The new plants will result in a much greater variety of products being refined in the United Kingdom and will stimulate the development of a petroleum chemical industry capable of producing many organic chemicals now imported from hard currency sources. Refinery capacity owned by British companies outside the United Kingdom is also being increased considerably. A new refinery is now under construction in Venezuela, while increases in capacity in Holland, the Middle East, and the East Indies are already under way or planned. Capacity

94. With regard to the pipe-line projects, increased output in the Iraq fields will necessitate increasing the capacity of the existing pipe-lines which carry the oil to the Mediterranean coast. British companies in conjunction with American companies also have plans for building pipe-lines to carry crude oil from the Persian Gulf to the Mediterranean coast.

overseas will be increased by more than 40 per cent. compared with 1947.

95. The programme of the British oil companies is vast. If it is successfully carried out, it is estimated that the dollar-saving and dollar-earning effect of the increased output will reduce the net dollar drain on oil in the United Kingdom balance of payments very considerably. The increased availability of sterling oil will, of course, make it possible for British companies to play their part in meeting the rising needs of the rest of the world including the sterling area and participating countries and will be an important contribution to the Recovery Programme. But it will be possible to achieve these objectives only if the large quantities of steel and steel equipment required for the programme are made available to the companies. It is estimated that in 1949-52 over 1 million tons of steel will be needed for plant and buildings over and above 2½ million tons for maintenance, production and marketing. Part of this can only be obtained from the United States. The rest must come from the United Kingdom and other continental steel producers can help in this by increasing their supplies to the United Kingdom of the steel it needs. The satisfaction of current requirements is already placing a heavy strain on United Kingdom steel supplies. While more steel will become available for oil development as United Kingdom steel production expands, it is clear that the carrying out of the full programme in good time and the meeting of this large demand for steel will require the co-operation of other participating countries, who will so largely tons of oil to the participating constries exclusing the Lagrantimoral the 1947. This will rise to about 13 million tons in 1985 and will rise to about 13 million tons in 1985. benefit from it.

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96. The United Kingdom steel industry is now operating at the full stretch of its steel-making capacity. The official target for output of crude steel in 1948 is 14.7 million ingot tons, but there are good hopes that this figure will be exceeded. Production up to the end of August was at a rate equivalent to 14.9 million tons a year, and for many weeks output has been maintained at an annual rate of over 15¼ million tons. Home output of crude steel in the United Kingdom is not, however, sufficient to meet demand. There is an excess of finishing capacity, but it has not been possible to obtain sufficient supplies of imported semi-finished steel to employ this capacity fully.

97. A review has recently been made of the probable demand for steel in the United Kingdom in the 1950's. This indicates a total requirement for home and export in the region of 18½ million ingot tons a year. Consumption for home use, including consumption in the manufacture of goods for export, is estimated at 15½ to 16½ million ingot tons. The possible demand for steel for export as such has been estimated at 2 to 2½ million ingot tons. This may be compared with actual supplies for all purposes, including exports, of 14·4 million ingot tons in 1947 and 13·2 million ingot tons in the years 1937–38.

98. The considerable increase in the estimated requirements of steel in the 1950's as compared with pre-war arises from three main causes. First, there has already been a very great substitution of steel for timber—for example, in coal mines and in the building of railway wagons. This tendency may be expected to continue. Second, a large part of the expected expansion of exports is in engineering products. Third, the high level of investment needed to restore and modernise the industries of the United Kingdom will make demands on steel which will certainly continue for some years beyond the period of this Programme.

99. Since the war ended the steel industry has embarked on a major re-equipment and development plan, the first stage of which is estimated to cost about \$1,000 million. Included in this figure is certain specialised plant (in particular a continuous strip mill), valued at \$70 million, which is being obtained from the United States and is a most important contribution to the scheme. The objects of the plan as a whole are to make good the modernisation and development postponed by the war, to increase capacity, and to lower costs by concentrating production. Under this plan, the production of crude steel in 1952-53 will rise to 17 million ingot tons. Some developments, which will expand the capacity for the production of crude steel still further, will not be finished until 1953 or 1954.

100. Despite the increased output of crude steel there will still be in 1952 some excess of finishing capacity which could be employed only by the import of some 650,000 tons of steel for finishing. Having regard, however, to the supplies likely to be available, only 440,000 tons (i.e., 380,000 tons of semi-finished steel, and 90,000 tons of material for tubes and wire) have been provided for in estimating the import programme for 1952-53. This quantity will be imported under the already existing agreements with continental steel producers which do not expire until 1953. With these supplies it will be possible to produce 17.5 m tons of finished steel (in terms of ingot equivalent). The level of the import demand for semi-finished steel in 1952-53 contrasts with the existing position where, owing to the present large excess of finishing capacity over crude steel capacity in the United Kingdom, there is a demand for imports of semi-finished steel of some 1.5 m. tons a year, which can be met only in small part, chiefly from the continent of Europe. One of the main features of the steel development plan is, therefore, the reduction of the gap between steel making and steel finishing capacities. This will reduce the United Kingdom's dependence on imports of semi-finished steel, which is expected to remain difficult to obtain from abroad in any quantity, and will eliminate the present need to seek substantial supplies from dollar sources.

101. It will be seen that there is a gap between this forecast of output of finished steel and the demand estimated in paragraph 97 above. It is expected that this will be partly closed by the use of second-hand material arising in the United Kingdom (estimated at 200,000 ingot tons) and by the import of 400,000 tons of finished steel (in terms of ingot equivalent), most of it under the existing agreements with the Continental steel producers. Unless additional imports of semi-finished steel are available, the remainder of the gap can be filled only by importing more finished steel from other O.E.E.C. countries, but whether or not it will be desirable to do this will depend on the strength of the demand for United Kingdom exports of steel. No provision has been made for such supplementary supplies of finished steel in the import programme. On the assumption that the home demand, taken as 14.8 million ingot tons, is met in full, provision has been made for exports of 1.6 million tons of finished steel (2.1 million tons in terms of ingot equivalent), including supplies to the oil industry abroad and for capital development in the sterling area. The position will, however, be reconsidered in the light of the discussion by the O.E.E.C. of the long-term programmes submitted by other participating countries.

102. A notable feature of the development plan is the modernisation and expansion of blast furnace capacity, which is designed to serve a three-fold purpose. It will increase the production of pig iron for steel making to 9.3 million tons in 1952-53 compared with 7.2 million tons in 1948, and also expand the output of foundry pig iron. The installation of the latest equipment will yield a marked saving in fuel consumption—a matter of first importance since great efforts will be needed to maintain the supply and quality of coking coal and coke to keep pace with the expansion of the steel industry. An increased output of pig iron will diminish the pressure on scrap supplies.

103. As regards particular types of finished steel products, the expansion of capacity will be particularly important in sheets and tinplate. The total output from the sheet and tinplate mills in 1952 is estimated to be sufficient to meet the home demand and to provide for export about 375,000 tons of tinplate and 175,000 tons of sheets. The improvement in the production of sheets and tinplate should enable the United Kingdom in the 1950's to make an important contribution to the supplies of the other O.E.E.C. countries. The Paris report of 1947 showed that in 1951 there would be a net import demand for tinplate by the O.E.E.C. countries on the United States of 250,000 tons a year. Full operation