dbAccess Indonesia Conference 2017, Jakarta
PT CHANDRA ASRI PETROCHEMICAL TBK [TPIA.JK]

Agenda: Management Presentation
November 8th, 2017
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2. Petrochemicals Industry Outlook
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1. Introduction to Chandra Asri Petrochemical
Chandra Asri – Indonesia’s Leading and Preferred Petrochemical Company

Largest Integrated Petrochemical Producer in Indonesia

- **Largest integrated petrochemical producer** in Indonesia and operates the country’s only naphtha cracker, styrene monomer and butadiene plants
- **Market leadership** in highly attractive Indonesia and SE Asia petrochemical market
  - Market share of approximately 52%, 24%, and 29% of the domestic market (including imports) in olefin, polyethylene, and polypropylene, respectively
- **Support** from Barito Pacific Group and Siam Cement Group
- **Transformed in 2016 following the 4Q2015 Naphtha Cracker expansion**, resulting in Adjusted EBITDA increase, reinforced balance sheet, and a more diversified product mix
  - 2015 – 2016 Adjusted EBITDA growth of +229%; LTM EBITDA (as of 30 Jun 2017) peaked at US$ 580 million (1)
  - Reduced debt and Debt / Adjusted EBITDA dropped to 0.8x as of FY2016 and further to 0.6x as of 30 Jun 2017 (1)
- **Vital National Object** status

Stable and Robust Financials Supported by Strong Credit Strengths

- **Integration** from upstream cracker to downstream polyolefin products
  - Strategically located near key customers
- **Low production cost** base and operating efficiencies
  - Benefit from scale of feedstock sourcing and stable supplier relationships
  - Naphtha cracker utilisation rate of 98% in 1H2017
- **Long-standing relationships** with diverse customer base
  - No single customer accounts for more than 7.4% of consolidated revenue
  - In 2016, 74% of products by revenue were sold to domestic market
- **Captive distribution network** provides significant cost efficiencies
  - Key customers integrated with CAP production facilities via CAP’s pipelines
  - Provides significant cost efficiencies to key customers
- **New projects fueling strategic growth**
  - Projects include partnership with Michelin to expand downstream products, new polyethylene plants, debottlenecking, and other efficiency improvements
  - Evaluation of a second petrochemical complex underway

(1) LTM figures are derived as follows: 1H2017 figure + 2016 figure – 1H2016 figure
25 Year Track Record of Successful Growth

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**Adjusted EBITDA**

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>135m</td>
</tr>
<tr>
<td>2015</td>
<td>510m</td>
</tr>
<tr>
<td>2016</td>
<td>2.1bn</td>
</tr>
</tbody>
</table>

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**Total Assets**

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>1.9bn</td>
</tr>
<tr>
<td>2015</td>
<td>1.9bn</td>
</tr>
</tbody>
</table>

---

**Track record of achieving operational and structured growth**

- **1992**: Started commercial production of polypropylene comprising annual capacity of 160 KT/A
- **1993**: Increased capacity of polypropylene plant to 240 KT/A
- **1995**: Commercial production begins at CAP with initial cracker capacity of 520 KT/A
- **2004**: Product expansion through selling of Mixed C4
- **2007**: Added a furnace at its naphtha cracker to increase ethylene production to 600 KT/A, propylene production to 320 KT/A, pygas production to 280 KT/A and mixed C4 production to 220 KT/A
- **2010**: Issued inaugural 5-year US$230m Bond
- **2011**: Merger of CA and TPI effective from 1 Jan 2011
- **2013**: Strategic partnership in the synthetic rubber business with Michelin to establish PT Synthetic Rubber Indonesia
- **2015**: Completed cracker expansion project and TAM
- **2016**: Public offering of CAP I Bonds 2016
- **2017**: Upgrade of long-term corporate credit rating from "B1" to "B3" by Moody’s in August 2017
- **2018**: Completed rights issue of approximately US$377 million in September 2017
- **2019**: Upgrade corporate rating from "idA+" to "idAA-" by Pefindo in October 2017
- **2020**: Obtained corporate rating of ‘BB-’ by Fitch in October 2017
Vision to be Indonesia’s Leading and Preferred Petrochemical Company

1. Increase capacity and build on leading market position

2. Expand product offerings and further optimize integration along the petrochemical value chain

3. Develop feedstock advantage to improve cost competitiveness

4. Develop and nurture human capital

5. Continue to leverage the Company’s unique infrastructure and customer service to maintain premium value to customers

6. Maintain and further improve best-in-class operating standards, cost efficiency, and safety, health and environment
Integrated Production of Diverse Products

CAP’s products encompass a wide range across the consumer products value-chain, and its leading position and strategic location enhances its competitiveness.
2. Petrochemicals Industry Outlook
Ethylene World Supply Growth and Capacity

