Minister of Natural Resources Canada



Ministre des Ressources naturelles Canada

Ottawa, Canada K1A 0E4

AFR 2 5 2007

Mr. Scott Young, President Mr. Robert Dick, Chair, Light Pollution Abatement Committee The Royal Astronomical Society of Canada 136 Dupont Street Toronto, Ontario M5R 1V2

Dear Mr. Young and Mr. Dick:

Thank you for your letter of February 12, 2007, presenting the energy-saving and environmental benefits of reducing night time lighting levels.

The Government of Canada, and many electricity utilities and municipalities across Canada, supports the principle of lowering night lighting levels and encourages the use of more energy-efficient alternatives as a way to secure energy savings.

As part of a broad strategy to improve the energy efficiency of lighting in Canada, Natural Resources Canada is working collaboratively with provincial and territorial jurisdictions, utilities and industry in order to phase out inefficient lighting products and designs from the market. Making outdoor lighting more efficient is part of this strategy.

This strategy supports a number of options, including collaborating with provinces on codes and standards; improving the availability of more energy-efficient products by implementing regulatory proposals; developing high efficiency levels to support lighting retrofit initiatives; working with stakeholders on delamping, dimming and control options; as well as aiming to improve energy efficiency through a dark sky approach.

For example, my department is participating in a large collaborative project with officials from the astrological observatory near Sherbrooke, Quebec, the Mont-Mégantic ASTROLab. This light pollution abatement project aims to reduce outdoor lighting levels in municipalities surrounding the ASTROLab, with the dual objective of saving the night



sky and increasing energy efficiency. This project has the potential to be replicated by other municipalities with similar challenges and objectives. With funding received from the federal and provincial governments and other organizations, the ASTROLab aims to replace more than 2500 outdoor lighting fixtures in 500 sites within 16 municipalities surrounding the observatory. This project is estimated to reduce the lighting levels by 25 percent at the top of Mont-Mégantic and energy consumption by 1.2 gigawatts per year.

You can find out more information on the Mont-Mégantic ASTROLab by viewing the following Web site:

http://www.astrolab-parc-national-mont-megantic.org

My department recognized several years ago, as part of its Energy Efficiency Awards, the City of Calgary's EnviroSmart Initiative. In this project, the City replaced more than 37,500 old, inefficient residential streetlights at a total cost of \$6.6 million (M), with energy-efficient, sharp cut-off luminaires, resulting in annual electricity savings of about \$1.7M.

The Province of British Columbia (B.C.), through BC Hydro, is also very active in making outdoor lighting, such as street and highway lighting, more energy-efficient and is a model for many other utilities across Canada. Piloted in the City of Prince George, this B.C. project uses a new technology that allows streetlights to be dimmed to achieve significant energy savings. The process of dimming streetlights at designated times of the night, the day, the week or the season will contribute to achieve energy savings for the customer and BC Hydro, and to decrease lighting levels. The city will not only save electricity but will also benefit from reduced maintenance costs. Installation of the lights has begun, with the goal of installing this technology in 171 streetlights in Prince George.

Many other model projects across Canada are very similar to those described above, and we will continue to strive towards making efficient outdoor lighting a priority.

The Government is taking action to mitigate greenhouse gas (GHG) emissions in all sectors of Canada's economy and has recently introduced Canada's *Clean Air Act*, to strengthen our ability to take coordinated action on reducing air pollution and GHG emissions. Improving lighting energy efficiency is an important aspect that will help Canada achieve its GHG reduction goals.

Again, thank you for writing on this matter.

Yours sincerely,

The Honourable Gary Lunn, P.C., M.P.