - ( <b>IN CAMERA</b> )	RW			Approval
<b><u>CONSENT ITEMS</u></b>					
15.	<u>Minutes of Previous Meeting - Meeting #2 (2023-24) held on December 6, 2023</u>	RW			Approval
16.	Metrics - <u>Facilities Management</u> - <u>Information Technology System</u>	SJ/ GA			Information
17.	Other Business	RW	<b>12:15</b>	5	
18.	ADJOURNMENT	RW	<b>12:20</b>		

**Agenda Legend**

RW	Rob Welch	JG	Jennifer Guarasci
SJ	Scott Johnstone	JT	Josh Tonnos
GA	Gemma Ahn	EW	Ed Wall
MQ	Mary Quintana	SS	Susan Strban
YR	Yvonne Roussel		

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## **Report to Capital Infrastructure Committee**

### INFORMATION ITEM

TOPIC: Committee Charter review

March 6, 2024

Yvonne Roussel, University Secretary & Vice-President, Governance & Policy

### EXECUTIVE SUMMARY

#### 1. Purpose of the Report

- To review the Committee Charter with the Committee to determine whether any updates are required.

#### 2. Key Background

- The Board Bylaw provides that each standing committee of the Board shall have a charter that sets out its functions, responsibilities, powers, and composition. The Board Bylaw also provides that each committee shall review its charter at least every two years, with any proposed changes to be considered by the Governance/Nominating Committee and approved by the Board.
- The Committee Charters were last reviewed in 2020.
- Each Committee is being asked to review its Charter to determine if any changes are required. The University Secretariat has reviewed the Committee Charter and is not proposing any changes at this time.

#### 3. Next steps

- Subject to feedback from the Committee, the Committee Charter will either be scheduled for a future review in 2025 or amendments to the Charter will be prepared for the consideration of the Governance/Nominating Committee.

#### 4. Background Materials

Appendix 1 - [Capital Infrastructure Committee Charter](#) (3 pages)



Board of Trustees

## **Report to the Capital Infrastructure Committee**

### INFORMATION ITEM

TOPIC: Campus Space Plan

March 6, 2024

Scott Johnstone, Associate Vice-President, Infrastructure & Operations

Jennifer Guarasci, Vice-President Administration (Interim)

### EXECUTIVE SUMMARY

#### 1. Purpose of the Report

- To provide an update on the Campus Space Plan study that is currently underway.

#### 2. Key Background

- Due to the significant number of building infrastructure changes to the campus over the past 4-5 years, the recent purchase of 3401 Schmon Parkway, and potential changes of a hybrid work environment, the Board of Trustees requested an update to the University campus space plan.
- Educational Consulting Services (ECS) was retained to develop a 5-Year Campus Space Plan Study to update previous space plans accounting for recent initiatives by the University.
- In summary, ECS has reported the following: (*Appendix 1*)
  - 3401 Schmon Parkway has now been identified to accommodate the new Department of Engineering teaching laboratories, research facilities and offices.
  - Further analysis is required to confirm if the existing pool of lecture halls and classrooms has the capacity to accommodate the new demand generated by Engineering courses.
  - The University work-from-home (WFH) policy will not yield a substantial reduction in the overall office space footprint.
  - Preliminary benchmarking analysis has identified a shortfall of study and student activity space.

#### 3. Next Steps

- Management is currently working on Peripheral Land Study, to be completed by the end of 2024, following this the University will undertake an update to the Campus Master Plan starting in 2025. Information related to space needs and strategy will be foundational for these upcoming plans.

#### 4. Background Materials

Appendix 1: Brock University 5-Year Campus Space Plan, December 2023 (2 pages)

# Brock University 5-Year Campus Space Plan | December 2023 Update

## Introduction

The 5-Year Campus Space Plan was commissioned by Brock University to develop strategies to optimize campus space in support of Brock's strategic vision for academic, research and campus life activities and to identify and find solutions for current and emerging space needs, pressure points and deficiencies.

Educational Consulting Services Corp. (ECS), specialists in post-secondary campus space planning, was selected to lead the study. Analyses and consultations with 19 academic and administrative leaders led to a first phase report in September 2022 setting out accommodation issues and articulating aims and priorities for optimizing space at the main campus over the next 5 years.

Thereafter the study was paused due to the start of tenure of the new University President and ongoing pandemic-induced flux around the future of academic delivery, remote work, and accommodation of the new Department of Engineering.



The second phase of the Campus Space Plan study involves a campus space benchmarking analysis that will provide a high-level, objective assessment of campus space types in shortfall and surplus using the new Council of Ontario Universities space guidelines and the development of high-level campus planning scenarios to position the University for future funding opportunities.

## Campus Space Current Status Snapshot

Space Element		Status
St. Catharines Campus		
1	New Property at 3401 Schmon Parkway	<ul style="list-style-type: none"> <li>Property will be renovated to accommodate new Department of Engineering teaching laboratories, research facilities and offices, and the University's data centre.</li> <li>This new academic activity hub will help to expand campus boundaries in the view of the university community.</li> <li><b>Analysis is required to confirm that the existing pool of lecture halls and classrooms has the capacity to accommodate the new demand generated by Engineering courses.</b></li> </ul>
2	Work-from-Home Office Backfill Opportunities	<ul style="list-style-type: none"> <li><b>It is now clear that the new work-from-home (WFH) policy will not yield a substantial reduction in overall office space footprint.</b> Although several small-scale office space consolidations, relocations and improvements have been achieved, there is insufficient backfill space to enable a 'big move' campus space solution such as creating a new consolidated student services hub.</li> </ul>
3	Spaces for Students	<ul style="list-style-type: none"> <li><b>Preliminary benchmarking analysis results identify space categories in shortfall on campus including:</b> <ul style="list-style-type: none"> <li>Study space – both in library and distributed</li> <li>Student activity and assembly space</li> </ul> </li> <li>Student surveys conducted by BUSU corroborate these findings from the student perspective.</li> <li>BUSU has conducted student surveys, secured funding approval from students, and commissioned preliminary studies for a capital project to expand the Student Centre.</li> <li>Although the University has worked to consolidate student services within the Market Eatery central hub precinct, services for students remain fragmented across multiple locations.</li> </ul>

