



## Lighting control savings and innovation

Natural Resources Canada statistics indicate that lighting represents approximately 15%<sup>1</sup> of the energy costs of commercial and industrial buildings in Quebec. According to other sources, the rate may be 40% in certain cases.

To save money, energy-efficient light sources are a good choice but the key is to reduce the length of time and how frequently they are used. As a result, building owners and managers are increasingly turning toward automatic control solutions to optimize the performance of their indoor and outdoor lighting systems and to reduce waste.

Based on objectives and needs, we will program the devices to operate based on the amount of sunlight, time of day, area, occupancy, level of security, desired atmosphere or ergonomic criteria. To do so, we will use a control system to co-ordinate the switches, dimmers, relays, motion sensors, ambient light sensors, automated blinds, etc.

### The many advantages of lighting control systems

- **Savings** given that energy use is based on real needs
- **Improved ergonomics** because the systems are adapted to the various tasks
- **Simplified management** thanks to centralized or area-based automatic control
- **Simplified planning** using the system's performance data
- **Appropriate atmosphere** through programmed scenarios
- **Stronger reputation** through the possibility of obtaining LEED credits

### Wireless technology, the modern solution

For a few years, conventional lighting control solutions have been enhanced by self-powered wireless technologies. These reliable and versatile technologies improve flexibility with regard to design and implementation.

For example, the control systems put in place communicate via a radio signal. Several self-powered wireless devices—

switches, motion and ambient light sensors—can be installed or relocated quickly, on a variety of surfaces, without requiring any architectural modifications.

Wireless technologies are therefore perfectly suited to renovation or expansion projects, as well as specific environments such as open areas or concrete structures. They are also a good solution for people who want a lighting control system for their building but who consider the work associated with the installation and the related costs to be major obstacles.

Technology worth discovering and proof that it is possible to be both wireless and connected!

Nathalie Fradet, Editor  
[nfradet@regulvar.com](mailto:nfradet@regulvar.com)

### For more information about lighting solutions, please contact

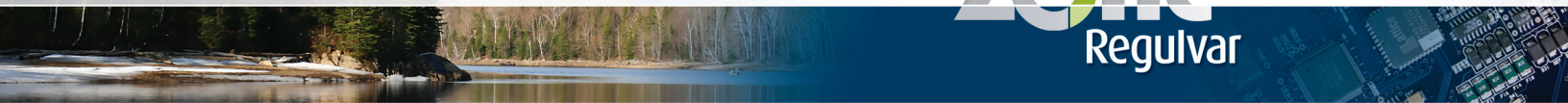
Marc-André Lagacé, Jr. Eng.  
Lighting and wireless product coordinator  
[malagace@regulvar.com](mailto:malagace@regulvar.com)

<sup>1</sup> Source: Natural Resources Canada  
([http://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/trends\\_com\\_qc.cfm?attr=0](http://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/trends_com_qc.cfm?attr=0))

## Did you know?

Regulvar will be contributing to the Maison du développement durable project? [www.maisondeveloppementdurable.org](http://www.maisondeveloppementdurable.org)





## An example of success the 600 Fullum

Built in 1972 and managed by the Société Immobilière du Québec (SIQ), the **600 Fullum** houses many offices, including those of the Ministère de l'Éducation, du Loisir et du Sport.

Until recently, this building's lighting control situation was not very standardized. In fact, there were three different technologies being used on each of the 11 floors (low-voltage switches, 120 V and 347 V line voltage switches), making the management and maintenance challenging.

In order to resolve the situation, increase the system's user-friendliness and improve lighting management, the SIQ ordered renovation work and the implementation of a centralized and automated control system.

To adhere to the established budget, it would have been impossible to resort to traditional devices. Wiring costs would have been high in terms of both material and

labour. For that reason, Regular was hired to implement a wireless solution on nine of the 11 floors of the building.

The installed system can be described as follows: on each floor, approximately 30 self-powered wireless switches send their commands to four antennas connected to a RUBI<sup>2</sup> gateway, which then transfers the commands to one or two Delta controllers that manage about 30 relays. An IT terminal located on the ground floor is used to supervise and monitor all of the switches (close to 300 in total).

Each floor has an electrical box that contains the relays and controllers, which greatly simplifies maintenance. The wiring for the old switches was also removed and the project did not require any additional wiring in the ceilings, other than for the antennas. A successfully co-ordinated operation!

Nathalie Fradet, Editor  
[nfradet@regular.com](mailto:nfradet@regular.com)

### Sources

André Harel  
Vice-President, Marketing  
[aharel@regular.com](mailto:aharel@regular.com)

Éric Beaumier, Jr. Eng.  
Assistant Manager, Service Department  
[ebeaumier@regular.com](mailto:ebeaumier@regular.com)

<sup>2</sup> Regular Universal BACnet interface

*We'll be there!*

### MCEE 2011

Mécanex/Climatex/Expolectriq/Éclairage

**Place Bonaventure**

Montreal, Quebec

**April 20 • 21 2011**

[www.mcee.ca](http://www.mcee.ca)

### Joint Conference CanBio/CRIBE/MDNMF Ontario

**Valhalla Inn**

Thunder Bay, Ontario

**April 26 • 27 2011**

[www.canbio.ca](http://www.canbio.ca)

### San-Tech 2011

**Palais des congrès de Montréal**

Montreal, Quebec

**April 28 • 29 2011**

[www.aqesss.qc.ca](http://www.aqesss.qc.ca)

### Conference of Association québécoise pour la maîtrise de l'énergie

**Best Western Hôtel Universel**

Drummondville, Quebec

**May 4 • 5 • 6 2011**

(Regular will be present May 4)

[www.aqme.org](http://www.aqme.org)

### CanBio Bioenergy Conference

**Château Laurier**

Quebec City, Quebec

**May 18 • 19 • 20 2011**

[www.canbio.ca](http://www.canbio.ca)

### Salon Quartier municipal des affaires

Union of Quebec Municipalities

**Centre des congrès de Québec**

Quebec City, Quebec

**May 5 • 6 2011**

[www.umq.qc.ca](http://www.umq.qc.ca)

### Montreal International Interior Design Show (SIDIM)

**Place Bonaventure**

Montreal, Quebec

**May 26 • 27 • 28 2011**

[www.sidim.com](http://www.sidim.com)



## UPCOMING TRAINING

**Laval (french) :**

**ORCAVIEW 3.33**  
intermediate level  
**Juin 6 • 7**

**ORCAVIEW 3.33**  
advanced level  
**Juin 8 • 9**

**GCL + PROGRAMMING**  
**Juin 13 • 14 • 15**

**CREATION OF  
GRAPHIC INTERFACE**  
**Juin 22 • 23**

**Ottawa (english) :**

**ORCAVIEW 3.33**  
intermediate level  
**May 2 • 3**

**ORCAVIEW 3.33**  
advanced level  
**May 4 • 5**

**GCL + PROGRAMMING**  
**May 9 • 10 • 11**

**CREATION OF  
GRAPHIC INTERFACE**  
Depending on enrollment

**For more  
information,**  
visit ou Website

or  
contact  
**Jocelyne Plamondon**  
at 450-629-0435  
ext. 1128

[jplamondon@regular.com](mailto:jplamondon@regular.com)

