1. Introduction to Chandra Asri Petrochemical
2. Key Investment Highlights
3. Attractive Growth Profile
4. Financial Highlights
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 Sep 2017) at US$ 570 million
  - Reduced debt and Debt / Adjusted EBITDA dropped to 0.8x as of FY2016 and further to 0.6x as of 30 Sep 2017
- 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 99% in YTD3Q17
- 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

CAP’s main integrated manufacturing complex
25 Year Track Record of Successful Growth

Track record of achieving operational and structured growth
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
CAP’s products encompass a wide range across the consumer products value-chain, and its leading position and strategic location enhances its competitiveness.
### Capacities of Petrochemical Producers in Indonesia (March 2017)

<table>
<thead>
<tr>
<th>Capacity ('000 tons per year)</th>
<th>CAP</th>
<th>LOTTE CHEMICAL</th>
<th>PERTAMINA</th>
<th>Polytama</th>
<th>ASC Group</th>
<th>Pertamina Indah</th>
<th>PT Brevet Indonesia</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></td>
<td>860</td>
</tr>
<tr>
<td>Propylene</td>
<td>470</td>
<td>608</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></td>
<td>766</td>
</tr>
<tr>
<td>HDPE</td>
<td>136</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>386</td>
</tr>
<tr>
<td>Polypropylene</td>
<td>480</td>
<td>45</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>765</td>
</tr>
<tr>
<td>Ethylene Dichloride</td>
<td></td>
<td></td>
<td></td>
<td>644</td>
<td>370</td>
<td></td>
<td></td>
<td></td>
<td>1,014</td>
</tr>
<tr>
<td>Vinyl Chloride Monomer</td>
<td></td>
<td></td>
<td></td>
<td>734</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td>864</td>
</tr>
<tr>
<td>Polyvinyl Chloride</td>
<td></td>
<td></td>
<td></td>
<td>507</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
<td>804</td>
</tr>
<tr>
<td>Ethylene Oxide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>240</td>
</tr>
<tr>
<td>Ethylene Glycol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>220</td>
</tr>
<tr>
<td>Acrylic Acid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>140</td>
</tr>
<tr>
<td>Butanol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Ethylhexanol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>140</td>
</tr>
<tr>
<td>Py-Gas</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>Crude C4</td>
<td>315</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>315</td>
</tr>
<tr>
<td>Butadiene</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Benzene</td>
<td></td>
<td></td>
<td></td>
<td>125</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td>525</td>
</tr>
<tr>
<td>Para-Xylene</td>
<td></td>
<td></td>
<td></td>
<td>298</td>
<td>540</td>
<td></td>
<td></td>
<td></td>
<td>838</td>
</tr>
<tr>
<td>Styrene</td>
<td>340</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>340</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,301</td>
<td>450</td>
<td>1,076</td>
<td>240</td>
<td>1,885</td>
<td>595</td>
<td>940</td>
<td>962</td>
<td>9,449</td>
</tr>
</tbody>
</table>

**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*
2. 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

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

Polyolefin Spreads Expected to Remain Resilient

Source: Nexant

Average spreads of key products will be continue to be resilient
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>CAGR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>7.7%</td>
</tr>
<tr>
<td>Philippines</td>
<td>6.8%</td>
</tr>
<tr>
<td>China</td>
<td>6.3%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>6.2%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>5.4%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>4.8%</td>
</tr>
<tr>
<td>Thailand</td>
<td>3.3%</td>
</tr>
<tr>
<td>Singapore</td>
<td>2.6%</td>
</tr>
<tr>
<td>U.S.</td>
<td>2.0%</td>
</tr>
<tr>
<td>U.K.</td>
<td>1.6%</td>
</tr>
<tr>
<td>Germany</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Foreign Direct Investment in Indonesia (2012 – 2016)

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment (US$bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>24.5</td>
</tr>
<tr>
<td>2013</td>
<td>28.6</td>
</tr>
<tr>
<td>2014</td>
<td>28.5</td>
</tr>
<tr>
<td>2015</td>
<td>29.3</td>
</tr>
<tr>
<td>2016</td>
<td>29.0</td>
</tr>
</tbody>
</table>