Space Element		Status
		<ul style="list-style-type: none"> <li>In 2019 the amount of space allocated towards student activity and campus life functions stood at 38% of what is allocated at peer comprehensive universities across Ontario. The benchmark for assembly facilities was 73% of the benchmarks achieved by peer universities. Planned enrolment growth by Brock University will amplify the impact of these shortfalls in terms of student experience and campus life.</li> </ul>
4	Research Space	<ul style="list-style-type: none"> <li>Mackenzie Chown Complex requires renewal due to aging infrastructure and poor building conditions. Existing researchers will require more research space due to growth in funding and research activities (e.g., Canada Research Chairs).</li> <li>Research support facilities including the Animal Care Services facility in Cairns require expansion and reconfiguration.</li> </ul>
5	New Residence	<ul style="list-style-type: none"> <li>New Residence has alleviated current demand for on-campus housing.</li> </ul>
Burlington Campus		
6	Burlington Campus	<ul style="list-style-type: none"> <li>The Hamilton site has been sold and existing programming is continuing at the temporary location at Lester B. Pearson in Burlington until Fall 2025.</li> <li>The Burlington Bateman facility is under construction and on schedule for occupancy April 1, 2025, allowing time for setup and move-in for a Fall 2025 opening.</li> <li>The new Bateman space will allow for more flexible programming and efficient space use: the total leased area is 35,000 SF compared to 72,430 SF at the Hamilton site.</li> <li>All instructional space at Bateman site will be centrally managed.</li> </ul>

## Conclusions

1	<p>The recent building additions to Brock's space inventory have or will benefit the University in specific areas of activity and services, without necessarily generating significant backfill opportunities elsewhere on campus:</p> <ul style="list-style-type: none"> <li>New 3401 Schmon Parkway property will accommodate the initial space needs for the new Department of Engineering; however, analysis is required to evaluate if the existing campus instructional space inventory is sufficient to absorb the new activities.</li> <li>Work-from-home policy has enabled small scale office accommodation consolidations and improvements but has not released significant backfill space.</li> </ul>
2	<p>Key space challenges therefore remain at the St. Catharines campus, particularly requirements to:</p> <ul style="list-style-type: none"> <li>Create additional study, assembly and activity space for students</li> <li>Consolidate student services in a convenient one-stop hub</li> <li>Address research space condition and quality deficiencies in Mackenzie Chown complex</li> <li>Match instructional room pool (classrooms, lecture halls, seminar rooms) to demand including demand that will be generated by the new Department of Engineering</li> </ul>

## Next Steps

1	ECS to advance Phase 2 of the 5-Year Campus Space Plan study by completing the campus space benchmarking analysis and developing high-level campus planning scenarios to position the University for future funding opportunities.
2	ECS to conduct a Functional Space Program study to validate space requirements for a potential new Student Centre facility funded by BUSU. The study will analyze requirements from a whole-campus lens.

## Report to the Capital Infrastructure Committee

### INFORMATION ITEM

#### TOPIC: T2 Financial Update on Capital and Related Project Plan

March 6, 2024

Josh Tonnos, Chief Financial Officer & Associate Vice-President, Financial Services

Scott Johnstone, Senior Associate Vice-President, Infrastructure and Operations

Gemma Ahn, Associate Vice-President & Head of Information Technology Services

#### EXECUTIVE SUMMARY

##### 1. Purpose of the Report

- Provide the Capital Infrastructure Committee with the trimester two update of the Capital and Related Projects, consistent with the Committee Charter and reporting requirements.

##### 2. Key Background

- Currently there are 108 open projects: 63 FM, 11 Residence and Ancillary, and 34 ITS. **Appendix 1 - Figure 1** illustrates the activity with respect to the number of projects.
- A breakdown of the Facilities Management, Residence and Ancillary, and Information Technology Services projects by category identifies a total of \$39 million dollars remaining to spend.
  - The FM project funds remaining to spend is \$26 million, such as the Research Farm (\$8.4 million), District Energy System Electrification (\$6.1 million), and 3401 Schmon Parkway (\$1.8 million fit up funds available from the external financing obtained to purchase the property).
  - The Residence and Ancillary funds remaining to spend is \$4.7 million, such as the Village Interior Renewal (\$0.8 million).
  - The ITS project funds remaining to spend is \$8.3 million, such as the Student Information System (\$1.4 million), Burlington Bateman ITS (\$1.5 million), and the Learning Management System (\$0.2 million).

**Appendix 1 - Figure 2** illustrates the activity with respect to the type and dollar amount of projects by FM, Residence and Ancillary, and ITS.

- The FY 2023/24 Facility Renewal Program funding from the Ministry has been reduced by \$274 thousand (\$3.579 million received vs \$3.853 million budgeted), as a result projects were identified and deferred to account for this shortfall.

##### 3. Next Steps

- As this report serves as an update on project activity, the next steps will be the finalization of the FY 2024/25 Capital Plan. To be presented to the Board of Trustees in Cycle 4.

#### 4. Background Materials

- Appendix 1 - T2 Financial Update on Capital and Related Project Plan - 1 page



Figure 1: Status of Capital Projects as of December 31, 2023

	Facilities Management	Residence and Ancillary Services	Information Technology Services
Total projects opened April 30, 2023	74	13	41
Projects opened to December 31, 2023	3	2	0
Projects closed/completed to December 31, 2023	14	4	7
<b>Total projects open to December 31, 2023</b>	<b>63</b>	<b>11</b>	<b>34</b>

Figure 2: Capital and Related Project Summary (By Category) (000's)

Project	Revenue / Funding	Spending to December 31, 2023	Remaining to Spend
<b>Facilities Management</b>			
AODA* Projects	530	166	364
Above surface/sub surface utilities, drainage, roads, parking lots, sidewalks	984	63	921
Adaptations/renovations and major renewal projects	941	889	52
Audits and studies	836	373	463
Buildings	10,049	4,624	5,426
Energy conservation and demand management	8,932	2,237	6,694
Major capital projects	16,517	6,288	10,229
Vehicles and wheeled equipment	378	225	153
FM - surplus/deficit	1,827	-	1,827
<b>Total Facilities Management</b>	<b>40,993</b>	<b>14,866</b>	<b>26,127</b>
<b>Ancillary Services</b>			
Above surface/sub surface utilities, drainage, roads, parking lots, sidewalks	415	309	106
Adaptations/renovations and major renewal projects	551	55	496
Audits and studies	-	-	-
Buildings	7,040	3,598	3,442
Res - surplus/deficit	623	-	623
<b>Total Ancillary Projects</b>	<b>8,629</b>	<b>3,962</b>	<b>4,666</b>
<b>Information Technology Services</b>			
Enterprise software projects	13,896	10,973	2,923
Hardware evergreening projects	2,152	595	1,558
Hardware growth projects	2,274	166	2,108
IT infrastructure projects	1,883	251	1,632
IT - surplus/deficit	44	-	44
<b>Total Information Technology Services</b>	<b>20,249</b>	<b>11,984</b>	<b>8,265</b>
<b>Total Capital and Related Projects</b>	<b>69,871</b>	<b>30,812</b>	<b>39,058</b>

\*AODA -Accessibility for Ontarians with Disabilities

## Report to the Capital Infrastructure Committee

### INFORMATION ITEM

TOPIC: Major Capital Projects Update - FM

March 6, 2024

Scott Johnstone, Associate Vice President, Infrastructure and Operations  
Susan Strban, Director, Capital and Financial Management, Facilities Management  
Jennifer Guarasci, Vice-President, Administration (Interim)

#### EXECUTIVE SUMMARY

##### 1. Purpose of the Report

- The purpose of this report is to provide Committee members with an overview of key Facilities Management and Ancillary Services projects aligned with the University's strategic priority of ***offering a transformational and accessible academic and university experience***.
- These projects, as well as others that FM is working on, all continue to enhance and strengthen the University's environment and help facilitate the University's mission of leadership, innovation and excellence in learning, teaching, research, scholarship, and creativity across disciplines.

