Thai Film Industries Plc.
TOPICS OF TODAY

- World BOPP Demand VS. Supply
- History of Pricing
- TFI Expansion Plan
- Q & A
BOPP DEMAND VS. SUPPLY
WORLD BOPP DEMAND (BY YEAR)

Unit: K-Tons

<table>
<thead>
<tr>
<th>Year</th>
<th>Demand (K-Tons)</th>
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<tbody>
<tr>
<td>2005</td>
<td>4,305</td>
</tr>
<tr>
<td>2006</td>
<td>4,710</td>
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<tr>
<td>2007</td>
<td>5,270</td>
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<tr>
<td>2008</td>
<td>5,700</td>
</tr>
<tr>
<td>2009</td>
<td>6,156</td>
</tr>
<tr>
<td>2010</td>
<td>6,648</td>
</tr>
</tbody>
</table>

Source: Bruckner
WORLD BOPP DEMAND (BY ZONE)

Unit: K-Tons

Source: Bruckner
WORLD BOPP DEMAND BY APPLICATION

- Pasta/Noodle, 11%
- Biscuits/Bakery, 15%
- Confectionery, 6%
- Tobacco, 4%
- Other Dried Foods
- Other Foods, 20%
- Others, 4%
- Tape, 20%

Source: AMI
**WORLD BOPP DEMAND VS. SUPPLY**

Unit: K-Tons

- **Yr 08**: 5,000, Balance: (700)
  - Demand: 5,700
- **Yr 09**: 5,722, Balance: (434)
  - Demand: 6,156
- **Yr 10**: 6,046, Balance: (602)
  - Demand: 6,648

* Global capacity used at 85% utilization
** Capacity in year 2010, not include new machines which not ordered.
- Growth at 8% per years (= 456,000 tons in year 09 and 492,000 tons in 2010)

Source: Bruckner
Sample of new capacities 2008-2010

ASIA

- China : Fujian Fuzhou Jingtai (8.2m. line), Zhejiang Baihui (8.2m.line)
- India : Cosmo (8.2m. line), Jindal(8.7m. line), Polypex (8.7m.line)
- Thailand : AJ Plast (8.2m.line)

MIDDLE EAST

- U.A.E : Flex Middle East (8.7m.line)
- Saudi Arabia : Roward National (8.2m.line)

Source : AMI + Bruckner
Sample of new capacities 2008-2010

NAFTA

- USA : Vifan (8.2m.line)
- Mexico : Altopro S.A. (8.2m.line)

EUROPE

- Russia : Biaxplen, Euromet (8.2m.line)
- France : Toray Film (8.2m.line)
- Turkey : Turkmenneftegas (7.2m.line)

SOUTH AMERICA

- Brazil : Polo (8.2m.line), Vitopel (8.2m.line)

Source : AMI + Bruckner
There were some BOPP plants were shut down during last few years

Asia

- Indonesia Diaz, PT Poly Darya, and Tri Polita
- China close 12 factories with capacity approximate 300,000 tons/year

Europe

- Rhone Poulenc Films in France
- Moplefan in Italy.
- Hoechst in Germany
- Shorko and ICI in U.K.

Australia

- ICI
Some were merged and acquired…

- Hoechst (Germany) was merged by Treophan.
- Shorko (U.K) and Radici (Italy) were taken over by Taghleef (Dubai film group).
- Manuli (Italy) now inviting new investors.

Bulgaria

- Famtex was merged by Plastchim (supplier of PE films, PP and injection molds)
Growth of BOPP comes from...

1. Increasing of world population

2. Growing of economy in China, India, Russia, Brazil and etc.

3. Substitution to other plastic films i.e. PE film, LDPE film, Cellophane film, PVC film and paper. In term of yield and price per sq.meter, BOPP film is better alternative.

4. Increasing of consumption per capita in developing countries due to higher standard of living required such as in China, Indochina, India, South America and etc.

5. Higher demand of consumer on sanitation and environmentally friendly issues.

Source: AMI + TFI
HISTORY OF PRICING
1998 - 2007 Historical Price BOPP Plain Film (Export Market)

Unit: US$/Tons
1998 - 2007 Historical Price BOPP Plain Film (Domestic Market)

Exchange Rate 1998 - 2005 $ = 40.00, 2006 $ = 38.00, 2007 $ = 34.00, 2008F - 2010F $ = 33.50
TFI EXPANSION PLAN
With Love
Thank you for your attention

Wanlop Kunanukornkul
Thai Film Industries Public Co., Ltd.