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

- India: 9 million tons
- Brazil: 4 million tons
- Indonesia: 3 million tons
- FSU: 8 million tons
- SEA: 4 million tons
- China: 46 million tons
- Japan: 5 million tons
- CE/WE: 24 million tons
- US: 19 million tons

Source:
- Nexant Industry Report, IMF, BKPM

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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)

- **PE**
  - Indonesia: 4.4%
  - Global: 3.4%

- **PP**
  - Indonesia: 4.7%
  - Global: 3.6%

- **SM**
  - Indonesia: 1.6%
  - Global: 10.5%

- **BD**
  - Indonesia: 2.4%
  - Global: 17.7%

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

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(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

<table>
<thead>
<tr>
<th>Olefin</th>
<th>Polyethylene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pertamina</td>
<td>CAP 24%</td>
</tr>
<tr>
<td>Import</td>
<td>Import 45%</td>
</tr>
<tr>
<td>24%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Total Supply: 2.6M tons

<table>
<thead>
<tr>
<th>Polypropylene</th>
<th>Styrene Monomer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polytama</td>
<td>CAP 29%</td>
</tr>
<tr>
<td>Pertamina</td>
<td>CAP 100%</td>
</tr>
<tr>
<td>15%</td>
<td>3%</td>
</tr>
<tr>
<td>Import</td>
<td>Import 53%</td>
</tr>
</tbody>
</table>

Total Supply: 1.6M tons

Total Supply: 1.4M tons

Total Supply: 0.3M tons

Olefin Top 10 South East Asia Producers

Polyolefin Top 10 South East Asia Producers

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

(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
Highly Integrated Production Process with Operational Flexibility

- 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 provides 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**.
- 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.
- **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.
Diversified Client Base of Industry Leaders

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></th>
<th>Domestic</th>
<th>Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>514</td>
<td>1,303</td>
</tr>
<tr>
<td>Olefins &amp; by-products(1)</td>
<td>171</td>
<td>419</td>
</tr>
<tr>
<td>Polyolefin</td>
<td>610</td>
<td>289</td>
</tr>
<tr>
<td>Styrene Monomer &amp; by-products</td>
<td>885</td>
<td>219</td>
</tr>
<tr>
<td>Butadiene &amp; by-products</td>
<td>869</td>
<td>78</td>
</tr>
<tr>
<td>Total</td>
<td>2,455</td>
<td>1,923</td>
</tr>
</tbody>
</table>

(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

Naphtha Supply (2016)

<table>
<thead>
<tr>
<th>Year</th>
<th>Contract Purchase</th>
<th>Spot Purchase</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>70%</td>
<td>30%</td>
<td>100%</td>
</tr>
<tr>
<td>2015</td>
<td>70%</td>
<td>30%</td>
<td>100%</td>
</tr>
<tr>
<td>2016</td>
<td>76%</td>
<td>24%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Main Raw Materials (2016)

- Naphtha/Condensate: 100%
- Benzene: 100%
- Propylene: 40% (External) 60% (Internal)
- Ethylene: 100%
- C4: 100%

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>854.9</td>
<td>100%</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>Shareholder</th>
<th>Ownership 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 Siam Cement Group</td>
<td>30.57%</td>
</tr>
<tr>
<td>Public</td>
<td>9.06%</td>
</tr>
</tbody>
</table>

#### Key benefits of partnership

- **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

- **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

- **Barito Pacific**
  - Available land for expansion
  - Financial commitment (e.g. full subscription to 2013 rights offering)

- **Key benefits of partnership**
  - 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

---

(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

DJOKO SUYANTO
President Commissioner
Independent Commissioner
2 years in Industry 2 years with CAP

TAN EK KIA
VP Commissioner
Independent Commissioner
44 years in Industry 6 years with CAP

HO HON CHEONG
Commissioner, Independent Commissioner
2 years in Industry 2 years with CAP

AGUS SALIM PANGESTU
Commissioner
11 years in Industry 11 years with CAP

LOEKI SUNDJAJA PUTERA
Commissioner
15 years in Industry 15 years with CAP

CHAVALIT EKABUT(1)
Commissioner
11 years in Industry 5 years with CAP

CHOLANAT YANARANOP(1)
Commissioner
30 years in Industry 5 years with CAP

Board of Directors

ERWIN CIPUTRA
President Director
13 years in Industry 13 years with CAP

KULACHET DHARACHANDRA(1)
VP Director of Operations
23 years in Industry 1 year with CAP