Ethylene World Supply Growth

(million tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>2011</td>
<td>110</td>
<td>125</td>
</tr>
<tr>
<td>2013</td>
<td>120</td>
<td>130</td>
</tr>
<tr>
<td>2015</td>
<td>130</td>
<td>140</td>
</tr>
<tr>
<td>2017</td>
<td>140</td>
<td>150</td>
</tr>
<tr>
<td>2019</td>
<td>150</td>
<td>160</td>
</tr>
<tr>
<td>2021</td>
<td>160</td>
<td>170</td>
</tr>
<tr>
<td>2023</td>
<td>170</td>
<td></td>
</tr>
</tbody>
</table>

- Ethylene Consumption
- Total Capacity (with Unsactioned Capacity)
- Total Capacity (with No Unsactioned Capacity)
- Operating Rates (with Unsactioned Capacity)
- Operating Rates (with No Unsactioned Capacity)

Ethylene Production Capacity: 218MT in 2023

- Naphtha/Liquids Cracking 44%
- NGLs Cracking 45%
- Shale Gas 6%
- CTO/MTO and Others 5%

- Global ethylene demand forecasted to grow at c.3.2% CAGR between 2017 – 2023
- As many as 20-26 new ethylene plants expected to be build
- 7 – 8 years required from planning to startup

New Capacity by Region: 25MT (2017 – 2023)

- Americas 34%
- China 20%
- SEA 9%
- Middle East/Africa 17%
- Europe 19%
- Asia Pacific (exc. SEA and China) 1%
The Petrochemical Industry is in a Long Term Cyclical Phase

Ethylene Spreads Over Naphtha

Gap over naphtha (US$/t) | % Utilisation
---|---
Average 2009-2012: US$306 | 60%
Average 2013-2016: US$567 | 70%
Average 2017-2019: US$568 | 80%
Average 2020-2023: US$424 | 90%

Source: Nexant

Petrochemical industry profitability to continue on path of sustainable recovery post 2012 as a result of improving demand and lower capacity addition
Strong Demand Growth for Petrochemicals in Indonesia

Petrochemical demand in Indonesia expected to outpace other regions

Source: Nexant
3. Key Investment Highlights
2. Key Investment Highlights

1. Attractive industry outlook

2. Well-positioned to benefit from attractive Indonesian growth fundamentals

3. Indonesia’s leading petrochemical producer with a diverse product portfolio

4. High degree of operational integration

5. Diversified customer base and strategically located to supply key customers

6. Diverse and secured sources of feedstock and raw materials

7. Strong shareholder support

8. Highly experienced management team with proven track record of managing and expanding operations
Attractive Industry Fundamentals Providing Tailwinds for Petrochemicals Demand Growth in SEA

Polyolefins Demand in SEA Expected to Outpace Global Market Growth...

Polyethylene consumption growth (2017 – 2023E CAGR)

- Global: 3.4%
- SEA: 3.9%
- Indonesia: 4.4%

Polypropylene consumption growth (2017 – 2023E CAGR)

- Global: 3.6%
- SEA: 4.2%
- Indonesia: 4.7%

...while Asian Naphtha Prices Remain Below Historical Average

(US$/t, real prices)

Past 5-year average price: US$713/t

Polyolefin Spreads Expected to Remain Resilient

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LDPE - Naphtha</td>
<td>662</td>
<td></td>
<td></td>
<td></td>
<td>754</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LLDPE - Naphtha</td>
<td>631</td>
<td></td>
<td></td>
<td></td>
<td>705</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE - Naphtha</td>
<td>630</td>
<td></td>
<td></td>
<td></td>
<td>689</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP - Naphtha</td>
<td>582</td>
<td></td>
<td></td>
<td></td>
<td>583</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average spreads of key products will be continue to be resilient

Source: Nexant
Well-Positioned to Benefit from Attractive Indonesian Macroeconomic Growth and Consumption Trends

### GDP Growth CAGR (2017 – 2020F)(1)

<table>
<thead>
<tr>
<th>Country</th>
<th>2017</th>
<th>2020F</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>7.7%</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>6.8%</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>6.3%</td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td>6.2%</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>5.4%</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>4.8%</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>3.3%</td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>2.6%</td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td>2.0%</td>
<td></td>
</tr>
<tr>
<td>U.K.</td>
<td>1.6%</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>1.6%</td>
<td></td>
</tr>
</tbody>
</table>

### Foreign Direct Investment in Indonesia (2012 – 2016)

(US$bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24.5</td>
<td>28.6</td>
<td>28.5</td>
<td>29.3</td>
<td>29.0</td>
</tr>
</tbody>
</table>

### Polyolefins Consumption per Capita(2)(3)(4)

- Bubble size indicates demand in 2016, million tons
- FSU means Former Soviet Union, CE means Central Europe, WE means Western Europe
- Source: Nexant Industry Report, IMF, BKPM