##### 2. Key Background

- There are currently four active major capital projects underway:
  - Major renovations on the ground floor at the Goodman School of Business with a proposed link between Mackenzie Chown building A (MCA) and the Goodman School of Business (GSB).
  - Major upgrades to the District Energy System (DES) including a new boiler, heat pump, piping retrofits and overall optimization of control sequences to reduce Brock's carbon emissions by up to 67% and save \$5M in carbon costs by 2030.
  - Design of Engineering space at 3401 Schmon Parkway, including administrative office and support space, teaching labs, graduate student space needs, and research labs.
  - Construction of a Research Farm on Merrittville Highway, including greenhouses, screen houses, aviary, vineyard, and a research facility.

Projects	Budget
Goodman School of Business Renovation, MCA	\$ 3,000,000
District Energy System Electrification	\$ 6,500,000
Engineering at 3401 Schmon Parkway	\$ 2,035,000
Research Farm	\$ 8,412,285

- Project details follow in Appendices 1 to 4
- Market conditions continue to have a significant impact on Brock projects, including those identified above.

### 3. Next Steps

- Continue to manage the construction process and to identify and mitigate any potential risks where possible to maintain project budget and schedule.

### 4. Background Materials

Appendix 1 - Goodman School of Business, MCA Renovation (1 page)

Appendix 2 - District Energy System Electrification (1 page)

Appendix 3 - Engineering at 3401 Schmon Parkway (1 page)

Appendix 4 - Research Farm (1 page)

## Appendix 1 – Goodman School of Business Renovation – MCA

March 6, 2024

### Project Status Update

Project Description:

The major renovation and proposed link between the Level 2 in the Mackenzie Chown building A (MCA) and the Goodman School of Business (GSB) includes approximately 5,000 SF (465 m2) of renovation to MCA level 200, and 300 SF (28 m2) of addition, creating an exciting new link between the two buildings. The goal of the project is to better serve the growing student population, with student focused space that offers support for undergraduate, international, and professional development programs.

Impact: Students, faculty, staff, and the Brock community. This project highlights the benefit of using the Revenue and Expense Allocation Model to support space usage decision making where GSB gains needed space including 12 offices, a reception area and a collaborative multipurpose area.

Status/Issues:

Occupancy has achieved.

Upcoming Milestones:

Complete deficiencies.

### Schedule

	Original	Current
Architect -complete tender drawings and specifications	October 2021	November 2021
Retain General Contractor	January 2022	December 2022
Construction Commencement	February 2022	January 2023
Substantial Performance and Occupancy	September 2022	December 2023

### Budget

Budget	\$3,000,000	
Actuals	\$2,572,500	
Commitments	\$190,003	
Forecasted Future Spend	\$37,497	
Total Projected Cost (estimate)	\$2,800,000	
Variance to Revised Budget	\$200,000	6.7%

Note: Project funding is from the “Goodman Trust Fund and the Dean’s Discretionary Fund”.

### Project Team

Facilities Management	John Rizzo, Senior Project Manager	
Research	Barry Wright, Dean, Goodman School of Business	Capital Infrastructure Committee
Architect	McCallum Sather	TOPIC: FM Major Capital Projects Update
General Contractor	Niacon Construction	DATE: March 6, 2024
		Appendix 2

## Appendix 2 – District Energy System Electrification

March 6, 2024

### Project Status Update

#### Project Description:

The District Energy System (DES) Electrification includes installing an electric boiler at Welch Hall, installing a heat pump in CAIRNS, recovering heat waste from CAIRNS' steam boiler for mechanical equipment, piping retrofits at Schmon Tower, Decew Residence, Welch Hall, Thistle Complex and Student Centre to supply the DES, and the optimization of control sequences DES and satellite generation assets. The goal of the project is to reduce Brock's carbon emissions by up to 67% thus reducing future costs of carbon by more than \$5M by 2030.

Impact: Students, faculty, staff, and the Brock community.

#### Status/Issues:

Tender drawings are 75% complete.

#### Upcoming Milestones:

Completion of tender drawings and ordering of equipment.

### Schedule

	Original	Current
Engineer	March 2023	March 2023
Retain Contractor(s)	March 2024	March 2024
Construction Commencement	April 2024	April 2024
Substantial Performance	March 2025	March 2025

### Budget

Budget	\$6,500,000	
Actuals	\$351,139	
Commitments	\$672,489	
Forecasted Future Spend	\$5,476,372	
Total Projected Cost (estimate)	\$6,500,000	
Variance to Budget	\$0	0.0%

Note: Project funding is from current and future years capital (\$3.6M) and a grant from the Ministry of Environment (\$2.9M).

### Project Team

Facilities Management Engineer General Contractor(s)	Drew Cullen, Manager, District Energy Equinox Strategies Inc. TBD
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Capital Infrastructure Committee  
TOPIC: FM Major Capital Projects Update  
DATE: March 6, 2024  
Appendix 3

## Appendix 3 – Engineering at 3401 Schmon Parkway

March 6, 2024

### Project Status Update

#### Project Description:

The property at 3401 Schmon Parkway provided the opportunity for Brock to consider various options to accommodate its short-term and future space needs, including those of the Yousef Haj-Ahmad Department of Engineering. A feasibility design was prepared demonstrating scalable options to meet Engineering's needs for administrative office and support space, teaching labs, graduate student space needs, and research labs. Further detailed development of phased designs is underway.

Impact: Students, faculty, staff, and the Brock community.

#### Status/Issues:

Architect has been retained.

#### Upcoming Milestones:

Continue with detailed design of phase 1.

### Schedule

	Original	Current
Retain Architect	November 2023	November 2023
Retain General Contractor	TBD	TBD
Construction Commencement	TBD	TBD
Occupancy	August 2025	August 2025

### Budget

Budget/Funding	\$2,035,000	
Actuals	\$261,512	
Commitments	\$1,086,185	
Forecasted Future Spend	\$0	
Total Projected Cost (estimate)	\$1,347,697	
Variance to Revised Budget	\$687,303	33.8%

Note: Project funding is from external financing obtained to purchase the property.

