Investment Opportunities at POIC Lahad Datu

Rose Pun, Head of Marketing & Sales Division
• Introduction
• Oil Palm Industry in Sabah
• Potential of Oleochemical Industry in Sabah
• Business Opportunities at POIC Lahad Datu
• Key Advantages at POIC Lahad Datu
• POIC Lahad Datu Development To-Date
• Concluding Remarks
### Sabah Economic Structure 2012

- Predominantly services and agro-based economy with relatively little industrial activities in Sabah
- Need to strengthen the contribution of the manufacturing sector in economic development

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>GDP * (RM Mil)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>9,237</td>
<td>20.8</td>
</tr>
<tr>
<td>Mining &amp; Quarrying</td>
<td>9,191</td>
<td>20.7</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3,496</td>
<td>7.9</td>
</tr>
<tr>
<td>Construction</td>
<td>1,275</td>
<td>2.9</td>
</tr>
<tr>
<td>Services</td>
<td>21,050</td>
<td>47.4</td>
</tr>
<tr>
<td>Import duties</td>
<td>186</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44,434</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Constant 2000 prices

Sources: Department of Statistics Malaysia, Sabah 2013
## Exports of Major Commodities, Sabah for Year 2013

- Palm Oil is the single largest Industry in Sabah and one of the major contributor to the state Economy

<table>
<thead>
<tr>
<th>NO</th>
<th>COMMODITIES</th>
<th>METRIC TONNE</th>
<th>RM ‘000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Palm Oil</td>
<td>6,082,436</td>
<td>14,473,415</td>
</tr>
<tr>
<td>2</td>
<td>Methanol</td>
<td>1,122,772</td>
<td>1,293,175</td>
</tr>
<tr>
<td>3</td>
<td>Palm Kernel Cake</td>
<td>675,718</td>
<td>315,532</td>
</tr>
<tr>
<td>4</td>
<td>Hot Briquetted Iron</td>
<td>475,098</td>
<td>503,531</td>
</tr>
<tr>
<td>5</td>
<td>Palm Kernel Oil</td>
<td>664,043</td>
<td>1,700,195</td>
</tr>
<tr>
<td>6</td>
<td>Uncoated Printing &amp; Writing Paper</td>
<td>113,377</td>
<td>269,576</td>
</tr>
<tr>
<td>7</td>
<td>Rubber</td>
<td>56,405</td>
<td>428,890</td>
</tr>
<tr>
<td>8</td>
<td>Crude Petroleum</td>
<td>6,876</td>
<td>18,249,115</td>
</tr>
<tr>
<td>8</td>
<td>Plywood Plain</td>
<td>648,858 (M³)</td>
<td>1,039,602</td>
</tr>
<tr>
<td>9</td>
<td>Sawn Timber</td>
<td>242 (‘000 M³)</td>
<td>359,218</td>
</tr>
</tbody>
</table>
## Oil Palm Cultivation and Crude Palm Oil Production in Malaysia

- Sabah: the largest oil palm growing State in Malaysia with abundant palm-based raw materials for downstream activities

<table>
<thead>
<tr>
<th>State</th>
<th>Oil Palm Plantation (hectares)</th>
<th>Crude Palm Oil Production (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Johor</td>
<td>730,694</td>
<td>3,013,784</td>
</tr>
<tr>
<td>Kedah</td>
<td>85,182</td>
<td>283,716</td>
</tr>
<tr>
<td>Kelantan</td>
<td>140,035</td>
<td>289,769</td>
</tr>
<tr>
<td>Malacca</td>
<td>52,704</td>
<td>102,930</td>
</tr>
<tr>
<td>Negeri Sembilan</td>
<td>170,048</td>
<td>662,173</td>
</tr>
<tr>
<td>Pahang</td>
<td>710,195</td>
<td>2,962,088</td>
</tr>
<tr>
<td>Perak</td>
<td>384,594</td>
<td>1,884,658</td>
</tr>
<tr>
<td>Perlis</td>
<td>278</td>
<td>Na</td>
</tr>
<tr>
<td>Pulau Pinang</td>
<td>13,480</td>
<td>93,930</td>
</tr>
<tr>
<td>Selangor</td>
<td>137,003</td>
<td>550,243</td>
</tr>
<tr>
<td>Terengganu</td>
<td>169,520</td>
<td>484,734</td>
</tr>
<tr>
<td><strong>PENINSULAR MALAYSIA</strong></td>
<td><strong>2,593,733</strong></td>
<td><strong>10,328,025</strong></td>
</tr>
<tr>
<td>1. Sabah</td>
<td>1,475,108</td>
<td>5,776,459</td>
</tr>
<tr>
<td>2. Sarawak</td>
<td>1,160,898</td>
<td>3,111,975</td>
</tr>
<tr>
<td><strong>SABAH &amp; SARAWAK</strong></td>
<td><strong>2,636,006</strong></td>
<td><strong>8,888,434</strong></td>
</tr>
<tr>
<td><strong>MALAYSIA</strong></td>
<td><strong>5,229,739</strong></td>
<td><strong>19,216,459</strong></td>
</tr>
</tbody>
</table>