BARITONO PRAJOGO PANGESTU
VP Director of Polymer Commercial
12 years in Industry 12 years with CAP

LIM CHONG THIAN
Director of Finance
37 years in Industry 12 years with CAP

SURYANDI
Director of Human Resource and Corp. Administration, Independent Director
27 years in Industry 27 years with CAP

PIBOON SIRINANTANAKUL(1)
Director of Manufacturing
24 years in Industry 1 year with CAP

FRANSISKUS RULY ARYAWAN
Director of Monomer Commercial
15 years in Industry 15 years with CAP

(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.
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
3. Attractive Growth Profile
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.
Strategic Growth via Expansion and Debottlenecking

**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$ 42.0 million

**New Polyethylene Plant**
- Increase facility of total 400 KT/A to produce LLDPE, HDPE, and Metallocene LLDPE
- Rationale:
  - Further vertical integration
  - Further vertical integration;
  - Protect and grow leading polymer market position in Indonesia
- 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

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  - Avoid opportunity loss of exporting excess C4
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- 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$ 87.0 million
4. Financial Highlights
Resilient Revenue Driven by Diverse Product Portfolio and Increased Volumes

Revenue by Product Segments

<table>
<thead>
<tr>
<th>Product Segment</th>
<th>2014 (US$m)</th>
<th>2015 (US$m)</th>
<th>2016 (US$m)</th>
<th>YTD 3Q17 (US$m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene</td>
<td>1,303</td>
<td>1,378</td>
<td>1,930</td>
<td>1,798</td>
</tr>
<tr>
<td>Propylene</td>
<td>514</td>
<td>256</td>
<td>869</td>
<td>706</td>
</tr>
<tr>
<td>Mixed C4</td>
<td>514</td>
<td>256</td>
<td>869</td>
<td>706</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>419</td>
<td>78</td>
<td>289</td>
<td>323</td>
</tr>
<tr>
<td>Polypropylene</td>
<td>419</td>
<td>78</td>
<td>289</td>
<td>323</td>
</tr>
<tr>
<td>Styrene Monomer</td>
<td>419</td>
<td>78</td>
<td>289</td>
<td>323</td>
</tr>
<tr>
<td>Butadiene and by-products</td>
<td>48</td>
<td>13</td>
<td>60</td>
<td>196</td>
</tr>
<tr>
<td>Pololefin</td>
<td>48</td>
<td>13</td>
<td>60</td>
<td>196</td>
</tr>
</tbody>
</table>

Sales Volume

<table>
<thead>
<tr>
<th>Product Segment</th>
<th>2014 (KT)</th>
<th>2015 (KT)</th>
<th>2016 (KT)</th>
<th>YTD 3Q17 (KT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene</td>
<td>2,460</td>
<td>2,19</td>
<td>1,280</td>
<td>1,219</td>
</tr>
<tr>
<td>Propylene</td>
<td>1,572</td>
<td>1,378</td>
<td>1,730</td>
<td>1,617</td>
</tr>
<tr>
<td>Mixed C4</td>
<td>1,173</td>
<td>1,173</td>
<td>1,173</td>
<td>1,173</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>1,908</td>
<td>1,173</td>
<td>1,173</td>
<td>1,173</td>
</tr>
<tr>
<td>Polypropylene</td>
<td>1,724</td>
<td>204</td>
<td>204</td>
<td>204</td>
</tr>
<tr>
<td>Styrene Monomer</td>
<td>1,724</td>
<td>204</td>
<td>204</td>
<td>204</td>
</tr>
<tr>
<td>Butadiene and by-products</td>
<td>1,173</td>
<td>1,173</td>
<td>1,173</td>
<td>1,173</td>
</tr>
<tr>
<td>Pololefin</td>
<td>1,173</td>
<td>1,173</td>
<td>1,173</td>
<td>1,173</td>
</tr>
</tbody>
</table>

Note: TAM in 2015 and ramp-up in 2016.
Strong Financials Further Enhanced by Economies of Scale

Gross Profit

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>YTD 3Q17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Profit</td>
<td>118</td>
<td>146</td>
<td>494</td>
<td>426</td>
</tr>
<tr>
<td>Growth</td>
<td>+239%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adjusted EBITDA (unaudited)