### Project Team

Facilities Management Engineering Dept Architect General Contractor	John Rizzo, Senior Project Manager Shahryar Rahnamayan Architects Tillman Ruth Robinson Inc. TBD
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## Appendix 4 – Research Farm

March 6, 2024

### Project Status Update

#### Project Description:

The Clean Agriculture for Sustainable Production (CASP) Field Infrastructure will be a world-leading, farm-based research centre. This Research Farm will provide researchers with the facilities required to: i) advance clean plant research and sustainable agriculture from the fundamental stages of innovative, tissue-culture based plant propagation in protective settings to applied field research for high throughput sequencing-based screening for pathogens; ii) propagate plants free from disease in natural and mixed agricultural settings; iii) understand these interactions at the landscape level; and iv) apply this knowledge to urban areas and other ecosystems.

Impact: Students, faculty, staff, and the Brock community.

#### Status/Issues:

Architect has been retained.

#### Upcoming Milestones:

Begin design and equipment selection.

### Schedule

	Original	Current
Retain Architect	January 2024	January 2024
Retain Contractor	TBD	TBD
Construction Commencement	TBD	TBD
Substantial Performance	TBD	TBD

### Budget

Budget	\$8,412,285	
Actuals	\$0	
Commitments	\$299,889	
Forecasted Future Spend	\$8,112,396	
Total Projected Cost (estimate)	\$8,412,285	
Variance to Budget	\$0	0.0%

Note: Project budget excludes \$499k of in-kind contributions.

### Project Team

Facilities Management	Braden Day, Project Manager, CPPM
Research	Sudarsana Poojari, Principal Scientist & Jim Willwerth, Assistant Professor
Architect	Cianfrone Architect Inc.
General Contractor	TBD



Board of Trustees

## Report to the Capital Infrastructure Committee

### INFORMATION ITEM

TOPIC: Energy Conservation & Demand Management Annual Update

March 6, 2024

Scott Johnstone, Associate Vice-President, Infrastructure & Operations

Mary Quintana, Director, Asset Management & Utilities

Jennifer Guarasci, Vice-President, Administration (Interim)

### EXECUTIVE SUMMARY

#### 1. Purpose of the Report

- The purpose of this report is to **present updates on Brock's performance** on energy and Greenhouse Gases (GHGs).
- Energy and GHGs are directly related to compliance (O.Reg. 25/23, Electricity Act 1998, O.Reg. 241/19, O.Reg. 390/18), operational costs and the advancement of sustainability in the institution. Compliance obligations include reporting energy consumption, tracking progress on energy use reduction and preparing a 5-year plan on how the institution will reduce and conserve energy.

#### 2. Key Background

- Brock University has mandatory requirements for reporting energy consumption annually, as well as for implementing measures to reduce energy usage and reporting the results.
- Since 1992, Brock has used natural gas as the main source of heating and, therefore, **the University's GHG emissions are directly correlated with the campus' energy consumption**. In the near future, Brock will again be using electricity as the primary source of energy for heating purposes. This will be accomplished via the DES Electrification project (a fuel switching initiative) for which Brock received \$2.9M in **federal funding in 2023. Once this project is completed in spring 2025, Brock's** electricity use will triple while natural gas consumption will reduce by an estimated **79%. In total, the campus's** overall energy consumption will be reduced by about 52%, while reducing GHG emissions by an estimated 67%.
- For the past years, Facilities Management has worked on updating its Building Automation System (BAS), replacing obsolete, proprietary hardware with modern devices that are compatible with multiple protocols and systems. The software and



- control sequences that are used in the BAS are also being modernized (e.g., using open source software) **improving the building systems' performance and enabling new ways to save energy.**
- Brock is one of 17 higher education institutions in Ontario that have joined the Independent Electricity System Operator's (IESO) Strategic Energy Management (SEM) program. This program helps organizations to enhance their energy efficiency and conservation efforts and to formalize the process to increase their effectiveness.

### 3. Next Steps

- In 2024, Brock will be preparing an updated Energy Conservation and Demand Management (ECDM) report, as required under provincial Acts and Regulations. This report will include a summary of the energy conservation measures taken in the past five years, as well as the measures that are planned (or will be considered) between 2024 and 2029.
- **Under the IESO's SEM framework,** Facilities Management team will engage stakeholders from across campus to provide guidance on possibilities to save energy on campus. A more integrated approach to energy management will provide insights into areas that are typically considered separately and will inform the decision-making process for undertaking energy projects.
- As technology evolves, we will explore innovative solutions to optimize the use of the big data sets Facilities Management collects. Some possibilities that will be explored are the use of machine learning to identify outliers in the systems' performance.