Source: MPOB website 2013
Sabah State government established POIC Sabah in 2005 to spearhead the state industrial efforts in accelerating the state economy

POIC started with promoting the palm oil downstream industries

With the establishment of POIC, there is an opportunity for further downstream of palm oil industry such as Oleochemical in Sabah
OIL PALM INDUSTRY IN SABAH
# Oil Palm Industry in Sabah, Malaysia (2013)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Sabah</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plantation Area (Mil. Ha)</td>
<td>1.48 (28 %)*</td>
<td>5.23</td>
</tr>
<tr>
<td>Palm Oil Mill (No.)</td>
<td>124 (28.9%)</td>
<td>429</td>
</tr>
<tr>
<td>(Capacity : 3.26 Mil.MT/Hr.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refineries (No.)</td>
<td>14 (27%)</td>
<td>52</td>
</tr>
<tr>
<td>(Capacity : 7.4 Mil.MT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palm Kernel Crusher (No.)</td>
<td>14 (30.4 %)</td>
<td>46</td>
</tr>
<tr>
<td>(Capacity : 2.3 Mil.MT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude Palm Oil Production (Mil. Tonnes)</td>
<td>5.78 (30%)</td>
<td>19.22</td>
</tr>
<tr>
<td>Crude Palm Kernel Oil Production (Mil. Tonnes)</td>
<td>0.611 (27 %)</td>
<td>2.27</td>
</tr>
<tr>
<td>Solid Biomass (Mil. Dry Tonnes per year)</td>
<td>28 (35%)</td>
<td>80</td>
</tr>
</tbody>
</table>

Source: Malaysian Palm Oil Board (MPOB) website, 2013 Statistics
### The Value Chain In The Palm Oil Industry

<table>
<thead>
<tr>
<th>Upstream</th>
<th>Midstream</th>
<th>Downstream Processing</th>
<th>Consumer Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>Activities</td>
<td>Activities</td>
<td>Activities</td>
</tr>
<tr>
<td>• Speed Production</td>
<td>• Trading</td>
<td>• Refining</td>
<td>• Packaging &amp; branding</td>
</tr>
<tr>
<td>• Nursery</td>
<td>• Crude Palm Oil (CPO) Bulking</td>
<td>• Fractionation</td>
<td>• Food products</td>
</tr>
<tr>
<td>• Cultivation</td>
<td>• Refined Product</td>
<td>• Oleochemical</td>
<td>• Non food products</td>
</tr>
<tr>
<td>• Harvesting Milling</td>
<td>• Storage</td>
<td>• Esterification</td>
<td></td>
</tr>
<tr>
<td>Products</td>
<td>Products</td>
<td>Products</td>
<td>Products</td>
</tr>
<tr>
<td>• DXP Seeds</td>
<td>• Crude Palm Oil (CPO)</td>
<td>• RBD Palm Oil</td>
<td>• Cooking oil, frying fats,</td>
</tr>
<tr>
<td>• Fresh Fruit Bunches</td>
<td>• Palm Kernel</td>
<td>• Palm Fatty Acids Distillates</td>
<td>• Margarine</td>
</tr>
<tr>
<td>• Crude Palm Oil</td>
<td>• Crude Palm Kernel Oil</td>
<td>• RBD Palm Olein</td>
<td>• Shortening</td>
</tr>
<tr>
<td>• Palm Kernel</td>
<td>• Palm Kernel Cake</td>
<td>• RBD Palm Stearin</td>
<td>• Vanaspati</td>
</tr>
<tr>
<td>• Biomass (Empty Fruit Bunches, Kernel shell, fronds)</td>
<td></td>
<td>• RBD PK Olein</td>
<td>• Ice creams, non diaries creamers,</td>
</tr>
<tr>
<td>• Palm Oil Mill Effluent</td>
<td></td>
<td>• RBD PK Stearin</td>
<td>• Candles, soaps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cocoa Butter</td>
<td>• Emulsifier</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equivalent</td>
<td>• Vitamin E Supplements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cocoa Butter Substitute</td>
<td>• Confectionary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cocoa Butter Replacer</td>
<td>• Bakery fats</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fatty Acids, alcohols, amines, amides</td>
<td>• Biodiesel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Glycerin</td>
<td>• Energy generation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Palm Methyl Ester</td>
<td>• Animal feed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tocotrienol</td>
<td>• Organic fertilizer from biomass</td>
</tr>
</tbody>
</table>
POTENTIAL OF OLEOCHEMICAL INDUSTRY IN SABAH
The Value Chain In The Malaysian Palm Oil Industry

