

Energy management is clearly showing itself to be well worth the investment for those charged with operating hospitals, hotels, convention centres, office complexes and schools.⁸² For example, the Frontenac Board of Education implemented a 4-year energy efficiency improvement program at its 50 area schools. The program cost an estimated \$1 million, but achieved energy savings of \$1.2 million over the same time period.⁸³ The University of Guelph received a \$200,000 Ontario Hydro capital expenditure rebate after it spent \$400,000 on a new variable speed pump for the central heating-cooling facility. The new pump varies the flow of water through the system to match the demand for air conditioning and heating, and in the process saves the university \$100,000 per year in electricity.

In both the domestic and commercial sectors energy savings can be realized through investment in efficient fluorescent lighting. Replacement of a 75 watt incandescent bulb with a 15 watt compact fluorescent bulb will provide the same amount of light for 13 times longer, and cut energy consumption by 80-90% over the lifetime of the bulb.⁸⁴

Given that there are many energy-efficiency investments that are not only beneficial to the environment but also yield relatively short-term financial benefits, it seems unusual that more consumers and more businesses are not taking advantage of these opportunities. One of the hurdles confronting greater market penetration by new energy-efficient technologies is a lack of precise and readily available information on the cost-benefits of these technologies. For example, an additional \$20 added to the weekly grocery bill for the purchase of a compact fluorescent bulb is difficult for the consumer to justify if accurate pay-back information is not readily available. This need for public education and information programs was expressed by Deborah Stine.⁸⁵ The Canadian government already assists the consumer in finding products that ease the burden on the environment. The Environmental Choice program subjects products to a set of environmental life-cycle criteria. Products that meet certification criteria are identified to the consumer by the EcoLogo, three intertwined doves in the form of a maple leaf. While the actions of this program are laudable, Environmental Choice does not aggressively disseminate cost pay-back information, collect and publicize examples of energy efficiency success stories, or focus its information beyond the consumer to the industrial and commercial sectors.

Recommendation No. 18

The Committee recommends that the Government of Canada establish a program or expand the mandate of an existing program (i) to document successful energy efficiency initiatives, (ii) to maintain a record of current energy-efficiency programs provided by governments and public utilities, (iii) to conduct cost-benefit and investment pay-back analyses on new energy-efficient products and technologies, and (iv) to effectively disseminate this information to the domestic, commercial and industrial sectors.

According to the *1992 IPCC Supplement*, the approximate one-half degree of warming experienced during the past century is within the range of natural climatic variation. However, evidence also suggests that other human factors may be offsetting more extensive warming. Reduced radiative forcing due to ozone depletion is such an example.

⁸² L. C. Myers (1992).

⁸³ "Electric Options," *Ontario Hydro*, No. 45, September 1990.

⁸⁴ J. Chertas, "Skeptics and Visionaries Examine Energy Saving," *Science*, Vol. 251, 11 January 1991, p. 154-156.

⁸⁵ D. Stine, *Scientific Assessment and Approaches to Curtailing Global Warming*, Written presentation to the House of Commons Standing Committee on Environment, 30 November 1992, p. 5.