

**⊯** PLUG 2019

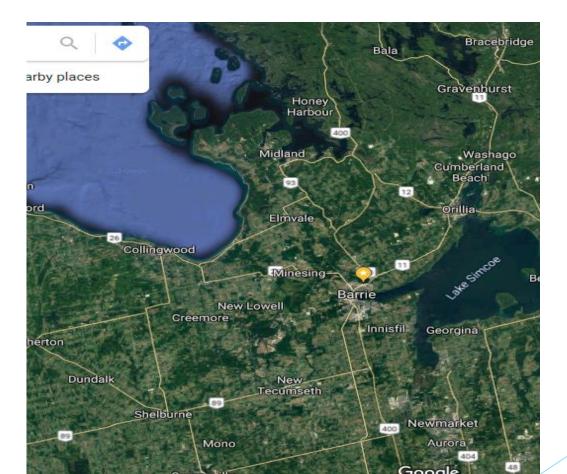
## **How Georgian Started**

- The college was established during the formation of Ontario's college system in 1967. Colleges of Applied Arts and Technology were established on May 21, 1965 when the Ontario system of public colleges was created.
- Georgian College opens in October in a storefront plaza in Barrie's east end with 101 students



#### Where We Are

Georgian College's main campus is located on a 205-acre site on the northeast edge of Barrie. Satellite campus's are located in Orillia, Owensound, Collingwood, Midland, Bracebridge and Orangeville



## Where We Are - cont.

▶ 13,000 full-time; including 3,600 international students attend Georgian





#### Ontario College Facilities Management Association

- Georgian College is one of the Provinces 24 colleges who is a member of OCFMA
- VISION STATEMENT
  - Building foundations for Ontario College success.
- MISSION
  - Advancing facilities management of Ontario Colleges by fostering excellence and professionalism through:
  - Advocacy
  - Leadership & Management
  - Best practices
  - Collaboration

As a result of our membership with OCFMA a system was required to report or energy consumption for reporting reasons.

## Changemaker

Georgian College is the first college in Canada to be designated a Changemaker Campus by Ashoka U for its role as a leader in social innovation and changemaking in higher education. Since 2008, over 40 colleges and universities around the world have received the designation, including four universities in Canada

The Ashoka U Changemaker Campus Network is a dynamic, global network of leading colleges and universities that commit to advancing social innovation and changemaking across their institution and beyond. From admissions and the curriculum, to career services and alumni engagement, these colleges and universities set the bar for social innovation and changemaking in higher education. The Changemaker Campus Network includes over 40 colleges and universities from around the world including Brown, UC San Diego, Arizona State University, Miami Dade College, University of Northampton, Ryerson University, Simon Fraser University, and Tecnológico de Monterrey - Campus Guadalajara.



We did have unfortunately have a small fire June 4<sup>th</sup> of this year which unfortunately affected our Changemaker space



# How Georgian Is Using PME SPARKLE project 2018/19

#### SPARKLE RESIDENCE PROJECT

The Barrie Campus offers an oncampus residence. The eight-floor residence houses approximately 525 students, which includes 16 live-in residence life staff (15 Resident Attendants and a Manager of Residence Life). There are also two dual bedroom rooms for students with disabilities. During the summer, this residence becomes a summer accommodation facility and hotel, although a few students remain in the building for the summer semester



## **Enter ION Metering**

# Schneider Electric



## Sparkle - cont.

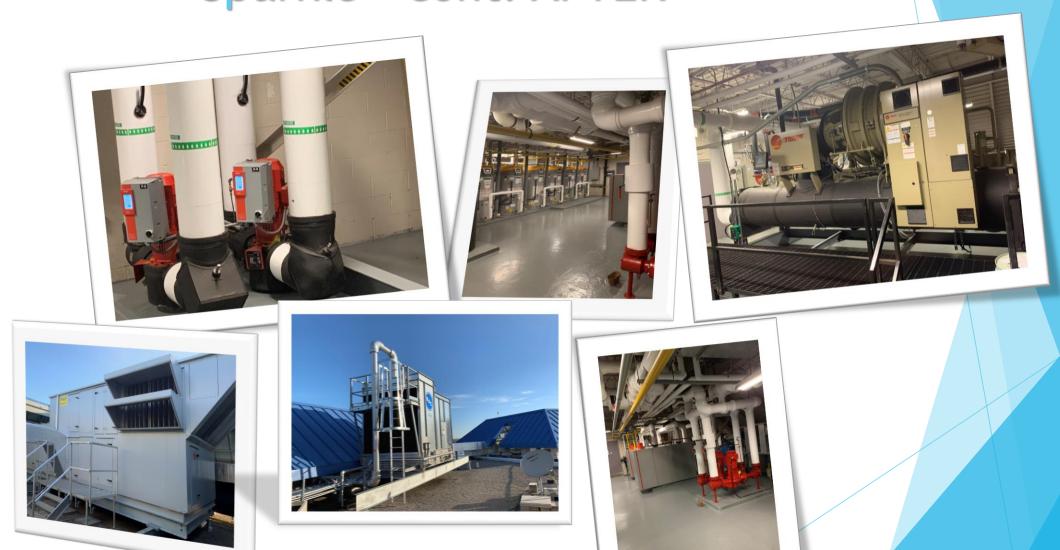
Georgians residence was at the time of construction was built due to need and expedience. This did not lend it to a energy efficient design. Or for that matter maintenance......