### Domestic trends

- **Rising Population**
- **Quality of Life**
- **Product Substitution**
- **Consumer Spending**
- **Urbanization**
- **Manufacturing**

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(1) GDP, constant prices; IMF World Economic Outlook Database, October 2017
(2) SEA excludes Indonesia
(3) Polyolefins include HDPE, LLDPE, LDPE and PP
(4) FSU means Former Soviet Union, CE means Central Europe, WE means Western Europe

*Source: Nexant Industry Report, IMF, BKPM*
Strong Demand Growth for Petrochemical Products in Indonesia

End Markets
- Polyethylene
  - Plastic films
  - Containers
  - Bottles
  - Plastic bags
- Polypropylene
  - Packaging
  - Films and sheets
  - Fibers and filaments
  - Toys
  - Automotive parts
- Styrene Monomer
  - Drinks cups
  - Food containers
  - Car interiors
  - Helmet padding
- Butadiene
  - Vehicle tires
  - Synthetic rubber
  - Gloves and footwear

Total Demand Growth (1)
(2017F – 2023F CAGR)
- Polyethylene (PE): Indonesia 3.4%, Global 4.4%
- Polypropylene (PP): Indonesia 3.6%, Global 4.7%
- Styrene Monomer (SM): Indonesia 1.6%, Global 10.5%
- Butadiene (BD): Indonesia 2.4%, Global 17.7%

Petrochemical products are fundamental to the production of a wide variety of consumer and industrial products, such as packaging, containers, automotive and construction materials.

(1) By volume
Source: Nexant
Petrochemical Market in Indonesia will Continue to See an Increasing Gap Between Supply and Demand

Indonesia is expected to remain in deficit and dependent on imports

(1) Includes unsanctioned capacity of 1MT
Source: Nexant
CAP is the Indonesian Market Leader

Largest Petrochemical Company in Indonesia\(^{(1)}\)

**Olefin**
- Pertamina: 24%
- Import: 24%
- CAP: 52%
- LCT\(^{(2)}\): 31%
- Import: 45%

**Polyethylene**
- LCT\(^{(2)}\): 31%
- Import: 45%
- CAP: 24%

**Polypropylene**
- Poltama: 15%
- Pertamina: 3%
- Import: 53%
- CAP: 29%

**Styrene Monomer**
- Pertamina: 100%
- CAP: 100%

Total Supply:
- Olefin: 2.6M tons
- Polypropylene: 1.6M tons
- Styrene Monomer: 0.3M tons
- Total Supply: 1.4M tons

Olefin Top 10 South East Asia Producers\(^{(3)}\)

Polyolefin Top 10 South East Asia Producers\(^{(3)}\)

CAP is a market leader in Indonesia across all of its products, and a leading player in the region.

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\(^{(1)}\) By production excluding fertilizer producers

\(^{(2)}\) Refers to Lotte Chemical Titan

\(^{(3)}\) Chandra Asri capacity is inclusive of SCG’s equity in Chandra Asri

Source: Nexant
### Capacities of Petrochemical Producers in Indonesia (March 2017)

<table>
<thead>
<tr>
<th>Capacity ('000 tons per year)</th>
<th>Chandra Asri Petrochemical</th>
<th>LOTTE CHEMICAL TITAN</th>
<th>Pertamina</th>
<th>Polytama</th>
<th>ASC</th>
<th>TAPPI</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene</td>
<td>860</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>860</td>
</tr>
<tr>
<td>Propylene</td>
<td>470</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,078</td>
</tr>
<tr>
<td>LLDPE</td>
<td>200</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>HDPE</td>
<td>136</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>386</td>
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<tr>
<td>Polypropylene</td>
<td>480</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>765</td>
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<tr>
<td>Ethylene Dichloride</td>
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<td></td>
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<td>1,014</td>
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<tr>
<td>Vinyl Chloride Monomer</td>
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<td></td>
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<td></td>
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<td>Ethylene Oxide</td>
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<td></td>
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<td>240</td>
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<td>Ethylene Glycol</td>
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<td></td>
<td></td>
<td>220</td>
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<tr>
<td>Acrylic Acid</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>140</td>
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<td>Butanol</td>
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<td>Py-Gas</td>
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<td></td>
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<td></td>
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<td></td>
<td>315</td>
</tr>
<tr>
<td>Benzene</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Para-Xylene</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>525</td>
</tr>
<tr>
<td>Styrene</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>838</td>
</tr>
</tbody>
</table>

**Total** 3,301 | 450 | 1,076 | 240 | 1,885 | 595 | 940 | 962 | 9,449

CAP offers the most diverse product range and is a dominant producer with market share of approximately 52%, 24%, and 29% of the domestic market (including imports) in olefin, polyethylene, and polypropylene, respectively.

*Source: Nexant*
Highly Integrated Production Process with Operational Flexibility

- **Specialised software** considers variables such as product prices, freight, product yield of naphtha and naphtha prices to determine the **optimum ratio** of naphtha grades required.