Malaysia’s palm oil industry spans the entire value chain from plantations to oleochemical and biodiesel plants.

- **Palm oil plantations (m hectares):** 4.7
- **Number of mills:** 416
- **Number of crushers:** 43
- **Number of refineries:** 51
- **Number of oleochemical plants:** 18
- **Number of bulking installations:** 34
- **Number of biodiesel plants:** 25

Source - Economic Transformation Programme ~ A Roadmap for Malaysia (2010)
Oleochemicals are chemicals derived from animal/vegetable oils or fats (petrochemicals are chemicals derived from petroleum).

- **Oils & Fats**
  - Tallow
  - Coconut Oil
  - CPO
  - PKO

- **Basic Oleochemicals**
  - Fatty Acid
  - Fatty Alcohol
  - Methyl Ester
  - Fatty Amine
  - Glycerol

- **Derivatives/Intermediates**
  - Soap Noodles
  - FAE
  - MES
  - Esterquats
  - Polyols

- **End Products**
  - Toilet Soap
  - Personal Care
  - Detergent
  - Softeners

Developing Oleo Derivatives ~ currently basic oleochemicals constitute 99% of the palm oil non-food based downstream production and only 1% contributed by oleo derivatives.
## Export Market of Palm Oil (Tonnes)

### MALAYSIA

<table>
<thead>
<tr>
<th>No</th>
<th>Destination</th>
<th>Tonnes</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China P.R</td>
<td>3,699,638</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>EU</td>
<td>2,336,759</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>India</td>
<td>2,325,386</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>Pakistan</td>
<td>1,435,217</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>U.S.A</td>
<td>1,026,989</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Iran</td>
<td>635,258</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Japan</td>
<td>501,452</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Vietnam</td>
<td>499,918</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>Singapore</td>
<td>492,138</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Benin</td>
<td>473,145</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Egypt</td>
<td>450,634</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>Others</td>
<td>4,270,288</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>18,146,823</strong></td>
<td></td>
</tr>
</tbody>
</table>

### SABAH (33%)

<table>
<thead>
<tr>
<th>No</th>
<th>Destination</th>
<th>Tonnes</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China P.R (49%)</td>
<td>1,813,050</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>EU (41%)</td>
<td>963,826</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>India (39%)</td>
<td>910,392</td>
<td>15.2</td>
</tr>
<tr>
<td>4</td>
<td>U.S.A (40%)</td>
<td>414,883</td>
<td>6.9</td>
</tr>
<tr>
<td>5</td>
<td>Pakistan (26%)</td>
<td>371,989</td>
<td>6.2</td>
</tr>
<tr>
<td>6</td>
<td>Vietnam (51%)</td>
<td>325,448</td>
<td>5.4</td>
</tr>
<tr>
<td>7</td>
<td>Japan (58%)</td>
<td>293,340</td>
<td>4.9</td>
</tr>
<tr>
<td>8</td>
<td>South Korea</td>
<td>280,091</td>
<td>4.7</td>
</tr>
<tr>
<td>9</td>
<td>Singapore (33%)</td>
<td>164,470</td>
<td>2.7</td>
</tr>
<tr>
<td>10</td>
<td>Taiwan</td>
<td>158,201</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Phillipines</td>
<td>114,927</td>
<td>1.9</td>
</tr>
<tr>
<td>12</td>
<td>Others</td>
<td>199,379</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>6,009,996</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: MPOB 2014
## Export Market of Palm Kernel Oil 2013 (Tonnes)