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>YTD 3Q17</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA</td>
<td>135</td>
<td>155</td>
<td>510</td>
<td>431</td>
</tr>
<tr>
<td>Margin</td>
<td>6%</td>
<td>11%</td>
<td>26%</td>
<td>24%</td>
</tr>
<tr>
<td>Growth</td>
<td></td>
<td>+229%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Net Profit

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>YTD 3Q17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Profit</td>
<td>18</td>
<td>26</td>
<td>300</td>
<td>251</td>
</tr>
<tr>
<td>Margin</td>
<td>1%</td>
<td>2%</td>
<td>16%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Cashflow from Operations, Capex

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>YTD 3Q17</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFO</td>
<td>116</td>
<td>194</td>
<td>476</td>
<td>295</td>
</tr>
<tr>
<td>Capex (unaudited)</td>
<td>105</td>
<td>224</td>
<td>73</td>
<td>126</td>
</tr>
</tbody>
</table>
### Strong Balance Sheet Supported by Financial Profile Strengthening

<table>
<thead>
<tr>
<th>Cash Balance (US$m)</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>YTD 3Q17</th>
</tr>
</thead>
<tbody>
<tr>
<td>208</td>
<td>97</td>
<td>299</td>
<td>634</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Debt and Net Debt (US$m)</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>YTD 3Q17</th>
</tr>
</thead>
<tbody>
<tr>
<td>491</td>
<td>283</td>
<td>451</td>
<td>425</td>
<td>356</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adjusted EBITDA / Finance Costs (1)</th>
<th>(x)</th>
<th>Min</th>
<th>3.0x</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>4.2x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>6.9x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>16.0x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YTD 3Q17</td>
<td>17.8x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leverage Ratios (2)</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>YTD 3Q17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt to Capitalisation</td>
<td>3.6x</td>
<td>3.5x</td>
<td>0.8x</td>
<td>0.6x</td>
</tr>
<tr>
<td>Debt to Adjusted EBITDA</td>
<td>2.1x</td>
<td>2.9x</td>
<td>0.2x</td>
<td>0.0x</td>
</tr>
<tr>
<td>Net debt to Adjusted EBITDA</td>
<td>36%</td>
<td>38%</td>
<td>27%</td>
<td>18%</td>
</tr>
</tbody>
</table>

---

(1) For YTD3Q17, calculated as LTM Adjusted EBITDA divided by LTM Finance Costs
(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 calculated as Net Debt divided by Adjusted EBITDA. Debt to Adjusted EBITDA and Net Debt to Adjusted EBITDA for YTD 3Q17 calculated as Total Debt divided by LTM Adjusted EBITDA and Net Debt divided by LTM Adjusted EBITDA respectively.
Capital Expenditure Plan to Pursue Value-Accretive Growth

Capex Plans Breakdown by Year 2018 – 2020 (US$m)

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
Appendix
Petrochemicals Industry Outlook
Ethylene World Supply Growth and Capacity

Ethylene World Supply Growth

- 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 built
- 7 – 8 years required from planning to startup

Ethylene Production Capacity: 218MT in 2023

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

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

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

Ethylene Spreads Over Naphtha

Gap over naphtha (US$/t)

Petrochemical industry profitability to continue on path of sustainable recovery post 2012 as a result of improving demand and lower capacity addition

Source: Nexant
Strong Demand Growth for Petrochemicals in Indonesia

Petrochemical demand in Indonesia expected to outpace other regions

Source: Nexant
## Prudent Financial Policies

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
</table>
| **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 |
Strong Gross Margins Reflecting Improved Supply/Demand Balance & Higher Utilization Rates

### Olefins

- 2014: 2.0%
- 2015: (0.9%)
- 2016: 27.2%
- YTD 3Q17: 29.6%

### Polyolefins

- 2014: 7.0%
- 2015: 15.8%
- 2016: 32.0%
- YTD 3Q17: 27.7%

### Styrene Monomer and by-products

- 2014: 1.7%
- 2015: 5.0%
- 2016: 8.7%
- YTD 3Q17: 8.4%

### Butadiene and by-products

- 2014: 2.9%
- 2015: (5.1%)
- 2016: 11.1%
- YTD 3Q17: 16.1%
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

Visit our website at www.chandra-asri.com

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

Disclaimer:

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