

## **CHAPTER 1**

### **INTRODUCTION**

## **Section 1.1 BACKGROUND OF STUDY**

This study is done for the benefit of PETROLEUM NASIONAL BERHAD (PETRONAS) in order to enable them to market one of their petrochemical products from a new joint-venture plant of theirs. The product produced is the Low Density Polyethylene (LDPE) from the PETLIN plant in Kertih, Trengganu.

The task of marketing this product has been handed down to one of PETRONAS's wholly owned subsidiaries, the Malaysian International Trading Corporation Sdn. Bhd. (MITCO). Because the local supply of LDPE is much more than the local demand, there is an intense competition in the local market. Therefore, there is a need for a strong marketing strategy to capture a fair share of the local market demand, as well as to target the right international markets.

### **Section 1.1.1 Malaysian International Trading Corporation Sdn. Bhd. (MITCO)**

MITCO was incorporated in January 1982, to act as the marketing and trading arm for Petronas's petrochemical products. However, MITCO remained relatively inactive until April 1994. In April 1994, Petronas decided to restructure and reactivate MITCO'S operations, by increasing its paid-up capital.

The organisational structure of MITCO is enclosed in *Appendix 1*.

One of the marketing and trading department in MITCO is the Olefin and Polymer Department. The organisational structure of the Olefin and Polymer Department is enclosed in *Appendix 2*.

The key objective of the Olefin and Polymer Department of MITCO is to market and trade the olefin and polymer petrochemical products, which are

produced by Petronas's fully owned or joint-ventured petrochemical plants. These plants are as follows:

Wholly-owned plants:

- (i) MTBE Malaysia Sdn Bhd (MTBE) – produces MTBE; and
- (ii) Polypropylene Malaysia Sdn Bhd (PPMSB) – produces polypropylene

Joint-venture plants:

- (i) Ethylene Malaysia Sdn. Bhd. (72.5% Petronas, 15% BP Chemicals, 12.5% Idemitsu Chemicals) – produces ethylene;
- (ii) Polyethylene Malaysia Sdn. Bhd. (PEMSB) (40% Petronas, 60% BP Chemicals) – produces high density polyethylene and low-level density polyethylene; and
- (iii) PETLIN (Malaysia) Sdn. Bhd. (40% Petronas, 40% POLIFIN of South Africa and 20% DSM Polyethylene of the Netherlands) – produces low density polyethylene.

Therefore, this is why MITCO shoulders the marketing responsibility of Petronas's share of the Low Density Polyethylene ("LDPE") produced by PETLIN.

### **Section 1.1.2 Low Density Polyethylene**

PETLIN (Malaysia) Sdn. Bhd. is a dynamic collaboration combining the efforts of PETRONAS – a Malaysian success story; POLIFIN of South Africa – an experienced Low Density Polyethylene producer; and DSM of the Netherlands – a polyethylene market leader in Europe. PETLIN was incorporated on the 9<sup>th</sup> of March, 1999.

The plant will have a nameplate capacity of 255,000 metric tons per annum of only Low Density Polyethylene (LDPE) and will be one of the largest single train LDPE plants in the world. PETLIN's plant will be located at the Kertih

Integrated Petrochemical Complex in Trengganu and is targeted to start up at the end of this year. The objective of PETLIN is to become a world-class polyethylene producer and a major supplier to converters in Asia Pacific.

PETLIN's facilities were designed to meet the most stringent quality, environmental and safety standards. DSM's 'tabular' technology is applied in the production of the LDPE in PETLIN. With this proven superior 'non-pulsating' Clean Tabular Reactor technology, PETLIN would be able to consistently produce high quality LDPE with product grades ranging from fractional Melt Flow Index (MI) 0.3 to high MI 22.

Amongst the many applications of LDPE are film for packaging, agricultural film, extrusion coating, lamination, injection moulding, foam and masterbatch.

There would be five different product grades to be produced by the plant. These products would differ in its clarity, shrinking properties, magnitude of glossary, level of antiblocking and its stiffness. It is these properties that determine the applications stated above for each of the product specified.

MITCO places strong emphasis on meeting customer needs and delivering to promise. They believe that customers are the prime-movers of their business. In their efforts to enable customers to attain maximum benefits and returns from their products, customer service will play a significant part in their marketing and sales activities.

Their marketing personnel will have to meet customers' needs and requirements, and ensure on-time delivery to customers. Competent technical service staff will be at hand to support customers on product application. Fostering a close relationship with their customers will ensure that they continuously innovate to meet the increasing needs of the market.

### **Section 1.1.3      The Need for the Product to be Marketed**

The demand for LDPE in the domestic market ranges from 80 to 90 thousand metric tons per annum. Currently, the only company producing LDPE in Malaysia is Titan Petrochemical Sdn. Bhd. (Titan). Titan's production volume is 188,000 metric tons per annum, which is way above the local demand for LDPE. Furthermore, there is a small portion of the local demand, which is provided by imported products (25,000 metric tons per annum). This creates a keen competition in the market, with the price of the product being a strong determining factor.