### MALAYSIA

<table>
<thead>
<tr>
<th>No</th>
<th>Destination</th>
<th>Tonnes</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China P.R</td>
<td>271,139</td>
<td>23</td>
</tr>
<tr>
<td>2</td>
<td>U.S.A</td>
<td>218,116</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>EU</td>
<td>207,526</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Japan</td>
<td>78,792</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>India</td>
<td>51,372</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Egypt</td>
<td>46,960</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Brazil</td>
<td>29,808</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Ukraine</td>
<td>26,372</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Sri Lanka</td>
<td>22,241</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>South Africa</td>
<td>18,940</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Others</td>
<td>197,523</td>
<td>17</td>
</tr>
</tbody>
</table>

**Total = 1,170,800**

### SABAH (34%)

<table>
<thead>
<tr>
<th>No</th>
<th>Destination</th>
<th>Tonnes</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China P.R (70%)</td>
<td>191,162</td>
<td>48</td>
</tr>
<tr>
<td>2</td>
<td>EU (38%)</td>
<td>79,449</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>U.S.A (31%)</td>
<td>67,640</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>Japan (46%)</td>
<td>36,325</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>India (18%)</td>
<td>8,998</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>South Korea</td>
<td>5,647</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Egypt (6%)</td>
<td>2,727</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Philippines</td>
<td>2,674</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Sri Lanka (9%)</td>
<td>2,039</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Others</td>
<td>203</td>
<td></td>
</tr>
</tbody>
</table>

**Total = 396,863**

Source: MPOB 2014
### Export Markets of Malaysian Oleochemicals (Tonnes)

<table>
<thead>
<tr>
<th>NO</th>
<th>DESTINATION</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EU</td>
<td>625,914</td>
</tr>
<tr>
<td>2</td>
<td>CHINA P.R</td>
<td>407,152</td>
</tr>
<tr>
<td>3</td>
<td>U.S.A</td>
<td>264,753</td>
</tr>
<tr>
<td>4</td>
<td>JAPAN</td>
<td>209,709</td>
</tr>
<tr>
<td>5</td>
<td>INDIA</td>
<td>145,200</td>
</tr>
<tr>
<td>6</td>
<td>SOUTH KOREA</td>
<td>102,024</td>
</tr>
<tr>
<td>7</td>
<td>SINGAPORE</td>
<td>92,529</td>
</tr>
<tr>
<td>8</td>
<td>TAIWAN</td>
<td>67,568</td>
</tr>
<tr>
<td>9</td>
<td>PHILIPPINES</td>
<td>66,499</td>
</tr>
<tr>
<td>10</td>
<td>U.A.E</td>
<td>64,761</td>
</tr>
<tr>
<td>11</td>
<td>OTHERS</td>
<td>680,823</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>2,726,930</td>
</tr>
</tbody>
</table>

Source: MPOB 2014
BUSINESS OPPORTUNITIES AT POIC LAHAD DATU
Value adding opportunities: oil-based downstream industries

**Products Currently Exported**
- Crude Palm Oil
- Refined Palm Oil
- Palm Olein
- Palm Stearin
- Crude Palm Kernel Oil
- Refined Palm Kernel Oil
- Palm Kernel Olein
- Palm Kernel Stearin

**Downstream Opportunities**
- Cooking Oil
- Shortening
- Margarine
- Vanaspati
- Confectionary
- Bakery fats
- Ice cream
- Cocoa butter alternatives

**Food Based Products**
- Carotenes
- Tocols (Vitamin E)
- Co-enzyme Q10
- Squalene
- Phytostrools
- Lecithin

**Oleochemicals**
- Personal care products
- Cosmetics
- Plasctics
- Textile processing
- Metal processing
- Lubricants
- Emulsifiers
- Soap
- Degreasers
- Protective coatings
- Explosives

**Phytonutrients**
- Personal care products
- Cosmetics
- Plastics
- Textile processing
- Metal processing
- Lubricants
- Emulsifiers
- Soap
- Degreasers
- Protective coatings
- Explosives
Sabah: 1.48 million hectares of oil palm plantations

