

STRATEGIC ENERGY MANAGEMENT PLAN FOR MIDDLESEX HOSPITAL ALLIANCE 2018 UPDATE

Submitted by, Ryan Whitney Manager –Maintenance Services, Facilities Management Middlesex Hospital Alliance Approved by,
Todd Stepanuik
President & Chief Executive Officer
Middlesex Hospital Alliance

Introduction

The purpose of Middlesex Hospital Alliance's energy management plan and policies is to promote good stewardship of our environment and community resources. In keeping with our core values of Efficiency and Financial Responsibility, Middlesex Hospital Alliance's energy management program will reduce operating costs and enable us to provide the healthcare we would expect for our own families to a greater number of persons in the community.

The following data is an update for 2018 of the Energy Data for 2016 submitted as part of our requirements under the Green Energy Act. We have also included updates to our 2014 Strategic Energy Management Plan Timeline where applicable.

Projects that have impacted Energy

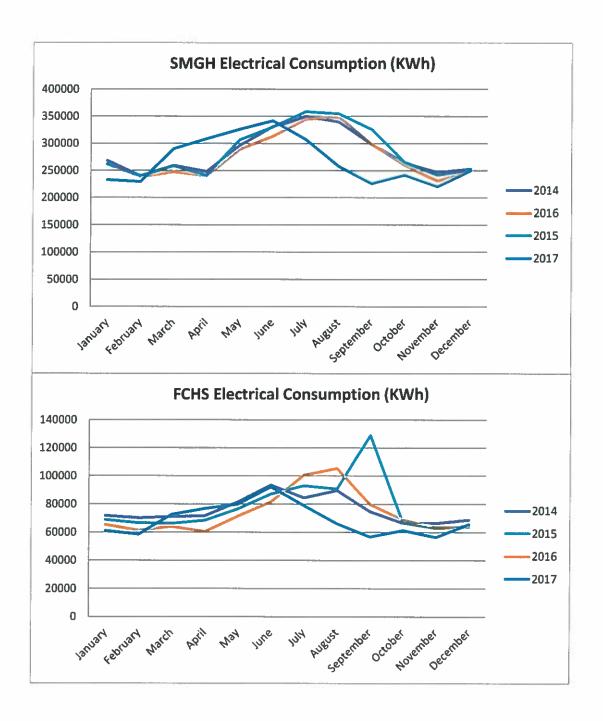
- 1) Replacement of AHU#3 at FCHS A new energy efficient Air Handler was installed in 2016-17 with improved controls
- 2) FCHS Controls -- The old control system was updated in 2016 with new Direct Digital Control allowing better control of HVAC systems. Further fine tuning took place in 2017
- 3) SMGH Controls The old control system was updated in 2016 with new Direct Digital Control allowing better control of HVAC systems. Further fine tuning took place in 2017
- 4) A major project at FCHS in 2017-18 replaced most interior lighting with LED with savings to exceed 50,000 KWh
- 5) Two new energy efficient Roof Top HVAC units where installed at FCHS in 2017-18
- 6) At SMGH the main cooling tower was replaced with a new efficient unit along with the use of VFD's on the cooling fans
- 7)Roofing programs at both sites have replaced old roofing and improved the insulation value of the new roof sections.
- 8) The SMGH OR area cooling system was replaced with a state of art efficient unit.
- 9) Old incandescent Exit lights where replaced with new LED energy efficient units at both sites