When the PETLIN plant is eventually fully on-stream, producing to its nameplate capacity of 255,000 metric tons per annum, the local supply including the imported volume of LDPE will exceed the local demand by more than 350,000 metric ton per annum.

Petronas's share of the total volume of LDPE produced by PETLIN is 130,000 metric tons per annum. Having analysed the scenario in hand, MITCO has determined that the domestic market can only absorb slightly more than twenty percent (20%) of this volume. This would result in MITCO having to look into the international markets for the remaining share of the product.

This would mean that the allocated volume for the domestic market is 30,000 metric tons per annum. Considering the local supply outweighing the local demand even now by a relatively huge amount, PETLIN would need a competent marketing strategy to enable them to sell this entire volume of 30,000 metric tons locally in the market per annum.

Lower ocean freight transportation cost, which would produce a higher net return from sale, is the core factor why the countries targeted in the international markets are the ones within this region, namely the Asia Pacific and the Indian sub-continent countries. Therefore, a further study had to be carried out on the demand and supply of polyethylene in these regional

countries to determine the specific countries to market PETLIN's LDPE product in the international market.

## **Section 1.2 OBJECTIVE OF STUDY**

With the supply of LDPE in the ASEAN region outweighing its demand, it is apparent why MITCO requires for the LDPE from PETLIN to be marketed strongly with an effective marketing strategy. The overall supply of LDPE in this region is much greater than its demand, therefore without a strong marketing strategy MITCO would undoubtedly find it difficult to sell all their share of the LDPE produced from PETLIN.

This study would need to formulate the strategy, identify the specific target markets and eventually devise an appropriate marketing plan for PETLIN.

An effective marketing strategy plan would include developing the broad marketing objectives and strategy based on an analysis of the current market situation and opportunities. As a new product, PETLIN's LDPE needs to be tested and then a preliminary marketing strategy plan has to be developed for introducing the new product into the market.

The **marketing strategy plan** consists of three parts. The **first part** describes the target market's size, structure, and behavior; the planned product positioning; and the sales, market share, and profit goals sought in the first few years. The **second part** of the marketing strategy outlines the product's planned price, distribution strategy, and marketing budget for the first year. Finally, the **third part** of the marketing strategy plan describes the long-run sales and profit goals and marketing-mix strategy over time.

### **Section 1.2.1 To Identify Target Markets**

MITCO will have to identify the target market for the LDPE from PETLIN, as required in the first part of the marketing strategy. A **market** is the set of all

actual and potential buyers of a product. The **potential market** is the set of consumers who profess a sufficient level of interest in a defined market offer. The **available market** is the set of consumers who have interest, income, and access to a particular market. The **qualified available market** is the set of consumers who have interest, income, access and qualification for that particular market.

Once MITCO has identified the available market, it has the choice of going after the whole market or concentrating on certain segments. **The target market is the part of the qualified available market MITCO decides to pursue.** MITCO and its competitors will end up selling to a certain number of buyers in its target market. The **penetrated market** is the set of consumers who would eventually purchase MITCO's product.

### **Section 1.2.2 To Devise the '4P' Marketing Plan**

**Marketing mix** is one of the key concepts in modern marketing theory. Marketing mix is the set of marketing tools that the firm uses to pursue its marketing objectives in the target market. One of the popular four-factor classifications of these tools is called the **four Ps: Product, Price, Place and Promotion.**

MITCO would have to prepare a mix of products, services, and prices, and utilising a promotion mix of sales promotion, sales force, public relations, direct mail and telemarketing to reach the distribution channels and the target customers. Apart from deciding on the marketing budget, MITCO has to realise that not all marketing mix variables can be adjusted in the short run.

Typically, MITCO can change its price, sales force size, and promotional expenditures in the short run. It can develop new products and modify its distribution channels only in the long run. Thus, MITCO typically makes fewer period-to-period marketing mix changes in the short run than the number of marketing mix variables might suggest.

### **Section 1.3 JUSTIFICATION FOR STUDY**

This study is done due to the keen competition to be faced by the MITCO staff in the sale of the PETLIN LDPE once it is in full production. With the domestic supply being more than the domestic demand, the objective of this study is to provide MITCO with the targeted nations for the PETLIN LDPE in the international market, together with the allocated volume for each of these selected nations.

### **Section 1.4 ORGANISATION OF CHAPTERS**

In **Chapter 1**, the background of the company and the project plant in focus are introduced. The objective of this study and the method to achieve it are also highlighted in this chapter. The players in the LDPE market globally, and specifically within this region is identified in the **Chapter 2**. Subsequently, the **Chapter 3** provides us with the methodology to capture the data required for this study and eventually how MITCO could structure an effective marketing strategy by applying the four Ps marketing tool.

**Chapter 4** presents us with all the data from the target markets and justifying the reason for MITCO to select certain targeted countries. The four Ps marketing tool will be executed based on the data of the targeted markets in **Chapter 5**. Finally, the recommendations to MITCO for the targeted markets, marketing strategy to be applied and the distribution of the total available LDPE volume from PETLIN are given in **Chapter 6**.