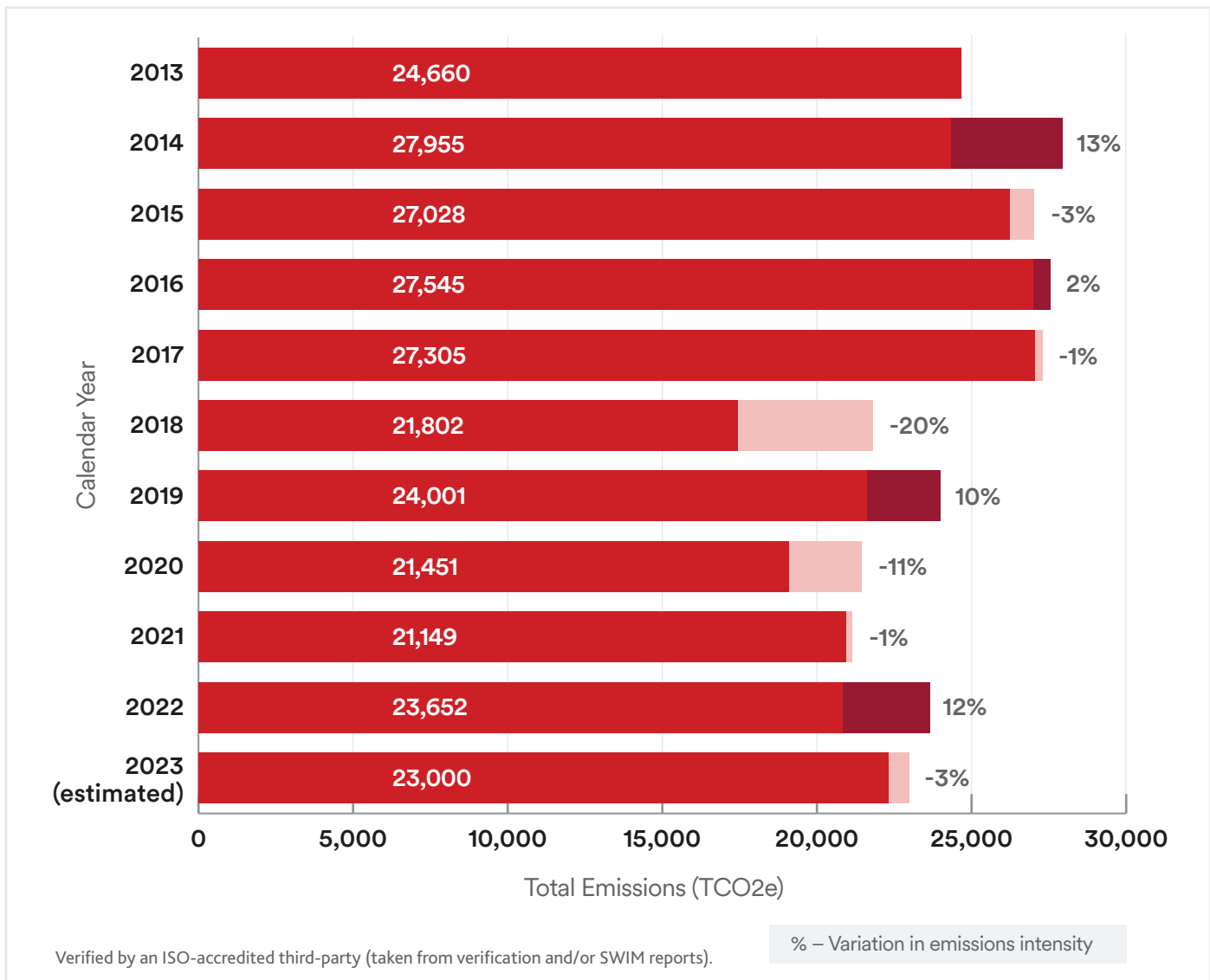
### 4. Background Materials

Appendix 1 - Energy Conservation and Demand Management Scorecard (2 pages)

# Energy Conservation and Demand Management Annual Scorecard

## Strategic priorities

Brock University's Integrated Strategic Plan, which has been endorsed by both the Board and the Senate, sets out the University's Integrated Strategic Priorities. In developing this ECDM, wherever possible, these strategic priorities were used as a lens through which decisions were made and priorities were set. The full Integrated Strategic Plan can be viewed at [brocku.ca/vp-academic/wp-content/uploads/sites/65/Brock-University-Strategic-Plan.pdf](https://brocku.ca/vp-academic/wp-content/uploads/sites/65/Brock-University-Strategic-Plan.pdf)



## Carbon Cost Per Year [CAD]

Pre-2018	FY2018-2019	FY2019-2020	FY2020-2021	FY2021-2022	FY2022-2023	2023-2024*
\$0	\$55,630	\$180,248	\$344,798	\$449,311	\$749,327	\$783,000

\*Estimated

## Drivers for carbon emissions:

- Weather variations (e.g., colder winters)
- Gross square footage
- Building performance
- District Energy System (DES) operations
- Carbon content of the fuels used

## Core principles:

- Efficiency
- Emissions
- Cost
- Resilience
- Asset life

## Major initiatives

Based on the proposed energy and GHG reduction initiatives, Brock University plans to pursue a GHG emissions density reduction target of 20% below 2013 baseline levels by the year 2023. The following provides details of some of the key initiatives currently underway.



1

### Generation

#### District Energy System

The District Energy System (DES) is now operated as a thermal-following plant, where the need for cooling and heating is the main driver of the operations. Electricity generation has become a secondary driver, since the success under the Industrial Conservation Initiative (ICI) program allows Brock to purchase electricity at a very competitive cost. These changes help maintain an appropriate balance between cost, engines life and efficiency while meeting the campus' energy needs.

2

### Operations

#### Enhanced utilities monitoring and tracking

New functionality has been added to Brock's Energy Management System (EMS). It now includes a tool to better predict potential provincial peaks for electricity consumption, allowing Brock to adjust its power purchase under the ICI program. In addition, the public-facing dashboard has a new screen, showcasing the leaderboard and posts for Brock's sustainability challenges.

3

### Procurement

#### Reducing the cost of utilities

Brock has continued purchasing gas at favourable prices, balancing price certainty with cost savings. Demand management activities also have allowed Brock to continue participating in the Industrial Conservation Initiative Program as a Class A electricity customer, which reduces the cost of electricity for the University.

4

### Communication

#### Increased exposure

Brock's second submission to the Times Higher Education Ranking for 2024 was prepared and the results are expected in the spring of 2024. In addition, Brock continues working on updating the university's Sustainability Tracking and Assessment & Rating System (STARS), which will be available in the fall of 2024. In 2023, Facilities Management conducted more tours (e.g., District Energy System, green buildings) than ever, further engaging students, faculty, staff and the broader Niagara community.

5

### Buildings

#### Modernization for Energy Efficiency

Efforts in reducing energy consumption via lighting retrofits to LED technology have also continued. The Ian Beddis Gym is one of the most prominent examples of these efforts. Significant emphasis has been given to modernizing the Building Automation System (BAS) in Roy & Lois Cairns Family Health Bioscience Research Complex, Field House, Plaza, South Block, Scotiabank Hall and Learning Commons.



Board of Trustees

## Report to the Capital Infrastructure Committee

### INFORMATION ITEM

#### TOPIC: Burlington Update

March 6, 2024

Scott Johnston, Associate Vice-President, Infrastructure & Operations

Jennifer Guarasci, Vice-President, Administration (Interim)

#### EXECUTIVE SUMMARY

##### 1. Purpose of the Report

- The purpose of this report is to keep Committee members informed regarding the status of the move to Burlington.

##### 2. Key Background

- The sale of the Hamilton Campus successfully closed August 31, 2023.
- The University successfully moved from Hamilton to the interim site at the former Lester B. Pearson High School and has been operating there since Fall 2023.
- The leases for both the current Pearson (2023/24 and 2024/25 academic years) and future Bateman site have been fully executed.
- The City of Burlington has officially named the Bateman site "Robert Bateman Community Centre".
- Renovation and construction of the Robert Bateman Community Centre is well underway and continuing on schedule for the Fall 2025 academic year opening.
- Demolition and abatement of Brock's tenant space is 100% complete.
- Framing of Brock's second floor tenant space, electrical and plumbing rough-in work is complete with mechanical rough-in and gypsum board installation continuing.