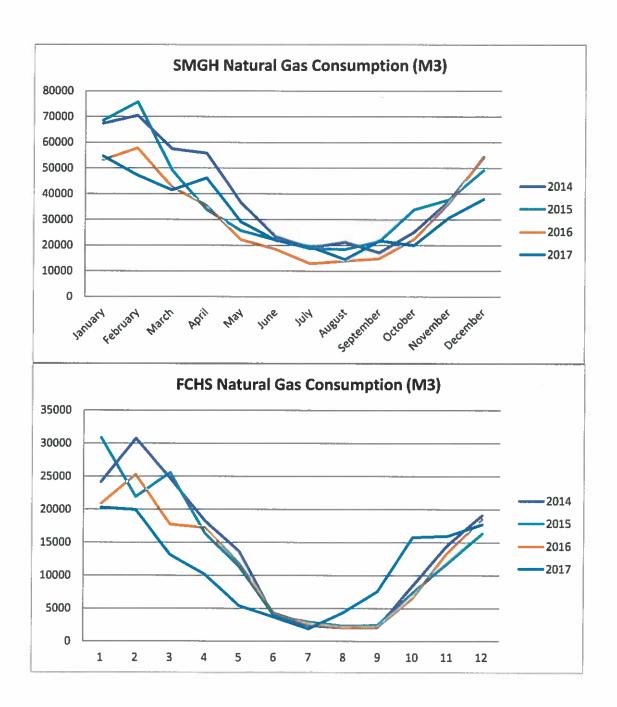
Save on Energy

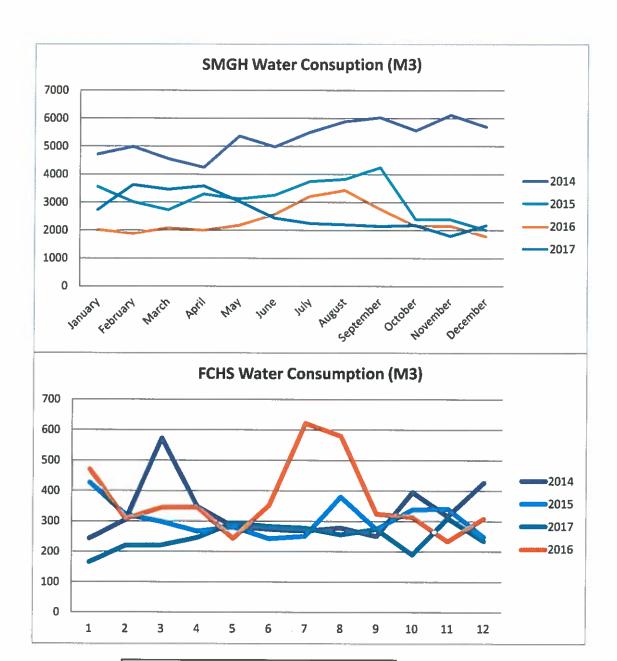
MHA has been working with both Union Gas and Entegrus to obtain Energy Incentives thru the Ontario Government Save on Energy program.

In total MHA have completed 15 projects and have submitted over 30 projects for review by Union Gas and Entegrus. This has resulted in over \$39,000 in incentive grants to date.

Annual Energy Consumption Data







	PERCENT REDUCTIO	NS 2013 vs 2017
	SMGH	FCHS
Hydro	105%	116%
Gas	114%	131%
Water	152%	133%

	PERCENT REDUCTIONS 2013-2016 avg vs 2017				
	SMGH	FCHS			
Hydro	105%	112%			
Gas	115%	117%			
Water	149%	124%			

Recognition

In 2018 MHA was recognized by the Canadian Coalition for Green Health Care with two awards for their work on Sustainability and Energy conservation.

SMGH was award the 2017 Green Hospital Scorecard Top Performer - Energy

FCHS was awarded the 2017 Green Hospital Scorecard Top Performer - Water

Timeline and Responsibilities for Plan Adoption and Implementation

Measure	2013	2014	2015	2016	2017	2018	2019
Report energy consumption as per O.Reg 397/11	Complete	Complete	Complete	Complete	Complete		
Complete an Energy Conservation and Demand Management Plan		Complete					
Obtain approval of SEMP		Pending					
RFP to select an Energy Performance Partner	Pending	Complete					
Energy Performance Contract		Pending	Pending Approval	Ongoing	Ongoing		
Ongoing monitoring and verification of energy conservation measures			Pending (to begin at end of installation phase)	Ongoing	Ongoing	Ongoing	Ongoing
Improved awareness and communication of energy conservation		Pending	Ongoing	Ongoing	Ongoing		
Monitor energy commodity cost	Increased water and sewer monitoring Ongoing for Electricity and Natural Gas	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Frack and report on SEMP		WWW.	Implement Process Update		Ongoing		