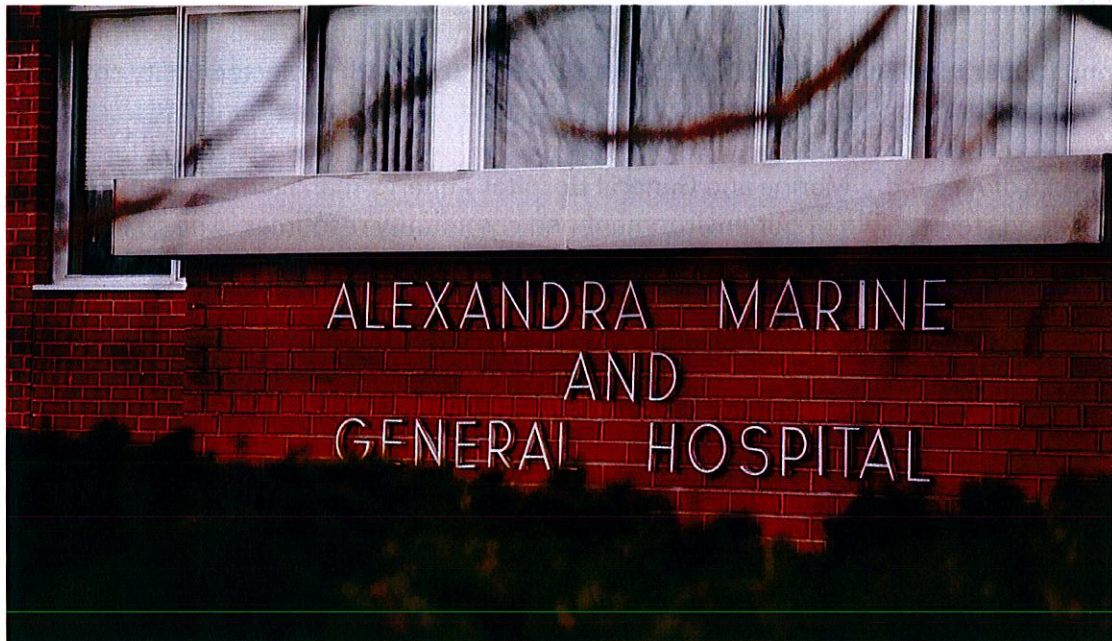




Alexandra Marine and General Hospital Energy Management Plan



June 2014- June 2019

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Introduction

The Alexandra Marine and General Hospital (AMGH) has been providing quality health care services to the residents of the Town of Goderich and surrounding municipalities for over 100 years.

AMGH is a full service community hospital. AMGH is the largest provider of hospital services in Huron County. AMGH currently operates forty two (42) beds providing acute, long-term, psychiatric, emergency and ambulatory care and is operating under a four year accreditation award granted in 2014. It is a Schedule I facility with a twenty bed inpatient psychiatric unit that provides care for all of Huron County as well as providing services for some bordering communities in Bruce, Grey and Perth Counties. The Hospital also offers full-time community psychiatric outpatient/day care facilities for the Towns of Goderich, Clinton, Seaforth and Wingham. In addition to these community programs, the Hospital is the sponsor for the Regional Intensive Case Management program serving mentally ill patients throughout Huron and Perth

Our annual Operating Budget for 2014/2015 is \$22, 613, 070, with projected utility costs of \$368,000.

The purpose of Alexandra Marine and General Hospital's energy management plan is to promote good stewardship of our environment and community resources. The goals within this plan align with our Strategic Pillars of People, Quality, Finance, Service, Integration and Stakeholder Relations.

Although this document is a 5 year plan, it will be a living document and will be updated annually.

The Purpose:

- A strategic approach will be taken to further strengthen and obtain full value from energy management activities: the organization will fully integrate energy management into its business decision-making, policies, and operating procedures.
- The province of Ontario has projected an annual 3.5% to 7.9% increase in electricity costs over the next 20 years. Natural Gas is also projected to trend upward. Utility and energy related costs are a significant part of overall operating costs at AMGH
 - Utility costs in 2013/14 were \$363,035
- With the implementation of the goals outlined in this plan, we hope to achieve a minimum of 10% reduction in energy consumption by June 2019.

Recent Accomplishments in Energy Management

- Constant monitoring and adjusting the Building Automation System (BAS) over the 2013/14 heating season. Reduced the natural gas consumption from Sept 2013 to April 2014 by 54,610 cubic meters less than expected. This was achieved by closing the gap of temperature difference between hot decks and cold decks on the heating and cooling systems - and also had positive impact on occupants comfort.
- Window replacement in fall of 2013 in areas that had original 1967 windows
- Project to install occupancy sensors in utility rooms and public washrooms in 2013- on going
- Steam trap survey April 2012. 20% of traps were found to be defective- that had an estimated annual steam loss of 868,044 pounds or equivalent to \$13,021 cost saving for natural gas as of November 2012
- Participated in "Energy Challenge" in month of June 2012, 2013 with neighboring hospitals- as competition to see what site could reduce electricity consumption for the month of June. AMGH came in 2nd place both years- reducing consumption by 11% in 2012 and 9% in 2013
- Energy Efficient lighting upgrades to Goderich Community Psychiatric Services and 108 Montcalm residence through Small Business Lighting program provide by local electrical utilities – June 2014.