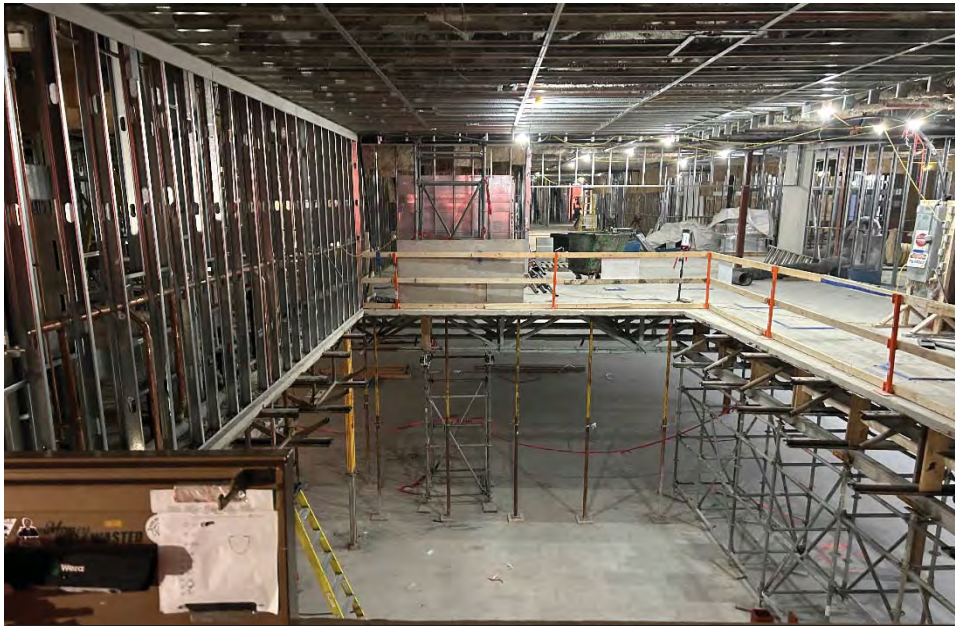
##### 3. Next Steps

- Information Technology Services and Facilities Management will be procuring the supply and installation of audio video and IT equipment and furniture respectively this fall, for delivery and installation in the summer of 2025.
- The University's move consultant will assist with managing the project of moving from Pearson to Bateman targeting July 2025.

##### 4. Background Materials

- Appendix 1: Progress Photos - January 24, 2024 - 1 page





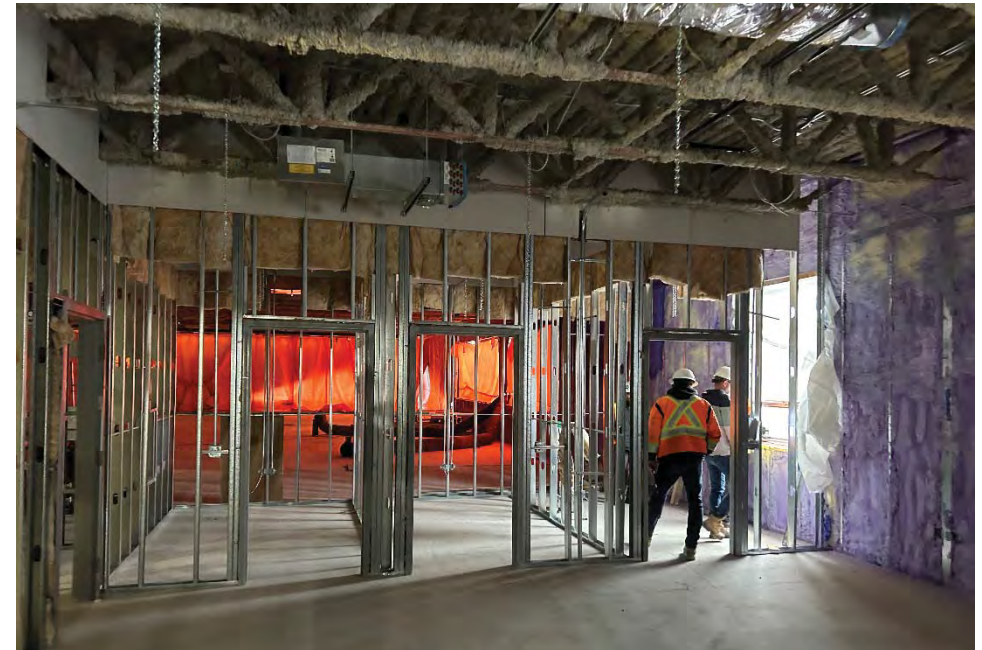
Feature Stair Opening facing Brock Main Entrance



Brock Main Entrance Lobby



Corridor Space leading to Conference Room and Classrooms



Shared Hoteling Offices with Micro-meeting Rooms





MINUTES OF MEETING #2 - CYCLE 2 (2023-2024)

CAPITAL INFRASTRUCTURE COMMITTEE

WEDNESDAY, DECEMBER 6, 2023, 10:30 AM

REMOTE PARTICIPATION VIA MICROSOFT TEAMS

MEMBERS

PRESENT: Rob Welch (Committee Chair), Kevin Magee (Vice-Chair), Mark Arthur, Anteneh Ayanso, Kristian Knibutat, Brian Lang, James Maxwell-Barillas, Anne McCourt, Matthew Melnyk, Lesley Rigg, Debbie Zimmerman

REGRETS: Nyarayi Kapisavanhu, Stephanie Thompson

KEY

RESOURCE: Chabriel Colebatch, Stacey Duncan, Jennifer Guarasci, Scott Johnstone, Tim Kenyon, Meghan Rusnell, Margaret Thompson, Lynn Wells

ALSO

PRESENT: Invited staff members during specific agenda items and other members of the Brock community

1. Call to Order

The Committee Chair welcomed members and staff, called the meeting to order, and provided a land acknowledgement. The Chair further recognized that today is the National Day of Remembrance and Action on Violence Against Women created in response to the murder of 14 women at the Montreal engineering school École Polytechnique in 1989.

2. Declaration of Conflict of Interest

There were no conflicts of interest declared to any matter on the Agenda.

3. Approval of the Agenda

The Committee Chair referred members to the Agenda and confirmed that there were no items to be lifted from the consent portion.

On a motion by Trustee Magee, seconded by Trustee Lang and carried, it was

RESOLVED that the Agenda, including consent items, be approved.

4. Business Arising from the Minutes - None

5. 2024-25 Capital and Related Projects Plan  
[A Decision Item *TOPIC: 2024-25 Capital and Related Projects Plan* dated December 6, 2023 had been posted with meeting materials together with Appendix 1 - 2024-2025 Capital and Related Projects Plan.]

The Chair referred members to the Report regarding a request for approval of the proposed Fiscal Year 2024-2025 Capital and Related Project Plan. He noted that following the posting of the Report, there were further discussions held with members of the University leadership, the Board Chair, and Chairs of the Financial Planning and Investment Committee and the Capital Infrastructure Committee. As a result, the motion in the Report will not be **presented for consideration at today's meeting**. The Board Chair expanded on the matter noting that further review is required within the context of the total budget. Further discussion ensued during which members of the University leadership responded to questions raised regarding timing and implementation of the projects.

On a motion by Trustee Arthur, seconded by Trustee McCourt and carried, it was

RESOLVED that the 2024-25 Capital Plan be referred back to University leadership for adjustments and that it be resubmitted to the Capital Infrastructure Committee for reconsideration prior to Cycle 3.

6. Major Capital Projects Update - Facilities Management  
[An Information Item *TOPIC: Major Capital Projects Update - Facilities Management* dated December 6, 2023 had been posted with the meeting materials together with the following appendices: 1 - Goodman School of Business, MCA Renovation; 2 - Village Residence Interior and Exterior Renewal; 3 - Village Residence Renewal Court 7 and 8; and 4 - District Energy System Electrification.]

