



Leaf Rapids, Manitoba is a new mining town, designed to overcome the social and economic problems which can make life unpleasant in resource-based settlements.

degree of self-sufficiency against outside shortages of energy and food. Powered by the wind, heated by the sun, it has fish-growing tanks and a huge greenhouse producing tomatoes year-round, summer harvests of melons, beans and peppers and winter yields of potatoes, pears, cucumbers and lettuce. Waste is recycled and pest-control in the greenhouse is by courtesy of lizards, tree-frogs and spiders, their diet being supplemented with a stock of fruit-flies grown on a small pile of rotting fruit produced in the greenhouse itself.

Provident House, Ontario. This is a solar-heated family house with a 60,000-gallon insulated water tank which is expected to store enough heat to last the winter — thereby making the house independent of any kind of supplementary heating. The experiment seeks to establish if this is possible and if the system is economically practical. Some housing officials think it could be if mass produced in quantities of 100 to 200 units.

Solar house, Mississauga, Ontario. This house works on a more complex system with two water tanks maintained at different temperatures in and below the basement and the flow of water from the solar collector thermostatically controlled. The two-storey, three-bedroomed house is 70 per cent solar heated.

Solar house, Gananoque, Ontario. The unique feature of this experiment is that solar heat is stored, not in water but in two tons of molten paraffin wax. Sun heat is supplemented in winter with hot flue gas generated by burning logs in the fireplace. The house is built on and around a large rock, which provides storage for heat transmitted directly through the glazed South wall. A hot water "booster" is powered by electricity, generated by a wind turbine on the roof. The house is insulated by a windbreak wall, earth mounds against outside walls and sods in the roof.

Appropriate energy and building systems for housing Quebec Indian communities. This project, directed by McGill University, aims at improving housing conditions for Quebec Indian communities with the introduction of greenhouses, windmills, solar heating panels and appropriate new architecture to go with these innovations. Three houses are being built in an experimental village at Manitou Community College, La Macaza, 100 miles northeast of Montreal, and one house on the north shore of Lake Mistassini. Made primarily of local rock, logs and moss, the houses are being built by Indian workers under the guidance of native architect Guy Courtois, with plans approved and modified by the Indians. Thus it is hoped that these useful features will be incorporated in dwellings

which Indians will find comfortable and suitable to their needs. At the same time, it is hoped that other Indians will visit these four houses during construction and learn how do-it-yourself techniques can give them more control over their housing and how wind power and sun power can be used.

The constant module. This bulk cargo container can be used to store and transport wheat, potash, and other commodities or to serve as a shell for modular housing.

Package reservoir systems. A saucer-shaped, 500,000-gallon water reservoir built of prefabricated steel panels and nylon-reinforced rubber fabric in Golden, British Columbia, is a cheaper alternative to the standard reinforced concrete.

Mirabel area planning. The development plan for the new Montreal International Airport and the area around it, submitted by the province of Quebec, was selected by the federal Government as an example the way such a development can be planned to fit physically, administratively and economically with the environment. Mirabel was planned with very careful consultation between those interested in creating the airport and the local municipalities and people affected by it.

Turn down traffic volume. This summer Vancouver is introducing a project which aims at reducing traffic density by extending and lightening the present 45-minute rush-hour peaks. Computer-matched car pools, publicity aimed at car drivers and more flexible working hours are expected to increase the peak traffic-handling of central Vancouver up to 40 per cent.

The livable region programme. This programme, which has attracted substantial public interest and support, is devised to involve people living in and around Vancouver in working together to make the region pleasantly "livable" — in spite of the fact that the population of the Greater Vancouver Region, now about a million people, may reach two million by the year 2000 — occupying a relatively small area confined by the sea, the mountains and the United States border.

The Blood Tribe 1964 - 1974 — a project for innovation and change. This is an evaluation of a 10-year programme designed to revitalise Alberta's Blood Indian Reserve — socially, culturally, economically and politically.

Leaf Rapids, Manitoba. A new mining town, built between 1971 and 1974 on Churchill River, 550 miles north of Winnipeg, has been chosen by the federal Government as a demonstration of the way a whole community can be helped by setting out to create an attractive and healthy environment. Because many resource-based towns in the north of Canada have produced unfortunate social and economic results, Leaf Rapids is being watched with considerable interest as its residents settle down. It incorporated last October, with the election of a mayor and council. Native Woods Cree Indians form

See leading article on solar energy in *Canada Today*, January-February 1976, "Catching the sun in a cold climate."