- Naphtha cracker, polyethylene and butadiene plants source **approximately half of the power from PLN** and the remaining half from the GTG, with the STG being used as backup.

- Polypropylene, styrene monomer and butadiene plant source power primarily from PLN. Two emergency generators provide part of the power required for the styrene monomer plants.

- One of our polyethylene plants is a **swing plant** that allows production to be switched between LLDPE and HDPE based on market demand.

- Integrated production system allows **improvement of feedstock yields and lower unit cost**.

- Modular set-up allows units to operate independently, thus **minimizing production disruptions**.

Integration allows us to take advantage of operational savings and synergies, and provides flexibility to respond to changes of key products.
Strategically Located to Supply Key Customers

CAP’s Integrated Petrochemical Complexes

Location proximity and well established pipeline ensures excellent connectivity to key customers. This coupled with reliability of supply lead to premium pricing, with integration of facilities creating significant barriers to entry.
Sales & Marketing Strategy

- Long term relationships with key customers
- Connected to production facilities via CAP’s pipeline (ethylene and propylene customers)
- Network of 300+ customers, with diversified clientele
  - Top 10 customers account for only 43.6% of revenues in 2016
  - Majority of top 10 customers have been with CAP for >10 years
- Trademarked brand names
  - “Asrene” for polyethylene products, “Trilene” for polypropylene products, “Grene” for resin products
- Strong marketing and distribution platform with nation-wide network
  - Short delivery times result in premium pricing over benchmarks
  - Onground technical support

Top 10 Customers (2016)

<table>
<thead>
<tr>
<th>Customer</th>
<th>Products</th>
<th>% of Revenue</th>
<th>Customer Since</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer 1</td>
<td>Polyethylene, polypropylene</td>
<td>7.4%</td>
<td>1995</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Customer 2</td>
<td>Ethylene, propylene and styrene monomer</td>
<td>5.1%</td>
<td>2002</td>
<td>Japan</td>
</tr>
<tr>
<td>Customer 3</td>
<td>Styrene monomer and butadiene</td>
<td>5.1%</td>
<td>2004</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Customer 4</td>
<td>Polyethylene, polypropylene</td>
<td>4.6%</td>
<td>1995</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Customer 5</td>
<td>Ethylene</td>
<td>4.5%</td>
<td>1995</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Customer 6</td>
<td>Ethylene</td>
<td>4.1%</td>
<td>2007</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Customer 7</td>
<td>Butadiene, raffinate, styrene monomer, C₄</td>
<td>3.9%</td>
<td>2002</td>
<td>Singapore</td>
</tr>
<tr>
<td>Customer 8</td>
<td>Pygas</td>
<td>3.7%</td>
<td>2011</td>
<td>Thailand</td>
</tr>
<tr>
<td>Customer 9</td>
<td>Propylene</td>
<td>2.8%</td>
<td>2011</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Customer 10</td>
<td>Ethylene</td>
<td>2.5%</td>
<td>2006</td>
<td>Indonesia</td>
</tr>
</tbody>
</table>

Top 10 Customers % of Revenue 43.6%

Sales Breakdown (2014 – 2016)

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic</th>
<th>Export</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>514</td>
<td>41%</td>
<td>59%</td>
</tr>
<tr>
<td>2015</td>
<td>171</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>2016</td>
<td>610</td>
<td>42%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Olefins & by-products (1)

- Includes ethylene, propylene, and by-products such as pygas and mixed C4
- Propylene: Majority used as feedstock for polypropylene production internally
- Mixed C4: Majority used as feedstock for butadiene production internally
- Pygas: Primarily sold to SCG

---

(1) Includes ethylene, propylene, and by-products such as pygas and mixed C4
- Propylene: Majority used as feedstock for polypropylene production internally
- Mixed C4: Majority used as feedstock for butadiene production internally
- Pygas: Primarily sold to SCG
Stable and Flexible Feedstock Supply

Feedstock Procurement Overview

- Long-standing stable supplier relationships
- No material feedstock supply disruption historically
- Flexibility in feedstock purchasing (spot vs. contract)
  - Avoids single supplier dependence
  - 76% of naphtha under contract with major oil trading companies in 2016
- Procurement synergies with SCG
- Substantial naphtha storage capacity to support 27 days of operations

Main Raw Materials (2016)

<table>
<thead>
<tr>
<th>Raw Material</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha/Condensate</td>
<td>100%</td>
</tr>
<tr>
<td>Benzene</td>
<td>100%</td>
</tr>
<tr>
<td>Propylene</td>
<td>40% / 60%</td>
</tr>
<tr>
<td>Ethylene</td>
<td>100%</td>
</tr>
<tr>
<td>C4</td>
<td>100%</td>
</tr>
</tbody>
</table>

Naphtha Supply (2016)

