



**FINAL YEAR PROJECT**

**DIPLOMA IN MECHANICAL ENGINEERING  
MARA UNIVERSITY OF TECHNOLOGY  
ARAU PERLIS**

# **INSTALLATION OF GAS PIPING SYSTEM IN RESIDENTIAL AREA**

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## OBJECTIVES

Most houses in Malaysia are using the cylindered gas storage to get the gas supply for home use. And they don't aware that there is a new gas supply system that doesn't need the storage tank. The gas will be distributed to houses in Malaysia using a pipe linked from the main pipe underground towards the houses. So, the main objectives for us to pick the topic as our final project are listed below:

1. To introduce to the consumer especially the residential area to the new type of gas supply system.
2. To learn the system it self.
3. To suggest the use of this system in the residential area by showing some example of piping inside a house in Taman Sri Wang in Kangar with relevant sketches and calculations.
4. To inform the reader about the advantages of using this type of gas supply system compared to the existing system.

So, by going through this module, we hope that the reader will understand the system and will get enough information about the advantages of it and hopefully, it will attract more people to apply this system in their house.

## **CHAPTER 1 TYPE OF GAS SUPPLY SYSTEM IN MALAYSIA**

### **1.1 Introduction**

Today, gas and petroleum have contributed for about 75 % of the energy in terms of the world needs ahead from other source of energy. Gas was first introduced as a combustible substance to replace the old and traditional combustion method such as coal, kerosene or even stones. At the beginning of its introduction to the public, the use of this type of energy is quite slow, due to the easily available of the traditional method of combustion. But now, as the development and research are being made about gas, the substance become more popular compared to other type of energy sources.\

Petronas, the leading national petroleum company, under their Petronas Carigali Sdn. Bhd. together with Shell (M) Bhd, Esso Production Malaysia Incorporation (EPMI) and Mobil Petroleum Malaysia (MOBIL) have given good effort in developing the gas industries in Malaysia through their gas plant especially in the offshore of Sarawak

The use of gas in residential area is really important, as it is the ideal energy source for home use especially when it comes to cooking. There are three different types of gas supply used in Malaysia. They are: