

NEW AVENUES OF COAL-UTILIZATION.

Since the termination of the Great War, the search for new avenues of coal-utilization has been carried on unceasingly in a number of countries. In the United Kingdom in 1913, 287,000,000 tons of coal was produced and 184,000,000 tons consumed internally. In 1929 the output was 258,000,000 tons and the consumption 173,000,000 tons, while in 1934 the figures dropped to 221,000,000 tons and 161,000,000 tons respectively. In New Zealand the total coal imported and locally produced amounted in the same years to the following :—

1913	..	..	..	..	2,356,945 tons.
1929	..	..	..	..	2,751,520 tons.
1934	..	..	..	..	2,161,030 tons.

In England the reduction in output has been largely brought about by the loss of export markets, and also by increased efficiency of coal-burning equipment.

In New Zealand the principal factor has been the replacement of coal by hydro-electricity and fuel oil, the latter applying particularly to shipping.

Fortunately in this country the full effect of the changes which have been taking place has not been felt by the local coal-mining industry, as the large reduction in consumption has to some extent been set off by a reduction in imports. If the industry is to enjoy a return to prosperity, however, it must either be rationalized or new fields for coal-utilization must be found. Thorough rationalization is an extremely difficult and complicated task as can be appreciated from a study of the recent history of the industry in England. I believe it can only be accomplished by nationalization and, in any case, it must involve the rehabilitation of many men in other forms of industry.

Unfortunately, too, the elimination of the waste at present going on must produce a similar reaction, as less coal will require to be mined.

It appears, therefore, that in view of the temporary difficulty of absorbing displaced employees, the best policy at the present time is to search for new avenues of coal-utilization.

The most promising avenue in prospect at the moment is the production of oil from coal by the hydrogenation process.

Under the system at present in use in England approximately 1,000,000 tons of coal per annum would be required to supply the 60,000,000 gallons of motor-spirit at present being imported into the Dominion.

The following difficulties, however, present themselves :—

- (1) The commercial application of hydrogenation is new and is still in a process of evolution.
- (2) The capital cost of the plant is very heavy. It has just been reported in the press that a plant to produce 45,000,000 gallons of motor-spirit per year in Australia would cost £8,000,000 to £10,000,000.
- (3) The production-cost per gallon would be much greater than the present cost of landing petrol. Either the Government would have to suffer a severe diminution of revenue or the public would have to pay considerably more for the commodity.

I do believe, however, that within a year or two we may be called upon to give such a scheme very careful consideration, and, therefore, the Government proposes through its technical officers to keep thoroughly apprised of all latest developments.

I can assure the industry that as soon as the Government is satisfied that a commercially practicable and economic system of extraction of oil from coal is developed and proved, it will not hesitate to approach Parliament to authorize any funds that may be necessary to establish or assist in establishing a plant.

In the meantime there is an enormous amount of preliminary work that can be put in hand. A qualitative and quantitative survey of our coal resources is most necessary. Certain coals are more suitable for processing than others, and before millions are spent on plant it is obvious that we must possess reliable estimates of the quantities of the most suitable coals which are available. At present there are no reliable estimates of our coal resources.