Energy Management Vision

“Passion to Make Healthcare Better” is our mission statement at AMGH, one of our means to do this is “to improve the health status of residents and visitors in Goderich and area”. In recognition of the critical linkages between environmental health and public health, it is our desire to limit adverse impacts upon the environment. By using our facilities efficiently and effectively we will be able to direct more resources toward patient care, reduce our environmental foot print and thus contributing to creating a healthier environment, for our community and those we serve.

“Our energy management vision is to integrate energy management into Alexandra Marine and General Hospital’s organizational policies, business practices and our culture to ensure the most efficient use of energy. We will become community leaders in Environmental Stewardship.”

Guiding Principles for Strategic Energy Management

Alexandra Marine and General Hospital Energy Management Plan will be guided by our **Strategic Pillars**.

People

Employee Engagement

Engaging employees and providing Energy Conservation awareness will create employees who are conscious of energy use at work and at home, contributing to reduction in energy use at the hospital and the community.

Quality

Enhanced Healing and Working Environment

Efficient operating practices improve patient as well as employee comfort with more stable air temperature, and better indoor air quality and lighting, thus enhancing patient and employee satisfaction.

Finance

Improved Financial Health and Operating Cost Reduction

Strategic energy management presents a highly leveraged opportunity to reduce operating costs and positively impact AMGH bottom line. Ensuring current equipment is operating efficiently and is maintained and monitored contributes to the reduction of energy costs. Capital investment in new equipment /infrastructure will reduce future energy costs.

Service

Purchasing/Procurement Procedures and Specifications

Standardized Purchasing Policies and specifications to ensure most energy efficient equipment is purchased. Energy Management Strategies will be considered when planning renovations or new building to ensure future energy consumption is minimized.

Integration

Partnerships and linkages with: other hospitals in the area for training programs, OHA (Ontario Hospital Association) HELO (Healthcare Energy Leaders of Ontario).

Stakeholder Relations

Strengthened Community Leadership and Environmental Stewardship

Energy management is a visible, public commitment to the community and environment. Through aggressive energy management, the hospital can provide leadership in promoting sustainable communities, efficient business practices, and environmental stewardship.

Energy Management Goals

The following outlines some of the energy management goals that we will be adopting to achieve Energy Management Vision.

People

- Reestablish “green team”. Identify champions/ leaders in various departments to participate, require Senior Team Support. By March of 2015
- Share utility data with employees, feature routine articles in AMGH Happenings on Energy Conservation tips for home and work. August 2014
- Review monthly utility bills with maintenance staff each month, to monitor trends and to address potential opportunities for improvement. June 2014.

Quality

- Improve building Operating Performance- compete a “Building Envelope Assessment”. To identify leaks that are impacting indoor air quality and energy consumption. By June of 2015.
- Once assessment is complete- develop a plan to address deficiencies and if needed seek capital funding, plan for improvements over 2015 and 2016.
- Complete facility lighting audit- August 2014- identify T12 lighting to be upgraded to T8, taking advantage of OPA lighting incentive programs – to have lighting retrofit completed by February 2015.
- Complete exterior lighting audit for parking lot lights and exterior building lights – upgrade as necessary. June 2017
- Replace windows on west side of hospital on 1st floor- poor efficiency and negative impact on occupants with drafts in cold weather. October 2014

Finance

- Obtain available rebates and incentives for energy efficient products and equipment purchases and training. Ongoing.
- Monitoring and reviewing monthly utility bills, identifying – utilize the ENERGY STAR Portfolio Manager to measure and track energy and water consumption as well as greenhouse gas emissions August 2014.
- Participate in the Small Business Lighting retrofit for Exeter, Seaforth, Clinton and Wingham Community Psychiatric sites. September 2014

Service

- Establish Procurement Standards that consider energy consumption- provide Product Evaluation Team with recommended procurement standards to include energy performance criteria. January 2016
- Routinely purchase ENERGY STAR qualified products such as computers, faxes, copiers, monitors, printers and other office equipment. September 2015
- Continue with occupancy sensor install in public washroom and utility closets- January 2015

Integration

- Participate in the OHA green hospital score card for benchmarking purposes July 2014
- Coordinate “close to home” training sessions for Maintenance staff – partner with other local hospitals - “Building Operator Certificate” November 2014
- Partner with HELO (Healthcare Energy Leaders of Ontario) June 2014

Stakeholder Relations

- Partner with Town of Goderich Energy leaders – include representatives on Green Team- March 2015
- Regular articles in Goderich Signal Star – “what’s happening” at AMGH around Energy Management September 2015.

Baseline Energy Use

The baseline energy profile is for 2013 which is the most recent full fiscal year with available utility data.

	<u>2013 Annual Consumption</u>	<u>10% Reduction by 2019</u>	<u>Total Target Consumption 2019</u>
Electricity:	2,249,477 kWh	224,947.70kWh	2,024,529.3 kWh
Natural Gas:	2,253,320.17m3	225,332.017m3	2,027,988.153 m3
Water:	12,190 m3	1,219m3	10,971 m3