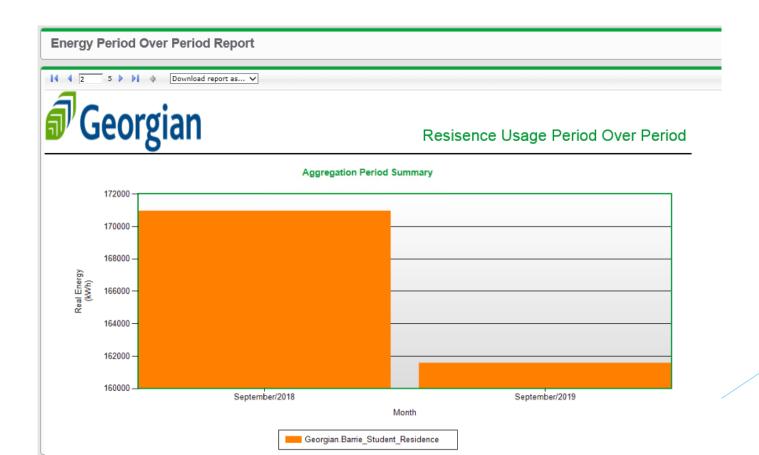
Before

# Sparkle - cont. AFTER



## Period over Period Usage

Using ION meter and PME Georgian was able to determine that a Significant amount of energy could be saved by focusing on our student residence and retrofitting the Mechanical Plant.

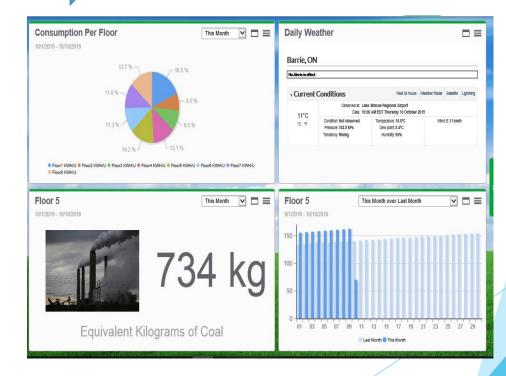


#### FLOOR TO FLOOR COMPETITION

#### **DASHBOARDS**

AS EACH STUDENT EXISTS THE ELEVATOR ON EVERY FLOOR THEY ARE GREETED WITH A DASHBOARD SHOWING HOW THEIR FLOOR IS DOING WITH REGARDS TO ENERGY CONSUMPTION IN COMPARISON WITH THE OTHER FLOORS IN THE RESIDENCE BUILDING

#### ON EVERY FLOOR



# Floor Winners get an ENERGY PIZZA PARTY



## Natural Gas and Water Project





### Water and Gas

- Realizing the capabilities of PME, Georgian is currently integrating the existing water and gas meters on site back to our ION metering
- Georgian Currently is undergoing a culture change, and part of that is understanding its behaviors.
- Presently each building is individually metered for water by the City of Barrie, but the Natural gas is bulk metered and no accurate understanding of consumption is currently available.
- By bringing back the pulse signal of each meter to the ION meter an then using PME as an analytical tool, Georgian hopes to better understand what is happening throughout all its campuses.

#### RETscreen



Natural Resources Ressources naturelles Canada Canada





Georgian also utilizes the data gathered from ION for use in generating reports using Natural Resources Canada RETscreen software. The ability to gather and import data from the PME software to usable formats in RETscreen is a timesaver

## Inter Departmental Billing

Using the PME Georgian has the ability to generate specific billing to departments within the college







### Pro's

- Was already existing so upgrade of components less costly than an initial install
- Very good technical support. If you call.... they pick up
- ► BACnet Compliant. Georgian uses BACnet extensively for 3<sup>rd</sup> party integration

### Con's

- Supply chain. It's not off the self product, so isn't readily available in all instances
- Cost.....Not the cheapest product out there...sorry Eric, you said say anything