<table>
<thead>
<tr>
<th>Year</th>
<th>Contract Purchase</th>
<th>Spot Purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>2015</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>2016</td>
<td>76%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Suppliers of Naphtha (2016)

<table>
<thead>
<tr>
<th>Supplier</th>
<th>US$m</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitol Asia Pte Ltd</td>
<td>304.2</td>
<td>35.6%</td>
</tr>
<tr>
<td>Marubeni Petroleum C Ltd</td>
<td>237.5</td>
<td>27.8%</td>
</tr>
<tr>
<td>SCG Chemicals Co. Ltd</td>
<td>81.8</td>
<td>9.6%</td>
</tr>
<tr>
<td>Chevron U.S.A. Inc</td>
<td>78.4</td>
<td>9.2%</td>
</tr>
<tr>
<td>Shell International Eastern Trading</td>
<td>69.4</td>
<td>8.1%</td>
</tr>
<tr>
<td>Shell MDS (Malaysia) Sendirian</td>
<td>26.2</td>
<td>3.1%</td>
</tr>
<tr>
<td>Konsorsium PT. Titis Sampurna</td>
<td>22.0</td>
<td>2.6%</td>
</tr>
<tr>
<td>PT Surya Mandala SaKTI</td>
<td>3.2</td>
<td>0.4%</td>
</tr>
<tr>
<td>PT Sadikun Chemical Indonesia</td>
<td>0.5</td>
<td>0.1%</td>
</tr>
<tr>
<td>Others</td>
<td>31.6</td>
<td>3.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>854.9</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Customer-centric approach has resulted in long-standing relationships
Strong Commitment from Shareholders

Shareholder Structure (as of 30 Sep 2017)

<table>
<thead>
<tr>
<th>Company</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barito Pacific</td>
<td>41.51%</td>
</tr>
<tr>
<td>Prajogo Pangestu(1)</td>
<td>14.11%</td>
</tr>
<tr>
<td>Marigold Resources(2)</td>
<td>4.75%</td>
</tr>
<tr>
<td>SCG</td>
<td>30.57%</td>
</tr>
<tr>
<td>Public</td>
<td>9.06%</td>
</tr>
</tbody>
</table>

**Barito Pacific**
- Indonesia based conglomerate with business interests in property, timber, plantation, power generation and petrochemicals

**Siam Cement Group**
- Thailand’s largest industrial conglomerate and Asia’s leading chemicals producer
- Invested 30% in CAP in 2011
- Second largest olefins and polyolefins producer in South East Asia

**Key benefits of partnership**
- Barito Pacific is committed to the growth and development of CAP
  - Available land for expansion
  - Financial commitment (e.g. full subscription to 2013 rights offering)
- Production know-how and sharing of best operational practices
- Raw material procurement savings
- Sales and marketing collaboration
- Access to Thai financial institutions
- Accelerate CAP’s expansion plans

**Strong backing from long term marquee strategic regional investors committed to the development of the business**

(1) Owns 69.23% of PT Barito Pacific Tbk as of 30 Sep 2017
(2) Subsidiary of PT Barito Pacific Tbk
# Strong Management Team with Substantial Industry Experience

## Board of Commissioners

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Industry Experience</th>
<th>CAP Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>DJOKO SUYANTO</td>
<td>President Commissioner, Independent Commissioner</td>
<td>2 years in Industry</td>
<td>2 years with CAP</td>
</tr>
<tr>
<td>TAN EK KIA</td>
<td>VC Commissioner, Independent Commissioner</td>
<td>44 years in Industry</td>
<td>6 years with CAP</td>
</tr>
<tr>
<td>HO HON CHEONG</td>
<td>Commissioner, Independent Commissioner</td>
<td>2 years in Industry</td>
<td>2 years with CAP</td>
</tr>
<tr>
<td>AGUS SALIM PANGESTU</td>
<td>Commissioner</td>
<td>11 years in Industry</td>
<td>11 years with CAP</td>
</tr>
<tr>
<td>LOEKI SUNDJAJA PUTERA</td>
<td>Commissioner</td>
<td>15 years in Industry</td>
<td>15 years with CAP</td>
</tr>
<tr>
<td>CHAOVALIT EKABUT(1)</td>
<td>Commissioner</td>
<td>11 years in Industry</td>
<td>5 years with CAP</td>
</tr>
<tr>
<td>CHOLANAT YANARANO(1)</td>
<td>Commissioner</td>
<td>30 years in Industry</td>
<td>5 years with CAP</td>
</tr>
</tbody>
</table>

