

## ABSTRACT

Sirte is a city in Libya. This city is located in the north. Precisely in the District of Sirte. In 2010, the city had a population of 75,358 persons. The city empties into the Gulf of Sidra and has a height of 28 m . Growth in energy demand Electricity in a city will show significant economic growth. Likewise in the Libyan city of Sirte, economic growth per year is around 6% and with a population growth rate of around 2% per year, the city is struggling to get ahead. Thus, waste generated due to economic activities of the population also increased. While all the garbage is thrown away and not utilized. Waste management that has not been properly organized, has made environmental sanitation around the garbage very poor. Communal health is a major issue in regional governments and in developing countries. This is a development priority that emphasizes a sustainable global environmen. Data from the World Bank states that in the Middle East and North Africa (including Libya) waste production in 2016 is 129 million tons predicted in 2030 to 177 million tons and in 2050 to 255 million tons. In addition, the population growth in Sirte Libya annually grows by about 2,2% causing waste production to increase every year. While the demand for electrical energy needs to grow at about 5% per year following the per capita income of the population. It is a problem for Site District, whereas electricity demand has increasely yearly.

