

Pacific and Atlantic Provinces Self-Sustaining, But Central Provinces Dependent for Coal

Plate No. 1 represents the coal consumption and production in Canada. The tabulated statement on the top of the plate summarizes the consumption in the various provinces of the different classes of coals, both domestic and imported. You will observe the greatest consump-

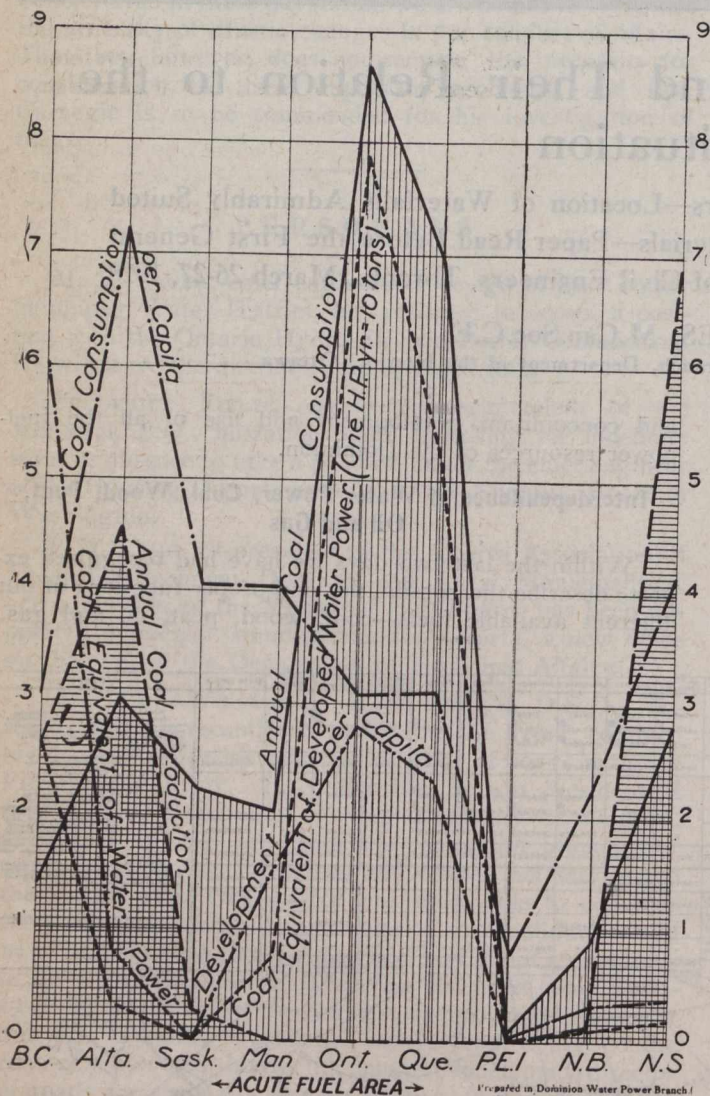


Plate No. 2—Diagrammatic Representation of Canadian Coal Situation

LEGEND

Annual Coal Consumption in millions of tons....	—
Annual Coal Production in millions of tons....	—
Annual Coal Consumption per Capita in tons....	—
Annual Coal Equivalent of Developed Water Power (1 H.P. Year = 10 tons) millions of tons.....	—
Equivalent Water Power Consumption per Capita in tons	—

tion is in central Canada, including the provinces of Manitoba, Ontario and Quebec. Coal production is greatest in the extreme western and eastern provinces. British Columbia and Alberta on the one hand and Nova Scotia on the other not only meet their own coal requirements, but produce a very considerable overplus for consumption in the contiguous portions of central Canada. The central provinces—Manitoba, Ontario and Quebec—are almost wholly dependent on outside sources, mainly imported coals. This is clearly shown by the hatched areas on the map, the horizontal hatching covering the areas

which produce their own needs, the vertical hatching covering the areas which are dependent. Where there is cross-hatching both Canadian and imported coals are consumed. It is to be observed that central Canada, where consumption is greatest, is non-productive. This I have termed the "acute fuel area" of Canada.

An Acute Fuel Area in Canada Largely Dependent on Imported Coal

This "acute fuel area" is now dependent for domestic requirements mainly upon Pennsylvania anthracite and for industrial needs upon Pennsylvania bituminous coals, as well as upon Canadian water power. So far as domestic heating requirements are concerned, Mr. Dick, the consulting mining engineer of the Conservation Commission, in his paper on the "Rational Development of Canadian Coal Resources," has pointed out the possibilities of the western portion of the "acute fuel area" being furnished with briquetted lignite from the prairie provinces. Mr. Stansfield, of the Dominion Mines Branch, in his paper on "The Low Temperature Carbonization and Briquetting of Bituminous Coal," has pointed out the possibilities of meeting the domestic heating requirements of the eastern portion of the "acute fuel area" by the product from the low temperature carbonization of Nova Scotia bituminous coals. Although both these processes are proven to be practicable, they are as yet in their formative or agitational stage and some considerable time must elapse before they can be placed on a commercial basis to furnish sufficient fuel to substitute for any large portion of the Pennsylvania anthracite now imported for domestic heating. There is at the present time no available supply, even in small quantities of a Canadian coal fuel to take the place of imported anthracite. Nevertheless, this "acute fuel area" can eventually be made independent of foreign fuel imports and Canada can become self-sustaining, at any rate, in respect of her domestic heating requirements. There must, as a necessary preliminary, be a national, co-ordinated development and use of all the available fuel and power-producing agencies in the Dominion. Such a co-ordination must be a matter of gradual evolution and adoption, and will, to a great extent hinge on whether Canada can reasonably expect assured fuel imports from the United States for a considerable period in the future.

Canada an Exporter of Electrical Energy

As we are now exporting large quantities of coals from British Columbia and Nova Scotia into adjacent States of the Union, and as we are also exporting about 275,000 horse-power of electric energy, equal in value to about 3,000,000 tons of coal, it is obvious the United States cannot afford to place a sudden and complete embargo on coal exportation to Canada. The two countries must deal with each other, at least, upon a basis of *quid pro quo*. Providing Canada has her own fuel resources under strict national control, this power exportation should assure her an importation of sufficient coal to tide over any readjustment period necessary to permit of an ultimate dependence on Canadian sources of fuel and power.

Exportation of Electrical Energy and Assurance for Fuel Needs

The exportation in the past of Canadian electric energy has not been without compensating advantages. An assured United States market for Canadian power loads has enabled the financing and completion of several hydro-electric projects, the construction of which, so far as do-