## Board of Directors

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Industry Experience</th>
<th>CAP Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERWIN CIPUTRA</td>
<td>President Director</td>
<td>13 years in Industry</td>
<td>13 years with CAP</td>
</tr>
<tr>
<td>KULACHET DHARACHANDRA(1)</td>
<td>VP Director of Operations</td>
<td>23 years in Industry</td>
<td>1 year with CAP</td>
</tr>
<tr>
<td>BARITONO PRAJOGO PANGESTU</td>
<td>VP Director of Polymer Commercial</td>
<td>12 years in Industry</td>
<td>12 years with CAP</td>
</tr>
<tr>
<td>LIM CHONG THIAN</td>
<td>Director of Finance</td>
<td>37 years in Industry</td>
<td>12 years with CAP</td>
</tr>
<tr>
<td>SURYANDI</td>
<td>Director of Human Resource and Corp. Administration, Independent Director</td>
<td>27 years in Industry</td>
<td>27 years with CAP</td>
</tr>
<tr>
<td>PIBOON SIRINANTANAKUL(1)</td>
<td>Director of Manufacturing</td>
<td>24 years in Industry</td>
<td>1 year with CAP</td>
</tr>
<tr>
<td>FRANSISKUS RULY ARYAWAN</td>
<td>Director of Monomer Commercial</td>
<td>15 years in Industry</td>
<td>15 years with CAP</td>
</tr>
</tbody>
</table>

(1) Representative of SCG
Plant utilization has remained high due to our operational process optimization initiatives

(1) In September to December 2015, we conducted a scheduled TAM and expansion tie-in works in conjunction with our cracker expansion project, which resulted in the shutdown of our cracker facility for 85 days and limited our production capacity for 2015. 2016 utilisation was reduced due to ramp-up in 1Q 2016

(2) Lower utilization due to unscheduled maintenance outages, the impacts of which were not material
Strong Success of Both Vertical and Horizontal Expansion

- Successfully acquired and integrated SMI and TPI
- Expanded naphtha cracker in 2015 to achieve economies of scale and take advantage of significant ethylene shortage in Indonesia
  - Mechanical completion on 9 Dec 2015, on time and within budget (c. US$380m)
  - Total actual project cost in line with budget (c. US$380m)
  - Achieved high utilization rates
- Currently undertaking next stage of expansions and growth

Expansion of production capacity and product range has enabled us to maintain our market leading position

(1) Represents addition to capacity due to merger with TPI that had installed propylene capacity of 480 KT/A at the time of merger
4. Attractive Growth Profile
Strategic Growth via Expansion and Debottlenecking (Excluding Second Petrochemical Complex)

After doubling the size of production capacity over historical 10-yrs, expected further growth in the next 5-yrs will come from several expansion & debottlenecking initiatives.

Note:
- SSBR – Solution Styrene Butadiene Rubber
- BD Expansion - Butadiene Plant Expansion
- PE – Polyethylene
- PP – Polypropylene
- MTBE - Methyl tert-butyl ether
- C2 / C3 – Refers to furnace revamp

CAGR: 6.2%

2016 – 2020

SSBR operation, BD expansion
PE expansion & PP Debottlenecking
C2, C3, MTBE and Butene-1

157
120KT
3,301
2016

3,458
SSBR: Δ120KT
BD: Δ37KT
3,968
PE: Δ400KT
PP: Δ110KT
510
2019

4,201
C2: Δ40KT
C3: Δ20KT
MTBE: Δ130KT
B1: Δ43KT

4,201
2020

233
### Strategic Growth via Expansion and Debottlenecking

#### Butadiene Plant Expansion
- **Rationale:**
  - Add value to incremental C4 post 2015 cracker expansion
  - Avoid opportunity loss of exporting excess C4
  - Enjoy BD domestic premium and fulfill SRI’s BD requirement
- **Proposed start-up:** 2Q2018
- **Estimated cost:** US$ 41.2 million

#### New Polyethylene Plant
- **New facility of total 400 KT/A to produce LLDPE, HDPE and Metallocene LLDPE**
- **Rationale:**
  - Further vertical integration
- **Proposed start-up:** 4Q2019
- **Estimated cost:** US$ 347.0 million

#### Furnace Revamp
- **Increase cracker capacity by modifying heat internals to increase ethylene capacity from 860 KT/A to 900 KT/A and propylene capacity from 470 KT/A to 490 KT/A**
- **Proposed start-up:** 1Q2020
- **Estimated cost:** US$ 45.0 million

#### Expand Product Offering by Moving Downstream
#### Synthetic Rubber Project (through SRI JV)
- **Part of downstream integration strategy and efforts to produce higher-value added products**
- **Partnership with leading global player Michelin (ownership 55:45%)**
- **Production capacity:** 120 KT/A
- **Proposed start-up:** 1Q2018
- **Estimated total project cost:** US$570.0 million (fully funded)

### Additional Expansion and Product Offering Initiatives

#### PP Debottlenecking
- **Debottleneck PP plant to increase capacity by 110 KT/A from 480 KT/A to 590 KT/A**
- **Rationale:**
  - Demand and supply gap for PP expected to widen in Indonesia
  - Opportunity to increase PP sales
- **Proposed start-up:** 3Q2019
- **Estimated cost:** US$ 35.5 million

