# CONTENTS

## INTRODUCTION

Bursa Malaysia Derivatives Berhad, formerly known as Malaysia Derivatives Exchange Berhad (MDEX), is a wholly owned subsidiary of the Bursa Malaysia Group. It operates under the supervision of the Securities Commission and is governed by the Futures Industry Act (FIA) 1993. Bursa Malaysia Derivatives Berhad also falls under the jurisdiction of the Ministry of Finance of Malaysia, thus offering investors the security of trading on a regulated Exchange with infrastructure and regulations comparable to that of established markets worldwide.

The following derivatives products are currently offered for trading via an electronic screen-based system on Bursa Malaysia Derivatives Berhad:

1. Crude Palm Oil Futures (FCPO)
2. Crude Palm Kernel Oil Futures (FPKO)
3. Kuala Lumpur Composite Index Futures (FKLI)
4. Kuala Lumpur Composite Index Options (OKLI)
5. 3-Month Kuala Lumpur Interbank Offered Rate Futures (FKB3)
6. 3-Year Malaysian Government Securities Futures (FMG3)
7. 5-Year Malaysian Government Securities Futures (FMG5)
8. 10-Year Malaysian Government Securities Futures (FMGA)

This brochure presents an overview of commodity derivatives, namely the FCPO and FPKO.

## WHAT IS CPO?

The underlying instrument of the country's first commodity derivatives contract, FCPO, is Crude Palm Oil (CPO). FCPO was launched in October 1980.

### *Defining CPO*

CPO is a vegetable oil that has been extracted from the fruits of oil palms, which were originally imported from Africa. Palm oil is second only to soybean oil in terms of global demand, accounting for 28% of total edible oil sales, and is also the most widely traded edible oil in the world.

Malaysia is the world's largest producer of CPO, with 14 million tons produced in 2004, from a total of 30 million tons produced worldwide. In trade contracts, the quality of CPO traded must meet the description of "good merchantable quality" and comply with quality specifications on Free Fatty Acid (FFA) content, Moisture and Impurities (M&I) and Deterioration of Bleachability Index (DOBI) value.

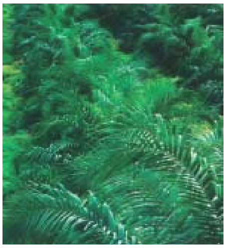
## WHAT IS PKO?

The underlying instrument of FPKO, which was launched in February 2004, is Crude Palm Kernel Oil (PKO).

### *Defining PKO*

PKO is the expeller pressed from the kernels or endosperm of the oil palm fruit. Both PKO and Coconut Oil are part of a group of oils known as Lauric Oils. These oils are largely used by the oleo chemical industry for the production of cleaning agents and detergents. The largest producers of PKO in the world are Malaysia and Indonesia.

## THE COMMODITY DERIVATIVES PRODUCTS



### *What is FCPO?*

FCPO is a derivatives contract between a buyer and a seller to take and make delivery respectively of CPO at a future date. It is a physically-settled contract, which means that upon expiry of the contract, the buyer would have to take delivery of the physical CPO. Market participants can use FCPO for trading, hedging and arbitraging strategies. FCPO prices are determined by market supply and demand with Bursa Malaysia Derivatives Berhad providing the marketplace for buyers and sellers to come together and trade.

### *What is FPKO?*

FPKO is a derivatives contract that allows the seller to make delivery and the buyer to take delivery of PKO at a future date. It is similar to the FCPO contract in that upon expiry, this contract is also physically-settled.

Market players use FPKO for trading, hedging and arbitraging strategies.

### *Advantages of Commodity Derivatives*

The FCPO and FPKO contracts offer market participants many benefits, some of which are listed below:

- Provides a mechanism for hedging as well as reallocating risk to those more tolerant of it
- Serves as a pricing benchmark as well as a price discovery tool
- Provides information about future price movements of the commodity
- Allows portfolio management for the edible oils market participants:
  - to hedge and cross hedge against price risk
  - to arbitrage when the opportunity arises
  - to speculate for profits
  - to allocate assets without having to sell the underlying
- Improves liquidity in the physical commodity markets.

