

New solar system developed

An Ottawa company, which is marketing a new kind of solar system, has become one of the fastest-growing solar firms in Canada, reports Keri Sweetman in *The Citizen*.

Nortec Solar Industries, formed three years ago by Jim Ramsden, is producing a new kind of solar system using Canadian technology — thermal diode solar collectors.



Jim Ramsden displays new system.

The technology transfers the sun's energy into heat by ordinary evaporation and condensation inside a solar collector. It is more efficient, loses less heat and costs up to 30 per cent less than conventional solar collectors.

The technology was developed by a professor at Queen's University in Kingston, Ontario and is patented in Canada, the United States, Australia and Japan. Nortec has the exclusive marketing licence.

For most of its first three years, the firm concentrated on turning the technology from a research prototype into a commercial line. Although Nortec's solar system could be used for residential space heating in some sunnier climates, its major potential in Canada is as a water heater. Even at that, a backup — usually a standard electrical element in the water tank — would be needed for cloudy days.

Most of the buyers at present are

federal and provincial governments, which are spending about \$350 million on converting some of their buildings to solar energy in the next five years.

For example, 130 of Nortec's collectors have been installed on the roof of the Parliament Buildings' south block, where they heat water for laundry and dishwashers. They will also be used to heat water in a Manitoba fish hatchery, a Newfoundland housing project and a warden's home in the Arctic Circle.

Relief contributions

The Canadian government has announced relief assistance to a number of countries.

The Canadian International Development Agency (CIDA) will provide \$208,000 in aid to Djibouti and Mozambique. A \$158,000 grant for Djibouti will help provide a medical team and supplies to areas suffering from two years of drought. A \$50,000 grant for Mozambique will go towards medical aid for those suffering from drought-related food shortages.

The federal government will also contribute \$650,000 to the United Nations Children's Fund (UNICEF) for emergency relief to Uganda. The money will help provide food health services, safe drinking water and agriculture to that country which has been experiencing drought and political upheaval in the last few years.

Another grant of \$600,000 will be provided to UNICEF for emergency assistance to those in drought-stricken areas of Ethiopia. The Canadian funds, to be provided through CIDA, are to support an expanded immunization program against communicable diseases such as measles, tuberculosis, pertussis, diphtheria, tetanus and polio.

Refugee aid

CIDA will also contribute \$3 million to the United Nations High Commissioner for Refugees (UNHCR) to help more than two million Afghans living in Pakistan. The grant brings Canada's contributions for Afghan refugee relief to \$8.45 million.

The Canadian government will provide another \$1.6 million to the UNHCR for refugees living in Sudan. The funds will provide food, shelter, clothing and support for resettlement of the refugees and is in addition to a previous grant of \$4 million to Sudan for the purchase and shipment of wheat flour announced last summer. The food aid is to be provided through CIDA and monitored by the

World Food Program.

A total of \$180,000 for humanitarian programs to assist people suffering the effects of prolonged war and drought in Angola and Chad was also announced by the Canadian government. Of this total, a grant of \$100,000 is being made to the World Council of Churches through the Canadian Council of Churches in response to its appeal for humanitarian assistance to displaced persons in Angola and will provide food, seeds, blankets, medicine and agricultural tools.

In response to a recent League of Red Cross Societies' appeal, an additional \$80,000 is being given to the Canadian Red Cross Society for humanitarian assistance in Chad. The Red Cross is implementing a relief program which includes provision of shelter and water supply for returning refugees suffering from leprosy and a supplementary feeding program for 10,000 undernourished children. The Canadian funds are being used to support a Canadian medical team composed of a doctor and two nurses.

TV Ontario extends service

The telecast signal from TVOntario will be extended to more than 170 northern Ontario communities over the next three years in a \$3-million program involving Canada's *Anik* satellite system.

The program will supply service to communities of 300 or more residents through a low-power rebroadcast transmitter and antenna provided by TVOntario, Ontario's educational television service.

Communities covered by the "footprint" of the *Anik B* satellite — all those north of a line that passes roughly from Sault Ste. Marie to just south of Timmins — now may apply for the equipment.

The launching of *Anik C* this year will provide the same service to communities outside that area and those with 100 to 300 residents.

Once the equipment is installed, TVOntario will seek licences for rebroadcast stations and maintain and operate the facilities.

The introduction of new TVOntario transmitters in Timmins and North Bay next year will provide service to 81 per cent of Northern Ontario residents.

Jim Parr, chairman of TVOntario, said broadcast service in northern communities is essential to the network's program of educational television.