

Canada's Energy Bus Speeds Savings

ONE OF THE MOST effective innovations in Canada's energy conservation program is the Energy Audit Vehicle or Energy Bus, which was pioneered in the province of Ontario.

Each vehicle carries energy experts and computerised specialist equipment, as well as demonstration materials and video units, to companies interested in having on-site energy audits conducted to help find the fastest and cheapest ways of saving energy at plant level.

The federal government's overall long-term objective with this widely accepted and successful, low-cost/high-profile program is to reduce annual energy consumption increases to two per cent or less nationwide.

A significant benefit is the Statistical Data Base Information and Retrieval System. During an energy audit extensive data are recorded in the computers as a prerequisite to calculating energy use patterns and areas of energy waste upon which energy reduction opportunities are identified. Before the program this information was

either unavailable or obtained through costly one-time surveys.

From the information collected it is possible to develop a profile which enables industry and commerce to measure their energy efficiency. The data base can also be used to measure the effectiveness of various federal/provincial programs and determine the impact of present and future programs.

In a summary of some 1,200 bus visits potential savings of close to \$12 million were identified from energy bills totalling \$79 million. These could be realized by industry and commerce at minimum or no capital cost with the implementation of efficient conservation practices. This averages out to 15 per cent identified potential savings per visit, with savings of 20 per cent to 30 per cent, and even 50 per cent.

The Canadian program has generated a great deal of interest from the International Energy Authority and countries of the European Economic Community. As a result, The Netherlands, Germany, Luxembourg, Belgium and Italy are implementing similar programs.

Telidon's Technology is Tops

IN THE VIDEOTEX technology popularity stakes, Telidon continues to be a winner. In the month of February alone, the second-generation videotex or two-way television system developed by the Canadian Department of Communications was chosen by three very large communication companies for the development of ultra-modern services.

It is understandable that Telelobe Canada might favour the Canadian product for its major international data base project, estimated to cost \$4.1 million and start in mid-1981. It will provide services via interactive video terminals distributed throughout the world and normal telecommunications channels. The terminals and software for the three-year project are being supplied under a \$1-million contract by Infomart, a Toronto-based Canadian joint-venture electronic publishing-communications company that is licensed by the government to promote and develop the commercial potential of Telidon worldwide.

The two U.S. buyers, however, were looking only at the quality and versatility of the product. Time Inc. of New York determined that, compared to competing French and British systems, the Telidon system offers greater editorial flexibility and superior graphics. Time Inc. will be introducing the first national multi-channel, satellite-delivered teletex service designed for non-stop, general in-home use at the end of this year.

The Times Mirror Company, headquartered in the second largest television market in the United States, selected Telidon for a major videotex field trial in the Los Angeles area. It will also start at the end of 1981. The initial contract for a complete turnkey system is worth more than \$1 million. A unique aspect of the Times Mirror videotex system is that it will operate simultaneously over both telephone and two-way cable networks.

In March Telidon won a major international award for design excellence and technical superiority over competing systems. The New Perspectives Awards are presented annually by Touche Ross and Company of New York, the accounting and management specialists.

This month the world's first commercial Telidon service actually goes into action. On Project Grassroots, Infomart worked with the province of Manitoba's government to offer the 30,000 agricultural producers in the area

Sun Pumps from Ottawa for Low-Cost Irrigation

AN OTTAWA, Ontario, firm specializing in alternative energy systems is moving into developing countries with Canada's first sun-powered water pumps.

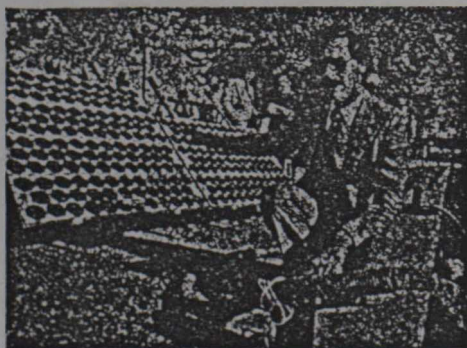
Officials of Canadian Energy Development Systems International (CEDSI) say the six-month-old consulting company has begun a drive to sell sun pumps to some of the world's poorest farmers, who cannot afford the fast-rising costs of traditional irrigation systems.

The system being marketed by CEDSI is deceptively simple: a few dozen photovoltaic (solar) cells are mounted on a sturdy aluminum frame and connected by cable to a submersible pump.

When the sun is shining, a unit with seven panels of cells produces up to 250 watts of power, easily pumping water from depths of up to 4.6 metres.

By using the pump to draw water from nearby streams or from shallow wells, a farmer can double his crop.

CEDSI's staff of six economists and



A demonstration of the sun-powered water pump developed in Canada.

engineers is also looking for markets for a similar pump which will be capable of drawing drinking water from depths of more than 30.5 metres. It should be ready within the next few months.

Solar power is not the company's only interest. It also sells consulting services on wind power and small-scale hydroelectric operations which can provide enough energy for small villages.