

The big resource projects have had profound and far-reaching effects on the Canadian economy. New transportation routes are threading their way north into the wilderness all across the country, opening the way for further development. The St. Lawrence Seaway and the oil and gas pipelines are strengthening the traditional lines of communication that link east and west. New industries are springing up based on the newly available raw materials. The establishment of a petrochemical industry in Alberta is of course the prime example. Often, too, resource projects are inter-related. One of Edmonton's petrochemical plants produces textile fibres using Alberta natural gas and British Columbia pulp as raw materials. Sulphur extracted from the "sour" gas produced in the foothills of south-western Alberta is shipped north to Uranium City, west to the B.C. pulp and paper mills and east to a new fertilizer plant at Medicine Hat, Alberta. The availability of natural gas as a fuel was an important factor in the recent establishment of the first pulp mill in the power-short Prairie Provinces - at Hinton, Alberta, north-west of Edmonton. And of course the transportation of iron ore from Quebec-Labrador to the heart of the continent was a key consideration in the decision to build the St. Lawrence Seaway.

No less important is the impact of the big resource projects on a host of supplying industries. For instance, the amount of cement required by the Seaway alone staggers the imagination. Though many of the more specialized types of machinery and equipment have been imported, heavy industries in eastern Canada have been turning out such things as generators for power plants, digesters for pulp mills, grinding rods and balls for mine concentrators and tanks for uranium leaching mills. Particularly striking is the construction of half-a-dozen new pipe mills in Ontario and the west in response to the soaring requirements of the oil and gas industry.

Finally, the success of large-scale projects has encouraged Canadians to think in bigger terms. When Knob Lake, Kitimat and the Interprovincial pipeline were embarked upon, they were regarded as remarkable, singular feats. They turned out, in fact, to be simply the first in a succession of huge projects, including the two largest single undertakings in Canada since the building of the trans-continental railway system: the St. Lawrence Seaway and the Trans-Canada gas pipeline.

#### KNOB LAKE AND STEEP ROCK

Last year iron ore became Canada's fourth-ranking mineral - following oil, copper and nickel. Its dramatic rise to prominence reflects the swelling flow of shipments from Knob Lake in Quebec-Labrador, which last year contributed no less than 60 per cent of the total output of 22½ million tons. The rich iron deposits of this remote and desolate area

were described by a geologist as long ago as the 1890's. But it was not until a few years ago that rising iron-ore requirements in the United States and the depletion of high-grade reserves in the Mesabi Range prompted a group of United States steel and ore companies, acting in conjunction with Canadian interests, to take the bold and expensive step of bringing them into production.

The construction of a 360-mile railway running north from Seven Islands on the St. Lawrence was the heart of the undertaking, accounting for half of the original cost of \$250 millions. A townsite named Schefferville, whose population now numbers about 2,500, was carved out of the uninhabited wilderness to serve the new mining area. Hydro-electric power was developed nearby, and also in the vicinity of Seven Islands to supply electricity to the dock and loading facilities established there. The tiny fishing village of Seven Islands has been transformed into a thriving port, its population increasing more than twenty-fold, to some 7,000.

The new railway has given access to the "Labrador-Trough" - a broad, mineralized belt extending north to Ungava Bay from a point well south of Knob Lake. Exploration, not only for iron ore but for non-ferrous metals as well, has been accelerated, and several big iron-ore projects have been proposed. One, at Wabush Lake, calls for the building of a 37-mile spur to the Seven Islands-Knob Lake railway; another, in the Mount Reed area, envisages the construction of a new 185-mile railway north from Shelter Bay on the St. Lawrence paralleling the existing line from Seven Islands.

Though Quebec-Labrador has held the centre of the stage, large-scale iron-ore development has not been confined to this region. The scope of the programme in the Steep Rock area of northwestern Ontario, initiated nearly 15 years ago, has been greatly enlarged in recent years. Not only is the original operation being expanded, but new United States interests are now engaged in preparing for mining the section of the orebody lying under Falls Bay - a dredging job comparable to that entailed in the building of the Panama Canal.

#### POWER AND "PACKAGED POWER"

In the past 10 years, installed hydro-electric capacity in Canada has increased by more than three-quarters to over 18 million horsepower. Much of the new capacity represents a filling-in process. Into this category for instance falls the power phase of the St. Lawrence Seaway: the International Rapids section, where the power authorities of Ontario and New York are building twin power plants, represents the last major source of hydro-electric power in southern Ontario, now that the Canadian share of the Niagara Falls potential is being fully realized. Development of big hydro-electric sites within reach of