#### Second Petrochemical Complex
- **Expected to conduct feasibility study for the construction and operation of second integrated petrochemical complex**
- **Complex expected to comprise:**
  - 1,000 KT/A ethylene cracker
  - Various downstream derivative products
- **Set up new company (PT Chandra Asri Perkasa) to undertake new project**
- **Shareholding structure yet to be finalized and CAP is in discussion with various third parties**
- **There is land available adjacent to main petrochemical complex which would be available for future acquisition as necessary**

#### MTBE and Butene – 1 Plant
- **Production of 130 KT/A and 43 KT/A of MTBE and Butene-1, respectively**
- **Rationale:**
  - Secure supply of MTBE and Butene-1 which are used in the production of Polyethylene
  - Excess demand for MTBE in Indonesia
- **Proposed start-up:** 3Q2020
- **Estimated cost:** US$ 86.8 million

#### Butadiene Plant Expansion
- **Increase BD capacity by 100 KT/A to 137 KT/A**
- **Rationale:**
  - Add value to incremental C4 post 2015 cracker expansion
  - Avoid opportunity loss of exporting excess C4
  - Enjoy BD domestic premium and fulfill SRI’s BD requirement
- **Proposed start-up:** 2Q2018
- **Estimated cost:** US$ 41.2 million
5. Financial Highlights
Prudent Financial Policies

- **Foreign Exchange**
  - Maintain natural economic hedge as underlying sales and majority of costs and borrowings are denominated in US$.
  - Treasury risk management on Rupiah currency risks:
    - Sales are hedged via pricing to customers and forward swaps with reputable banks.
    - Minimum Rupiah cash holdings of up to 10 – 15% of idle cash to meet operational needs.

- **Leverage**
  - Maximum total debt to capitalization of 40% on sustainable basis.
  - Maximum Net Debt / Adjusted EBITDA of 3.0x.

- **Coverage**
  - Minimum Adjusted EBITDA / Interest cover of 3.0x.

- **Liquidity**
  - Seek to maintain minimum cash of US$100m at all times.

- **Return on Capital**
  - Seek minimum 15% IRR for new investments.

- **Dividend Policy**
  - Payout in the amount of c. 40% of consolidated net profit subject to:
    - Liquidity, leverage and reserves.
    - Financial performance / sustainability.
    - Projected operational and capital expenditure.
Resilient Revenue Driven by Diverse Product Portfolio and Increased Volumes

Revenue by Product Segments

<table>
<thead>
<tr>
<th>Year</th>
<th>Tanks and Jetty rent</th>
<th>Styrene Monomer and by-products</th>
<th>Polyolefin</th>
<th>Butadiene and by-products</th>
<th>Olefin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>514</td>
<td>1,303</td>
<td>1,895</td>
<td>2,460</td>
<td>619</td>
</tr>
<tr>
<td>2015</td>
<td>869</td>
<td>1,378</td>
<td>3,298</td>
<td>1,930</td>
<td>814</td>
</tr>
<tr>
<td>2016</td>
<td>610</td>
<td>1,950</td>
<td>5,051</td>
<td>1,195</td>
<td>2,147</td>
</tr>
<tr>
<td>1H2017</td>
<td>370</td>
<td>1,075</td>
<td>3,200</td>
<td>1,915</td>
<td>1,380</td>
</tr>
</tbody>
</table>

Sales Volume

<table>
<thead>
<tr>
<th>Year</th>
<th>Ethylene</th>
<th>Mixed C4</th>
<th>Polypropylene</th>
<th>Propylene</th>
<th>Polymethylene</th>
<th>Py-gas</th>
<th>Styrene Monomer</th>
<th>Butadiene</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>2014</td>
<td>2015</td>
<td>2016</td>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>2014</td>
<td>2015</td>
<td>2016</td>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>2014</td>
<td>2015</td>
<td>2016</td>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>2014</td>
<td>2015</td>
<td>2016</td>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: TAM in 2015 and ramp-up in 2016.
Strong Gross Margins Reflecting Improved Supply/Demand Balance & Higher Utilization Rates

**Olefins**
- 2014: 2.0%
- 2015: (0.9%)
- 2016: 27.2%
- 1H2017: 32.2%

**Polyolefins**
- 2014: 7.0%
- 2015: 15.8%
- 2016: 32.0%
- 1H2017: 28.2%

**Styrene Monomer and by-products**
- 2014: 1.7%
- 2015: 5.0%
- 2016: 8.7%
- 1H2017: 7.1%

**Butadiene and by-products**
- 2014: 2.9%
- 2015: (5.1%)
- 2016: 11.1%
- 1H2017: 16.9%
Strong Financials Further Enhanced by Economies of Scale