## *Reasons to Trade Commodity Derivatives*

- Traded on the highly cost-effective and efficient electronic trading platform in a transparent and liquid derivatives market
- Credible benchmark for the palm and lauric oils industry
- Excellent hedging instrument for institutional and corporate users in the oils and fats community to minimise their price exposures
- Take advantage of the leverage factor by holding a much larger position with a small amount of funds
- Profit from combining various strategies with different derivatives contracts, for example FCPO and FPKO, or simultaneously with the physical markets.

## *Users of Commodity Derivatives*

### Institutional Users

Institutional users such as fund managers and commodity trading houses are among the most active users of the underlying market. Commodity derivatives would greatly assist them in managing their commodity portfolios and diversification of risks.

### Hedgers

Hedgers are market participants who employ certain strategies in the derivatives market to minimise their risk exposure in the underlying commodity markets.

### Arbitrageurs/Basis Traders

The arbitrageurs' primary purpose is to trade both the underlying and derivatives market in tandem to capture any temporary price distortions between the 2 markets. They would use both the derivatives and physical markets to secure virtually risk-free profits in an inefficient marketplace.

### Local Members and Retailers

These are individual investors or traders who assume risk in return for trading profits. They are an important group of liquidity providers.

## WHY USE COMMODITY DERIVATIVES?

The following is a summary of the principal uses of commodity derivatives:

- **To hedge a commodity portfolio**

  An oil palm plantation company with a large harvest in the near term can sell FCPO contracts to protect itself against a decline in their value caused by falling palm oil prices

- **A temporary substitute for holding physical palm oil**

  A refiner who is unable to obtain enough physical crude palm oil for his future refining needs could buy FCPO as a temporary substitute for holding CPO until he is able to source for the oil from the physical market. The derivatives position would then be liquidated once the oil has been bought

- **To hedge portfolios of similar instruments**

  A trader in Coconut Oil can use FPKO to manage their price risk as both crude PKO and Crude Coconut Oil are similar types of lauric oils with a high degree of price correlation between both products

- **Directional trade**

  Traders benefit from low transaction costs, ease of opening and closing positions, narrow bid/ask spreads, transparent pricing and the ability to sell first in a bearish market. High liquidity, volatility and a tendency to trend provide opportunities for generating trading profits

- **Arbitrage transactions**

  During periods when commodity derivatives are trading above or below their theoretical “fair value”, it is possible to undertake arbitrage strategies by buying or selling the derivatives and simultaneously selling or purchasing the underlying physical commodity. The arbitrage can then be held to expiry or reversed prior to maturity, once prices return to normal.

## EXAMPLES OF TRADING STRATEGIES

### *Scenario 1*

Plantation companies are perpetually long in palm oil, therefore their risk exposure to the market would be enhanced in declining markets. A producer of palm oil knows that in 3 months' time, his crop will be ready to be harvested.However, he is worried that prices may fall by the time he can sell his CPO. He chooses to enter the FCPO market and hedges his position by selling the derivatives contract. In doing so, he has effectively locked-in his selling price 3 months later.

### *Scenario 2*

A refiner has an order from an overseas buyer to deliver 10,000 metric tons of processed palm oil at a very attractive price. However, he only has enough CPO to fulfil 80% of this transaction and has a shortfall of 2,000 metric tons. He turns to the physical market to cover this shortfall but is unable to find any sellers in a bullish market. As the market is anticipating higher prices, he prefers to buy at the current price to protect his profit margin. He turns to the derivatives market instead and buys 80 lots of FCPO (80 lots x 25 metric tons per lot = 2,000 metric tons) at the prevailing price. He has now effectively locked-in his buying price. Once he has managed to procure the oil in the physical market, he will then close out his derivatives position.

### *Scenario 3*

A trading house realises that the prices of physical palm oil and the FCPO markets have moved out of line and FCPO is trading at a huge premium to the physical market. It decides to sell FCPO and buy physical CPO to arbitrage. By doing so, they have locked-in their profits and they will close out their positions once the gap between both markets return to normal.

### *Scenario 4*

An oleo chemical manufacturer wishing to buy more PKO for his plant can use the FPKO market to lock-in his buying price first. He then has time to source around for the physical oil to purchase, and can close out his derivatives position once the oil has been bought.

