

ROYAL VICTORIA REGIONAL HEALTH CENTRE STRATEGIC ENERGY MANAGEMENT PLAN 2014



www.vrhphoto.ca 706-221-1189

TABLE OF CONTENTS

- About RVH
- Introduction
- Energy Consumption
- Goals of the Energy Management Strategic Plan
- Guiding Principles of the Energy Management Strategic Plan
- Energy Conservation and Demand Management Initiatives
- Energy Usage Graphs

ABOUT RVH

Royal Victoria Regional Health Centre (RVH) is a regional health centre in Barrie, Ontario, located 80 kilometres north of Toronto. As the largest hospital in the region of Simcoe Muskoka, RVH's team of over 350 physicians, 2,600 employees and 850 volunteers provides exceptional care and specialty services to almost half a million residents, including cancer care, stroke services, orthopaedics, intensive care, mental health and interventional radiology. RVH is focused on delivering high-quality, safe care that puts patients and their families first.

RVH is part of The North Simcoe Muskoka Local Health Integration Network (LHIN) 12. LHIN 12 includes the municipalities of Muskoka, most of Simcoe County, and part of Grey County.

In 2013/14, there were 415,000 patient visits to RVH and over 81,000 visits to RVH's Emergency department. Nearly 4.2 million lab tests were conducted, over 168,000 Imaging procedures and RVH welcomed 2030 babies into the world.

In 2012, RVH completed a \$450 million expansion, which doubled the size of the health centre and added programs and services not found elsewhere in the region. RVH is now focused on continuing to bring specialized programs closer to home, including advanced heart care, child and youth mental health and women's cancer services, while expanding clinical research.

For further information, visit the RVH website at www.rvh.on.ca

INTRODUCTION

As per Ontario Regulation 397/11 all public agencies shall prepare, publish, implement and make available to the public energy conservation and demand management plans.

RVH's plan, in order to meet Ontario Regulation 397/11 will include:

- Information on RVH's annual energy consumption during the last year where complete information is available for a full year.
- RVH's goals and objectives for conserving and otherwise reducing energy consumption and managing its demand for energy.
- Confirmation that RVH's senior leadership team has approved the Strategic Energy Management Plan.

* RVH has no renewable energy generation and therefore does not need to report on such activities.

ENERGY CONSUMPTION FOR YEARS 2011 AND 2012

RVH 201 Georgian Drive, Barrie, ON L4M 6M2

2011 Electricity 18,417,620 Kilowatt Hours
Natural Gas 2,503,381 Cubic Meters

2012* Electricity 24,124,715 Kilowatt Hours
Natural Gas 3,761,922 Cubic Meters

Rotary Building 201 Georgian Drive

2012* Electricity 825,600 Kilowatt Hours as of May 2012
Natural Gas 74,550 Cubic Meters as of May 2012

* In March of 2012 Rotary Place was opened and in May of 2012 RVH's expansion opened. Rotary Place is approximately 75,000 square feet and the expansion is approximately 400,000 square feet.

GOALS OF THE STRATEGIC ENERGY MANAGEMENT PLAN

The overall goal and objective of Royal Victoria Regional Health Centre's Strategic Energy Management Plan (SEMP), is to promote stewardship of our environment, management of our resources and a reduction in our energy usage of 5% over the course of the plan.

RVH's SEMP has the support of the senior leadership team.

ALIGNMENT OF VALUES FOR THE STRATEGIC ENERGY MANAGEMENT PLAN

Royal Victoria Regional Health Centre's Strategic Energy Management Plan will be guided by our core **Values**.

Work Together: Everyone at RVH in some way can contribute to energy reduction regardless of whether they are staff, physician, volunteer or visitor. We can all help to reduce energy usage by turning off lights and computers, adjusting thermostats, reporting leaking faucets, etc.

Respect All: Respect All, including our environment. All efforts need to be made to wisely use our energy, reduce consumption and increase our recycling activities.

Think Big: Our SEMP will not only require partnership and buy in from our internal stakeholders, we will also be seeking or enhancing partnerships with Healthpro, ECNG, Powerstream, COHPA and the City of Barrie.

Own It: All of us need to be aware of our personal energy usage and make efforts to use it wisely. When purchasing new equipment, one of the objectives is to support suppliers that demonstrate their commitment to the environment and one of the ways we can evaluate this is to score the overall environmental effect including energy efficiency of any equipment supplied.

Care: We all need to care about our energy usage. The annual updating of our Strategic Energy Management Plan will provide information to everyone about how we are performing year over year. Energy conservation initiatives will be featured in our internal RVH publications.

ENERGY CONSERVATION AND DEMAND MANAGEMENT INITIATIVES

Year 2012

- Replacement of the heat wheel on AHU #22 at a cost of \$82,000. The replacement resulted in an estimated annual energy savings of \$65,000 annually.
- Replacement of Boiler #501 at a cost of \$128,000. The replacement resulted in an estimated energy savings of \$12,000 annually.

Year 2013

- Replacement of the Reverse Osmosis system for the original building at a cost of \$40,000. The replacement of the system was necessary due to age and reliability. There are no water meters on the system, but it does use less water than the previous system.
- Building Automation System upgrade in the original building at a cost of \$135,000. Estimated savings of approximately 5% on natural gas usage equate to \$30,000 annually.
- Installation of new variable speed drives on domestic water system at a cost of \$14,000. This was a new installation, replacing an antiqued water regulating system and therefore there were no comparable energy savings although this project still qualified for a Save On Energy incentive of \$2,000.

Year 2014 Upcoming Projects

- Replacement of the cooling tower in the original building at a cost of \$700,000. Estimated energy savings of \$95,000 annually. This project qualified for a Save On Energy incentive of \$41,000.
- Enrollment in the Enbridge Run It Right program whereby an investment of \$30,000 in repair/replacement of heating system components will be matched by an incentive of \$30,000 and provide an estimated savings of 5% on our natural gas budget, which represents \$30,000 annually.
- Replacement of Main Lobby pot and globe lights from metal halide to LED lamps at a cost of \$29,000 and an estimated energy savings of \$8,000 annually. This project qualified for a Save On Energy incentive of \$4,000.
- Refit all elevator lamps with LED at a cost of \$13,000. Estimated energy savings of \$13,000 annually. This project qualified for a Save On Energy incentive of \$7,000.
- Installation of variable speed drive on AHU #9 and RF #9 at a cost of \$11,000. This was a new installation and therefore there were no comparable energy savings although this project still qualified for a Save On Energy incentive of \$3,000.
- Replacement of dishwasher at cost of \$176,000. Estimated energy savings of \$73,000 annually. This project has qualified for a Save On Energy incentive that is to be determined.

Appendix A