The Associate Vice-President, Infrastructure and Operations provided highlights of the Report that contained an overview of key Facilities Management and Ancillary Services **projects aligned with the University's strategic priority of offering a transformational** and accessible academic and university experience. During discussion, the AVP, Infrastructure and Operations provided clarification on matters raised regarding contingencies and inflation factors.

The Committee Chair noted that a motion was required to move *in camera* to consider the following confidential items:

9. Clean Agriculture for Sustainable Production (CASP) Field Infrastructure Project - *In camera*  
8. ITS Major Projects Update - *In camera*  
9. Brock Land Use Planning - *In camera*

On a motion by Trustee Knibutat, seconded by Trustee McCourt and carried, the Committee moved *in camera* at 10:52 a.m. Only members of the Committee and those invited staff remained for the closed session.

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[During closed session, the Committee reviewed the confidential Reports and approved a confidential motion for the consideration of the Board.]

The Committee resumed open session at 11:51 a.m.

10. In Camera Record of Proceedings of the Previous Meeting - *In camera*  
[The *in camera* Record of Proceedings of the previous meeting had been posted with the meeting materials.]

The confidential Record of Proceedings from the previous meeting held on September 27, 2023 had been approved by consent.

11. Minutes of Previous Meeting  
[The minutes of the previous meeting had been posted with the meeting materials.]

The Minutes of the previous meeting held on September 27, 2023 were approved by consent.

12. Metrics  
[An Information Item *TOPIC: Metrics - Facilities Management* dated December 6, 2023 had been posted with the meeting materials.]

The Metrics were received by consent.

13. Other Business - None

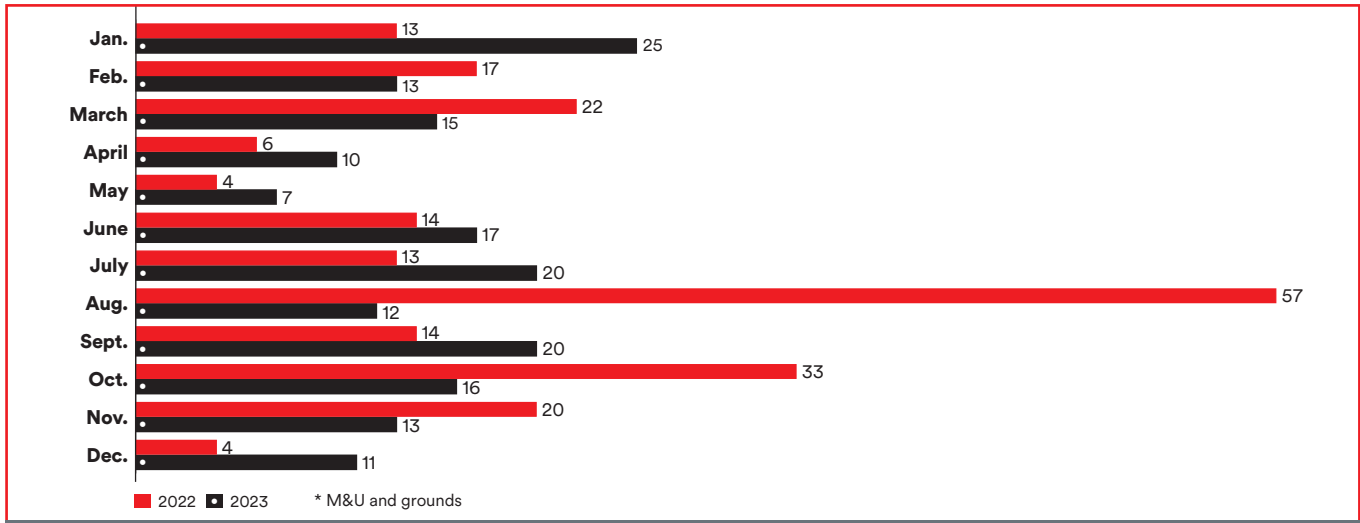
14. Adjournment

The meeting adjourned at 11:52 a.m.