- EFB: 2.3 million
- Fibre: 4.5 million
- Trunks: 16.4 million
- Fronds: 2.3 million
- POME: 1.0 million
- PKS: 1.4 million

... 28 million dry tonnes every year
Value Adding Opportunities in Palm-based Biomass Downstream Industries

**Feedstock Currently Underutilised**

- **Oil Palm Fronds**
  - 16.4 mil dry tonnes
- **Oil Palm Trunks**
  - 4.5 mil dry tonnes
- **Empty Fruit Bunches**
  - 2.3 mil dry tonnes

**Downstream Opportunities**

- **Bioethanol**
- **Biobased Chemical**
- **Biofuels**
- **Pellets**
- **Furniture from Oil Palm Lumber**
- **Wood Plastic Composite**
- **Plywood**
- **Particle Board / Moulded Particle Board**
- **MDF**
- **Pulp & paper**
- **Finished Paper Product**
- **Compost**
- **Fibre**
- **Animal Feed from Oil Palm Fronds**

**Our current focus:-**
- Bio-refinery
- Sugars
- Bio-fuels
- Bio-chem
- Bio-pellets
Industrializing Sabah Through Industrial Clustering

Palm oil cluster & other clusters

OIL PALM PLANTATIONS

OLEOCHEMICALS

CPO MILLS

BIOFUELS

REFINERIES

BIOMASS

FERTILIZERS

PORT & LOGISTICS CLUSTER

PORT HANDLERS/OPERATORS
EDUCATIONAL INSTITUTIONS
FINANCIAL INSTITUTIONS
LAND DEVELOPERS

BIOREFINERY CLUSTER

BULKERS
TECHNOLOGY PROVIDERS
TRANSPORTATION COMPANIES
MACHINERY EQUIPMENT COMPANIES
REAL ESTATE COMPANIES
WAREHOUSES
RESEARCH INSTITUTES
GOVERNMENT & RELATED AGENCIES
ENERGY SUPPLIERS
FOOD PRODUCTS MANUFACTURERS
HALAL PRODUCT MANUFACTURERS
BIO-REFINERY PRODUCT MANUFACTURERS

SMI CLUSTER

HALAL CLUSTER

BIO TECHNOLOGY CLUSTER

FOOD AQUACULTURE / AGRICULTURE CLUSTER

OIL & GAS CLUSTER

EDUCATIONAL INSTITUTIONS
PORT HANDLERS/OPERATORS
FINANCIAL INSTITUTIONS
LAND DEVELOPERS

HALAL PRODUCT MANUFACTURERS
BIO-REFINERY PRODUCT MANUFACTURERS

FOOD PRODUCTS MANUFACTURERS
KEY ADVANTAGES AT POIC LAHAD DATU
Located at the centre of oil palm growing belt in Sabah

Easy access to raw materials:

Malaysia is second largest producer of CPO

1.48 million hectares (contribute to 28% of Malaysia’s total plantation)

5.78 million tonnes of crude palm oil (CPO) production (30% of Malaysia’s total production)

124 mills in Sabah (28.9% of 429 mills in Malaysia)

14 refineries in Sabah (27% of 52 refineries in Malaysia)

4.5 million tonnes of processed palm oil

0.611 million tonnes of palm kernel oil (PKO)

0.69 million tonnes of palm kernel cake

28 million dry tonnes of solid biomass

Source: Malaysian Palm Oil Board (MPOB) website, 2013 Statistics
Deep Sea Port & Large Industrial Area For Development

- 4,400 acres of industrial land for development
- 1,600 acres already developed
- Deep & sheltered harbour ~ depth up to 20-metre
- Strategic location – plentiful of supply source of PO & proximity to SE Asia
## Huge Land For Development ~4,400 Acres Industrial Complex

- 1,700 acres of completed development with ready to plug in infrastructures
- Designed to cater to light, medium and heavy industries

