

April 12, 2021

Appendix #2 - Information in regards to energy efficiency/zero carbon potential for other City facilities

This appendix is additional information to inform **the Zero Carbon Retrofit of South Fletcher's Sportsplex** report being considered at the April 14, 2021 Committee of Council meeting.

On March 31, 2021, a motion was passed to consider making the South Fletcher's Sportsplex, the first zero carbon building for the City of Brampton. The request from Committee of Council at that time was to provide information in regards to the energy efficiency/zero carbon potential for other City facilities.

State of Good Repair Facilities and Top GHG Emitters

Chris Gibson

It was not in the scope of work or RFP to make the entire Chris Gibson facility have net zero emissions. The new systems for the building addition will be entirely electric which contributes to less GHG emissions but the existing natural gas system in the old building will remain as it is since it is not in the scope to replace.

Facilities

There are approximately 100 facilities and 30 of these are responsible for 85% of Brampton's emissions¹. Thus, these 30 were investigated including State of Good Repair (SOGR) projects². These 30 are divided into two categorized lists.

Recreation

Recreation facilities that are top 30 emitters and some of which have upcoming state of good repair projects for 2022 are in the below list and itemized as 1-16. The facilities at the top (1-6) have updates while the ones following (7-16) do not have mechanical or Heating Ventilation and Air conditioning (HVAC) SOGR projects planned for 2022.

1. Loafer's Lake Recreation Centre – construction renovation started and to be completed in 2021
2. Balmoral Recreation Centre – design at 60% with project team
3. Earncliffe Recreation Centre – currently under study for zero carbon

¹ 2018 emission which is most current year based on available emission factors

² BDC's proposed preliminary list of Recreation facility SOGR capital projects for the 2022 Capital submission will likely change prior to the final submission.

4. Century Gardens Recreation Centre – HVAC upgrades planned for 2021, under study for zero carbon
5. Jim Archdekin Recreation Centre – mechanical equipment replacement (duct heater, various pumps)
6. Terry Miller Recreation Centre – refrigeration plant compressors and dehumidifiers replacement
7. South Fletcher’s Sportsplex – Committee of Council (CoC) report in e-scribe
8. Chinguacousy Park Tennis and Curling
9. Chinguacousy Wellness Centre
10. Chinguacousy Park Greenhouses
11. Gore Meadows Community Centre and Library
12. Cassie Campbell Community Centre
13. Brampton Soccer Centre
14. Senior’s Centre – FCCC
15. FCCC Units 1 & 2
16. Kiwanis Youth Hub

Facilities, Operations and Maintenance, Fire, and Transit

The (non-recreation) facilities that are top 30 emitters with some having upcoming SOGR projects for 2022 are shown as 17-29. The facilities at the top 17-19 have updates while the ones following (20-29) do not have mechanical or HVAC SOGR projects planned for 2022.

17. Civic Centre – mechanical and HVAC upgrades
18. POA Courthouse – HVAC upgrades
19. Rose Theatre – RFP development for HVAC upgrades
20. Brampton Transit Yard Sandalwood Facility
21. Brampton Transit Yard Clark Facility
22. Williams Parkway Works Operation Centre
23. City Hall
24. Williams Parkway Administrative Building & Fire Station 203
25. City Hall West Tower
26. Sandalwood Sand & Salt Storage and Garage Building
27. 129 Glidden Rd
28. Animal Shelter
29. A & M Fire Apparatus Building

To complete the Top 30, number 30 is Chris Gibson which is described at the beginning of this Appendix.