

limestone. The cement industry has limited possibilities for forward integration and a limited export potential. Petroleum and petrochemicals provide Puerto Rico's main hope for the development of a heavy industry base which can be integrated forward through fibers and plastics to support the existing light industry concentrations in apparel and plastics fabricating.

III. PETROLEUM REFINING AND PETROCHEMICALS; PROGRESS AND PROBLEMS

A. Initial promotion of petroleum refining and petrochemical facilities (1950-55)

At the time of the establishment of the Economic Development Administration Puerto Rico had neither petroleum refining capacity nor facilities for the production of synthetic organic chemicals.

Demand in Puerto Rico for petroleum products at that time amounted to approximately 14,400 b/d broken down as follows:

Product:	Quantity (b/d)
Gasoline -----	5,300
Kerosene -----	1,700
Distillate -----	800
Residual -----	6,400
Other -----	200

It is relevant to note that the 1950 makeup of product demand in Puerto Rico differed markedly from that on the U.S. Mainland. In the former case demand for heavy products amounted to 46 percent of the total while in the latter case the comparable percentage was 25 percent.

Satisfaction by source of local demand for petroleum products in 1950 was governed by the import tax structure of the U.S. Internal Revenue Code: heavy materials were imported into Puerto Rico from foreign Caribbean sources; light products were shipped into Puerto Rico from the U.S. Mainland.

An early and prime objective of the Commonwealth's development effort was the promotion of petroleum refining capacity in Puerto Rico. The fruits of this effort were establishment of the Caribbean Refining Company and of the Commonwealth Oil Refining Company. The plant of the former company came "on stream" in May 1955; that of the latter in December 1955.

The early promotional efforts of the Commonwealth Government in this area are relevant to present purposes for two reasons.

The first of these reasons is derivative from the composition of petroleum product demand (noted above) as it existed in Puerto Rico in 1950. Should this demand have been viewed in isolation (which it was not) it would probably have suggested promotion of a "topping" plant involving an investment of, say, \$1,500,000. Instead, however, the basic concept was that of a common Puerto Rico-U.S. Mainland market (free movement of goods, capital and persons) which would warrant investment in refining capacity to produce a full range of the major refinery products: production of any product in excess of local demand would be shipped to the U.S. Mainland.

The second of the reasons concerning this early and prime promotional effort of the Commonwealth Government which is relevant to present purposes relates to the importance which government attached to this promotional activity. The best measure of a sense of urgency and importance in this context is a willingness to commit resources to the purpose at hand; in this case scarce governmental financial resources.

In the matter of such a commitment outside, expert advice, contracted for by the Commonwealth Government recommended caution, delay and, in effect, inaction. Despite this, the Commonwealth Government made the largest single financial commitment it has ever made to an industrial facility to bring into being the first petroleum refinery in Puerto Rico (the governmental line of credit established was 50 percent of the estimated cost—\$12 million—of building the refinery of the Caribbean Refining Company).

The interest of government in local production of synthetic organic chemicals dates from this early period of the Economic Development Administration and is also attested to by the fact of the willingness on the part of government to commit scarce resources to such an end.

Specifically, the Government Development Bank and the Puerto Rico Industrial Development Company subscribed to bonds in an amount of approximately \$5 million which made possible the construction of a synthetic ammonia plant