<table>
<thead>
<tr>
<th>Phase</th>
<th>Land area (Acres)</th>
<th>Industrial Cluster Activities</th>
<th>Status</th>
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<tr>
<td>1</td>
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<td>Oil-based Industries, Bulking, Port &amp; Logistics, Supporting Industries</td>
<td>Developed</td>
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<tr>
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<td>550</td>
<td>Fertilizer, Supporting Industries, Commercial, Residential, Port &amp; logistics</td>
<td>Developed</td>
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<td>Biomass, Bio-refinery cluster, SMI, Supporting Industries, warehouse, Port &amp; Logistics</td>
<td>Developed</td>
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<tr>
<td>3</td>
<td>2,753</td>
<td>Bio-refinery cluster, Ship Building &amp; Repair, Food Industry, Port &amp; Logistics, SMI, Commercial, Supporting Industries</td>
<td>Future Development</td>
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### POIC LAHAD DATU PORT

#### Liquid Bulk Terminal

#### Dry Bulk Terminal

#### Container Terminal

<table>
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<tr>
<th>Berth No</th>
<th>Draft (M)</th>
<th>Maximum Vessel Size (DWT)</th>
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<tr>
<td>1</td>
<td>20</td>
<td>100,000</td>
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<tr>
<td>2</td>
<td>20</td>
<td>100,000</td>
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<tr>
<td>7</td>
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<th>Draft (M)</th>
<th>Length (M)</th>
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<td>188</td>
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<tr>
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<td>12.8</td>
<td>188</td>
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<tr>
<td>4</td>
<td>10.8</td>
<td>138</td>
<td>10,000</td>
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</tbody>
</table>

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<thead>
<tr>
<th>Berth</th>
<th>Draft (M)</th>
<th>Length (M)</th>
<th>Maxi Vessel Size (DWT)</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
<td>300</td>
<td>65,000</td>
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</tbody>
</table>

### Bulking Installation

Phase 1 Facilities - 5 tanks of 2,500 Metric Tonnes
POIC Infrastructures

PIPE RACKS
- Pipe rack provided by POIC to connect to investors' lots within Phase 1 to the liquid jetty
- Investors are required to lay their own pipelines

INTERCHANGE
- Located within our liquid terminal with boiler and air compressor facility
- Pipelines are provided from interchange to berth

ELECTRICITY
- Double Circuit Underground cabling system
- Electricity supply up to a total of 50MW
- At least one ring of 11kV underground cabling circuit running along lot frontage

WATER
- 3 Million Gallons (11.35 million litres) in Permastore Tanks

TELECOMMUNICATIONS
- Underground cabling system
- Provided by Telekom Malaysia (TM) within the whole POIC area
1. Government-backed: Owned and supported by the State Gov. of Sabah. Strong Federal and State Gov. financial support to develop basic infrastructures ~ port, electricity, industrial land.

2. Raw materials: Lots of PO – currently very limited value adding

3. Strategic project location: Centre of PO belt, dedicated port facilities ~ deep & sheltered harbour (20m draft), 2 km from town centre

4. Market access: Strategic geographical location, proximity to South East Asia market.

5. Strategic leverage: Proximity to plentiful supply resources and strategically located at the confluence of shipping lines with easy access to global markets

6. Infrastructure supports: Competitive infrastructure support & speed of completion

7. Investment themes: Refinery, fertilizer, oleochemical, renewable energy biomass, bio-refinery and commodities being the sought-after thematic focus

8. Presence of major industry players: Able to form a cluster - gives confidence to new investor

9. Relaxation of licensing criteria: E.g: approval of refinery license – to locate as many as possible in order to form a cluster strategy

10. Technology driven: Commercialization of Malaysia’s R&D technologies in Palm Oil

11. Large industrial land for development: Areas of 4,400 acres for future expansion and able to meet industrial needs

Putting the pieces together

Opportunities

- Raw Materials
- Knowledge & Technology
- Government-backed
- Project Location
- Strategic leverage
- Good Investment Themes
- Competitive infra
- Market access
- Licensing criteria
- Industry player
- Government incentives
- Large industrial land

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POIC LAHAD DATU DEVELOPMENT TO-DATE
Completed Facilities (19)

Tabanac Land Development
Bristeel Properties
Anjur Handal
JS Biomass
TS Shipping
Behn Meyer
Sabah Softwood
SPC Biodiesel
Mewah
Zurex
The Green Biomass
Choy Huat
AgriBorneo
FPM
CCM
Global Biodiesel
Taiko Fertiliser
QL Bioenergy
GLOBAL BIODIESEL SDN BHD
– Biodiesel