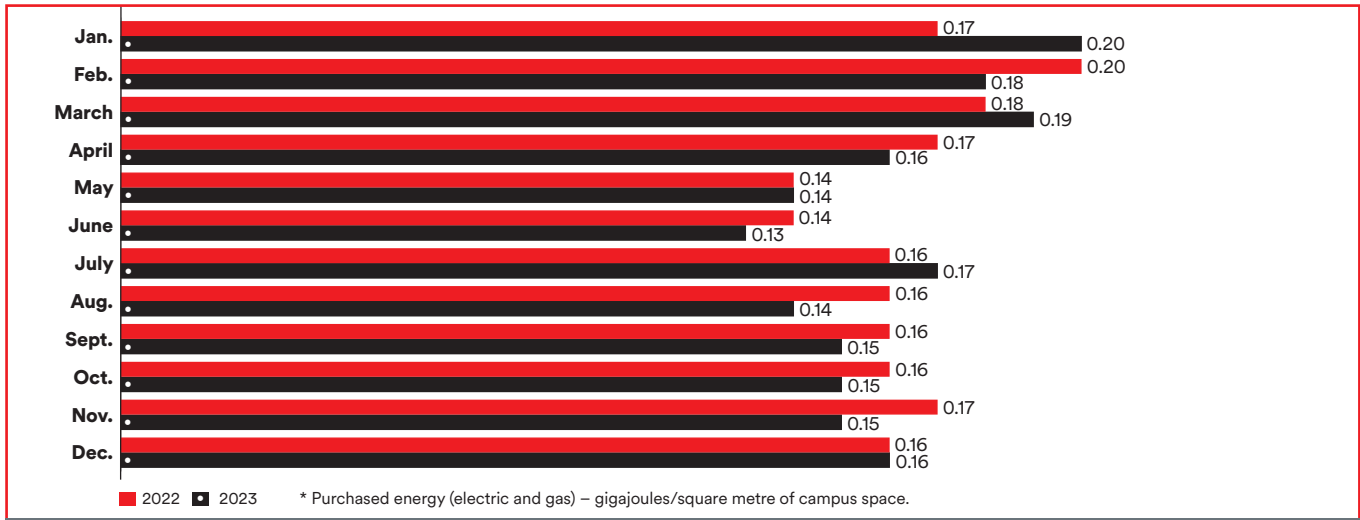


# Facilities Management scorecard

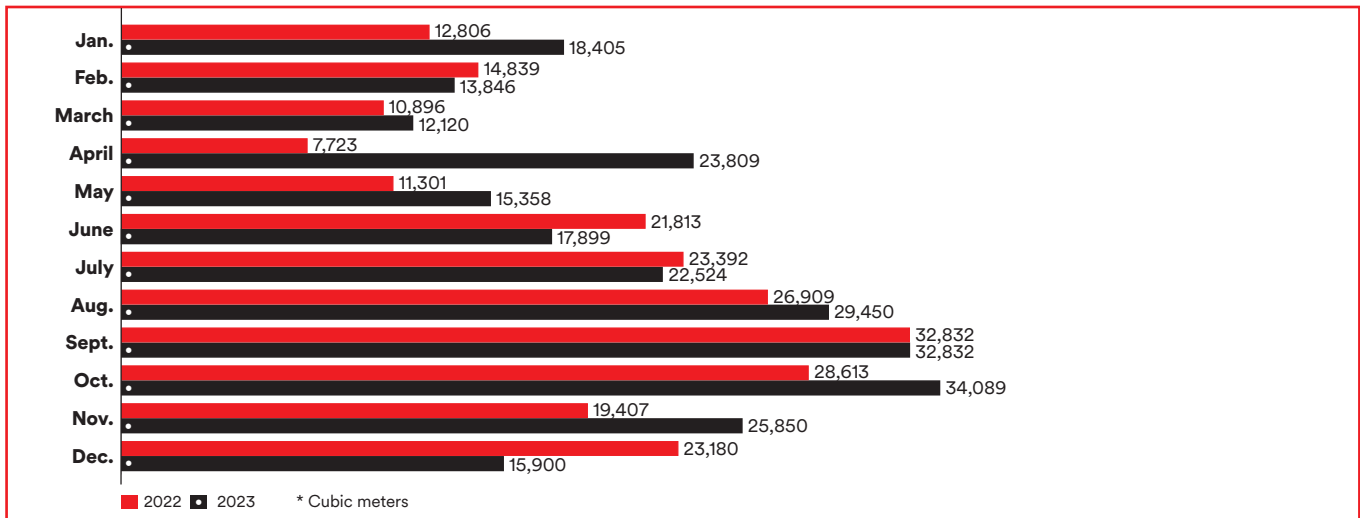
## Number of emergency/after hour call-ins\*



## Energy intensity (GJ/M2)\*

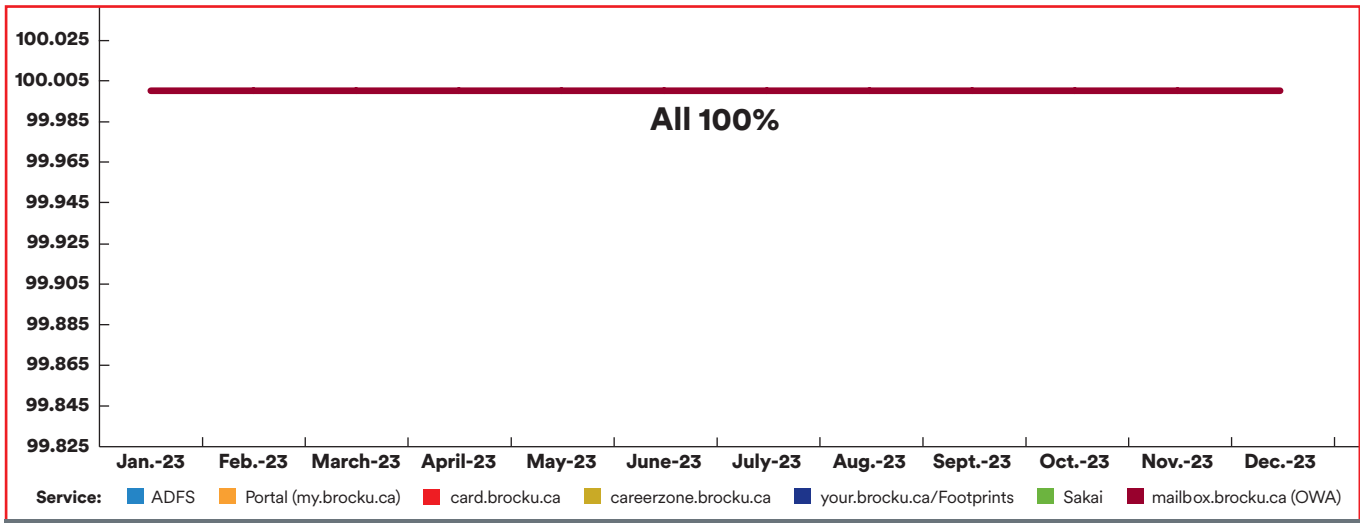


## Water consumption (M3)\*

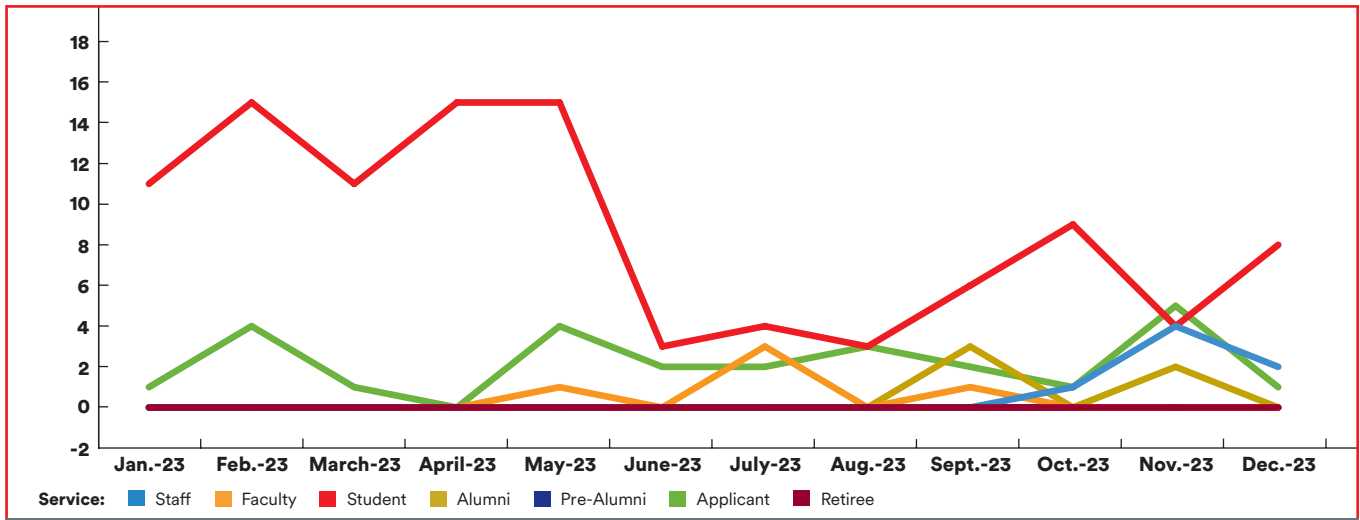


# Information Technology Services scorecard

## Web application availability (January 2023 to December 2023)



## Compromised accounts (January 2023 to December 2023)



## Firewall threats by month (January 2023 to December 2023)