### *Scenario 5*

The FCPO and FPKO contracts could also provide trading opportunities for those who simply wish to take a view on the direction of palm and lauric oil prices. The leverage offered by the derivatives market means that large percentage returns can be realised through accurate forecasting of price trends.

### *Scenario 6*

A Coconut Oil trader wishing to sell his stock may use the FPKO market to lock-in his selling price whilst looking for potential buyers. As PKO and Coconut Oil has a strong price correlation, the FPKO contract can act as a near-perfect hedge.

### *Trading Strategies at a Glance*

| User | Strategies | Application |
|---|---|---|
| Institutional investors | • Hedging | • Long physical market/ sell derivatives<br>• Short physical market/ buy derivatives |
| | • Investing future cash | • Buy derivatives (sell when the physical oil is bought) |
| | • Change asset allocation | • E.g., sell stock index derivatives and buy FCPO |
| Traders | • Directional trades | • Buy/sell derivatives |
| | • Spread trades | • Buy/sell different derivatives months |

## CONTRACT SPECIFICATIONS

### Crude Palm Oil Futures

| | | |
|---|---|---|
| Contract Code | : | FCPO |
| Underlying Instrument | : | Crude Palm Oil |
| Contract Size | : | 25 metric tons |
| Minimum Price Fluctuation | : | RM1.00 per metric ton |
| Daily Price Limits | : | RM100 per metric ton above or below the Settlement Prices of the preceding day for all months, except spot month. Limits are expanded when the Settlement Prices of 3 quoted months immediately following the current month, in any day, are at limits as follows: |

| Day | Limit |
|---|---|
| First Day | RM100 |
| Second Day | RM150 |
| Third Day | RM200 |

Daily price limits will remain at RM200, when the preceding day's Settlement Prices of all the 3 quoted months immediately following the spot month settle at limits of RM200.

Otherwise, it shall revert to the basic limit amount of RM100.

| | | |
|---|---|---|
| Contract Months | : | Spot and the next 5 succeeding months, and thereafter, alternate months up to 12 months ahead. |

| | | |
|---|---|---|
| Trading Hours | : | First trading session:<br>Malaysian time: 10:30 a.m. to 12:30 p.m.<br>Second trading session:<br>Malaysian time : 3:00 p.m. to 6:00 p.m. |
| Final Trading Day and Maturity Date | : | Contract expires at noon on the 15th day of the delivery month, or if the 15th is a non-market day, the preceding Business Day. |
| Tender Period | : | 1st Business Day to the 20th Business Day of the delivery month, or if the 20th is a non-market day, the preceding Business Day. |
| Contract Grade and Delivery Points | : | Crude Palm Oil of good merchantable quality, in bulk, unbleached, in Port Tank Installations located at the option of the seller at Port Klang, Penang/Butterworth and Pasir Gudang (Johor).<br><br>Free Fatty Acid (FFA) content of palm oil delivered into Port Tank Installations shall not exceed 4% and from Port Tank Installations shall not exceed 5%.<br><br>Moisture and Impurities (M&I) content shall not exceed 0.25%.<br><br>Deterioration of Bleachability Index (DOBI) value of palm oil delivered into Port Tank Installations shall be at minimum of 2.5 and of palm oil delivered from Port Tank Installations shall be at a minimum of 2.31. |
| Deliverable Unit | : | 25 metric tons, plus or minus not more than 2%.<br><br>Settlement of weight differences shall be based on the simple average of the daily Settlement Prices of the delivery month from: |

a) the 1st Business Day of the delivery month to the day of tender, if the tender is made before the last trading day of the delivery month; or

b) the 1st Business Day of the delivery month to the Business Day immediately preceding the last day of trading, if the tender is made on the last trading day or thereafter.

| | | |
|---|---|---|
| Reportable Position | : | Open Position of 100 or more open contracts, long or short, in any 1 delivery month. |
| Position Limit | : | 500 contracts net long or net short on the spot month.<br>1,500 contracts on any single month except for the spot month.<br>2,500 contracts on all contract months combined. |