SPC BIODIESEL SDN BHD
– Biodiesel

ZUREX CORPORATION SDN BHD
– Refinery

ANJUR HANDAL SDN BHD
– Transportation & Servicing Facility

CHOY HUAT CONSTRUCTION SDN BHD
– Warehouse

MEWAH DATU
– Refinery

THE GREEN BIOMASS SDN BHD
– Oil Palm Pellet

BRISTEEL PROPERTIES SDN BHD
– Port City Shop Offices & Warehouses
TAIKO FERTILISER SDN BHD
– Fertilizer

BEHN MEYER AGRICARE (M) SDN BHD
– Fertilizer

FPM SDN BHD (FELDA)
– Fertilizer

SABAH SOFTWOODS HYBRID FERTILISER
– Fertilizer

CCM AGRICULTURE (S) SDN BHD
– Fertilizer

AGRIBORNEO FERTILIZERS SDN BHD
– Fertilizer

TABANAC LAND DEVELOPMENT
– PUSPAKOM Facility

BLOSSOM BIO ENERGY SDN BHD
– Storage, Process & Packaging of PKS, EFB & other oil palm products

TS SHIPPING & FORWARDING SDN BHD
– Warehousing, logistic & service of lorries & equipment

ASIA DEPOT SDN BHD
– Warehousing facilities, container services & logistic management
GAMALUX OILS
- Solvent extraction & other palm oil related activities

BRISTEEL PROPERTIES
- Warehouses

SYARIKAT TUAH JAYA
- Transportation, forwarding & facilities

ECOOILS
- Plant for recovery of vegetable oils from agricultural waste
Largest Fertilizer Cluster
~ 1.2 Million MT combined capacity in POIC Lahad Datu

Agri Borneo Fertilizers Sdn Bhd
Behn Meyer & Co (M) Sdn Bhd
CCM Agriculture (Sabah) Sdn Bhd
Taiko Fertilizer Sdn Bhd
Felda Agricultural Services Sdn Bhd
Union Harvest (East Malaysia) Sdn Bhd
Sabah Softwood Hybrid Fertilizer Sdn Bhd
Excelwin Biotech Sdn Bhd
Sunnite Timur Sdn Bhd
8.4 Mil. MT combined Refinery Capacity in Sabah

**2.4 Mil MT – Lahad Datu**
1. Felda Vegetable Oil Products Sdn Bhd
2. KLK Premier Oils Sdn Bhd
3. Kwantas Oil Sdn Bhd
4. LDEO Sdn Bhd

**2.0 Mil. MT – POIC Lahad Datu**
1. Zurex Corporation Sdn Bhd
2. Mewah Datu Sdn (Mewah Oils)
3. Reliance Synergy Sdn Bhd
4. QL Plantation Sdn Bhd
5. Asia Oil Palm Sdn Bhd (JC Chang Group)
6. SAB Biofuels Sdn Bhd (Southern Group)

**2.2 Mil. MT – Sandakan**
1. Green Edible Oil Sdn Bhd
2. IOI Edible Oils Sdn Bhd
3. IOI Specialty Fats Sdn Bhd
4. Sandakan Specialty Fats Sdn Bhd

**1.77 Mil. MT – Tawau**
1. Kunak Refinery Sdn Bhd
2. TSH-Wilmar Sdn Bhd - Kunak
3. Felda Vegetable Oil Products Sdn Bhd
4. Felda Vegetable Oil Products Sdn Bhd
World’s Largest Integrated Bio-Refinery Complex in the making

With Land size more than 80 acres

GLOBAL BIODIESEL SDN BHD
- 100,000 MT Capacity Biodiesel

SPC BIODIESEL SDN BHD
- Biodiesel 200,000 MT capacity

Refinery – RBD PO/Olein

Specialty Chemical

Oleochemical - MES
POIC Sabah is established to drive the economy development through industrialization in Sabah with emphasis given to the value-added palm oil and palm-based biomass downstream activities.

With its proximity to abundant palm oil and palm-based biomass feedstock supported by many critical strength and advantages, the POIC Lahad Datu provides excellent investment opportunities in palm oil and palm biomass downstream industries including the oleochemical downstream activities.
Thank You

Special Acknowledgements:
Datuk Dr. Pang Teck Wai (CEO), Dr. Lee Ming Tong (Advisor), Dr. Bilson Kurus (Head of Research Division)

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