Gross Profit

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>118</td>
</tr>
<tr>
<td>2015</td>
<td>146</td>
</tr>
<tr>
<td>2016</td>
<td>494</td>
</tr>
<tr>
<td>1H2017</td>
<td>292</td>
</tr>
</tbody>
</table>

Adjusted EBITDA (unaudited)

<table>
<thead>
<tr>
<th>Year</th>
<th>Adjusted EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>6%</td>
</tr>
<tr>
<td>2015</td>
<td>11%</td>
</tr>
<tr>
<td>2016</td>
<td>26%</td>
</tr>
<tr>
<td>1H2017</td>
<td>25%</td>
</tr>
</tbody>
</table>

Net Profit

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Profit Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1%</td>
</tr>
<tr>
<td>2015</td>
<td>2%</td>
</tr>
<tr>
<td>2016</td>
<td>16%</td>
</tr>
<tr>
<td>1H2017</td>
<td>15%</td>
</tr>
</tbody>
</table>

Cashflow from Operations, Capex

<table>
<thead>
<tr>
<th>Year</th>
<th>CFO</th>
<th>Capex (unaudited)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>116</td>
<td>194</td>
</tr>
<tr>
<td>2015</td>
<td>105</td>
<td>224</td>
</tr>
<tr>
<td>2016</td>
<td>73</td>
<td>476</td>
</tr>
<tr>
<td>1H2017</td>
<td>180</td>
<td>69</td>
</tr>
</tbody>
</table>
Strong Balance Sheet Supported by Financial Profile Strengthening

### Cash Balance
(US$m)

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>1H2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance</td>
<td>208</td>
<td>97</td>
<td>299</td>
<td>212</td>
</tr>
</tbody>
</table>

Rights Issue: 377

### Debt and Net Debt
(US$m)

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>1H2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt</td>
<td>491</td>
<td>283</td>
<td>451</td>
<td>425</td>
</tr>
<tr>
<td>Net Debt</td>
<td>373</td>
<td>126</td>
<td>161</td>
<td></td>
</tr>
</tbody>
</table>

*Net cash position after Rights Offering

### Adjusted EBITDA / Finance Costs (1)

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>1H2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA</td>
<td>4.2x</td>
<td>6.9x</td>
<td>16.0x</td>
<td>16.5x</td>
</tr>
</tbody>
</table>

Issuer’s Internal Financial Policy

### Leverage Ratios (2)

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>1H2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt to Capitalisation</td>
<td>3.6x</td>
<td>3.5x</td>
<td>2.1x</td>
<td>0.6x</td>
</tr>
<tr>
<td>Debt to Adjusted EBITDA</td>
<td>2.9x</td>
<td>38%</td>
<td>27%</td>
<td>24%</td>
</tr>
<tr>
<td>Net debt to Adjusted EBITDA</td>
<td>36%</td>
<td>40%</td>
<td>Max</td>
<td></td>
</tr>
</tbody>
</table>

Issuer’s Internal Financial Policy

---

(1) For 1H2017 calculated as LTM Adjusted EBITDA divided by LTM Finance Costs; LTM figures are derived as follows: 1H2017 figure + 2016 figure – 1H2016 figure

(2) Debt to Capitalisation calculated as total debt divided by (total debt + equity). Debt to Adjusted EBITDA calculated as Total Debt divided by Adjusted EBITDA. Net Debt to Adjusted EBITDA for 1H2017 calculated as Total Debt divided by LTM Adjusted EBITDA and Net Debt divided by LTM Adjusted EBITDA respectively; LTM figures are derived as follows: 1H2017 figure + 2016 figure – 1H2016 figure
Capital Expenditure Plan to Pursue Value-Accretive Growth

Capex Plans Breakdown by Year 2017 – 2019 (US$m)

<table>
<thead>
<tr>
<th>Year</th>
<th>BD expansion</th>
<th>PE expansion</th>
<th>Furnace Revamp</th>
<th>MTBE &amp; Butene-1</th>
<th>Others/TAM</th>
<th>New Cracker Initial Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017F</td>
<td>81</td>
<td>62</td>
<td>12</td>
<td>63</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>2018F</td>
<td>39</td>
<td>24</td>
<td>16</td>
<td>98</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>2019F</td>
<td>30</td>
<td>42</td>
<td>11</td>
<td>137</td>
<td>303</td>
<td></td>
</tr>
</tbody>
</table>

Sources of Funding
- Internal generated cash flows
- Proceeds from Rights Issue
- Debt drawdown

Estimated US$1.2b over next 3 years, mainly for Expansion and Debottlenecking
Thank You

Address:
PT Chandra Asri Petrochemical Tbk
Wisma Barito Pacific Tower A, Lt. 7
Jl. Let. Jend. S. Parman Kav. 62-63
Jakarta 11410

Contact:
Investor Relations
Email: investor-relations@capcx.com
Tel: +62 21 530 7950
Fax: +62 21 530 8930

Visit our website at www.chandra-asri.com

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