## CONTRACT SPECIFICATIONS

### Crude Palm Kernel Oil Futures

| | | |
|---|---|---|
| Contract Code | : | FPKO |
| Underlying Instrument | : | Crude Palm Kernel Oil |
| Contract Size | : | 25 metric tons |
| Minimum Price Fluctuation | : | RM1.00 per metric ton |
| Daily Price Limits | : | RM100 per metric ton above or below the preceding day's Settlement Prices for all months, except spot month. Limits are expanded when the Settlement Prices of all 3 quoted months immediately following the current month, in any day, are at limits as follows: |

| Day | Limit |
|---|---|
| First Day | RM100 |
| Second Day | RM150 |
| Third Day | RM200 |

Daily price limits will remain at RM200, when the preceding day's Settlement Prices of all the 3 quoted months immediately following the spot month settle at limits of RM200.

Otherwise, it shall revert to the basic limit amount of RM100.

| | | |
|---|---|---|
| Contract Months | : | Spot and the next 5 succeeding months, and thereafter, alternate months up to 12 months ahead. |

| | |
|---|---|
| Trading Hours | : First trading session:<br>Malaysian time: 10:30 a.m. to 12:30 p.m.<br>Second trading session:<br>Malaysian time: 3:00 p.m. to 6:05 p.m. |
| Final Trading Day and Maturity Date | : Contract expires at 12:05 p.m. on the 15th day of the delivery month. If the 15th is a non-market day, the preceding Business Day. |
| Tender Period | : 1st Business Day to the 20th Business Day of the delivery month, or if the 20th is a non-market day, the preceding Business Day. |
| Contract Grade and Delivery Points | : Each tender shall consists of 25 metric tons of Crude Palm Kernel Oil in bulk unbleached of good merchantable quality and stored at a Port Tank Installations located at the option of the seller at Port Klang, Penang/ Butterworth and Pasir Gudang (Johor).<br><br>Free Fatty Acid (FFA) content (as Lauric Acid of Crude Palm Kernel Oil) delivered into Port Tank Installations shall not exceed 3.5% and out of Port Tank Installations shall not exceed 4%.<br><br>Moisture and Impurities (M&I) shall not exceed 0.5%.<br><br>Iodine value at range 16.5 $\leq$ 18.75.<br><br>Colour range from 4 Red to 8 Red & 60 Yellow Max. |
| Deliverable Unit | : 25 metric tons, plus or minus not more than 2%.<br><br>Settlement of weight differences shall be based on the simple average of the daily Settlement Prices of the delivery month from: |

| | | |
|---|---|---|
| | | a) the 1st Business Day of the delivery month to the day of tender, if the tender is made before the last trading day of the delivery month; or<br>b) the 1st Business Day of the delivery month to the Business Day immediately preceding the last day of trading, if the tender is made on the last trading day or thereafter. |
| Reportable Position | : | Open Position of 100 or more contracts, long or short, in any one delivery month. |
| Position Limit | : | 250 contracts net long or net short on the spot month.<br>1,000 contracts on any single month except for the spot month.<br>1,500 contracts on all contract months combined. |

## Contact Bursa Malaysia Berhad for more information at:

Phone : +(603) 2034 7070

E-mail : derivatives@bursamalaysia.com

### DISCLAIMER

This brochure has been provided by Bursa Malaysia Derivatives Berhad for general reference purposes only. Although care has been taken to ensure the accuracy of the information/data within this brochure, there is no warranty or representation expressed or implied by Bursa Malaysia Derivatives Berhad as to the accuracy or completeness of the materials herein, therefore applicable laws, regulations and current Exchange and Clearing House rules should be consulted.

**FUTURES AND OPTIONS TRADING INVOLVES RISK. THEREFORE, KNOW THE RISKS BEFORE YOU TRADE.**

The Business Rules of Bursa Malaysia Derivatives Berhad supersedes all matters pertaining to derivatives contracts. The current Business Rules of Bursa Malaysia Derivatives Berhad should be referred to concerning trading related issues. Please note that contract specifications of each product is subject to change from time to time.

Please contact your broker or Bursa Malaysia Derivatives Berhad concerning current contract specifications.