

In light of this projected change to energy consumption patterns, this report will discuss manufactured and town gas only briefly, concentrating on the new potential of "natural gas" to affect the Chilean energy market today.

5.2 MANUFACTURED AND "TOWN" GAS

Manufactured gas is currently produced principally from petroleum derivative cracking and, to a lesser extent, from sanitary landfills. It is distributed in bottles.

Since 1978, Santiago Gas Consumers Company (GASCO), a private distributor of manufactured gas in Santiago, has been conducting studies jointly with the Santiago Municipality for production and use of biogas from trash landfills.

This idea was successful and, since 1982, biogas is being extracted from the La Feria landfill. Biogas from the Lo Errázuriz and Cerros de Renca landfills is now being used. The process for extracting biogas from landfills was developed in Chile and has allowed for the production of over 30% of the manufactured gas in Santiago.

The same technology has been applied since 1988 by GASVALPO, a private gas distributor in Valparaíso and Viña del Mar. In this case, manufactured gas is produced from a coal plant in combination with a watergas plant.

Up to 1986, the manufactured gas distributed in Concepción and Talcahuano by GAS CONCEPCION, a private company, came from gas produced at the Huachipato steel mill. The gas was a combination of gases from the coking plant and blast furnaces. Due to an increase in the internal use of gas at the steel mill, it was necessary for GAS CONCEPCION to build its own manufacturing plant, and a production technology based on coal was chosen. This plant started production in 1986. It has a capacity of 140,000 cu.m/day (4.9 million cu.ft/day), thus allowing for total substitution of gas previously obtained from the steel industry.

Town Gas, which is distributed through an underground network, includes natural gas and manufactured gas, produced from coal distillation, naphta cracking, or a mixture of one of them with biogas. It is also usual to include in this sector gas produced at steel mills, like coking plant gas or blast furnace gas.

Town gas is presently used only in some districts of the V Region (Valparaíso and Viña del Mar), the Metropolitan Region (mainly in downtown Santiago and the Providencia, Las Condes and Ñuñoa districts), the VIII Region (Concepción and Talcahuano) and the XII Región (Punta Arenas, Puerto Natales and Puerto Porvenir). Except for the XII Region, where natural gas is produced by ENAP, the other regions mentioned above are supplied with privately manufactured and distributed gas. It should be pointed out that, except for the XII Region, town gas consumption is not very significant, since it represents